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

CONTRACT NUMBER - LC - 00822914

DELIBERABLE

B.2 Periodic report M2

<table>
<thead>
<tr>
<th>Revision</th>
<th>1.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of submission</td>
<td>31 October 2018</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Julia Schellenberg, Victor-Jan Vos, Europeana Foundation</td>
</tr>
<tr>
<td>Dissemination Level</td>
<td>Public</td>
</tr>
</tbody>
</table>
REVISION HISTORY AND STATEMENT OF ORIGINALITY

Revision History

<table>
<thead>
<tr>
<th>Revision No.</th>
<th>Date</th>
<th>Author</th>
<th>Organisation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>24-10-18</td>
<td>Henning Scholz, Valentine Charles, Antoine Isaac, Julia Fallon, Andrea Zandarin, Dasha Moskalenko, Ash Marriott, Hugo Manguinhas, Milena Popova, Nienke van Schaeverbeke, Zuzana Malicherova, Shadi Ardalan</td>
<td>Europeana Foundation</td>
<td>First draft</td>
</tr>
<tr>
<td>0.2</td>
<td>25-10-18</td>
<td>Julia Schellenberg</td>
<td>Europeana Foundation</td>
<td>Draft</td>
</tr>
<tr>
<td>1.0</td>
<td>31-10-18</td>
<td>Julia Schellenberg, Victor-Jan Vos</td>
<td>Europeana Foundation</td>
<td>Final version</td>
</tr>
</tbody>
</table>

Europeana DSI-4 is funded by the European Union’s Connecting Europe Facility. It is operated by a consortium led by the Europeana Foundation, under a service contract with the European Commission, contract number LC - 00822914.

The European Commission does not guarantee the accuracy of the information and accepts no responsibility or liability whatsoever with regard to the information in this document. Neither the European Commission, nor any person acting on the European Commission’s behalf, is responsible or liable for the accuracy or use of the information in this document.

This deliverable contains original unpublished work except where clearly indicated.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.
# TABLE OF CONTENTS

Abbreviations 4  
Introduction 5  
Work package 1: Operating, maintaining and developing Europeana DSI as the pan-European online cultural platform 6  
Work package 2: Content supply 17  
Work Package 3: Fostering reuse of digital cultural heritage resources 20  
Work Package 4: Communication and Dissemination 29  
Work Package 5: Animate and further enlarge the Europeana Network Association 33  
Work Package 6: Studying the impact of digitisation and reuse of cultural heritage 36  
Work Package 7: Governance 38  
Work Package 8: Phasing-in and phasing-out periods 38  
Work Package 9: Project and Programme Management 39
## Abbreviations

### Consortium participants

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF</td>
<td>Europeana Foundation (Coordinator), The Netherlands</td>
</tr>
<tr>
<td>AIT-Graz</td>
<td>AIT Angewandte Informationstechnik Forschungsgesellschaft mbH, Austria</td>
</tr>
<tr>
<td>AIT-Vienna</td>
<td>AIT Austrian Institute of Technology GmbH, Austria</td>
</tr>
<tr>
<td>APEF</td>
<td>Archives Portal Europe Foundation, The Netherlands</td>
</tr>
<tr>
<td>AthenaRC</td>
<td>Athena Research and Innovation Center in Information Communication and Knowledge Technologies, Greece</td>
</tr>
<tr>
<td>BL</td>
<td>The British Library Board, United Kingdom</td>
</tr>
<tr>
<td>CARARE</td>
<td>Connecting Archaeology and Architecture in Europe, Ireland</td>
</tr>
<tr>
<td>CLARIN</td>
<td>CLARIN ERIC, The Netherlands</td>
</tr>
<tr>
<td>DEN</td>
<td>Stichting Digitaal Erfgoed Nederland, The Netherlands</td>
</tr>
<tr>
<td>DIF</td>
<td>Deutsches Filminstitut - DIF e.V., Germany</td>
</tr>
<tr>
<td>DNB</td>
<td>Deutsche Nationalbibliothek, Germany</td>
</tr>
<tr>
<td>eFashion</td>
<td>European Fashion Heritage Association, Italy</td>
</tr>
<tr>
<td>EUN</td>
<td>EUN Partnership AISBL, Belgium</td>
</tr>
<tr>
<td>Euroclio</td>
<td>Euroclio European Association of History Educators, The Netherlands</td>
</tr>
<tr>
<td>F&amp;F</td>
<td>Facts &amp; Files Historisches Forschungsinstitut Berlin Drauschke Schreiber Partnerschaftsgesellschaft Archiv-, Geschichts- und Literaturwissenschaftler, Germany</td>
</tr>
<tr>
<td>INESC-ID</td>
<td>INESC-ID, Instituto de Engenharia de Sistemas e Computadores - Investigação e Desenvolvimento em Lisboa, Portugal</td>
</tr>
<tr>
<td>KL</td>
<td>Stichting Nederland Kennisland, The Netherlands</td>
</tr>
<tr>
<td>Lovegrove</td>
<td>James Lovegrove SPRL, Belgium</td>
</tr>
<tr>
<td>MCA</td>
<td>Michael Culture AISBL, Belgium</td>
</tr>
<tr>
<td>NISV</td>
<td>Stichting Nederlands Instituut voor Beeld en Geluid, The Netherlands</td>
</tr>
<tr>
<td>NTUA</td>
<td>National Technical University of Athens, Greece</td>
</tr>
<tr>
<td>Photocons</td>
<td>International Consortium for Photographic Heritage Photoconsortium, Italy</td>
</tr>
<tr>
<td>PSNC</td>
<td>Instytut Chemii Bioorganicznej Polskiej Akademii Nauk - Poznańskie Centrum Superkomputerowo-Sieciowe, Poland</td>
</tr>
<tr>
<td>SPK</td>
<td>Stiftung Preussischer Kulturbesitz, Germany</td>
</tr>
</tbody>
</table>

### Others

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIs</td>
<td>Cultural Heritage Institutions</td>
</tr>
<tr>
<td>CH</td>
<td>Cultural Heritage</td>
</tr>
<tr>
<td>DC</td>
<td>Dublin Core</td>
</tr>
<tr>
<td>DPS</td>
<td>Data Partner Services</td>
</tr>
<tr>
<td>EDM</td>
<td>Europeana Data Model</td>
</tr>
<tr>
<td>ELF</td>
<td>Europeana Licensing Framework</td>
</tr>
<tr>
<td>ENA</td>
<td>Europeana Network Association</td>
</tr>
<tr>
<td>EPF</td>
<td>Europeana Publishing Framework</td>
</tr>
<tr>
<td>EYCH</td>
<td>European Year of Cultural Heritage</td>
</tr>
<tr>
<td>IIIF</td>
<td>International Image Interoperability Framework</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research &amp; Development</td>
</tr>
</tbody>
</table>
Introduction

The Periodic report describes the work carried out under Europeana DSI-4 from 1 September 2018 until 31 October 2018, according to the implementation plan (B.1 deliverable, M1). 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: 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
Work package 1: Operating, maintaining and developing Europeana DSI as the pan-European online cultural platform

Work package 1 maintains and continuously improves Europeana DSI’s main functionalities and will deliver the web user interfaces of the Europeana DSI (Europeana Collections and thematic collections, and Europeana Pro). Improvements and proposed changes towards functionalities and interfaces will be based on user feedback, advice and analysis according to the change management process.

Task 1.1. Maintenance and continuous improvement of the Europeana DSI’s main functionalities

Requirement A.1. Metadata repository (EF, PSNC, INESC-ID, DNB)

Number and quality of datasets per category (Tiers)

Due to the migration of the data to a new infrastructure and the preparation for the launch of Metis, ingestion was frozen over summer and just started again in October. Therefore, the number and quality of datasets per category (tiers) has not changed since August 2018. The table below lists the values per tier.

<table>
<thead>
<tr>
<th>EPF compliance</th>
<th>No. of records</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not compliant to EPF1</td>
<td>9,610,588</td>
<td>16.5%</td>
</tr>
<tr>
<td>Tier 1</td>
<td>20,677,325</td>
<td>35.5%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>14,503,251</td>
<td>24.9%</td>
</tr>
<tr>
<td>Tier 3</td>
<td>2,388,085</td>
<td>4.1%</td>
</tr>
<tr>
<td>Tier 4</td>
<td>11,066,737</td>
<td>19.0%</td>
</tr>
</tbody>
</table>

As reported earlier, it is still a challenge to measure tier progress consistently and regularly due to technical issues. Our previous media service has not created a full set of technical metadata for all 58 million records, which is a necessary prerequisite to measure tier progress. With the launch of Metis including a new media service we expect to solve these technical issues to be able to reprocess records that have no technical metadata to date.

1 Not compliant to EPF is all content that was ingested in the early days of Europeana in a quality lower than tier 1, e.g. image resolution <0.1 megapixel.
Data and aggregation infrastructure, the ingestion system Metis

Metis, as tool for publishing metadata in Europeana is strongly tight with the infrastructure supporting the Europeana APIs and Europeana Collections. At the same time of releasing Metis, EF is also migrating its infrastructure to new servers hosted at PSNC, Poland. Because of the strong dependency between the two projects it was decided to release both the new infrastructure and Metis at the same time, if possible. The release of Metis V1.0 is planned for November 2018.

Developments towards new harvesting processes

EF continued its efforts to provide Europeana metadata aggregation (i.e. Metis) with new acquisition channels. In September, all code for R&D on metadata aggregation was grouped under the "Data Aggregation Lab" label on Github². A short guide was delivered to the DPS team on how to harvest a IIIF collection using our IIIF harvesting component. EF presented previous experiments on Linked Data/Schema.org harvesting (with KB/NDE) at the SEMANTiCS conference³ and started to discuss the extension of these experiments in the context of the upcoming Europeana Common Culture project. Meanwhile, older Europeana DSI-3 experiments on harvesting in a IIIF context gained more visibility by being published in the International Journal on Digital Libraries⁴.

Requirement A.2. Metadata and content quality (EF, KL, APEF, BL, CARARE, AthenaRC, MCA, eFashion, DIF, NISV, AIT-Graz, PhotoCons)

Europeana Publishing Framework and Publishing Guide

In September, EF published an update to the Europeana Publishing Guide⁵. An extensive list of currently implemented keywords was added to the guide which can be used to get digital objects (of minimum Tier 2) featured in Europeana thematic collections.

Work on the metadata component of the Europeana Publishing Framework⁶ continued as part of the work of the Data Quality Committee⁷, with most aggregating partners participating (AIT Graz, BL, CARARE, DIF, Europeana Fashion, NISV, Photoconsortium). A proposal for establishing a strategy for descriptive metadata was presented and discussed at the last Europeana Aggregators’ Forum meeting in Berlin (October 2018). Work is in progress to identify how this strategy can be incorporated into the metadata component of the Europeana Publishing Framework.

---

² https://github.com/nfreire/data-aggregation-lab
³ https://2018.semantics.cc/
⁵ https://pro.europeana.eu/post/publication-policy
⁶ https://pro.europeana.eu/post/publishing-framework
⁷ https://pro.europeana.eu/project/data-quality-committee
Europeana Data Model
EF worked on keeping EDM aligned with relevant standards in the field. Special attention was placed towards the evolution of these standards and to keep potential gaps between EDM and other standards as narrow as possible.

EF contributed to the Usage Board of the Dublin Core Metadata Initiative\(^8\), which co-edits the next edition of the DC terms with ISO. A first version was exchanged between both bodies, and we started discussing updates to DC terms' semantics, which will solve some issues where EDM had to deviate from the DC standard.

EF collaborated with the IIIF Text Granularity technical specification group\(^9\). This resulted in the inclusion of some elements required for the EDM Full Text profile into the recommendations of this group, and the adoption of the group's vocabulary for text granularity in the Europeana Newspapers dataset.

EF provided feedback on a first set of candidate metadata properties for Wikimedia's Structured Data on Commons\(^10\) project. Particularly, we made recommendations so that the patterns used to describe media files in the next version of Wikimedia Commons make the same key distinctions that EDM does between cultural objects and their digital representations.

EF presented its work on semantic interoperability (with one part on EDM) as part of a workshop for sharing best practices in this field among CEF DSIs\(^11\) (October, 2018).

Europeana Licensing Framework and Rightstatements.org
EF prepared the next steps for the copyright community to support the implementation of the ELF. A rights statements webinar was hosted in September with four attendees from the copyright community. A survey was sent to participants to better understand how the webinar met their needs and how it can be scaled to a larger group.

To support the implementation of rightsstatements.org Spanish, Finnish, Finland-Swedish and Polish translations are currently being undertaken by partners and members of the Network.

Data quality work plans by aggregating partners
The data quality work plans of all aggregating partners were finalised and work on the individual objectives has started. For those aggregators working with MINT, NTUA is involved in the planning of the activities.

\(^8\) [http://dublincore.org/usage/](http://dublincore.org/usage/)
\(^9\) [https://iiif.io/community/groups/text-granularity/](https://iiif.io/community/groups/text-granularity/)
\(^10\) [https://commons.wikimedia.org/wiki/Structured_data](https://commons.wikimedia.org/wiki/Structured_data)
Priorities for the partners specified in the plans differ to some extent depending on the status of the data and the needs of the communities. Main priorities by aggregating partner for the next few months are summarized in the table below.

<table>
<thead>
<tr>
<th>Partner</th>
<th>Main objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT-Graz</td>
<td>● Increase the use of the Place contextual class (prefLabel, longitude, latitude)&lt;br&gt;● Research possible solutions for geographical map display for uninhabited places in Europeana Collections&lt;br&gt;● Approach the 8% of providers that do not provide content to tier 3 or 4 and ask them to choose a license that allows for re-use&lt;br&gt;● Increase the presence of edm:isShownAt and dc:description in the data&lt;br&gt;● Add language tag attribute for skos:concepts and increase the use of the Timespan contextual class</td>
</tr>
<tr>
<td>APEF</td>
<td>● Improvement of the existing conversion from archival standards to the Europeana metadata format (see also task 2.3)</td>
</tr>
<tr>
<td>BL</td>
<td>● Add five new data providers aggregating content to Europeana via Europeana Sounds, providing training and support&lt;br&gt;● Increase amount of tier 2 material to 20% and tier 3 material to 5%&lt;br&gt;● Increase records with georeferenced terms to 50% and with agent classes to 50%&lt;br&gt;● Increase number of records with DBpedia terms to 110,000 and with MIMO terms to 10,000</td>
</tr>
<tr>
<td>CARARE</td>
<td>● Increase the percentage of content that is available at tier 2 and above&lt;br&gt;● Highlighting the benefits of providing higher quality and more open access content&lt;br&gt;● Support, inform and enable partners to showcase their content in Europeana</td>
</tr>
<tr>
<td>DIF (EFG)</td>
<td>● Increase of language attributes, Geonames links and of the skos:Concept class through the increased usage of URIs from controlled vocabularies&lt;br&gt;● Normalisation of date values&lt;br&gt;● Maintain the EFG database and carry out data improvements and new ingestion</td>
</tr>
<tr>
<td>eFashion</td>
<td>● Set-up and carry-on awareness-raising and dissemination activities in the fashion heritage domain to showcase the value of being in Europeana and bring in more new content providers and improve content quality&lt;br&gt;● Improve and increase the contextual information in metadata where appropriate: geonames links, agents, type&lt;br&gt;● Curation for the thematic collection to incentivise content improvements&lt;br&gt;● Increase the use of xml:lang attributes&lt;br&gt;● Increase and improve the links (isShownAt and isShownBy)</td>
</tr>
</tbody>
</table>
NISV (EUscreen)

- Increase the completeness of the mapped EUscreen thesaurus
- Improve language description of properties
- Align terms with controlled vocabularies

Photocons

- Further enlarge the Photography thesaurus (useful for collections curation)
- Normalisation of dc:creator, implementation of the Photographers’ index (agent)
- Improve the consistency of the photographic techniques and formats across collections, for improved search consistency
- Improve population of dc:type and dc:terms_created, and language attributes

Some first achievements have been made in the reporting period towards the objectives in the data quality work plans. For more details on achievements per individual institutions by aggregating partner, see the Data quality & content supply sheet.

To achieve better data quality, in most cases aggregators are dependent on CHIs updating their collections or in some cases even digitising their collections again. Despite the fact the recent progress against the tiers was very positive, it may become more and more difficult to influence a further increase. Ways to solve it would be (1) to suspend more data not compliant to tier 1 or even not compliant to tier 2, (2) find ways to support institutions financially, (3) have much more powerful incentives to make it even more attractive for CHIs to be published in Europeana.

New content providers to join Europeana

Several partners prepared or executed outreach activities for new data providers. Main activities by aggregating partner are summarized in the table below.

<table>
<thead>
<tr>
<th>Partner</th>
<th>Main activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT-Graz (OpenUp!)</td>
<td>Served first new data provider in Europeana DSI-4 and is planning various initiatives to reach out to other new partners</td>
</tr>
<tr>
<td>BL (Europeana Sounds)</td>
<td>Identified first five data providers that could join Europeana Sounds as associate partners in first year of Europeana DSI-4</td>
</tr>
<tr>
<td></td>
<td>Communicated and explored options with one data provider to join the aggregator as associate partner</td>
</tr>
<tr>
<td>CARARE</td>
<td>Welcomed two new members to the CARARE association: Baselland Museums and the Cultural Heritage Agency of the Netherlands</td>
</tr>
<tr>
<td></td>
<td>Reached out to two potential new members and data providers</td>
</tr>
</tbody>
</table>

https://docs.google.com/spreadsheets/d/1WAEW1RJcdmfdgiR5D9QLiXlbWffQ5ooQpdx0mi-hDyQ/edit#gid=1158063986
DIF (EFG)  
- Identified potential new EFG/Europeana data providers from the film archive domain (possible data providers are mainly smaller archives from Eastern Europe that are currently underrepresented in EFG and Europeana)

NISV (EUscreen)  
- Reached out to six new potential partners that stated interest in participating in EUscreen and Europeana

**Requirement A.3. Quality of service (QoS), data security and disaster recovery (EF, PSNC)**

The following table summarizes performance towards our products\(^{13}\) (APIs\(^{14}\), Europeana Collections, Europeana Pro and Metis):

<table>
<thead>
<tr>
<th>Product</th>
<th>Load (rpm(^{15}))</th>
<th>Response times (seconds)</th>
<th>Uptime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search API</td>
<td>316 rpm</td>
<td>0.50s</td>
<td>99.98%</td>
</tr>
<tr>
<td>Record API</td>
<td>443 rpm</td>
<td>0.28s</td>
<td>99.98%</td>
</tr>
<tr>
<td>Europeana Collections: Homepage</td>
<td>698 rpm</td>
<td>1.50s</td>
<td>99.91%</td>
</tr>
<tr>
<td>Europeana Collections: Record page</td>
<td>698 rpm</td>
<td>1.63s</td>
<td>99.91%</td>
</tr>
<tr>
<td>Europeana Collections: Search results</td>
<td>698 rpm</td>
<td>2.61s</td>
<td>99.91%</td>
</tr>
<tr>
<td>Europeana Pro</td>
<td>N/A(^{16})</td>
<td>1.05s</td>
<td>99.99%</td>
</tr>
<tr>
<td>Metis(^{17})</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

EF has recently begun to face attempted SQL injection attacks\(^{18}\). While we are already protected against SQL injection, we were not able to cope with the load and intensity of these requests. We immediately mitigated against the attacks by blocking the IP addresses and redeploying our apache configuration, and have now mitigated against the longer term effects of downtime and ensured 24 hour protection by implementing the tool Cloudflare\(^{19}\) which add a protective layer against a variety of threats. Over the coming months we will

---

\(^{13}\) Figures reflect status of current production services. Figures are average response times taken from figures recorded in the period 1 September - 24 October 2018.

\(^{14}\) The Search API and Record API are the APIs used the most on Europeana, information on other APIs can be provided on request.

\(^{15}\) Rpm: response per minute, average figures from the period between 1 September until 31 October 2018.

\(^{16}\) Tracking the load of the Europeana Pro website is not important, we check if the site is online/constantly available using a tool like pingdom.

\(^{17}\) Metrics for Metis are available once it is live.

\(^{18}\) https://en.wikipedia.org/wiki/SQL_injection

\(^{19}\) https://www.cloudflare.com/
assess the success of this tool through monitoring what attacks have been prevented through its use.

Infrastructure
The new back end infrastructure in PSNC is currently being tested, for performance and high availability. Nagios monitoring is in place, and Grafana provides metrics for the performance analysis. A backup procedure is in place, which allows to restore the data from PSNC to a minimal disaster recovery environment in Hetzner.

Requirement A.4. Mechanisms for probing broken links (EF)
EF has several mechanisms for probing broken links. Broken links are tested during ingestion to Europeana and are also part of the work on datasets with records that are not compliant to the EPF. An overview on the evolution of number and nature of broken links identified on the platform, rectification of broken links by aggregator and by content providers, as well as improvement measures planned will be reported on in the A.1 Platform report (M10).

Requirement A.5. Log files on user behaviour and usage analytics (EF)
The infrastructure includes a repository of log files that capture and time-stamp every single action performed by users. EF also employs Google Analytics, as the state-of-the-art web analytics tool. EF will report on use and usage statistics and analytics, major changes observed in use of the platform as well as improvement measures taken and planned in the C.2 User and usage report (M5 and M10).

Requirement A.6. Application Programming Interface (API) (EF, AIT-Vienna)
The platform provides multiple API endpoints for software clients to interact with the platform. EF and AIT-Vienna maintain and improve the technical distribution mechanisms towards our target markets education, academic research and creative industries. Activities towards APIs developments will be reported on in the C.3 Content supply and reuse report (M10). This will include usage metrics of the API, access statistics from the various clients (at a minimum: number of requests, type of requests, type of client, timeline, country the data was accessed from) and how these relate to its efforts to encourage reuse of the platform resources by developers and third party applications, as well as improvement measures taken and planned.

Task 1.2. Continuous improvement of service functionalities and the user interfaces

Requirement B.1. Search and user guidance (EF)
The search interface on Europeana Collections searches the full Europeana database, on thematic collections it enables search within the selected theme. Under Europeana DSI-4 EF
focuses on improving the search functionality (effectiveness, completeness, and accuracy) and browse options. Activities towards the development of the search interface will be reported in the C.2 User and usage report (M5 and M10) including search metrics and performance as well as improvement measures taken and planned.

**Requirement B.2. Visualization and display (EF)**
EF offers various visualisation interfaces for data held by Europeana including the search results page, the item page and the newly developed entity pages. Activities towards the development of visualization and display including number and nature of suggestions received, satisfaction metrics (e.g. NPS or Likert scale), as well as improvement measures taken and planned will be reported on in the C.2 User and usage report (M5 and M10).

**Developments on Europeana Collections**

**Item page**
The new item page is currently being connected to other content across Europeana. When a user is on the new item page and that item exists in a gallery, exhibition or blog post, the related content will be promoted on the right hand side. This means that more than 25% of our records will be connected to some other related content on Europeana automatically. EF has completed this work for blog posts, galleries and entities, while exhibitions is still in progress. This contributes towards our target of increasing our user retention.

**Newspapers**
To enhance the discoverability of newspaper titles, EF implemented browse pages which allow the user to navigate through the titles. These pages are curated editorially, and can be structured as needed. For example, browse by country of origin, or browse A-Z. These pages are functionally complete, however not visible, as these are currently being curated in preparation for the launch of Europeana Newspapers.

**Redevelopment of Europeana Collections**
EF is currently establishing a new environment in order to begin our redevelopment work. This will entail a new design and new CMS. We decided to start from fresh in order to tackle performance, accessibility and design robustness from the start. The design and UX components are being worked on in tandem with development. This redesign project works towards our KPI of obtaining a yearly user base of six million visits.

**Editorial contributions on Europeana Collections**
EF promotes content and provides quick access to topics of interest through browse entry points, galleries, blogs and exhibitions. In the September/October 2018, EF published 12 blogs, 9 galleries and one exhibition. The most popular content is listed in the table below:

<table>
<thead>
<tr>
<th>Title</th>
<th>Theme</th>
<th>Type</th>
<th>Date of publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europeana DSI-4 B.2 Periodic report M2</td>
<td>Europeana DSI-4 B.2 Periodic report M2</td>
<td>Europeana DSI-4 B.2 Periodic report M2</td>
<td>Europeana DSI-4 B.2 Periodic report M2</td>
</tr>
<tr>
<td><strong>Banned Authors – who got on the Index Librorum Prohibitorum</strong></td>
<td>Literature</td>
<td>Blogpost</td>
<td>13/09/2018</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>------------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>The ‘Romance of the Rose’: A Medieval Guide to Love</strong></td>
<td>Manuscripts</td>
<td>Blogpost</td>
<td>20/09/2018</td>
</tr>
<tr>
<td><strong>GIF IT UP 2018 – create animated GIFs from openly licensed cultural heritage material</strong></td>
<td>Competition announcement</td>
<td>Blogpost</td>
<td>01/10/2018</td>
</tr>
<tr>
<td><strong>Autumn in Art</strong></td>
<td>Art</td>
<td>Gallery</td>
<td>24/09/2018</td>
</tr>
<tr>
<td><strong>WWI Propaganda Postcards</strong></td>
<td>Europeana 1914-1918</td>
<td>Gallery</td>
<td>11/10/2018</td>
</tr>
<tr>
<td><strong>Beetles and Butterflies - Nature of Turkestan in Drawings</strong></td>
<td>Europeana 1914-1918</td>
<td>Gallery</td>
<td>17/09/2018</td>
</tr>
<tr>
<td><strong>People on the Move: How Migration Has Change the World</strong></td>
<td>Migration</td>
<td>Exhibition</td>
<td>09/10/2018</td>
</tr>
</tbody>
</table>

**Requirement B.3. User feedback mechanism (EF)**

The platform offers a user feedback mechanism allowing visitors to directly leave comments on the website - every page on Europeana Collections and Europeana Pro has a feedback button. EF will report on the insights drawn from user contributions received via the feedback button in the C.2 User and usage reports (M5 and M10).

**Requirement B.4. Applications of third parties (EF)**

Applications developed by third parties are encouraged through free use of the Europeana APIs by commercial and non-commercial organisations, by researchers, creatives, developers and educational publishers. Data access for app development can also be via SPARQL Endpoint, OAI-PMH or Linked Data. Applications developed by third parties including usage metrics of third party applications, number and nature of queries served via third party applications, evolution in active third party applications, as well as measures taken and planned will reported on in the C.3 Content supply and reuse report (M10).

---

Requirement B.5. Data Exchange Agreement and licensing assistant (EF, KL)
EF manages the Data Exchange Agreement (DEA). EF and KL provide licensing assistance by providing standardised use of rights statements as well as interoperable (across member states and the wider world) machine readable mechanism for rights related information such as the Europeana Licensing Framework and Rightsstatements.org. These pieces of work are continually reviewed and updated (see Requirement A.2. Europeana Licensing Framework and Rightsstatements.org). As part of Europeana DSI-3, a new DEA was developed which will be implemented under Europeana DSI-4 with new data providers.

EF will report on patterns discovered with respect to licensing conditions and interoperability between licenses as well as measures taken and planned in the C.3 Content supply and reuse report (M10).

Requirement B.6. Content management system for editorial content (EF)
EF will maintain and improve the content management system for editorial content for internal (EF) use. Activities towards the development the content management system will be reported on in section Requirement B.2. Developments on Europeana Collections.

Developments on Europeana Pro
EF maintained Europeana Pro and updated the aggregator profiles on Europeana Pro. We developed a new narrative for Europeana Pro focusing the website on delivering a service to one primary audience, the CHIs. Currently, we are working on a new design for the website which will align with the design of the factsheet and that of Europeana Collections.

Requirement B.7. Multilingual capabilities (EF)
The user interface of Europeana Collections supports internationalisation and localisation. Following table lists the geographic distribution of users, the number of unique users and total sessions.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Unique Users</th>
<th>Total Sessions</th>
<th>Rank</th>
<th>Country</th>
<th>Unique Users</th>
<th>Total Sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Netherlands</td>
<td>62,264</td>
<td>71,542</td>
<td>11</td>
<td>Denmark</td>
<td>14,348</td>
<td>16,042</td>
</tr>
<tr>
<td>2</td>
<td>Spain</td>
<td>48,818</td>
<td>59,775</td>
<td>12</td>
<td>Hungary</td>
<td>13,147</td>
<td>15,126</td>
</tr>
<tr>
<td>3</td>
<td>Germany</td>
<td>43,400</td>
<td>50,405</td>
<td>13</td>
<td>Belgium</td>
<td>11,431</td>
<td>13,734</td>
</tr>
<tr>
<td>4</td>
<td>United States</td>
<td>42,822</td>
<td>49,945</td>
<td>14</td>
<td>Finland</td>
<td>8,938</td>
<td>9,932</td>
</tr>
</tbody>
</table>

27 For example: https://pro.europeana.eu/organisation/german-digital-library
28 Metrics from the period between 1 September and 24 October 2018.
29 Metrics exclude Europeana offices users, The Netherlands.
<table>
<thead>
<tr>
<th></th>
<th>Country</th>
<th></th>
<th></th>
<th></th>
<th>Country</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Italy</td>
<td>30,352</td>
<td>37,017</td>
<td>15</td>
<td>Bulgaria</td>
<td>7,486</td>
<td>8,657</td>
</tr>
<tr>
<td>6</td>
<td>France</td>
<td>24,283</td>
<td>30,423</td>
<td>16</td>
<td>Norway</td>
<td>7,395</td>
<td>8,104</td>
</tr>
<tr>
<td>7</td>
<td>Poland</td>
<td>23,132</td>
<td>28,438</td>
<td>17</td>
<td>Austria</td>
<td>6,700</td>
<td>7,870</td>
</tr>
<tr>
<td>8</td>
<td>United Kingdom</td>
<td>21,215</td>
<td>24,813</td>
<td>18</td>
<td>Canada</td>
<td>6,450</td>
<td>7,675</td>
</tr>
<tr>
<td>9</td>
<td>Sweden</td>
<td>20,607</td>
<td>22,916</td>
<td>19</td>
<td>Russia</td>
<td>6,256</td>
<td>8,172</td>
</tr>
<tr>
<td>10</td>
<td>Mexico</td>
<td>15,717</td>
<td>17,856</td>
<td>20</td>
<td>Brazil</td>
<td>6,082</td>
<td>7,513</td>
</tr>
</tbody>
</table>

In the first year of the contract, EF will investigate the technical basis for real time translation of dynamic content and deploying a client to function with the API of the machine translation service of the European Institutions (CEF.AT). Developments towards real-time translations will be reported in the A.1 Platform report (M10).

**Requirement B.8. Helpdesk (EF)**

EF will perform helpdesk activities for Europeana Collections users and data users (API-users) (see also Requirement B.3 [User feedback mechanisms](#)). Developments towards helpdesk activities will be reported on in the C.2 User and usage report (M5 and M10).

**Task 1.3. General conditions for delivery of the requirements**

Activities towards general conditions for delivery of the requirements will be reported on in the A.1 Platform report (M10) including the use of free and open source software and maintaining and further developing the platform infrastructure. Information towards hosting of the platform infrastructure including technical aspects on how to set-up, configure, operate and monitor the platform will be reported on in C.1 Technical documentation (M9).
Work package 2: Content supply

Work package 2 delivers the organisational and expertise knowledge needed to ingest the data into Europeana DSI. Europeana DSI-4 will support the content providers directly and assist them to prepare high-quality datasets for inclusion in the Europeana DSI platform. This will be done through training programmes, support for mappings, and by promoting the uptake of multilingual vocabularies and of Europeana frameworks and guidelines.

Task 2.1. Promote organisational and technical requirements for publication of cultural heritage data and the uptake of frameworks (EF, APEF, BL, CARARE, AthenaRC, MCA, eFashion, DIF, NISV, AIT-Graz, PhotoCons)

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.

In September/October the aggregating partners worked with a total of 37 different institutions\(^{30}\) from 18 countries eventually affecting more than 3 million records in Europeana Collections. Support activities include assistance in preparing data, working on IPR related questions, advise on metadata mapping (incl XSLT transformations), advise on use of vocabularies, processing/ingesting of data, etc.

CARARE reached out to all members of the CARARE association to invite them to inform the new “Archaeology” collection planned by Europeana, and to raise their awareness of the content quality guidelines and to offer support.

In September, BL (United Kingdom) and Photocons (Belgium) organised workshops to promote the organisational and technical requirements for publication of cultural heritage data and the uptake of frameworks. More workshops are in preparation including workshops organised by EF and national aggregators.

In September/October EF and aggregating partners attended five outreach events to promote the Europeana initiative. EF and aggregating partners also attended and contributed to the Europeana Aggregators’ Forum meeting (23-24 Oct 2018, Berlin) (outcomes will be reported on in the upcoming B.2 deliverable, M4). Details about past and future events are stated in the sheet workshops and events\(^{31}\).

---

\(^{30}\) Overview of data quality and content supply activities: https://docs.google.com/spreadsheets/d/1WAEW1RJCdmfdgiR5D9QLIXlbbWfFQ5ooQpdx0mi-hDyQ/edit#gid=1158063986

\(^{31}\) Overview of data quality and content supply activities → Tab: Workshops and events: https://docs.google.com/spreadsheets/d/1WAEW1RJCdmfdgiR5D9QLIXlbbWfFQ5ooQpdx0mi-hDyQ/edit#gid=1613890381
Technical support activities

A specific achievement of AthenaRC (for CARARE) under this task is the development of a new language identification service in the backend of MORe for allowing the user to manually add languages in specific elements of each record. In addition, AthenaRC fixed an error in the OAI-PMH List Identifiers response and re-generated all related OAI-PMH information.

More technical support activities are detailed in task 2.3. Ensure that mappings between metadata schema are maintained and task 2.4. Promote the use of controlled vocabularies and terms from multilingual thesauri.

Task 2.2. Develop and maintain interaction with potential user groups

EF will report on interactions with potential user groups in the three focused markets education, academic research and creative industries in Work Package 3: Fostering reuse of digital cultural heritage resources and in the D.1 Communication and dissemination deliverables (M1 and M9).

Task 2.3. Ensure that mappings between metadata schema are maintained

Maintenance and improvements of mappings are an important element to achieve data quality improvements as specified in the data quality work plans.

AIT Graz (OpenUp!) adapted the existing mappings for the automated transformation routines. The transformation process was updated in order to enable incremental harvesting and improve performance. To make the harvesting process even more manageable, large sets (more than 500k records) are distributed across several batches. A split of larger XML files in smaller chunks allowed AIT Graz to speed up the transformation process by more than 50%.

APEF is improving the mapping from apeEAD to EDM. Main objectives are better extraction of digital objects from an archival inventory and improved population of the various temporal and language metadata elements.

CARARE is working on Version 3.0 of the CARARE metadata schema, to increase the support for Linked Open Data and developers. The mapping of the CARARE-schema to EDM is under review as part of the process of developing the new version. The mappings of CARARE 2.0.5 datasets (produced during the 3D ICONS project) to the latest version of EDM were reviewed, and a new mapping was prepared.

DIF (EFG) evaluated existing mappings and created a list of mappings that need to be updated in order to allow for future data updates. Mapping revisions have to be carried out regularly in order to account for changes in partners' local database systems and for
changing data provision requirements by Europeana. Also, the EFG-EDM mapping was evaluated and necessary changes documented.

eFashion worked with NTUA to make sure the mapping from EDM-fp to EDM is correct. MCA (MUSEU) worked with NTUA on the ESE to EDM transition of the data provided under Athena and Linked Heritage.

Task 2.4. Promote the use of controlled vocabularies and terms from multilingual thesauri

Aggregating partners promoted the use of controlled vocabularies as part of their outreach actions or via helpdesk activities. More specific achievements under this task were reported by BL (Europeana Sounds) who did a conversion of text-based instrument terms to MIMO terms and applied it to BL datasets. BL is now investigating to apply this conversion also to other data providers. CARARE continues to promote the use of concepts from the Getty's AAT thesaurus to providers of archaeology content to Europeana (this includes content being provided via CARARE, LoCloud, 3D ICONS and also national aggregators). eFashion published to Getty (that accepted the submission) more than 2,500 translations of AAT terms (in six languages) used in the fashion thesaurus, making the efforts of fashion partners that contributed those translations publicly available as linked open data, as part of the Getty AAT thesaurus. Photocons is making progress with the improvement and enlargement of the current Photography vocabulary (particularly for the list of terms about techniques and photographic properties) and its implementation in MINT for an automated enrichment of the current datasets.
Work Package 3: Fostering reuse of digital cultural heritage resources

Work package 3 fosters reuse of digital cultural heritage by community engagement as well as markets and audiences outreach. The outreach plans to the re-user communities are presented in the D.1 Communication and dissemination plans (M1 and M9).

Task 3.1 Engage with the communities interested in reuse

EF builds up market-specific communities to bring together various stakeholders on the three reuser markets education, academic research and creative industries. EF serves its reuser communities via dedicated online spaces on Europeana Pro (creative industries\(^{32}\), education\(^{33}\) and academic research\(^{34}\)). For even stronger engagement, we work with selected market partners on cross-promotion and joint community outreach campaigns.

Subtask 3.1.1. Further develop Europeana Pro, for the continuous engagement of communities (EF)

EF will continue to maintain and develop Europeana Pro as a main element of the Europeana DSI (see Requirement B.6. - \[Developments on Europeana Pro\].)

Subtask 1.3.2. Engage with educational communities (EF, EUN, EUROCLIO)

EF, EUN and EUROCLIO engage with teachers in secondary education to raise their awareness about the educational value of digital cultural data and to increase the use of digital learning resources with Europeana content in their classrooms and other educational projects.

Following communication and dissemination activities were undertaken in the reporting period:

<table>
<thead>
<tr>
<th>Partner</th>
<th>Name of event</th>
<th>Activity</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF &amp; EUN &amp; EUROCLIO</td>
<td>Annual eTwinning Conference, “eTwinning and our Heritage: Where the past meets the future.”</td>
<td>Workshops “Teaching with digital cultural heritage” (EF) “Making Historical thinking explicit to students using online tools” (EUROCLIO) “STEM and cultural heritage” (EUN)</td>
<td>Warsaw, Poland</td>
<td>25-27/10/2018</td>
</tr>
</tbody>
</table>

\(^{32}\) [https://pro.europeana.eu/post/europeana-labs]
\(^{33}\) [https://pro.europeana.eu/what-we-do/education]
\(^{34}\) [https://pro.europeana.eu/what-we-do/academic-research]
During this reporting period, the Europeana Education LinkedIn group has increased by 41 members (total 373 members, or 12.3% increase in comparison to the previous reporting period).

**European Schoolnet**

EUN will coordinate a network of Europeana teacher ambassadors to deliver learning scenarios integrating Europeana resource, update and rerun the Europeana MOOC, and create and maintain a dedicated Europeana teacher blog space.

**Organise a network of Europeana Teacher Ambassadors**

Working with its supporting Education Ministries, EUN published an open call to identify 12 Europeana Teacher Ambassadors. Over 110 teachers from 21 countries answered. In order to ensure the widest geographical spread possible, the 12 countries from where the ambassadors will be selected will be Croatia, Finland, France, Greece, Hungary, Italy, Malta, Poland, Portugal, Romania, Spain and Turkey. The selection is currently being validated by the respective Ministries of Education.

35 https://summit.all-digital.org/programme/
36 https://ec.europa.eu/epale/en/node/82838
39 http://www.eun.org/
40 http://fcl.eun.org/web/guest/news/details?articleId=3133047
The Ambassadors will support the project by leading the development of Europeana learning scenarios as well as the promotion and adoption of these resources at national level. The selected Ambassadors will be invited to the first Future Classroom Lab workshop, which will be held on Friday, 30 November - Saturday, 1 December 2018 in Brussels. During this first workshop, the 12 Europeana Teacher Ambassadors will prepare the work for the year and finalise 12 new Europeana learning scenarios, which later will be featured in the rerun of the “Europeana in your classroom: building 21st-century competences with digital cultural heritage” MOOC (Massive Open Online Course).

**Update and rerun the Europeana MOOC**

EUN and EF agreed on steps to update the “Europeana in your classroom: building 21st-century competencies with digital cultural heritage” MOOC. The update will be undertaken by EUN during the months of October and November 2018.

The course will start on 14 January 2018 and run until the end of February. Additionally, the MOOC will be translated and run in two additional languages in 2019. EUN, together with its Ministries of Education, will agree on the languages of the translated MOOCs in November and December 2018. These MOOCs will feed both the creation of learning scenarios and promotion of the use of Europeana resources in classes. We expect a minimum of 50 new learning scenarios with Europeana resources per language to come out of each MOOC (in total about 150 per year).

**"Teach with Europeana" blog**

EUN started to discuss the content of the "Teach with Europeana" blog, which will be hosted at [http://teachwitheuropeana.eun.org](http://teachwitheuropeana.eun.org). The blog will feature the following sections:

1. A catalogue of new learning scenarios created with Europeana resources by the Europeana User Group.
2. Blog posts with stories of implementations from teachers using their own scenarios or those of other colleagues in classes.

**EUROCLIO**

EUROCLIO continues 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.

**Source collections & eLearning activities**

EUROCLIO worked on a shortlist of possible subjects for the future source collections and eLearning Activities which can be linked to the themes of the first 12 source collections (European Renaisances, Industrial Revolutions, and Napoleon and his times). In addition,
EUROCLIO gathered ideas for the sources collections, via the EUROCLIO Facebook Community. As a next step, EUROCLIO will work with Europeana (specifically, the API team) on how to best search the Europeana Collections and which content providers are most relevant for the selected topics.

Historiana website
For the search engine optimisation on Historiana, Webtic installed a plugin that enables to see which search words people used who ended up on Historiana. This data will be used later to ensure that these type of search words are added.

eTwinning
EF will develop further the strong relationship with eTwinning, the EC-supported community of 600,000+ teachers and 190,000+ schools in Europe.

EF participated in the eTwinning Weeks42 between 1 and 25 October 2018 which invited teachers from the eTwinning network to develop and submit their projects on cultural heritage. Our contribution included:

- Sharing Europeana’s online guide for educators
- Webinar introducing Europeana resources for educators which was attended by 235 educators across Europe (Net Promoter Score of 6443)
- Quiz for eTwinners with Europeana content which aimed to test educators’ knowledge of Europe’s cultural heritage and help them use it in their classrooms
- Communication and dissemination activities on Europeana education-related channels and @EuropeanaEU Twitter

EF also conducted a workshop on ‘Teaching with digital cultural heritage’ during the eTwinning annual conference on 25-27 October in Warsaw. The workshop was attended by 22 teachers (full room capacity) from various European countries who gave an NPS of 37. The conference also marked the release of the eTwinning annual book which featured a dedicated contribution on Europeana and its resources for education.

Subtask 3.1.3. Engage with creative industries communities
EF engages with creative audiences via Europeana Labs, newsletter and Twitter as well as community outreach campaigns with other creative industries partner channels (such as THE ARTS+ Festival) (see also subtask 3.2.3. Develop and maintain partnerships with the Creative Industries market). The annual Europeana Challenges also play an important role for growing the Europeana Labs community (see task 3.3 Facilitate the development of new products and services by reuser communities).

43 A NPS that is positive (e.g. higher than zero) is felt to be good while an NPS of +50 is excellent.
During this reporting period, we published five blogs (e.g. CCI Manifesto at THE ARTS+\textsuperscript{44}) related to the creative industries on topics ranging from challenge winners releases, partner labs developments and policy initiatives. We published two Labs newsletters which reached 549 subscribers and registered a 5,5% increase of the opening rate (from 33,7% to 39,2%). Our Twitter following continued growing, with a slight increase of ca. 2% to 1198 members.

**Subtask 3.1.4. Engage with academic research communities**

During the reporting period, three blogs (e.g. Launch of the third Research Grants call, September 2018) related to research were published on Europeana Pro. The Europeana Research Twitter account registered over 180 new followers and, respectively, grew up by 8,2%. The dedicated Research Community page was redesigned to reflect better the relation of Europeana Network Association and the respective member benefits.

Europeana Research reached out to researcher audiences at several events.

<table>
<thead>
<tr>
<th>Partner</th>
<th>Name of event</th>
<th>Activity</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EF</td>
<td>International Conference on the Re-Use of Images\textsuperscript{45}</td>
<td>Presentation about Europeana Research resources and activities</td>
<td>Paris, France</td>
<td>22-23/10/2018</td>
</tr>
<tr>
<td>EF</td>
<td>Digital Humanities Foresight\textsuperscript{46} by the PARTHENOS project, as part of the CLARIN annual conference</td>
<td>Participation in a panel</td>
<td>Pisa, Italy</td>
<td>10/10/2018</td>
</tr>
<tr>
<td>CLARIN &amp; EF</td>
<td>CLARIN annual conference\textsuperscript{47}</td>
<td>Presentation at Bazaar</td>
<td>Pisa, Italy</td>
<td>08-10/10/2018</td>
</tr>
<tr>
<td>EF</td>
<td>8th International Conference of Art Libraries\textsuperscript{48}</td>
<td>Networking</td>
<td>Amsterdam, The Netherlands</td>
<td>04-05/10/2018</td>
</tr>
<tr>
<td>EF</td>
<td>“Building Library Labs”\textsuperscript{49} event</td>
<td>Session on revenue models for labs and initiated conversations about potential partnerships with several libraries, including</td>
<td>London, UK</td>
<td>13-14/09/2018</td>
</tr>
</tbody>
</table>

\textsuperscript{44} https://pro.europeana.eu/post/europeana-research-grants-programme-2018-submit-your-project
\textsuperscript{46} https://www.clarin.eu/sites/default/files/T3.4%20Foresight%20workshop%20at%20CLARIN%20event_0.pdf
\textsuperscript{48} https://www.rijksmuseum.nl/en/whats-on/symposiums/8th-international-conference-of-art-libraries
\textsuperscript{49} https://pro.europeana.eu/event/building-library-labs
Task 3.2. Markets and audiences outreach

EF aims to increase the visibility and reuse of Europeana Collections by professionals working in our target markets of education, academic research and the creative industries.

Subtask 3.2.1. Develop and maintain partnerships with the educational market

EF aims to embed relevant Europeana resources in various educational systems and increase awareness of Europeana as a resource for education. For this purpose, EF works closely with three types of partners: governmental (Ministries of Education), commercial and noncommercial educational partners. EUN and EUROCLIO are our key noncommercial partners (see subtask 3.1.2 Engage with educational communities).

In October, our Italian partner DiCultHer⁵⁰ (The Digital Cultural Heritage, Arts and Humanities School) presented their activities 2018-2019 to engage youth with cultural heritage at the Italian Ministry of Education, University and Research (MIUR) in Rome⁵¹. The main focus was on #HackCultura2019, a collaboration between the Italian ministries of education and culture and other Italian organisations⁵² as well as EF which aims at the development of projects with cultural heritage content in Italian schools. The initiative consists of six “challenges” (or activity strands), one of them led by Europeana Education - #imparaconeuropeana. #HackCultura2019 aims to reach 3,500 schools and impact 250,000 students. At the meeting, Europeana presented its resources for learning and confirmed its interest in giving webinars with more detailed information to Italian educators and students throughout the challenge duration.

Subtask 3.2.2. Develop and maintain partnerships with the academic research market (EF, CLARIN)

EF and CLARIN continued to work together with selected partners to connect the cultural sector with digital humanities and research infrastructures to make cultural heritage data easily accessible to researchers.

EF and CLARIN worked on a more detailed plan for activities in the first project year. Key points are:

---

⁵⁰ https://www.diculther.it/
⁵¹ https://www.diculther.it/blog/2018/10/05/miur-9-ottobre/
- A list with suitable Europeana datasets for further integration into CLARIN's Virtual Language Observatory\(^\text{53}\) (VLO) and a list of possible topics for future datasets by end 2018. A timeline for the integration of the selected datasets will be created after the datasets approval.
- Case study for the current integration of Europeana data in the VLO early 2019
- Setup of regular usage stats reporting on data on CLARIN's platform by end 2018
- Joint communication and dissemination activities

**Subtask 3.2.3. Develop and maintain partnerships with the Creative Industries market (EF)**

EF develops partnerships with intermediaries e.g. high profile organisations, networks and initiatives in the creative industry market which can help us reach their communities fast and effectively (for example, THE ARTS+ Festival).

In October, for the third consecutive year, Europeana partnered with the festival for the creative and cultural industries THE ARTS+\(^\text{54}\) at the Frankfurt Book Fair. EF's Executive Director Harry Verwayen was one of the panelists on the micro-conference “Cultural trailblazers” focusing on the changing role of the cultural heritage institutions. In addition, we took part in the parallel Innovation Summit\(^\text{55}\) which aimed to help build an ecosystem for adequate innovation support frameworks in Europe, but also at national scale. 14 partners – amongst them EF, the European Creative Business Network\(^\text{56}\) and Fitzcarraldo Foundation\(^\text{57}\) as strategic partners - and 100 international representatives from business, culture, technology and politics discussed ‘The bigger picture: How can the cultural and creative sectors bridge the innovation gap?’ The event resulted in a European Manifesto\(^\text{58}\) for supporting innovation for cultural and creative sectors which was presented at a special press conference on 11 October and promoted widely on Europeana and other channels.

EF highly promoted its participation with a dedicated outreach campaign on all relevant Europeana channels and several THE ARTS+ channels. EF registered over 29,000 impressions and more than 300 engagements on Twitter (@EuropeanaEU and @EuropeanaLabs) before and during the event. After the event we published a news article\(^\text{59}\) on Europeana Pro.

\(^{53}\) [https://www.clarin.eu/content/virtual-language-observatory-vlo](https://www.clarin.eu/content/virtual-language-observatory-vlo)

\(^{54}\) [https://theartsplus.com/](https://theartsplus.com/)


\(^{56}\) [http://ecbnetwork.eu/](http://ecbnetwork.eu/)

\(^{57}\) [http://www.fitzcarraldo.it/en/](http://www.fitzcarraldo.it/en/)


Task 3.3. Facilitate the development of new products and services by reuser communities

For all re-user markets, we support the development of new products, services and creations with cultural data by providing easy access to relevant resources: high-quality reusable cultural heritage material, free APIs, access to sum seed funding and examples for inspiration.

Between 5 September and 15 October, EF ran the third call\(^6\) for submissions within the Research Grants Programme which aimed at supporting early-career scholars in the field of the Humanities. The projects must focus on the First World War, use openly licensed Europeana content, included but not limited to the Europeana 1914-1918 collection, and apply digital tools and digital humanities methods. The call was widely promoted in a communication campaign on the Europeana channels (including Europeana 1914-1918 and Europeana research channels) and personal emails to over 100 academics, institutions or networks interested in the topic of the First World War. The announcement of this programme was the most popular news piece of the reporting period with approximately 8,000 page views. This demonstrates the appetite within the digital humanities for both funding, and for research projects that incorporate digital cultural heritage. We received 22 applications, with most of the proposed host institutions based in Italy (7), Spain (6), France (3). The applications will be reviewed and evaluated by the Europeana Research Advisory Board\(^7\). The winners will be notified by 16 November and formally announced at a dedicated WWI commemoration event on 27-28 November at the House of European History in Brussels.

Task 3.4. Work with major platforms and development of platform functionalities to increase use of Europeana content communities

EF places culture right where people are most likely to make use of it, on social media and third-party platforms such as Wikimedia, reaching them in their online activities and via their communities of interest.

The 2018 and fifth edition of GIFITUP was launched on 1 October, the closing date is 31 October 2018. EF aims to increase its reach to new and wider audiences and to promote the engagement with Europeana content. EF collaborated with international partners including DPLA (Digital Public Library of America), Digital NZ (New Zealand), Trove (National Library of Australia), and the leading online GIF site GIPHY\(^8\) to run and promote the competition. For 2018 an additional prize category has been created for WW1 content to complement the Europeana 1914-1918 Centenary Tour held as part of the European Year


\(^7\) [https://pro.europeana.eu/page/research-advisory-board](https://pro.europeana.eu/page/research-advisory-board)

\(^8\) [https://giphy.com/gifitup](https://giphy.com/gifitup)
of Cultural Heritage. The competition was promoted on various Europeana channels\(^{63}\) (to date over 10 million impressions) and online tutorials were provided. To date the campaign generated over 10 million impressions. Examples of international media coverage generated include publications in France\(^{64}\), Spain\(^{65}\) and even Russia\(^{66}\). To date 125 entries were received with a week to the closing date.

In October 2018, EF collaborated with Netwerk Digitaal Erfgoed\(^{67}\) (NDE) and Wikimedia Netherlands\(^{68}\) (WMNL) in a workshop centered around Dutch cultural heritage institutions, achieving the goals of:

- Strengthening the relationship between Europeana, NDE and WMNL
- Raising awareness about the power and possibilities of Wikidata to Dutch CHIs
- Show the connections between Wikidata and Europeana - what was done with Wikidata at Europeana and what is planned in future
- Provide CHIs with practical tools and insights so they can start using structured and linked data in their collections
- Create more visibility for Wikidata and Europeana to Dutch CHIs of all sizes

The workshop was fully booked, a total of 28 representatives from Dutch heritage institutions participated in the workshop and a survey was sent out to the participants to evaluate the workshop. Results will follow in next reporting period.


\(^{64}\) https://www.ladn.eu/mondes-creatifs/gifitup-2018-participer-concours-gif/\(^{65}\)


\(^{67}\) https://www.netwerkdigitaal erfgoed.nl/\(^{68}\)

\(^{68}\) https://www.wikimedia.nl/nieuwsbericht/wikidata-workshop
Work Package 4: Communication and Dissemination

Under work package 4 EF will undertake communications and dissemination activities to raise awareness of and promote Europeana and its services in all target markets (cultural heritage institutions and aggregators, end-users (European Citizens), and re-users (education, academic research and creative industries). We also run an annual campaign showcasing the value of digital cultural heritage to a variety of audiences.

Task 4.1. Communication and dissemination of Europeana

The communication and dissemination strategy aims to increase new visits and re-visits to the Europeana Platform and promotes Europeana on high-impact channels, where the users already are. Communication activities function on channels that Europeana owns (e.g. Europeana Collections, Europeana Pro, Transcribathon.eu), through for example the blogs and newsletters, as well as, external channels, such as social media and partnerships with with third party platforms. Specific communication and dissemination activities are reported on as part of the tasks/activities performed in the individual work packages.

In September, Europeana Collections received about 374,300 visits per month. Users were also engaged with Europeana products with 12,4% returning visitors to Europeana Collections, around 26,200 downloads of items as well as about 31,600 click-throughs to partners websites on item pages.

Traffic on Europeana end-user products

EF continues 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 thematic collections and to support pan-European campaigns. In September, we achieved about 12
million impressions on third parties (Wikimedia) and about 7.2 million impressions on social media (Facebook, Twitter, Pinterest, GIPHY)

Europeana Pro

News posts commissioned by themes continue to serve Europeana Pro well. A series on the importance and relevance today of ‘digital transformation’  in the cultural heritage sector continued with an interview with Pier Luigi Sacco 70, with almost 1,000 page views. While the GLAM-tech series 71 continued with a successful post about building library labs 72 - again, almost 1,000 views.

Task 4.2. Run a series of activities showcasing the value of digital cultural heritage to a variety of audiences

As part of the EYCH 2018, the Europeana Migration campaign and the 1914-18 Centenary Tour campaigns are both ongoing. Both campaigns will finish November/December 2018.

Europeana Migration

EF continued to organise participatory events to promote the value of digital cultural heritage to European citizens. In September/October, five Collection days were organised in cooperation with heritage institutions throughout Europe.

<table>
<thead>
<tr>
<th>Date/Institution(s)/Location</th>
<th>Outcomes/highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>21/10/2018 and 26-27/10/2018 Luxembourg Centre de documentation sur les migrations humaines (CDMH), Centre Culturel ‘An der Eech’, Luxembourg, ‘Gares &amp; Usines’, Dudelange</td>
<td>50 people participated and shared 15 stories (event 21 October) A representative from CDMH was interviewed by several national Luxembourg media, e.g. Tageblatt 73 (in German). The event on 21 October took place at the 13th National Genealogy Day.</td>
</tr>
<tr>
<td>19-20/10/2018 Belgrade, Serbia National Library of Serbia</td>
<td>40 people participated and shared 15 stories Family photographs relating to ‘guest worker’ migration collected by students of Belgrade Metropolitan University were digitally displayed. These photographs will be ingested to Europeana. A panel discussion was held involving 5 authors and</td>
</tr>
</tbody>
</table>

---

69 https://pro.europeana.eu/tags/digital-transformation
71 https://pro.europeana.eu/tags/glamb-tech
73 http://www.tageblatt.lu/headlines/familienforschung-wenn-tote-wieder-lebendig-werden/
poets (Dragoslav Dedović, Kajoko Jamasaki, Žarko Radaković, Dana Todorović, Stevan Tontić) discussing their experiences of migration to and from Serbia.

A representative of National Library of Serbia spoke on Uhvati dan radio show on Radio Belgrade 1 discussing Europeana, Europeana Migration and National Library of Serbia’s involvement.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Outcomes/highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/10/2018</td>
<td>Pisa, Italy</td>
<td>60 people participated and shared 15 stories</td>
</tr>
<tr>
<td></td>
<td>Museo della Grafica, Pisa.</td>
<td>The collection day marked the opening of an exhibition ‘Thousands are sailing’ at the museum which exemplifies the theme of migration through 20 portraits which have been sourced from Europeana Collections.</td>
</tr>
<tr>
<td>12/09/2018</td>
<td>Zagreb, Croatia</td>
<td>5 people shared their stories</td>
</tr>
<tr>
<td></td>
<td>Institute for Migration and</td>
<td>A representative of EF along with a representative of Croatian Ministry of Culture was interviewed on Good Morning Croatia (Dobro Jutro Hrvatska TV show) speaking about digital transformation, digitisation projects, Europeana and the upcoming collection day.</td>
</tr>
<tr>
<td></td>
<td>Ethnic Studies in cooperation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with Croatian Heritage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foundation, Zagreb Croatia,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with partners Croatian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ministry of Culture, Croatian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio Television</td>
<td></td>
</tr>
</tbody>
</table>

1914-18 Centenary Tour campaign
F&F and EF continued to organise participatory events to promote the value of digital cultural heritage to European citizens. In September/October, three Transcribathons (either online or physical) and one Collection day (either online or physical) were organised in cooperation with heritage institutions throughout Europe.

<table>
<thead>
<tr>
<th>Date/Institution(s)/Location</th>
<th>Outcomes/highlights</th>
</tr>
</thead>
<tbody>
<tr>
<td>08-12/10/2018</td>
<td>637 documents transcribed</td>
</tr>
<tr>
<td>Rome, Italy</td>
<td>During the four-day competition 30 students from various faculties from Roma University competed in 6 teams in the</td>
</tr>
<tr>
<td>Biblioteca Nazionale Centrale</td>
<td></td>
</tr>
</tbody>
</table>

76 [https://magazin.hrt.hr/460844/europena-prica-o-europi-i-ljudima-koji-ovdje-zive](https://magazin.hrt.hr/460844/europena-prica-o-europi-i-ljudima-koji-ovdje-zive)
### di Roma and ICCU

Transcription and annotation of Italian documents from the First World War.

### 01/10/2018 until 11/11/2018 Online

**Centenary Run**

A six-week long transcription marathon, showcasing stories from around the time of the armistice. Everyone who transcribes and annotates online during the Centenary Run automatically takes part in the competition and has the possibility to be crowned Centenary Champion and win prizes.

### 25-28/09/2018

**Münster, Germany**

**52 Biennial Meeting of German Historians, HistorikerTag Münster 2018**

35 documents transcribed

Professional historians, students and history enthusiasts worked in six teams to transcribe and annotate letters, diaries and other digitised documents from Europeana 1914-1918.

### 15/09/2018

**Budapest, Hungary**

National Archives of Hungary, Fortepan online photo archives[^81], Nagy Háború Blog[^82] (Hungarian Great War Blog)

26 stories contributed relating to app. 1000 items

During the event a round table session took place highlighting archival materials kept by the National Archives and discussing possibilities of publishing them on various platforms.

[^77]: [http://www.bncrm.beniculturali.it/](http://www.bncrm.beniculturali.it/)
[^78]: [https://www.diculther.it/europeana-iccu/transcribathon/](https://www.diculther.it/europeana-iccu/transcribathon/)
[^81]: [http://fortepan.hu/?lang=en](http://fortepan.hu/?lang=en)
[^82]: [https://www.facebook.com/NagyHaboruBlog](https://www.facebook.com/NagyHaboruBlog)
Work Package 5: Animate and further enlarge the Europeana Network Association

The Europeana Network Association (ENA) consists of more than 2,000 members from across Europe who give time and expertise voluntarily to achieve the Europeana strategy, and to strengthen the role of cultural heritage in our society.

Task 5.1. Support the ENA in attracting citizens, professionals and institutions with an interest in digital cultural heritage

Enlargement of the ENA by attracting citizens, professionals and institutions, while keeping it fully engaged and active, continues to be our main objective. The current ENA membership stands at 206483.

Annual General Meeting (AGM)

We are in the final stage of organizing the AGM 2018 on 5 December at the Technisches Museum Wien in Vienna, Austria. Interest in the event is apparent in the number of views of the announcement84 (1,600 views) - while communication around the AGM resulted in all early bird tickets selling out in record time. The programme, which will be focusing on the six ENA communities and celebration of the 10th anniversary of Europeana, was finalized and will be published shortly. So far, 165 People have registered for the event.

Members Council and Management board

EF started the 2018 Members Council elections campaign85, inviting the Network members to come forward or to step up again as to fill at least 28 open seats by submitting their candidacy online86 before 13 November 2018. The campaign will last until the start of the elections on 5 December.

The secretariat organised two virtual Management Board meetings (September, October) which aimed at refining the rules of the current ENA governance structure. Minutes and actions of the meetings are regularly updated following their review on Europeana Pro page87.

---

83 https://pro.europeana.eu/network-association/network-members
86 https://app.smartsheet.com/b/form/fdebc3642961439a8547d9c7c880146f
Task forces and Working groups
EF supports the work of the Task Forces and Working Groups. Six Working Groups are currently running and are involved in ongoing activities: Library, #AllezCulture, Data Quality, Copyright, 2018 Governance WG, and 2018 AGM WG.

Four Task Forces are currently running: Europeana Resource Citation and Object Identity Standardization, Creation and Governance of EDM mappings, profiles and extensions, Europeana Migration and Impact Assessment no.2. The approval process of the task force proposals and overall terms of reference were revised in light of having the new communities in place.

Task 5.2. ENA Secretariat (EF)
EF reports on activities of the ENA Secretariat related to the memberships, meetings and events, elections to the Members Council, and Europeana Network Association related communication under task 5.1. and task 5.3. EF will report on Europeana Network communities under task 5.4. and activities related to EU presidency events under task 5.5.

Task 5.3. Publication services for the ENA
EF engaged with ENA members through Europeana Pro blogs (e.g. launch of the 2018 Members Council elections campaign, September 2018) and the September’s newsletter referred to as monthly Network Update (1050 subscribers). The blogs and newsletters are relayed through various communication channels such as LinkedIn, Twitter and Facebook.

We also managed the Europeana LinkedIn Group (4105 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 Europeana Foundation.

Task 5.4. Europeana Network Communities
EF coordinated and fostered activities of the ENA communities, where members come together to promote exchange of knowledge, experiences, and best practices around

---

88 https://pro.europeana.eu/network-association/working-groups
89 https://pro.europeana.eu/network-association/task-forces
90 https://pro.europeana.eu/blog
92 https://us3.campaign-archive.com/?u=ad318b7566f97ecc895e014e&id=d5c132235a
93 https://pro.europeana.eu/network-association/network-members
94 https://www.linkedin.com/groups?gid=134927&trk=vsrp_groups_res_name&trkInfo=VSRPsearchId%3A1260728031426260127839%2CSVRPtargetId%3A134927%2CSVRPcmpt%3Aprimary
specific topics of common interest. Topics are related to technology, research and development, as well as education, copyright, impact, and outreach campaigns.

There are currently six active Europeana Network communities\(^95\): Europeana Tech, Europeana Impact, Europeana Copyright, Europeana Research, Europeana Education, and Europeana Communicators group.

The Secretariat together with the ENA Management Board established the rules and functional terms of reference for the communities. They will be reviewed and formally approved by the Members Council in December 2018.

The Members Council coordination group for the EuropeanaTech community worked on a specific set of terms and goals\(^96\). Chairs, co-chairs and community managers were designated. It was also agreed that an activity on 3D will be among the first efforts launched by the group.

Europeana Communicators group introduced their community with the post ‘A call for cultural heritage communicators’\(^97\) (800 views).

**Task 5.5 Europeana EU presidency events to connect to member states**

EF attended the ‘Challenging (the) Content Conference’\(^98\) in Vienna in October 2018, organized under Austrian Presidency. The event initiated a debate about key challenges for the European cultural, media and creative sectors in the digital age. Harry Verwayen (Executive Director of EF) took part in the panel discussion on ‘Successful synergies in the cultural, media and creative industries at the EU level’ to speak about Europeana and its vast network; how the sector can collaborate through Europeana; and the role of Europeana to connect the sector for common solutions to main challenges, alliances and innovation.

---

95 [https://pro.europeana.eu/network-association/special-interest-groups](https://pro.europeana.eu/network-association/special-interest-groups)
96 [https://docs.google.com/document/d/12kh1xiqUM6C6pS1sqZibZDZ3Dcpm6r14xfZCHQOD2i4/edit](https://docs.google.com/document/d/12kh1xiqUM6C6pS1sqZibZDZ3Dcpm6r14xfZCHQOD2i4/edit)
Work Package 6: Studying the impact of digitisation and reuse of cultural heritage

Work package 6 contributes to the study of 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

The work on digitisation and reuse of cultural heritage is expected to be based on ENUMERATE surveys, the available statistical data and the digital heritage indicators that ENUMERATE developed. They will be evaluated to see if they offer sufficient intelligence to support conclusions about the reuse of digital cultural content in Europe.

DEN represents the ENUMERATE thematic network to improve the quality and usages of intelligence about digitisation within the cultural sector. As such DEN, with the help of the network, will focus on improving the observatory and its interpretation layer of indicators, encouraging the reuse of available statistics, e.g. in national reports, and gathering statistics from other resources.

EF and DEN will report outcomes of the research on statistics on digitisation of cultural heritage in Europe in the deliverables D.2, to be delivered in year two of the contract (M14).

Task 6.2. Study on the cost and funding (per MS) of digitisation of cultural heritage

Costs of digitisation were one of the four themes of the ENUMERATE framework. Statistical data on costs and their development over time are available as a result of four core surveys (2012-2017), including funding, and used to indicate the economics behind digitisation of cultural collections in Europe. DEN will use its network of national coordinators to combine available intelligence with other information sources like national funding programs to improve knowledge on costs and funding sources of digitisation. Insights on the costs and funding of digitisation are expected for the second year of the contract (M20).

Task 6.3. Develop a report on 10 cases on the impact of opening up high quality cultural heritage in terms of reuse and economic benefits

Impact Framework

The impact framework consists of various tools (Europeana Impact Playbook, community) that enable heritage institutions to assess the impact of their activities. EF further develops the impact framework based on findings gathered via case studies. Main developments will be reported on in the D.2 deliverables, to be delivered in year two of the contract (M14).
Reporting on 10 cases of impact

To bring more depth to the analysis of the statistics of ENUMERATE, DEN and EF will select ten examples or case studies demonstrating economic impact. Outcomes of these work are expected for the second year of the contract (M22).

Task 6.4. Cost-benefit analysis

The activity has not started while outcomes are expected for the second year of the contract (M24).
Work Package 7: Governance

The objectives of this work package 7 is to report to the DCHE/expert group 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.

Task 7.1. Report to the Advisory Committee
EF, as the coordinator of the Consortium, will report to the DCHE/expert group. This activity has not started.

Task 7.2. Re-prioritise and re-assign resources based on the received advice
EF will report on the re-prioritisation and reassignment of resources based on feedback received by DCHE/expert group. This activity has not started.

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

Since this contract is performed by the current operator of the Europeana DSI, no phasing-in period is required (task 8.1). EF will report to the European Commission on assets and liabilities related to Europeana DSI (task 8.4., 8.5.) and to test phasing-out and transfer processes to a successor supplier (task 8.2., 8.3.) in the deliverables E.1 Transfer of assets and liabilities reports (M1 and M10), E.2 Transfer process report (M1 and M10), and E.3 Employed staff reports (M1, M6 and M12).
Work Package 9: Project and Programme Management

The objectives work package 9 are to provide high-quality project and programme management for Europeana DSI-4 and to manage good relations with Europeana DSI Generic Services projects.

Task 9.1. Project management of Europeana DSI-4
EF coordinates Europeana DSI-4 as described in the implementation plan.

The Europeana DSI-4 kick-off meeting took place in Hilversum, The Netherlands on 27-28 October 2018. During a 1½ days meeting the consortium partners got familiar with the aims and objectives of Europeana DSI-4 and collaborated in several workshops and activities. In the main workshop the consortium took a closer look at the evaluation report of Europeana from the Commission (COM 2018, 612 final99) and how the insights of the report may be implemented in the project. A full report will be delivered in November 2018. The whole consortium was presented at the meeting, in total around 50 participants.

Task 9.2. Relations with Europeana DSI Generic Services projects
EF maintains relations with the Europeana DSI Generic services projects and facilitates the integration of their results into the Core Service Platform.

On 29-30 October representatives of the Generic Services projects (GS1 and GS2) met in the Europeana offices, The Hague. Eleven projects were presented by the individual project representatives and EF gave presentations on several areas of interest to the audience (including editorial strategy, Europeana Collections, APIs, Re-use, Branding, ENA and communities). Project participants also met in one-to-one meetings with EF staff to discuss support on individual areas in more detail.

EF will report on activities and developments towards the integration of the projects into the Core Service Platform in the A.1 Platform reports (M10).