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Europeana DSI-1 Project Progress Report

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Europeana – Core Service Platform

MILESTONE

MS44: Technical Development Report 2

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Author(s)	Cristiana Grosaru, Europeana Foundation
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3	17-02-2016	All project partners		Added work package information
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TECHNICAL DEVELOPMENT REPORT 2

Project acronym: Europeana DSI

Project title: Europeana DSI - Core Service Platform

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Periodic report:

3rd

Period covered:

from 01 November 2015 to 31 January 2016

'Europeana DSI is co-financed by the European Union's Connecting Europe Facility'

1. Publishable Summary

Europeana aims to connect Europe's cultural heritage institutions in order to provide access to the commonly shared heritage online for work, learning or pleasure: we are on a mission to transform the world with culture. The Europeana DSI project provides the platform that allows that to happen.

This document is the third progress report of the project covering period 1 November 2015 - 31 January 2016, in line with both the DSI Description of the Action and the recently launched Europeana Business Plan 2016.

The first goal of Europeana is to **create value for partners**. In order to accomplish this goal, Europeana launched in December 2015 Europeana Music Collections on the Europeana Collections site. This provides a selection of the best music recordings, sheet music and other music related collections. Also, with the purpose to create more value to partners, Europeana has focused on the development of the Statistics Dashboard, which will provide all our partners with information regarding the traffic to their data on the Europeana sites.

The second goal is to **improve data quality**. One way to reach this goal is by innovating the way we aggregate material. In the reporting period, Europeana focused on improving its ingestion tools and by establishing expert hubs. Also, the Europeana Publishing Framework was published in November 2015. It underlines the value of quality data and presents four tiers of participation in Europeana to data partners. According to these tiers, the higher the quality of information provided, the more benefit will be created to audiences. Likewise, a Data Quality Committee has been set up with the main role to address key data quality issues and to propose quality improvements. The members of the Committee consist of members from the Aggregator Forum and representatives of users, re-users and Europeana Foundation.

Regarding the third goal – **open the data**, Europeana continued its work on developing and maintaining EDM, our data model for allowing interoperable data exchange in the cultural heritage sector. In what concerns Europeana Labs, the first Europeana innovation challenge was launched in January 2016, encouraging applicants to submit designs for products and services by re-using Europe's digital cultural heritage on the topics of First World War, Art & Design and Europe's Music Heritage. We received 56 applications and we plan to carry interviews in the following period with a shortlist of applicants in order to decide the winners. Likewise, intense work was carried in preparing the launch of Europeana 280 campaign in April 2016. For this campaign, each of the 28 European Ministries of Culture (+ Norway) were invited to select ten pieces of art held in their country that have contributed to a European art movement. Through an interactive online and social media campaign, people across the EU will be encouraged to engage with their national art history based on the nominated pieces of art.

The last goal of the Business Plan is to **strengthen the Europeana ecosystem**. In what concerns this goal, Europeana organised a successful AGM 2015 in Amsterdam between 2nd and 4th of November 2015, which provided the opportunity for the Europeana Network and partners to share, discuss and develop specific areas of mutual interest. During the AGM, the Members Council elections have been launched for the Europeana Network Association, elections which ended with 30 elected representatives.

Overall, the Europeana DSI project is on track and has met its objectives so far. The project duration has been extended with one month until 30th June, in order to make possible the redistribution and spend of the identified underspend of the project. Periodic project meetings of work package leaders have been held and partners have been informed on project status and implementation procedures that had to be followed. The project is due to be reviewed by the European Commission in July 2016.

2. Europeana DSI objectives

As a Digital Service Infrastructure (DSI), Europeana DSI will continue to connect the digital collections of Europe's cultural heritage institutions. The core objectives of Europeana DSI are:

1. to innovate the aggregation infrastructure for cultural heritage
2. to extend the distribution infrastructure towards several strategic partners in end-user and re-user markets
3. to work towards long-term financial stability through business model innovation.

To create a complete, cohesive and integrated DSI, Europeana relies on partnerships with domain and national aggregating partners, who are full and/or associate partners in this project.

The work for the first objective is mostly taking place in work packages 1, 6 and 7. Work for the second objective is mostly taking place in work packages 2,3,4. The work for securing our long-term financial stability mostly in work packages 3,4,5, 8 and 9. In the next chapter, we present our progress towards these objectives during period 1st of November 2015 - 31st of January 2016 and how we relate these objectives to the actual tasks in each work package.

3. Progress 1 November 2015 - 31 January 2016

WP1 Data Partner Services

This work package is responsible for the operations of our aggregation infrastructure (including relationships of the aggregators to our data providers, such as archives, museums, libraries and other cultural institutions and projects. In addition, we are developing a new, innovative and efficient data and aggregation infrastructure and continuously improving metadata and data quality in our repository.

Partners in this work package:

- Association Cinématiques Européennes (ACE) and Deutsches Filminstitut (DIF) (both representing the film archive-domain)
- MICHAEL Culture AISBL and Collections Trust (both representing the museums domain)
- Europeana Fashion International Association (fashion domain)
- Freie Universität Berlin (UB) (natural history domain)

- 2Culture Associates and AthenaRC (both representing the archaeology domain)
- Netherlands Institute for Sound and Vision (NISV) (representing the television and video archive domain)
- International Association of Labour History Institutes (IALHI) (representing the labour and social history domain).

EF have set subcontracts with associate partners Archival Portal Europe Foundation (APEf) (representing the national archival domain) and Daguerreobase (the aggregator for early photography), with the aim to continue aggregation of digital objects from these domains.

Associate partners (non-funded) are the Europeana Sounds project (representing by the British Library) and several national aggregators or national libraries (France, Spain, Germany, Austria, Belgium/Flanders, Czech Republic, Italy, Lithuania, Norway, Romania, Sweden, Croatia). Associate partners provide data to Europeana and are involved in discussions on the innovation of the infrastructure.

The objectives of this work package are to:

- innovate the aggregation infrastructure
- optimize the interaction between aggregators and data providers
- integrate The European Library data aggregation into the new aggregation infrastructure and the Europeana DSI
- create the requirements for the integration of museum data aggregation into the new aggregation infrastructure and Europeana DSI
- improve the Europeana DSI repository
- streamline and improve the Europeana DSI operational workflow.

Description of work carried out and achievements:

Task 1.1 Data and aggregation infrastructure innovation

Subtask 1.1.1 Devise business requirements for the new aggregation infrastructure

Since EF started to work on high-level requirements for a new shared aggregation infrastructure in 2015, we focussed on consolidating the current status for D1.1, the work and implementation plan to innovate the aggregation infrastructure¹. As part of this innovation in the sector and in consultation with the Europeana DSI aggregators, we are developing a shared toolset for harvesting, analysing, transforming, enriching and publishing data on the Europeana platforms (e.g. Europeana Collections). The Europeana Foundation and The European Library are the first two customers for this. At a later stage (2017 onwards), this toolset will be developed further and offered as a package of tools to more expert hubs (see below). More details and a roadmap are provided with D1.1.

1

http://pro.europeana.eu/files/Europeana_Professional/Projects/Project_list/Europeana_DSI/Deliverables/europeana-dsi-d1.1-work-and-implementation-plan-to-innovate-the-aggregation-infrastructure.pdf

This subtask is also about the specifications for the accurate representation of data providers' names in the Europeana DSI. The work towards these specifications is summarised in MS1². It outlines possible solutions for solving the variety of problems with data providers' names.

Subtask 1.1.2 Investigate and develop the concept of expert hubs

We need to transform the way we make Europe's cultural heritage available by turning the aggregator model upside down: from a hierarchically organized top-down approach, we need to change and start collaborating as interconnected nodes that support each other and work together to provide value to Europe's memory institutions. The expert hub concept is key to this change: domain and thematic aggregators will become expert hubs of the Europeana DSI, recognizing the expertise they already provide and allowing for an increased emphasis on expertise-based services. This concept was further specified in the last reporting period by working on the criteria, key activities and key values. The expert hub working group collaboratively worked on this and held a virtual meeting on 24 November 2015. The outcome of this work fed into D1.1, the work and implementation plan to innovate the aggregation infrastructure, where the expert hub concept is described further. It also includes a roadmap for the further development of the concept and when the first expert hubs are expected to launch.

2Culture on behalf of CARARE

2Culture participated in the working group contributing to discussions on the concept of expert hubs and the services and expertise that might be offered by CARARE in the role of expert hub.

ACE on behalf of EFG

ACE contributed to documents and discussions of the working group and lead internal discussions with DIF and selected EFG partners about possible services and expertise that ACE/DIF could offer once turned into an expert hub.

FUB on behalf of the OpenUp! network

FUB contributed to documents and discussions of the expert hub working group. The contribution of FUB to the Work and Implementation plan to innovate the aggregation infrastructure (D1.1) was finished.

International Association of Labour History Institutions (IALHI)

IALHI is in the process of revising its best practice wiki of the HOPE (Heritage of People's history Online) project to share knowledge on content provision and data curation. IALHI will make this available to, content providers through Europe. IALHI hopes to spread the model of sharing case studies with constantly updated guidelines along with specific case studies on the LAM domain.

2

http://pro.europeana.eu/files/Europeana_Professional/Projects/Project_list/Europeana_DSI/Milestones/europeana-dsi-ms1-specifications-for-the-accurate-representation-of-data-providers-names-in-the-dsi.pdf

MICHAEL on behalf of MUSEU

Michael Culture contributed to documents and discussions of the expert hub working group. MCA, together with Collections Trust, worked on in the development Expert Hub for museums and on the specifications of the website of the Hub in terms of services provided, contents and technical requirements.

Thanks to the subscription of a cooperation agreement, MCA involved in the Hub activities NEMO, the European network of museum organisations and launched the first actions as a hub: it organised two workshops (Bologna, Italy on 9 October 2015 and Berlin, Germany on 15 and 16 February 2016) to start networking at the nation levels. A third workshop is planned in Paris at the beginning of May 2016. In those occasions the MUSEU Hub provided the attending institutions information on Europeana, on IPR in a digital environment and on how to publish quality records in the Internet and in the Europeana portal.

Europeana Fashion International Association (eFashion)

Europeana Fashion participated to the Expert Hubs working group with contributing to documents and discussions on the possible role and configuration of the Expert Hubs. Europeana Fashion is heading the Task Force on brokerage and business opportunities, in which it has analysed possible business cases for the activities of the Expert Hubs and it has presented them to the working group in order to explore possible ways for their sustainability. eFashion with its legal entity supported by 21 members and its established network of more than 35 data providers is one of the first candidates for the kick-off of an expert hub.

Task 1.2 Continue and maintain The European Library data distribution into Europeana and migrate the aggregation infrastructure

Using Europeana Cloud, The European Library bibliographic data and full text of Newspapers is being migrated. There is an API for Newspapers that is exposing the data in [Europeana Research](#). A draft migration plan is in place to commence the transfer of data starting with that of the Research Libraries. It is hoped that by the end of 2016 all libraries digital collection data will be transferred.

Under Europeana DSI, 485,422 amount of data has been prepared by The European Library and ingested by Europeana. TEL is the largest contributor to Europeana with 11,238,510 items (February 2016).

Task 1.3. Create the requirements for the integration of museum data aggregation into the new aggregation infrastructure and Europeana DSI

Europeana Foundation is working with MICHAEL and CT on the requirements for the new aggregation infrastructure for the MUSEU aggregator. We are preparing a meeting with MICHAEL for 16-18 February 2016 in Berlin to develop a shared understanding of our workflows and to use this shared understanding for the development of requirements for a shared aggregation infrastructure.

Work is in progress to improve the dark aggregator (that is, an aggregator with no front-end showcase for its data) built under Europeana Inside. It is an entry point for the CMS vendors using the Europeana Connection Kit (ECK - developed under the Europeana Inside project). Within this reporting period, we have received the first updates from former Europeana Inside partners via the dark aggregator. We have had a meeting with former partners of the Europeana Inside project alongside the AGM in November 2015. This resulted in first ideas for how to collaborate in the future. We now agreed to work more closely with Knowledge Integration when developing our three first back-end services that will also be used by Metis: EDM validation service, EDM data statistics, Europeana Collections preview service.

MICHAEL on behalf of MUSEU

During this report period, MICHAEL participated in the preparation of the agenda of the 'Aggregators in residence' meeting in Berlin and organized the logistical aspects. The document "Requirements for Visualization and Indexing of Museum Content" is being released as deliverable as MUSEU contribution to this task.

MCA is responsible for the development of the ECK in Europeana DSI and organised in November 2015, a meeting with Europeana and partners concerning the Europeana Collection Kit in order to report and overcome some issues concerning the fulfilment of the second part of the subcontract, tightly related to the development of Metis. With regard to this point, under Europeana DSI the subcontractor will be carrying out work to see what will be needed and developed to do the work in Europeana DSI-2.

Task 1.4 Optimize the interaction between Europeana DSI and aggregators

Subtask 1.4.1 Partner relationships of Europeana DSI with aggregators and data providers

We are continuously working on implementing the recommendations of the last Partner and Data Development Plan, delivered in May 2015 as part of work under Europeana v3. In this reporting period we worked very closely with aggregators in Slovakia and Estonia and also visited them. Slovakia launched its national aggregator Slovakiana end of November 2015. Estonia will launch a new national aggregator shortly. We explored the potential for future collaboration and how we can help developing national aggregation in these countries.

With the publication of the Europeana Publishing Framework (EPF - see below under 1.5.2), we revised Europeana Pro and updated the 'share your data' section. The framework and the revised Europeana Publishing Guide are now much better integrated in Europeana Pro to make it easier for data partners to prepare their data submissions for Europeana.

Subtask 1.4.2 Organize and facilitate aggregator meetings

In this reporting period we started to prepare for the spring edition of the Aggregator Forum meeting. It is scheduled for 20-22 April 2016 in The Hague. Several workshops are planned alongside the meeting, to use the opportunity working with our aggregating partners on common

issues and challenges. An IPR training is scheduled, the Data Quality Committee will have its first physical meeting, national aggregators will work on their role in the Europeana aggregation landscape and DSI aggregating partners will work on the expert hub concepts and how to sustain expert hubs as part of the Europeana DSI.

MICHAEL on behalf of MUSEU

MICHAEL supported the Europeana Foundation in the organisation of the Aggregator Forum in Rome from 21 to 23 October 2015: 27 aggregators were represented by 66 attendants from 19 countries.

Task 1.5 Improve the Europeana DSI data and metadata quality

Subtask 1.5.1 Ingest and enrich metadata for Europeana DSI

In July 2015, we started a big project to re-index the Europeana database and closed down ingestion. As part of the re-indexing project, we also changed significant parts of the technical infrastructure. The completion of this task took longer than expected, but since November 2015 we are publishing again. We not only moved back to our regular publication schedule, but we are now able to publish continuously. This means that the database and the number of records that are accessible in europeana.eu is changing every day. We are still taking a snapshot of our database and produce content reports on a monthly basis. As of January 2016, we have 48,838,150 records published in Europeana Collections.

In this reporting period we have started to process and publish the first data for Europeana 280, which are now also accessible on europeana.eu³.

Subtask 1.5.2 Improve data quality

Europeana Foundation is still working with all aggregating partners on a revised data quality plan, previously submitted as D1.3. Based on feedback from the European Commission and using input from some DSI aggregators (EFG, OpenUp, CARARE, TEL). A proposal for revising D1.3 was made. Based on this proposal, we will work on a common set of tasks with all partners to bring as much of their legacy data as possible up towards tier 2 of the Europeana Publishing Framework (direct links, thumbnails, correct rights statements). We would also like to align and harmonize our semantic enrichment activities. The proposal is now in progress to be adopted for a revised D1.3.

As an outcome of the Aggregator Forum in Rome, we agreed to set up a Data Quality Committee with members from the Aggregator Forum, with representatives from users and re-users and with Europeana Foundation. This Committee is currently in progress to be officialised as a Working Group of the Europeana Network Association. A mission statement was written, discussed with the members of the committee and approved. The Data Quality Committee works to address key data quality issues over time and comes up with proposals on quality improvements. The following areas are expected to structure the Committee's work. Specific tasks will be defined and

³ <http://www.europeana.eu/portal/search?f%5BPROVIDER%5D%5B%5D=Europeana+280>

prioritized within these areas as the Committee sees fit: mandatory metadata elements for ingestion of EDM data, data checking and normalization, meaningful metadata values (in the context of use), quality of content (digitized media), coordination with other quality-related initiatives.

The work on the Europeana Publishing Framework was completed in this reporting period⁴. It was published end of November together with the Europeana Publishing Guide⁵, which is a revised version of the Europeana Publication Policy, published earlier in 2015. Implementing the Europeana Publishing Framework is in progress, towards a full adoption of this framework by our data partners. This framework will clarify the value of quality data, with a focus on the actual content. High-quality and openly licensed content can be used and re-used in many different ways, which is something that will be of value to our partners.

This reporting period also concluded the reporting against the Europeana Business Plan 2015 and the KPI defined in it. We surpassed most of the quality KPI of 2015. We have 30.1 million records in EDM at the end of 2015. About 50% of the Europeana database refers to cultural heritage objects labelled under rights statements that allow re-use (PDM, CC0, CC, OOC-NC). We counted 13.2 million records with direct links. This measure is expected to become much more precise in early 2016, now that we are also making technical metadata of the underlying content available. With these technical metadata we can also provide better and more meaningful statistics to monitor the development of content complying to the 4 tiers of the Europeana Publishing Framework.

The only KPI that we have not met is the number of digital objects that include geo-location data. Instead of 18 million at the end of 2015 we now have 14.7 million records with geo-location information. This may be due to the decrease of EU-funded projects that focus on geo-location data as part of their enrichment and data improvement work.

MICHAEL on behalf of MUSEU

MCA representatives from NTUA and Bildarchiv FotoMarburg participates in the Data Quality Committee to express the vision of the Europeana museums about the quality of records.

The new MINT aggregation infrastructure for MUSEU is shaped taking into account the quality parameters as discussed in DSI and those ones released inside the community (« Requirements for the Visualization and Indexing of the Museum Content ») in order to raise the bar of the quality of the future content. MCA informed of this all data partners as well as about the new Europeana Publishing Framework.

MCA collected the feedback of the content providers about the enrichment of the legacy records: 2 data partners will do this task using the ULAN and TGN vocabularies and probably including some more AAT references.

⁴ <http://pro.europeana.eu/publication/publishing-framework>

⁵ <http://pro.europeana.eu/publication/publication-policy>

Europeana Fashion International Association (eFashion)

Europeana Fashion contributed to the preparation of D1.3 on the data quality plan and continued the activities of normalisation and enrichment of its published datasets. In particular eFashion started the application to all its datasets, coming from 35 different data providers, of the semiautomatic semantic enrichment techniques developed and tested at the end of the Europeana Fashion project. The objective of this task is to add automatically specific properties of the EDM-fp schema, like "colours", "materials" and "techniques" to all the ingested records, through the analysis of the textual descriptions and also through image analysis techniques.

Europeana Fashion has also started the normalisation activities on metadata elements like names of designers/brands and dates, with the objective to republish all its datasets (more than 770.000 items) in a normalised form, by the end of the DSI-1 project.

Thanks also to the training workshop organised at the end of October 2015, Europeana Fashion promoted -in particular to its new members - best practices on the production and publication of quality metadata, also according to the new Europeana Publishing Framework and invited all its data providers to revise their metadata content and mappings accordingly.

eFashion is also actively participating in the Europeana Data Quality Committee.

2Culture and AthenaRC, on behalf of CARARE

2Culture completed the survey of existing CARARE metadata and commenced contacting partners to discuss quality issues in their datasets and re-publication. AthenaRC re-transformed all CARARE datasets on MORE using the updated mapping from the CARARE metadata schema to EDM. AthenaRC has provided updates of three CARARE partners' datasets to Europeana for republication.

AthenaRC and 2Culture are participating in the Europeana Data Quality Committee and contributing to the work required. AthenaRC has designed three micro-services related to quality: one that measures the various images types/resolution and another two that aim at normalizing subject terms and temporal information through a common thesaurus.

DIF on behalf of EFG

EFG partner archives continued to work on data improvement and new contributions. DIF and the EFG technical service provider worked on mapping and matching to allow for an improved ingest process resulting in a better presentation of data. DIF developed a new conceptual mapping from EFG to EDM, which will be implemented in the coming weeks to provide improved EFG data to Europeana. DIF is also working to improve the normalisation of partner data in the EFG database, where this was still an issue. Additionally, DIF is participating in the Data Quality Committee task force.

FUB on behalf of the OpenUp! network

Quality check for Darwin Core mapping: FUB together with the subcontractor AIT developed a mapping of the Darwin Core Metadata Schema to the EDM Metadata Schema (see 1.7.2 for details). FUB contributed to ABCD knowledge and checked the new Darwin-Core mapping for inconsistencies with the existing standard for biodiversity information ABCD(EFG). The Open Up! natural history aggregator is now able to harvest and transform the most common biodiversity

metadata standards (DwC-A and ABCD) which widens the network of potential data providers for Europeana.

Generate metadata: FUB developed an approach for digital photographs without any metadata to make these images fit for Europeana data provision via OpenUp!. For 400 images of photo exsiccate of mosses 11 data elements have been added respectively in standardised form according to internal collection information on these multimedia items. The approach served as a pilot for similar multimedia collections, for example in France, to establish an efficient workflow for the mobilization of further European multimedia collections for Europeana (see also preparation of a joint workshop with GBIF France).

Publishing Framework: Upon completion of the new Europeana Publishing Framework FUB analysed all OpenUp! data sets regarding the defined criteria for data quality and probability for re-use. In November 2015, 19 % of the records were ready for free re-use (Tier 4); 30 % ready for non-commercial re-use (Tier 3); 32 % of the records were published to use Europeana as a showcase (Tier 2); and 14 % of the records were of less quality or access was restricted (Tier1). Further quality checks confirmed that all OpenUp! records provide titles. ETI Bioinformatics, Leiden (Netherlands), which accounted for more than 4 % of the OpenUp! content in Europeana, was removed as a data provider. Institutional changes - ETI was incorporated into Naturalis - induced that data provision now follows Naturalis policies. ETI provided a collection of images assembled within a citizen science project by hundreds of authors for a single purpose. ETI was neither able to provide thumbnails nor direct links to images. Digital objects were only accessible through paid access. These restrictions are not compatible with Naturalis and OpenUp! data policies.

Common Names: The subcontractor Natural History Museum in Vienna (Austria) further developed the CommonNames web service. It is now able to request several external web sources in parallel, which shortens the overall time of request. The subcontractor integrated 10 additional web sources into the CommonNames web service to facilitate access to natural history content in more languages. This time web sources from Japan, Brazil, Thailand, and Indonesia have been added.

International Association of Labour History Institutions (IALHI)

IALHI continued to work on data improvement using the Europeana's internal diagnostic tool for a better understanding of the media quality of the current collections and will act upon the results to improve media quality where possible.

One of the current data providers to the Social History Aggregators is conducting a research on the impact of the availability of data provision to Europeana and other portals. Preliminary results of the study will be discussed in the coming month and can also provide suggestions on possible improvement of content or curation of collections. In the past, some Social History Collections were withdrawn from Europeana because of copyright issues that we will be able to re-provide based on Extended Collective Licensing with improved media quality.

For new provisions, we have been working on translations of metadata from Greek to English, transliteration, introducing controlled vocabularies and authority records to widen the potential use of these rare and relevant collections. New data providers are asked to meet the new data quality standards and provide their objects in high resolution. For one collection the objects will be rescanned for this purpose and delivered to Europeana in a high quality for re-use. We are

also running a campaign on new licensing options among our content providers, we encourage them to apply more open licenses which support the broader definition of reuse.

Subtask 1.5.3 Source content for creative re-use

This is an ongoing task, developed out of the Europeana Creative project. We scan the Europeana database every month for new datasets that are openly licensed, of high quality and attractive enough for creative re-use. We have two mechanisms to feature them: (1) as part of our open collections on social media, (2) on Europeana Labs. Since we started publication only in November, it took a while to also restart the open collection activities. In the last reporting period, we featured one dataset as open collection⁶ and on Europeana Labs⁷. More datasets are in preparation to be featured in the next weeks and months.

Task 1.6. Optimize the interaction between aggregators and data providers

Subtask 1.6.1 Relationships of partner aggregators with data providers

The concrete progress and achievements per partner are described in detail below.

2Culture and AthenaRC, on behalf of CARARE

During the reporting period, the focus has been on contacting network members about the forthcoming training workshops and concerning updates to their datasets to address metadata quality issues. 2Culture has continued to maintain the CARARE website and Basecamp, sharing news with members about forthcoming conferences, events and policy initiatives.

ACE and DIF on behalf of EFG

ACE and DIF are closely working with EFG partner archives to ensure they are aware of metadata quality issues and stay updated on developments related to Europeana. ACE and DIF were able to attract and connect 4 new data providers to the EFG database following a data provider workshop carried out jointly by DIF and ACE in July 2015. About $\frac{3}{4}$ of the ACE members are now represented in EFG. Relevant information on Europeana such as the Europeana Publishing Framework or Europeana Collections are shared with ACE members and other EFG partners through the ACE website as well as through dedicated mailing lists and facebook.

ACE was also co-leader of the Task Force “Europeana Communicators Group”. This Task Force sets out to develop recommendations for a Communicator's Group to support pan-european awareness of Europeana's added value, strengthen the role of domain and thematic aggregators in reaching out to the data providers and the wider network.

FUB on behalf of the OpenUp! network

Acquisition: Direct communication with potential new data providers took place focusing memory institutions in Germany and France. Following our meeting in Oslo, UiO Natural History Museum Oslo agreed to join Europeana, but decided to export their data via the Norwegian GBIF node to Norvegiana which will provide the data to Europeana. Publication of data was planned to start

⁶ <https://www.facebook.com/Europeana/posts/10153433439218668>; this is in our top 5 most popular Open Collections in 2015

⁷ <http://labs.europeana.eu/data/high-resolution-public-domain-images-from-statens-museum-for-kunst>

before December 2015. Three major data providers in the OpenUp! network recently considered to provide their collections using a different aggregator, either because of streamlining their technical workflows or due to other (not domain specific aggregation) mechanisms that are offered free of charge. The technical developments in subtask 1.7.2 improved the situation on the side of the OpenUp! natural history aggregator as data partners may now provide all of the most common biodiversity metadata standards. Communication is still going on, but all three data partners seem to stay in the OpenUp! network and may even grow the amount of shared records. *OpenUp! Website:* To enable a better communication with data providers and potential new providers, FUB wants to alter the OpenUp! website. A first step communication with the Narodni museum (Prague, Czech Republic) took place in order to agree upon basic principles, enable access to the content management system for FUB members and develop a first concept of reorganization.

Europeana Fashion International Association (eFashion)

Europeana Fashion continued to keep constant contacts with its members through a dedicated group on Basecamp and also through its blog and social media channels, targeting also new potential members. Since April 2015, eFashion have attracted 15 new data providers and 4 new institutions registered to the Association as supporting members. New and existing partners have been engaged through the eFashion portal and also through social media. Every month, eFashion involved a different partner in the curation of its Tumblr fashion blog, which now has almost 7.000 followers. Also Instagram has been used to engage fashion institutions, publishing on a daily basis the best images from each of the contributing partners. eFashion also maintains an area of its website in which it regularly publishes information on relevant events in the fashion heritage domain and it runs also a blog in which partner institutions are invited to contribute.

International Association of Labour History Institutions (IALHI)

Relations with data providers have intensified over the last months. Existing data providers were contacted about data enrichment and improving quality of the existing data. This is a process that will continue in remaining months of the project. Selected new data providers were contacted and close cooperation followed in preparing their data provision (see also T1.6.2). Since we have an existing network which is connected through the Social history Portal, we manage to schedule outreach campaigns through our web site, we also meet on regular basis every year and have Coordination Committee meetings twice a year to discuss network related issues. These forums, along with well-known social history conferences, make communication, training and networking quite easy, however, off-site visits were paid to all content providers to get acquainted with their recent collection development and content provision plans.

MICHAEL on behalf of MUSEU

MICHAEL started to prepare a Workshop in Berlin for museums, new content providers and current museums, co-organized with NEMO and SPK. It is scheduled for 15-16.02.2016. It will be a two day European workshop with a presentation of Europeana DSI, MUSEU HUB, presentation of MINT and the museum quality requirements and practical sessions on the use of LIDO and MINT. Thanks to the partnership between MICHAEL and NEMO, this workshop will focus on

NEMO members and network, German museums and representatives of the German Digital Library.

Moreover, MICHAEL is developing a specific campaign toward French museums in order to increase the number of new content providers from territorial museums. The national museums put their contents in the national instance Collection which sends content to Europeana.

In this reporting period we prepared and made circulate towards French museums a specific paper with presentation of Europeana DSI and why to join as new content providers. MICHAEL disseminated towards national and territorial museums through several departments of the French Ministry of Culture.

Subtask 1.6.2. Raising competency levels of data-providing partners

Europeana Foundation, with Kennisland (under WP4) is involved in preparing two more IPR trainings for aggregators. One is scheduled for 24 March in Amsterdam, the second one is scheduled for 20 April in The Hague.

2Culture and Athena RC on behalf of CARARE

2Culture and AthenaRC planned and delivered two training workshops: the first was held in York on 7-8 December 2015 and the second in Athens on 28 January 2016. The workshops provided an introduction to the Europeana Publishing Framework, a discussion of metadata quality issues, an update on the CARARE metadata schema, hands-on training in MINT, MORE and its metadata enrichment services, and copyright and licencing of archaeology data in Europeana. 2Culture and AthenaRC are planning the CARARE helpdesk to support institutions to join the network.

ACE and DIF on behalf of EFG

Following a workshop held by ACE and DIF in July 2015, DIF is in close contact with EFG partner archives to discuss relevant issues related to data contribution to Europeana, most notably related to rights labelling and to the Europeana Publishing Framework. ACE shared the final version of the Publishing Framework with all EFG partner archives and DIF talked to archives about concrete possibilities to improve data in a way that it meets the tiers described in the Framework document. ACE shared relevant Europeana-related news with its members.

FUB on behalf of the OpenUp! network

Unfortunately, contacts with the ANMS (Associazione Nazionale Musei Scientifici) and other potential partners in Italy did not reveal any results until January 2016. We, therefore, decided to organize a joint workshop with GBIF France for natural history collections in France which want to join the Europeana network. First organizational steps took place: the venue and program were fixed. The workshop with +/- 20 participants will be held in French and English from 13th to 15th April 2016 in Montpellier, France.

Europeana Fashion International Association (eFashion)

After the successful organisation of a training workshop in October 2015 on metadata quality improvement, eFashion is now planning the organisation of a co-creation workshop in collaboration with Platoniq (under WP3) for 20 April 2016 at the Rijksmuseum, in which fashion

GLAMs and professionals will be invited to “co-create” new ideas for the exploitation of digital fashion heritage. In addition to events, Europeana Fashion is also regularly maintaining a dedicated Basecamp group for data providers, in which partners can share their questions and get support in relation to metadata mapping and publication, content ingestion activities and any other technical issue they can encounter during the data provision process.

International Association of Labour History Institutions (IALHI)

Following the workshop held by IALHI in Edinburgh in September 2015, close contact was maintained via email and skype sessions with the selected new data providers to prepare together the data provision to Europeana DSI. In preparing the data provision, much attention was given to the importance of the labelling of rights statements, metadata quality, as well the guidelines of the Europeana Publishing Framework. IALHI did not organize a joint workshop for new data providers, but provided them individually with a 2-3 day on site training by digital collections specialists, metadata experts and developers to improve their local workflow and be able to provide the collections to Europeana. Three new data providers have received this training: Archeia Synchronis Koinonikis Istorias (ASKI) in Greece, Arbetarrörelsens Arkiv och Bibliotek (ARAB) and the European Trade Union Institute Documentation centre (ETUI) in Belgium. As a result of this onsite training, IALHI will be able to aggregate and deliver their curated collections to Europeana by the end of March.

Two more data providers are considered to be eligible for onsite training and data provision in the coming months.

MICHAEL on behalf of MUSEU

MICHAEL prepared during this period the practical sessions of a workshop to be held in February 2016 in Berlin. MICHAEL invited museums from NEMO network as well as German museums to participate to practical sessions. MICHAEL prepared tutorials and materials focusing on: aggregating content for Europeana thanks to MUSEU workflow, introduction on LIDO, introduction on MINT and practical sessions on the use of LIDO and MINT. During this 2-day workshop, the attendees will be informed on IPR in the digital environment, museum open data good practices and digital tools for creating virtual exhibitions and cultural online experiences.

Task 1.7 Streamline and improve the Europeana DSI operational workflow

Subtask 1.7.1 Develop the Europeana DSI ingestion product requirements and improve the operational workflow

This subtask is closely related to subtask 1.1.1. The aspects that were described in the last progress report were all considered for D1.1, the work and implementation plan to innovate the aggregation infrastructure. As a response to the needs of aggregators, Europeana is prioritising the work on the EDM validation service, EDM data statistics and Europeana Collections.

The overhaul of the technical infrastructure that supports our ingestion workflow was completed last autumn and since November we are regularly and continuously publishing to the Europeana Collections site. After having collected first experiences with continuous publication in this

reporting period, we are now in the position to review the ingestion workflow and make adaptations in order to manage the publication process more efficiently.

Subtask 1.7.2 Develop, establish and maintain technical infrastructure

AthenaRC has developed two new micro-services: (1) a micro-service that allows mapping of subject terms to a common thesaurus (in this case AAT) and (2) a micro-service that maps temporal information to a common thesaurus (in this case Perio.do). Both micro-services require that the content providers create the appropriate mappings using MORE.

DIF on behalf of EFG

As the result of an RFP issued in September, DIF has selected a technical service provider to do the following for the EFG technical infrastructure: a) Development and implementation of new mappings (for 3 new partner archives); b) Adjustment of preexisting mappings (for 7 partner archives) to allow the ingest of information in newly added database fields; c) Ingestion of metadata in XML format (for 13 partner archives); d) Data provision to Europeana and make EFG to EDM mapping; e) Hosting the EFG infrastructure. All activities are currently being worked on and will be finished in May 2016.

MICHAEL on behalf of MUSEU

MICHAEL revised, thanks to a subcontracting, the MINT ingestion platform for MUSEU on the basis of the Europeana quality parameters discussed in DSI and the « Requirements for the Visualization and Indexing of Museum Content ». Moreover MCA assured the development of the ECK in DSI: the first release was tested and now ready to be integrated in the management systems.

Europeana Fashion International Association (eFashion)

Europeana Fashion assigned the subcontracting for the maintenance of its technical infrastructure, involving both the front-end (its portal hosted on Amazon AWS cloud services) and the back-end (the MINT aggregation platform). Several improvements has been made to the publication workflow, offering through an OAI interface the publication of metadata both in EDM and EDM-fp (fashion profile) format. Improvements has been achieved also in the automatic production of thumbnails from both images, PDFs and videos. The optimisation process will be finalised in the forthcoming months. in the meantime, eFashion also monitored and adjusted the mapping and publication of about 75.000 new records in its aggregator, which will be published after their enrichment to Europeana by May 2016.

FUB on behalf of the OpenUp! network

AIT (Austrian software and research company AIT Forschungsgesellschaft mbH, Graz) developed a mapping of the Darwin Core Metadata Schema to the EDM Metadata Schema and submitted it to the EDM mappings, refinements and extensions survey in November 2015. The Darwin Core is based on the standards developed by the Dublin Core Metadata Initiative [DCMI] and can be viewed as an extension of the Dublin Core for biodiversity information. Based on the mapping a harvest and transformation routine for Darwin Core metadata to EDM was established

in the OpenUp! natural history aggregator for future ingest of Darwin Core biodiversity metadata repositories to Europeana.

Furthermore the new B-HIT software for harvesting of biodiversity metadata was installed and is now used for data harvesting of standard dumps of biodiversity repositories using the ABCDEFG metadata standard. In December, AIT gave a presentation of Europeana and the preparation and enrichment of biodiversity metadata for Europeana at the DARIAH workshop “Biodiversity and linguistic diversity: Linked Open Data 4 Living Organisms” in Vienna.

In January the preparation of another major data upload of biodiversity data to Europeana started. After the new Europeana portal was published, the OpenUp! data presentation has been evaluated and feedback was provided to the Europeana office.

International Association of Labour History Institutions (IALHI)

The current Social History Aggregator and tools for content checking and enrichment has been built by CNRI ISTI using D-NET within the EU funded project Heritage of the Peoples Europe (HOPE) 2010-2013. Extensive research on the current technical infrastructure and big efforts to upgrade it to be able to provide a more user friendly platform for the data providers for the (re) ingestion of collections has led to the conclusion that given its relatively high dependency on technical human expertise DNet is not a sustainable long-term solution. It has been decided to switch from the use of the HOPE data model to Europeana EDM. IALHI has therefore decided to make use of the MINT Open Source software. Within the next months an intensified effort (with consultation of the Mint developers) will be made to install and implementing MINT on IALHI servers and provide a sustainable aggregation solution for the social history domain. This installation will work with the existing Persistent Identifier web service and dissemination platform and provide mapping tools and crosswalks directly to EDM. To guarantee delivery of new and improved content to Europeana DSI we will be using both the existing DNET infrastructure and the new MINT platform for a couple of months.

WP2 End User Services

The objectives of this work package are to connect and interact directly with end-users and increase the visibility of partner's collections. It will specifically:

- Publish Europeana Collections (the Europeana.eu portal) and up to four thematic collections as points of entry for end-users, in collaboration with WP6 (Product Development). The first collections delivered are on art history and music, the third one will be on fashion; the fourth channel's topic is to be decided. This WP will set our business goals for the portal development and functionality.
- Engage users through crowdsourcing campaigns, via outreach to publications such as Wikipedia, and via social media forums to help improve data quality.
- Continuously monitor the improvement and development of the user experiences in each end-user product, including Europeana Collections, based on analysis of traffic and user metrics and the feedback loop for new products.
- Create and curate content by highlighting and showcasing high-quality content via user galleries, virtual exhibitions platforms and our thematic collections.

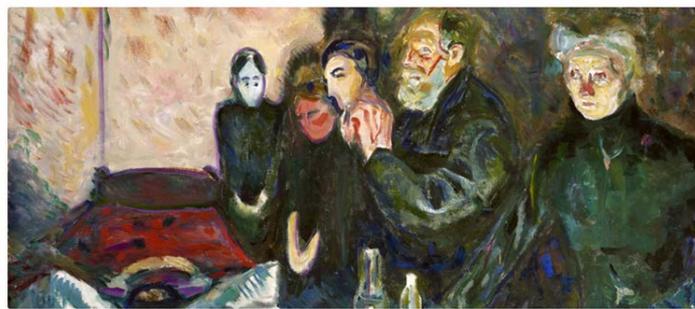
- Identify and make optimal use of social media channels and external platforms such as Wikipedia, Imgur, DailyArt for the dissemination of partner's collections.
- Show the impact of Europeana DSI's work by providing feedback and statistics for stakeholders, through the Statistics Dashboard. (The actual development for the dashboard will be done in WP6, this WP will deliver the business requirements for it.)
- Articulate a vision on future User-Generated Content projects.

Description of work carried out and achievements:

Task 2.1 Promote partner data via Europeana End-User Products and external platforms

Subtask 2.1.1 Promote data via Europeana's end-user products

In the reporting period, data was promoted both via Europeana's end-user products and external platforms. End-user blogs were published on a weekly basis featuring Europeana content in context. Most popular were blogs with the titles: Discover Rare Photos of Edvard Munch, Tea Reading, and #ColorOurCollections: Europeana's Colouring Book for Grown-ups.



Discover rare photos of Edvard Munch

For art lovers across Europe, Edvard Munch (1863-1944) is one of modern art's greatest painters. He is best known for his work "The Scream", which is one of the most recognizable works of art worldwide. Munch was born on December ...

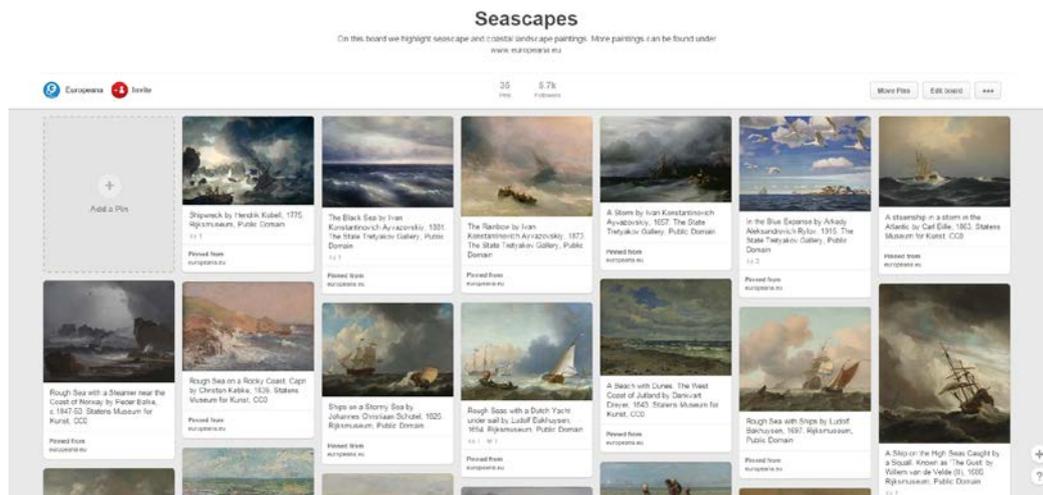
written by Julia Schellenberg on December 8, 2015 in Content with one Comment



[Discover Rare Photos of Edvard Munch](#)

Since the launch of the Europeana thematic Collections in mid-December 2015, content was actively promoted on the thematic Collections pages. The product offers the possibility to feature content in form of a banner image, browse entry points such as spotlights, exhibitions and galleries on specific topics.

Besides Europeana end-user products, data was also promoted via external Europeana Branded platforms such as social media (Facebook, Twitter, Pinterest, etc.). Europeana content was promoted on Facebook and Twitter daily. More than 10 new boards on themes such as seascapes, the artist Bruno Liljefors, etc. have been published on Pinterest.



[Board seascapes on Europeana Pinterest](#)

Subtask 2.1.2 Define end-user product requirements

During the period September-December 2015, the end-user team worked very closely with the Product Development team to develop the new Europeana Collections and Thematic Collections. Based on user research, the landing pages were designed to have prominent search boxes combined with browse entry points to highlight specific parts of the collections, exhibitions or blogs. Given that currently over 80% of the visits come from (google) searches, a lot of attention went into the definition of the object pages. So far the most successful new feature has been the download button which has resulted in over 20.000 downloads in the first month of release.

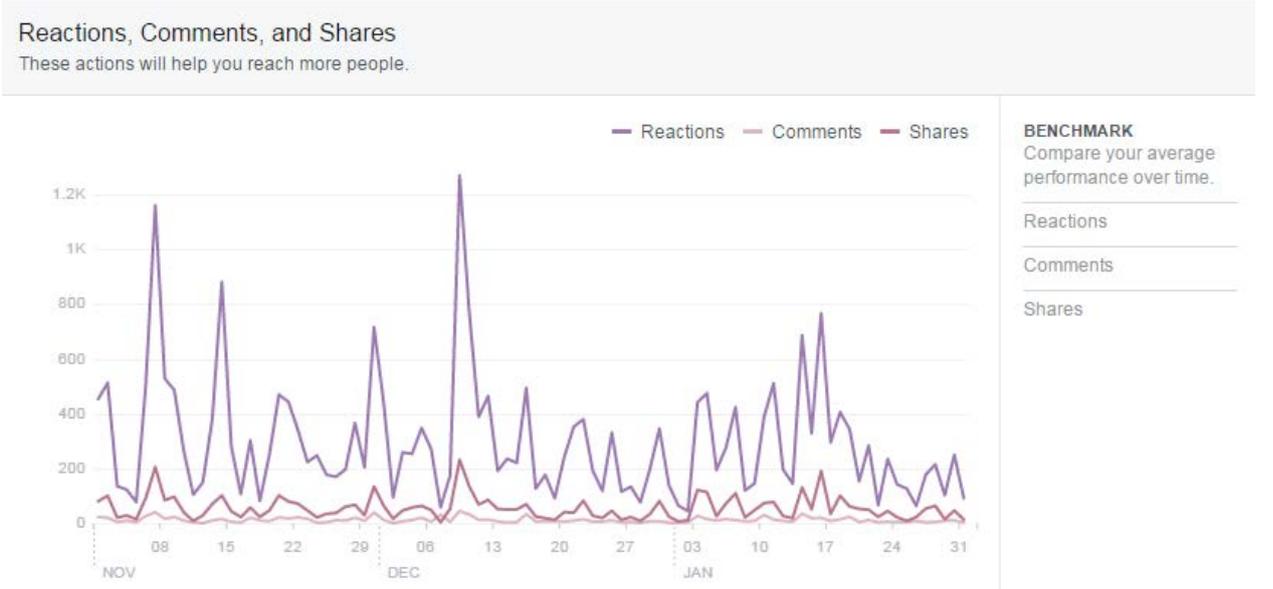
Subtask 2.1.3 Increase the visibility of partner data through Wikipedia

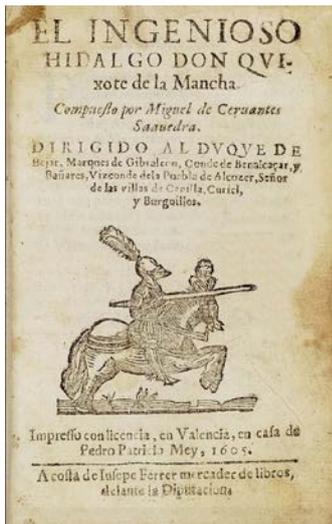
Various projects have been run which integrate existing Europeana activities with the Wikimedia websites. These are listed at <https://meta.wikimedia.org/wiki/Europeana/Projects>. The most common activity is a batch or “mass” upload of Public Domain multimedia from a Europeana partner organisation to Wikimedia Commons, which is then promoted to Wikipedia editors to encourage using the images in Wikipedia articles. The upload process is frequently undertaken with the “GLAMwiki Toolset”, software which Europeana built, and then followed with one/several “editathon” event(s). These uploads are the main drivers behind the ‘impressions’ that Europeana Partner data get on external platforms. During this reporting period, the main focus was to develop a concept for a collaboration with Wikidata in the context of Europeana 280. The concept comprises of a competition to translate and enrich the 280 artworks that Europeana is collecting from the member states. The concept was approved and initiated in January 2016 with an expected delivery date of June 2016.

Task 2.2 Engage

Subtask 2.2.1 Engage end-users through social media

In the reporting period, Europeana daily engaged the end-users through social media platforms: Facebook, Twitter and Google Plus. Facebookposts , published daily, reached above 1,300,000 and engaged above 53,000 people between November 2015 and January 2016. The posts covered a variety of cultural heritage related topics in different formats (image, video, animated gif). In order to present our updates in context, we used #OnThisDay hashtag to relate to important dates and historical events and introduced interactive elements such as voting for the cover image.





Europeana.eu
Published by Aleksandra Strzelichowska [?] - January 3 · 🌐

Will the GIFs remain so popular in 2016? Let's hope they will, especially great ones like this 😊 Artwork by Juan Ibanez, first runner up in #GIFITUP2015 contest <http://bit.ly/1StKgB7>

Source material: courtesy the National Library of France via Europeana, public domain, <http://bit.ly/1kCnrxg>

42,352 people reached Boost Post

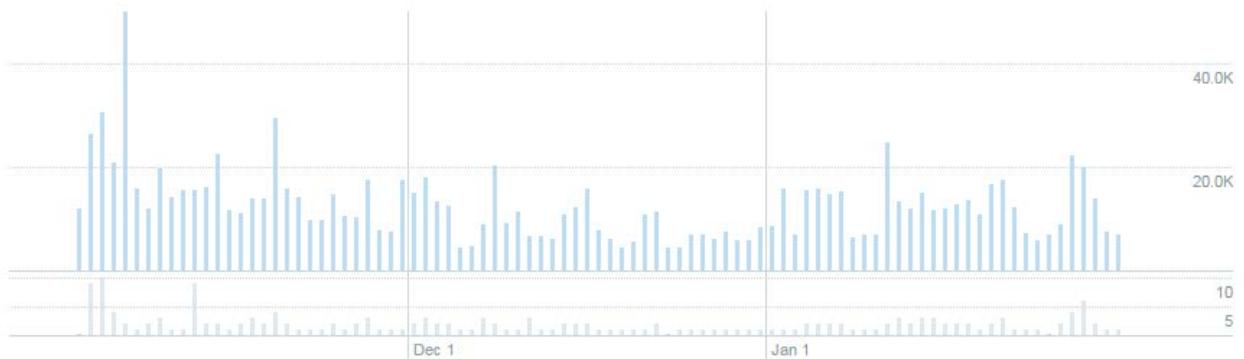
Like Comment Share Storify

Zuzanna Stanska, Bartosz Jaskólski, Emil Džemil and 397 others like this.

272 shares

On Twitter, we've received over 8,800 likes and retweets and our tweets had over 1,100,000 impressions. In the reporting period we put more effort into community management and interaction with the users.

Your Tweets earned **1.1M impressions** over this **91 day** period



Task 2.3 Create and curate

Subtask 2.3.1 Thematic Collections



[Europeana Art History](#)

With the launch of the new Europeana Collections website in December, we also beta launched the first two thematic collections: Art History and Music (in collaboration with Europeana Sounds). During this phase, we were actively seeking user feedback before the launch campaigns started in the period March- December 2016 when we wanted to build up community.

Subtask 2.3.2 UGC collection days, supported by Facts & Files

In the reporting period, meetings were held, to plan and prepare further Europeana 1914-1918 campaigns in spring 2016 in Bosnia (March), the Czech Republic (April) and Poland (May). The Europeana AGM was used to discuss further activities in the coming years. For instance events in Riga/Latvia accompanying the AGM 2016.

A [Business Plan](#) for Europeana 1914-1918 has been put in action covering ambitions milestones for the period January 2016 - September 2017 (funded under Europeana DSI and Europeana DSI-2), while looking ahead at the period September 2017- December 2018 when the commemorations around the end of the war will come to its peak.

Subtask 2.3.3 Crowdsourcing community campaigns

Europeana continues to aim reaching out to new and different audiences via crowdsourcing campaigns. Within Europeana DSI the following events will be organised in cooperation with educational institutions and GLAMs:

- Sarajevo, Bosnia in March 2016 in cooperation with the National & University Library of Bosnia & Herzegovina;
- Prague and Brno, Czech Republic in April 2016 in cooperation with National Museum and National Film Archive (including WW1 film screening and educational children events);
- Poland in May 2016 (partners to be decided).

Task 2.4 Monitor

We are monitoring traffic on a monthly basis in our Traffic & Engagement reports. Furthermore, we are developing our statistics dashboard so that all partners can accurately monitor their collections on Europeana themselves (it also includes country reports). The dashboard development has experienced some delays on the backend - it has been proven to be harder than expected to map all relationships in an accurate and understandable way. The beta release of the Statistics Dashboard is now expected by end of March.

WP3 Re-user services

This work package aims to support re-use and distribution of Europeana data and to generate economic value for the Europeana DSI. It is responsible for boosting the distribution infrastructure and long-term financial stability through business model innovation.

The objectives of this work package are:

- Expand the distribution infrastructure
- Improve take-up and re-use of digital cultural heritage
- Develop a more independent financial basis for Europeana to increase the re-use of Europeana material and grow an entrepreneurial arm.

Description of work carried out and achievements:

Task 3.1 Expand the distribution infrastructure

Subtask 3.1.1 Establish Europeana Labs as a product and service for a targeted audience of cultural apps developers, designers, makers and entrepreneurs (with ONB)

EF and ONB finalised the research of potential creative industries partners and executed a mailing campaign to the identified leads. We faced interest by a few organisations (example: Leeds Creative Labs) but most of them had not planned competitions or events until the end of Europeana DSI where Europeana Labs resources can be of use. A very concrete campaign outcome was a partnership with Creative Estonia initiative which covers contests for creative industries in January and autumn 2016. Europeana joint their first content, the Creative Estonia hackathon, on 29-31 January in Tallinn, Estonia with special award category “Best ideas for cultural heritage re-use”. The event was run by Digix, the Digital Creative Incubator, and Tallinn University and brought together over 120 technologists, designers, and media specialists from across Estonia's vibrant creative communities. EF presented Europeana Labs and participated as a mentor and a jury member. The special Europeana awards went to [three high-potential projects](#). Europeana will conduct skype interviews with the project leads in the last week of February to discuss how we can support their ideas and help them grow.

EF and ONB also created the brief for the [first Europeana innovation challenge](#) which was launched on Europeana Labs on 27 January 2016. Applicants can submit their designs for fantastic products and services re-using Europe's rich digital cultural heritage on the topics of First World War, Art & Design and Europe's Music Heritage till 29 February. The challenge

launch was promoted extensively on the relevant Europeana Labs channels (Labs website, Labs newsletter, Labs blog), Europeana Twitter, Europeana thematic collections websites (Europeana 1914-1918 and Europeana Music) and their social media, related specific mailing lists (such as OpenGLAM), and partner channels (ONB Twitter, accounts of Europeana Communicators Group).

Subtask 3.1.2 Continue to improve access to materials and tools

We released an upgraded version of the API which is fully documented in the [API Changelog](#) on Europeana Labs. We have also added information and guidance on the [media search](#) to the API documentation on Labs to allow for developers to easily exploit the Content Re-use Framework (CRF).

Subtask 3.1.3 Establish a Europeana Research prototype, under Europeana Cloud, directed at digital humanities research communities



www.research.europeana.eu

The first iteration of the Europeana Research service is now live. Main activity after the release has been the set-up of a strong Editorial Board which met once during this reporting period. The Editorial Board has terms of references for its activities and its main activities are to guide the service and advise Europeana staff on editorial and strategic issues. A first iteration of a business plan was conceived (0.5) with a 1.0 version expected in the second reporting period.

Subtask 3.1.4. Build on the partnerships in research with DARIAH, CLARIN and The European Library (TEL), created within Europeana Cloud, under Europeana DSI, co-ordinated by ONB

The concrete progress and achievements per partner are described in detail below.

ONB

ONB continued work on Europeana Research in close consultation with TEL. The blog series on 'text mining' that was commissioned in Q2 were put online in December and brought some attention via social media channels to research.europeana.eu.

Therefore it was decided to initiate a second blog series, this time on digital musicology. Following researchers agreed to contribute:

- Ashley Burgoyne (University of Amsterdam)
- Peter van Kranenburg (Royal Netherlands Academy of Arts and Sciences - KNAW)
- Eliane Fankhauser (Utrecht University)
- Marnix van Berchum (Royal Netherlands Academy of Arts and Sciences - KNAW)

The individual post will be published early 2016.

Additionally, ONB contributed in including collections that were uploaded to Europeana via TEL to the Europeana Research website and thus populating the “Data” section of the site.

DARIAH

DARIAH continued to promote the Europeana API to the Digital Humanities community, via activities organised through the DARIAH’s VCC2 and internal and external presentation given by DARIAH’s CEO. A presentation has been made during the EIFL General Assembly in Riga, the 13th of November 2015. Another presentation will be given during a workshop organised in the framework of the Horizon 2020 project RITrain.

Also, DARIAH started working via selected Working Groups in order to raise awareness of Europeana Research.

DARIAH will provide a report on how GLAMs and Europeana can better provide access of their content to researchers, exploring, technical (cf. EAD, TEI, EDM), hosting and licensing issues. Two meetings have been held with Alastair Dunning (November 2015 and January 2016) to explore this theme and set up a plan. The deadline for the report has been extended at the end of April 2016 and a table of contents for review to be lodged with Europeana at the end of February.

CLARIN

CLARIN performed a test import of a wide variety of metadata records provided by Europeana/TEL into its Virtual Language Observatory (VLO). The VLO is a metadata aggregator and search engine for language related resources and tools. As a first step, the harvested metadata was transformed into the CMDI (Component MetaData Infrastructure, ISO 24622-1:2015) metadata format used by CLARIN. The results of the harvest (at <http://alpha-vlo.clarin.eu/vlo/search?fq=dataProvider:European+Library>) are currently being checked and evaluated with respect to the relevance of the data for the CLARIN research community. A summary of the evaluation will be presented to Europeana/TEL by the end of February 2016.

Task 3.2 Develop distribution partnerships in education and tourism

Subtask 3.2.1. Develop distribution partnerships in education with European Schoolnet (EUN), Euroclio, Inventing Europe

We continued developing the partnerships with EUN, EUROCLIO and Inventing Europe as outlined in the D3.3 Plan for distribution in education. The concrete progress and achievements per partner are described in more detail below.

European Schoolnet (EUN)

During the previous reporting periods, EUN's initial effort focused on:

- Identifying subsets of Europeana collections that have both an educational value and the potential to [travel well](#) across national, cultural and linguistic boundaries so that they can usefully complement the national resources already offered by Ministries of Education.
- Preparing queries necessary to obtain the metadata records describing these resources and obtaining them by calling the Europeana API.

From 1 November 2015 to 31 January 2016, in continuation of this work, European Schoolnet's contributions to the project mainly consisted of:

- Mapping metadata from Europeana to the LRE. Open Educational Resources are described according to the [LRE Metadata Application Profile](#) (LREMAP), which significantly differs from the Europeana Data Model (EDM) and its controlled vocabularies. Therefore, in order to import metadata records into the LRE, it was necessary to map them from the EDM to the LREMAP;
- Further filtering/curating the records to make sure only relevant resources are added to the LRE;
- Automating the whole process; and
- Further enriching the metadata with pedagogically specific metadata.

As a result, a first batch of Europeana resources can now be accessed from the educational portals connected to the LRE (such as the [LRE for schools portal](#)). These resources are well-suited for a variety of subjects such as history, world religions and geography. During the remaining months of the project, EUN will add, curate and enrich more Europeana resources, promote their use and work on improving the automation of the whole process.

Stichting Historie der Techniek (SHT)

SHT has translated the results of the extensive teacher surveys performed during the previous period into an improved and enhanced "What's like this?" section below each of the stories in each of the tours on Inventing Europe (www.inventingeurope.eu). This section fully relies on Europeana API technology. The improvement of the "What's like this?" section involved:

- a new design;
- an update of the API technology;
- the integration of a pop-up with a better view of metadata, large images and the option to play audio and video;
- the creation of an advanced search option that not only allows to filter the search query results, but also to create and compare search requests.

In addition, the technical work also involved the insertion of permalinks, an activity which allows us to measure in Google Analytics the number of downloads of assignments and other lecture materials.

The SHT launched the new “What’s like this?” section to its audiences through a social media campaign via a special issue of the Tensions of Europe community newsletter, as well as via Facebook and Twitter. Results of the campaign will become available in the course of February.

During the remaining months of the project, SHT will work on the improvement of the search queries of the new “What’s like this?” section and will improve the Inventing Europe education environment with new and interesting assignments using this section and thus Europe’s digital cultural heritage materials.

EUROCLIO

In the Europeana DSI project, EUROCLIO is working on a way to enable users to search and select digital heritage items from Europeana and use them in the Historiana website. This would enable them to create online learning activities using sources from Europeana. To achieve this, Euroclio will identify, develop and feature collections of Europeana sources on specific topics or from selected Europeana content providers. All collections will be relevant for history educators, openly licensed (so that they can be used freely in education) and with direct links to the media objects which can be downloaded.

In the previous reporting period, Webtic developed a way in the backend of the Historiana to select content providers to Europeana that should be included in the list that users can see.

From 1 November 2015 to 31 January 2016, in continuation of this work, EUROCLIO’s contribution to the project mainly consisted of:

- Finding a way to work online on the improvement of the functionality sketches (this became [Realttimeboard](#), a service where multiple users can work together on a shared board). The sketches make clear how users can select Europeana source when they are creating an online learning activity within Historiana, and how the Featured Europeana Collections looks like.
- Working with Webtic on the development of Sketches on how the “Search and Select” functionality will be integrated.
- Identifying possible source collections based on the content of Europeana to present to teachers.
- Developing a way to upload Europeana featured collections that fits in the workflow of the people working at or with EUROCLIO on the selection of relevant content.
- Preparing a feedback session with educators/teacher trainers during the EUROCLIO annual conference on 21 March in Belfast.

The next steps (before the end of the project) are to:

- Develop the sketches into a wireframe / click model and develop exemplar content for testing purposes.
- Organise a testing session during the EUROCLIO Annual Conference to get feedback on the way the Search and Select works and the Featured Source Collections (21 March 2016, Queens University, Belfast, Northern Ireland).
- Finalise and upload the featured Source Collections.
- Finalise the selection of content providers that have relevant content for history educators.
- Make the Search and Select functions.

Subtask 3.2.2. Distribution partnerships in tourism with PLURIO and SE1 Media

SE1 Media continued working on the plan for Europeana's distribution in the tourism market. The plan delivery deadline was extended to 31 March 2016 so that the plan can be broadened with the conclusions from a deeper investigation of the conducted interviews with key tourism players, the results from industry testing of solutions through a multi-stakeholder focus group and a tactical and strategic roadmap setting out specific actions and milestones along a chronological timeframe.

Task 3.3. Develop and promote end-to-end services for the creative re-use of Europeana material

Subtask 3.3.1 Create a business plan for Europeana Inc.

Europeana Inc. business plan was delivered in the previous reporting period (30 September 2015).

Subtask 3.3.2 Create end-to-end processes for Europeana Inc.

During this reporting period, we refined and enriched the end-to-end incubation process.

We regularly promoted relevant hackathons and events for creative industries wishing to experiment with cultural heritage under the [event section](#) of Europeana Labs.

We also featured two new partner physical Labs - Open Lab Heritage, Seville and Open Lab Culture, Rome under the incubation section on Labs and thus ensured more opportunities for developers and digital innovators to experiment and build with cultural content.

Finally, we built up our partnership with Platoniq and focused on the development of the co-creation and crowdfunding capabilities and services. After consultations with Europeana, Platoniq started building the backend of the co-creation kit website in early January 2016. They are also adapting the crowdfunding workshop materials to be integrated in the co-creation kit platform as an add-on.

In addition, Platoniq redesigned and improved their crowdfunding platform Goteo. In particular, they developed a fully responsive project page for more visual impact, improved the payment

functionality on the platform to easily add other payment systems across Europe and improved Goteo's API to get better visualization of the project's impact.

Subtask 3.3.3 Develop the Europeana Incubator with Platoniq

Platoniq and Europeana held a series of mini-workshops on crowdfunding at the [DISH conference](#) on 8 December in Rotterdam. In these sessions we introduced crowdfunding as an alternative funding strategy for cultural heritage projects. As a result of these and other promotional and networking activities, Platoniq created a database of potential leads for co-creation and crowdfunding workshops. These leads have been actively followed up and a co-creation workshop in cooperation with Europeana Fashion at the two-day [international conference](#) of Rijksmuseum on 21-22 April 2016 in Amsterdam is confirmed.

Subtask 3.3.4 Broker relationships between Europeana partners and industries wishing to associate with culture

We have facilitated the partnership between the educational division of Apple (iTunes University) and the cultural sector. Europeana's first joint project with Apple resulted in a well-received Multi-Touch book and an iTunes U course on the outbreak of First World War (release date 13 Oct 2015). We wanted to promote it further to our network at the Europeana Network Association AGM in 3-4 November in Amsterdam and inspire future collaborations between cultural heritage institutions, Europeana, educators and Apple.

On the second AGM day, the Belgian history teacher and Apple Distinguished Educator Gwen Vergouwen demonstrated the Multi-Touch book and iTunes U course to all participants. In the lunch break afterwards Apple representatives had a special session on the potential of iTunes U for cultural institutions and their educational projects. The presentation and session resulted in greater awareness about our first iTunes U project and discussions about two potential iTunes U projects with the natural history museum Naturalis in Leiden and Museo Galileo in Florence.

WP4 Policy, Research, Knowledge and Programme Management

This work package is responsible for programme and knowledge management, and supports other work packages with research and development and policy-making.

Its objectives are:

- Managing the Europeana Foundation programme of projects and subcontracts.
- Developing new projects to fulfil the innovation needs of the Europeana DSI, under funding streams other than CEF, with the aim of upgrading the quality of the Europeana DSI.
- Coordinating Europeana DSI's knowledge management.
- Coordinating Europeana DSI's advocacy and policy development on IPR and open data.
- Coordinating the development of Europeana DSI's business models, strategy and impact assessment.
- Coordinating Europeana DSI Research and Development activities, including coordinating the EuropeanaTech community.

Description of work carried out and achievements:

Task 4.1 Implement strategic programme management

This task, which manages the full programme of all Europeana projects, including Europeana DSI, has continued as planned. Regular project meetings of work package leaders have been held and partners have been informed on project status if necessary.

Task 4.2 Develop new projects to fulfil the research and development needs of the Europeana DSI

There have been no particular actions under this task in this reporting period.

Task 4.3 Coordinate knowledge in relation with projects and the Europeana DSI

Subtask 4.3.1. Manage the development of ENUMERATE Observatory on the Europeana DSI Platform

DEN and CT

Digitaal Erfgoed Nederland (DEN) and Collections Trust (CT) focussed on carrying out research for, and designing indicator pages for the ENUMERATE Observatory. An extensible indicator database was developed, where indicators from the ENUMERATE Conceptual Framework are documented and linked to a basic prioritization mechanism. In the coming months the quest for potentially useful indicators will be intensified. Particular attention will be paid to the possibility of further alignment with the Europeana Impact Framework.

Work has started on preparing content pages for each indicator, with an interpretation of results from the most recent surveys and an analysis of trends over the years. To this end templates and instructions were mounted onto a Google Drive. This work will be continued in the coming months due to an additional contribution from the central (Europeana) project budget.

ENUMERATE proceedings and plans were presented on the annual EGMUS Meeting (CBS, The Hague, November 2, 2015). ENUMERATE was also represented at an expert meeting of the Cultuurindex Nederland (November 27, 2015).

Task 4.4 Coordinate Europeana DSI's advocacy and policy development on IPR

Subtask 4.4.1. Embed existing IPR and Open Data policies in the Europeana DSI Network

KL

KL is continuing its work in embedding knowledge and policies within the DSI network. KL is working on training materials that Aggregators can use, and is preparing for and organising two training opportunities over the next few months, one in late March and one in late April. We are

also hosting a shared discussion space on Basecamp with the members of the Europeana DSI Network.

Subtask 4.4.2. Develop Europeana DSI's IPR policy

KL

In terms of the work in creating a shared namespace for right statements, Europeana Foundation, the Digital Public Library of America (DPLA) and Creative Commons, have started developing the technical rightsstatements.org infrastructure. We have also selected contractors for our visual identity and back-end application, and are working with them on delivering the rightsstatements.org resource in Q1 of 2016. KL have also been working with Europeana Library partners to update the OOC-NC (Out-of-Commerce-Non-Commercial Use) statement so that it will work within the rigtstatements.org Framework, to ensure compatibility with the current Europeana Licensing Framework.

KL has continued its advocacy efforts directed at the European Commission, Member State representatives and MEPs. KL has set up an Europeana Network working group on copyright policy to facilitate the information flow between the network and Europeana Foundation / Kennisland. It has worked on preparing case studies on the costs of rights clearance for mass digitization projects for the copyright unity of DG Connect.

Subtask 4.4.3. Coordinate the development of Europeana DSI's business plans, strategies and impact framework

The Europeana Business Plan 2016 has been delivered under this task, after extensive consultation with stakeholders, such as the Europeana Network Association (Member Council), the European Commission (MSEG) and the Europeana Foundation Board.

Task 4.5 Coordinate Europeana DSI research and development (R&D)

Subtask 4.5.1 R&D Coordination

As part of the EuropeanaTech R&D Coordination, The Netherlands Institute for Sound and Vision has increased their presence in the FLOSS community around Europe and the US.

One of the key actions was the initiation and completion of the FLOSS Task Force which sought to improve the EuropeanaTech FLOSS Inventory and provided recommendations for future actions. The Task Force ran from May 2015-December 2016.

EuropeanaTech has been liaising with the Hydra EU community and has arranged a series of Workshops at conferences around the EU with a focus on improving the uptake of and developmental community around Open Source software.

From an admin and editorial side EuropeanaTech Insight was further investigated including the dissemination of a user feedback survey. However, the future of EuropeanaTech Insight is still being investigated.

There has been a continuation of the "Who's Using What?" developer spotlight column with six new interviews published in the past 6 months.

Other EuropeanaTech-related actions from the Europeana Foundation include the setting of the new Data Quality Committee presented in subtask 1.5.2 as a Europeana Network / EuropeanaTech Working Group, with first activities starting in January and formal approval scheduled for February.

We also represented EuropeanaTech at the EUDAT workshop, where we reported on TEL and Europeana experience on various aspects. We did two presentations and chaired a special session at the conference on Semantic Web In Libraries.

Finally, Europeana joined the 'Annotate all knowledge' Coalition, that aims at promoting annotation applications and sharing best practices to develop them.

Subtask 4.5.2 Develop EDM

We organized an EDM Workshop "EDM turns five" at the Europeana AGM (November 2015) to reflect with key members of the community on the work done in the past years and got feedback on the directions we should follow to progress EDM for the greater benefit of the community.

To better represent the work of the Europeana Network around EDM, we have updated a survey on EDM mappings, profiles and extensions published on Europeana Pro.

In collaboration with the Europeana Cloud project we investigated options to better align EDM to the International Image Interoperability Framework (IIIF). Europeana has been actively involved in the IIIF conference and community days in Ghent.

This enabled to develop an new EDM update for handling references to IIIF content. In the same update we released new fields for representing intermediate providers in the aggregation flow, and supporting changes in Europeana's thumbnail logic.

We continued the work on developing EDM for annotations and new ways to check EDM data.

Finally, we kept liaising with the International Rights Statement Working Group to monitor the technical implementation of the rightstatements.org service (for publishing data on statements).

Subtask 4.5.3 Improvement on search

We have set up a crowdsourcing tool for getting feedback on multilingual search challenges. We have defined - after thorough experimentation using a tool developed for the occasion - new weighting for metadata fields in Europeana's search, to be implemented in production in the coming period.

We have worked on specifications on the Europeana Entity Collection, which will gather relevant contextual data for improving enrichment and search of objects in Europeana. We also began concrete work on populating the collection from a selection, from the current enrichment database.

We began preparation work for applying learning-to-rank algorithms to Europeana.

WP5 Network and Sustainability

The work package is responsible for managing the activities of the Europeana Network Association with the following objectives:

- strengthening and growing the Europeana Network Association
- managing the transition towards new Europeana DSI governance
- coordinating network activity and communication
- broadening the sustainability of Europeana DSI

Description of work carried out and achievements:

Task 5.1 Complete the transition to a new governance of Europeana

In 2015, we transformed Europeana Network into the Europeana Network Association, a democratic and transparent body that represents the interests of all organisations who work with or contribute to Europeana, and support the [Europeana Commons principles](#).

The Statutes and Bylaws of Europeana Association are now in place. Association members were asked to (electronically) dis/approve of the last amendments to both documents by November 10.

In June 2015, nearly 1,850 people were members of the original Europeana Network. Because those members needed to take action to become part of the new Association, we projected a loss of 40% due to various variables (e.g. members no longer interested, members who had moved or changed jobs, faulty email addresses). In practical terms, we expected to have +/- 1,200 engaged individuals in the Europeana Network Association by December, 2015. Those who registered before September 30 were eligible for Members Council candidacy and were invited to participate in the 2015 Members Council elections. (See below)

Task 5.2 Coordinate Europeana Network Association membership, meetings (including the AGM), elections to the Members Council and communication

In November, the Association recorded 1265 members. In total 1167 members were eligible to vote, as this is the number of Association members who registered by the 2 October deadline. (note that Europeana Association records 1,319 members at the end of December 2015, and 1,355 mid-February 2016)

After the establishment of the new elections procedures (gradual 20% increase up until the number of 50 in 2015) 7 seats - 5 new seats, plus 2 from Councillors who decided to stand down - were up for election at the 2015 General Assembly taking place during the AGM. We have had

positive interest in the elections: in all we have received 30 candidates. The elections started on 3 November and ran until 10 November.

The Members Council elections were launched at the [Annual General Meeting \(3-4 November\)](#) with a communications campaign featuring [Network election special bulletins](#) and social media campaigns (LinkedIn, [Twitter](#)), all under the #EuropeanaElects hashtag. Every Network Association member had the opportunity to review the Members Council candidates profile on Europeana Pro; they were invited to vote for up to 3 representatives. The election outcomes were made public on 24 November 2015 and extended the Members Council to a group of 30 elected representatives.

A Working Group of Members Council monitored the elections procedure and communicated with the network: 603 (51.7%) members participated in the elections [[Full elections' results](#)].

The importance of this network to the work of the Europeana DSI cannot be underestimated. Members give time and energy to various aspects of the development of the platform, from standards to community reach and development. They provide the validation for frameworks and are the ecosystem that underpins the platform.

Under Task 5.2, we organised a series of meetings supporting the Association development:

- Management Board meetings (monthly recurrence) - 8 participants: 6 Management Board + 2 Europeana Office representatives. We organised 2 virtual and 1 physical meeting during the reporting period;
- Members Council physical meetings (2 to 3 times a year) - All Councilors and 4 Europeana Office representatives. We organised 1 physical meeting during the reporting period in conjunction with the AGM;
- General Assembly at which Association members are introduced to the Statutes, ByLaws and new elections candidates. We organise one General Assembly per year; the 2015 and 1st Association General Assembly was organised during the AGM.

Finally, we organised a successful [AGM 2015](#) in Amsterdam on November 2-4. The event provided the opportunity for Europeana and its partners for all to share, discuss and develop specific areas of mutual interest. This year's edition was designed and organised by the Members Council dedicated Working Group. It was the 1st edition entirely prepared by the network and recorded an unprecedented success under the title "[We are Europeana](#)". 240 Association members participated during this two days event; the [programme](#) featured four tracks, namely the General Assembly (see above), the Europeana Common principles, Europeana Business Plan 2016 and digital cultural innovation that will drive Europeana in the future.

The yearly AGM survey circulated after the event recorded up to 80% satisfaction from participants.

Membership, elections, AGM and outcomes were all communicated through our [network monthly newsletters](#) and various specific campaigns. Each campaigns was endorsed by the dedicated Working Group Chair and followed a specific Communications Plan:

- Membership campaign champion: Joke van der Leeuw-Roord
- Elections campaign champion: Rolf Källman
- AGM campaign champion: Johan Oomen, Lizzy Jongma

The communication feeds were relayed through Europeana LinkedIn Group and Twitter.

Task 5.3 Continue development on Europeana Professional

[Europeana Pro](#) was re-launched in February 2015; Europeana Pro is the platform for all information and knowledge exchange for Europeana's network of cultural heritage professionals, technologists and projects. It is the official source for technical information, legal information, metadata standards and case studies, as well as project outcomes. Europeana Pro plays a key role in our dissemination objectives. However, it remains a source of information rather than an interactive tool. An Editorial team makes sure the tone of voice and content give visitors the best experience and appropriate messages. Europeana Pro is also the dedicated Association information platform.

Europeana Pro Blogs - available from [Europeana Pro](#) - feature specific highlights of Europeana Network Association activities, Task Force recommendations, Working Group deliverables and other Members Council initiatives. They cover the whole range of activities across the Europeana organisations. Blogs are relayed through the support of the Network Newsletter and Europeana LinkedIn Group, as well as Twitter. Europeana Pro blogs are used strategically to reflect our core messages and priorities and provide opportunity for collaboration and input with Network members.

The use of Europeana Pro was more specifically geared towards the Association requirements during the reporting period: membership, elections and AGM.

Task 5.4 Deepening and broadening our relationships with policy-makers in culture, education, tourism, research and the creative industries

Following the organisation of the Luxembourg event with PlurioNet dedicated to SmartCities (Oct 14-15. See previous reporting period), EF is currently tackling our next event during the Netherlands's Presidency with the Koninklijke Bibliotheek (Jan-June 2016). See Task 8.4.

Task 5.5 Broaden Europeana's sustainability

Three strands of work are contributing to achieving this task: 1. analysis of the value of Europeana to client groups, 2. work under the Dutch Presidency on sustainability of Europeana and 3. broadening the use of Europeana as resource for education, research and tourism.

1. Analysis of the value of Europeana to client groups

Value proposition work was undertaken with each of the client groups of Europeana to get a solid understanding of the value of Europeana to each potential client group, culminating in *Towards a sustainable future for Europeana - MSEG October 2015*. This will contribute to MS37 report on sustainability due in M13. An initial version of this was discussed at the MSEG meeting in October 2015, and formed the basis of a summary document for Commissioner Oettinger.

In essence the conclusion was that there is value for the 5 client groups:

1. For the End User: Free Access to trustworthy digital cultural heritage;
2. For the European Commission: interoperability facilitating the Digital Single Market & fuelling the creative industries;
3. For Member States: increased international visibility & being part of a community;
4. For Creative Industries: access to high-quality, rights-cleared digital cultural heritage material;
5. For Expert Hubs: innovation & shared costs for services (infrastructure, core and add-on).

But the paper concludes that having investigated alternative sources of income, including the creative industries, at this time, it does not seem feasible that Europeana can become self-sustaining if it is to retain its current philosophy of making cultural heritage freely accessible to all. To do this, it must be part of the European Commission's strategic programmes. Therefore, we will continue to rely on EC funding for the majority of our funding with other sources contributing smaller but still significant amounts. In return for such core funding, the EC is giving the European Union three primary returns on investment: a) Interoperability of data that comes from different cultural heritage sectors across all Member States thus facilitating the digital single market; b) fuel for the creative industries so underpinning jobs and growth in this growing sector; c) community cohesion and understanding - a truly interconnected Europe through its culture. Member States are also being asked to consider more structural contribution to Europeana in return for the services provided by Europeana and international visibility for their cultural heritage and more influence alongside the EC on the forward strategy of Europeana.

One avenue we have explored over the last three years, as part of the Europeana Creative project, under Europeana V3, and is the subject of a milestone under the Europeana DSI1 funding - the potential for businesses using Europeana in the creative industries to pay for the services they receive. However, the businesses that Europeana appeals to most are small low-budget ones (long-tail), who do not have the budget to pay for the digital resources we can give them access to. These businesses remain an important client group for Europeana though, as by using our digital resources, we are supporting their businesses to flourish and grow so that they may contribute to the European economy, jobs and growth.

2. Work under the Dutch Presidency on sustainability of Europeana

The Council of the Dutch Presidency are working towards finding a mid and long term solution to the sustainability of Europeana. A draft version was created in December 2015 -*Draft Council conclusions on access, visibility and use of European digital cultural heritage and in particular on the role of Europeana*. Work will continue on these with recommendations for funding, with a result on May 31, where Ministers will vote on the Conclusions. The aim is to get core funding assured under this multi-annual framework and agreement on facilitating its inclusion under the next one.

Europeana is contributing to this work with financial information and a breakdown of the understanding of what are core platform activities and the need for the supporting ecosystem in relation to aggregation and distribution.

3. Broadening the use of Europeana as resource for education, research and tourism

Sustainability comes also from use of the service. If it is seen to be of value and use by other communities, it will become part of their funding programmes or agreed as a central cost against market failure. To this end WP3 works on the increase of take up in education, research and the creative industries and WP2 on the development of communities and engagement into the Collections.

WP6 Product Development

This work package is responsible for managing product development and ownership which includes:

- product development (chief ownership) of all Europeana DSI products
- product ownership of core services
- product ownership of all end-user products
- product ownership of re-use products
- product ownership of all data partner and network related products

Description of work carried out and achievements:

Task 6.1 Manage Product Development

Subtask 6.1.1 Chief product ownership and technical projects coordination

Routines are in place for product owners to regularly meet to surface and prioritise cross-team concerns. Technical liaisons are in place for projects where Europeana is less involved (e.g. Europeana Food&Drink and Space) and product owners in place where we are deeply involved (e.g. Europeana Sounds and Cloud).

Subtask 6.1.2 Management of product development subcontracts

All subcontracts are allocated and either finalised or in progress.

Subtask 6.1.3 Manage knowledge management and process support tools

These tools are actively used to manage our internal and external communication and other daily coordination tasks. Primary tools are Assembla and Github. We're testing Slack as a team chat function to reduce the amount of emails.

Task 6.2 Manage product development of core platform services

Subtask 6.2.1 Develop storage and search services for metadata, vocabularies and content

An internal alpha version is in place for Entities (Concepts and Agents). Content storage is developed in the context of Europeana Cloud where an image storage service is currently in development. For metadata storage the services have, in preparation for the release of Europeana Collections, been made more robust. The search services have been migrated from Solr to SolrCloud to allow for a more distributed and durable approach to search and indexing, part of which fuels the ability to continuously update and re-index metadata which before was not feasible.

Subtask 6.2.2 Develop APIs for search, retrieval and user annotations

The Europeana Search API has been extended with [media queries](#)⁸, the ability for API users to sort data and to process multilingual data in an [easier way](#) via search. Development has started on an Entity API to allow API users to retrieve and search for named entities to improve search. For annotations, a first external Alpha version of the Annotations API has been under development and is close to a limited release.

Subtask 6.2.3 Develop an authentication and authorization service

As part of the work to make all Europeana functionality into an API (platform), work has been done to further migrate and adapt all authentication and authorisation services from the old Europeana portal to the Europeana API, as part of the MyEuropeana API. The components for user roles and the separation and management of users and API clients have been completed.

Subtask 6.2.4 Develop data exchange solutions for other data platforms and digital libraries

A [shim](#) has been developed that allows all Blacklight based libraries to search Europeana.

Task 6.3 Manage product development of all re-use related products

Subtask 6.3.1 Develop Europeana Labs

The content management system that Europeana Labs runs on has been maintained during this period including upgraded to the latest version and small bugs were fixed.

Subtask 6.3.2 Develop Europeana Research

We've expanded the [Europeana Research website](#) with a data content type and introduced a browsing option that allows filtering datasets by item type, spatial coverage and time coverage.

⁸ Development initiated in Europeana Creative but finished after that project ended.

Europeana Newspaper metadata and OCR:ed text have been exported and [made available for download via Europeana Research](#).

Subtask 6.3.3 Migrate Europeana Newspapers

The migration of Europeana Newspaper metadata records and high-resolution scans to the Europeana Cloud Storage Service and Image Service has been initiated but not completed.

Task 6.4 Manage product development of data partner and network-oriented products

Subtask 6.4.1 Develop ingestion APIs and tools

We organised a workshop with the Europeana Cloud technical team to design shared requirements for future ingestion tools using Europeana Cloud. Contributed to the technical/product related sections of DSI-1 D1.1. Further improved the Content Re-use toolset to better scale the processes of technical metadata extraction and thumbnail generation (caching), the majority of the Europeana metadata has now been processed by this toolset.

Subtask 6.4.2 Develop data enrichment services and APIs

The data.europeana agents URIs have been implemented for the entity collection and we also did a full re-enrichment of the data selected for inclusion in the thematic Music collection adding further music genres and music related resource types to its subset of data. This re-enrichment was accomplished with a new and improved solution for re-enrichment and re-indexing.

Subtask 6.4.3 Further develop the Statistics Dashboard

During this period we worked on the following functionalities and refinements:

- Automatically a dashboard has been generated for all data_providers, providers and countries;
- Refinement of queries to show more accurate data;
- URL Syntax change to better separate between different kind of dashboards;
- Improvements to the way we visualise data.

Subtask 6.4.4 Maintain Europeana Professional

The content management system that Europeana Pro runs on has been maintained during this period including upgraded to the latest version and small bugs were fixed.

Task 6.5 Manage product development of end-user applications

Subtask 6.5.1. User experience (UX) research, design and evaluation

Leading up to the launch of Europeana Collections, the thematic collections and the improvement of Virtual Exhibitions, numerous actions have been undertaken to improve the usability, accessibility and overall pleasure between the user and our services.

The delivery of the new Europeana Collections was a big mark for research and design. There were preliminary tests while in beta version (mostly internal and with selected partners) a

planning for a bigger scale user research was ignited based on the new release, which will take place in the next few months.

Some smaller scale testing was in place with the release of the portal concerning user satisfaction of the overall design both for specific thematic collections and Europeana Collections.

We have developed a test plan for Europeana's (thematic) Collections which will focus on UX and set out a tender in order to evaluate this service and gain new insights with regards to further development and created a concept, sketches, wireframes and product plan for Virtual Exhibitions.

Subtask 6.5.2 Maintain and develop the portal, exhibitions and end-user blog

With the launch of the new portal beta in this reporting period (see below) we have done no work on the old portal. In this reporting period we have developed a new exhibitions concept and selected a new exhibitions CMS, [Pageflow.io](https://pageflow.io).

Subtask 6.5.3 Develop the portal and channels engine

In this period we have finalised and released a public beta version of [Europeana Collections](#) which encompasses both the portal and channels engine. The latter means that channels, or thematic collections as they're called in the user interface, can be created in the Europeana Collections CMS with no programming/development needed⁹. The [source code](#) is available on the Europeana GitHub.

Subtask 6.5.4 Maintain Europeana 1914-1918

We have not developed on Europeana 1914-1918 in this reporting period.

Subtask 6.5.5 Migrate Europeana 1989 and 89 Voices

We have not developed on Europeana 1989 or 89 Voices in this reporting period.

WP7 Technology

The overall objectives of this work package are to:

- Operate existing Europeana systems
- Migrate to a new cloud-based hosting infrastructure
- Plan the Europeana system architecture
- Migrate TEL and Europeana Newspapers to be fully part of Europeana DSI (cloud storage and platform)
- Introduce cloud technologies on various levels to promote efficiency of Europeana operations
- Develop innovative software for Europeana's needs

⁹ Unless development of channel specific features are required.

Description of work carried out and achievements:

Task 7.1 Operation of existing systems

Europeana's systems ran in a stable manner during the reporting period. To improve their availability, we established a 24x7 monitoring and reporting dashboard which is using [Pingdom](#), a commercial service. As part of the new dashboard, we launched the public [Europeana Status Page](#), providing us and our stakeholders with information on the uptime and availability of Europeana DSI's components in a transparent way.

Task 7.2. Architectural Planning of the Platform (with PSNC)

In December, EF and PSNC have hold a developer meet-up to assess the metadata and content storage service, developed by Europeana Cloud, for their aggregation needs. The outcome was a set of refinements to the data model that need to be implemented to fully serve the two aggregators. The work on implementing the recommendations has started.

Task 7.3 Metadata and content synchronisation (with PSNC)

Europeana Cloud storage service was extended with more mechanisms to upload data to it: harvesting records from FTP and OAI-PMH repositories. We have tested these mechanisms with real-life use cases using content from data partners.

Task 7.4 Reactive Architecture (with PSNC)

An infrastructure for data processing services was developed on top of Europeana Cloud Storage Service and tested on a number of use cases. The infrastructure uses [Apache Storm](#) as its central component for executing tasks. EF and PSNC have experimented with the following service use cases: transformation of metadata records, conversion of images, and exposing images in a way compatible with IIIF.

WP8 Communication

This objectives of this work package are:

- strategic positioning of the Europeana DSI
- coordinating events in relation to the rotating EU presidencies
- coordinating the Europeana DSI communications towards cultural heritage professionals
- developing and maintaining the Europeana Communicators Group

Description of work carried out and achievements:

Task 8.1. Manage the strategic positioning of Europeana

The new Europeana Collections website launched on 14 December 2015. Timing for communication & dissemination activities was scheduled for January 2016 to ensure the website was stable and worked correctly. Activity focused on positioning Europeana as the trustworthy and relevant source of digital cultural heritage from diverse sources across Europe, brought together for learning, research, innovation or pleasure.

A range of channels and tools were used to reach Europeana's different audiences: end-user and Pro blogs, a press release, direct email to policy makers and key media, Europeana end user and Network Newsletter, Twitter and Facebook. The launch messages were positively received. Highlights of the campaign include the reach and engagement on Twitter (over 900 tweets/retweets, over 3 MLN impressions) and social shares - over 4,5 K generated by one review in [Open Culture](#) alone.

In December we launched a mini social media campaign to encourage partners to share their digital cultural heritage highlights from 2015 using #AllezCulture. This festive hook encouraged the sharing of positive stories and provided the opportunity to underline the value the sector creates, while offering partners a chance to reflect on and promote their achievements in the wider Europeana community. Example tweets:

https://twitter.com/eu_sounds/status/671675206235258880

https://twitter.com/spildaftid_dk/status/673786575310966784

<https://twitter.com/ducaannalise/status/672766936686678016>

Task 8.2 Develop advocacy on policies relating to European cultural heritage at European and Member State levels

This task helps create understanding of the purpose and benefits of the Europeana DSI and includes advocacy at European and national levels to promote the work and needs of the cultural heritage sector to politicians and policy makers. Participation at conferences workshops and meetings relevant to the larger political and policymaking landscape are a key part of this work.

In this context participation at relevant external events during the reporting period included the following: event organised by the Italian Permanent Representation to discuss a European Year of Cultural Heritage; Socialist & Democrat group's event on copyright 'Limitations and Exceptions, Geoblocking & Portability' in the European Parliament (19 Nov); The ALDE annual conference in Budapest (20-21 Nov); the Communia event in European Parliament on open access and copyright (25 Jan 2016).

As part of an ongoing approach, advocacy activities between November 2015 and January 2016 have focused on targeted approach to senior policymakers and political figures relevant to the cultural heritage field on challenges relating to the sector. These included meetings with:

Director General for DG EAC, Mrs Reichert; Deputy head of Commissioner Oettinger's cabinet, Mr Mamer; Commissioner Oettinger; Copyright counsellor at the German permanent representation Copyright adviser to MEP Costa, chair of CULT committee, European Parliament; Policy Adviser for International Media Law at Federal Government Commissioner for Culture and the Media, Germany; the new counsellor for Culture at the German permanent representation.

Task 8.3 Coordinate Europeana 280 campaign

Under *Europeana 280*, each of the 28 Ministries of Culture has been invited to liaise with their national cultural institutions to select 10 pieces of art held in their country that have contributed to, or created, a European art movement. In 2016, a public-facing campaign, based on the nominated pieces of art, will encourage people across the EU to engage with their national art history in the context of its contribution to Europe's rich heritage through interactive online and social media campaigns. And a dedicated, professionally curated virtual exhibition will showcase the collection across Europe.

Members of Europeana's Communications and Marketing, Collections, and Ingestion teams have been jointly working on this task

Liaison on content submission

Pre-campaign the main focus of work since 1 November 2015 has necessarily been focused on ongoing liaison with Ministries and cultural institutions, providing advice and support on the selection process, rights statements and the delivery of content. During this period 29 countries (EU 28 plus Norway) have been actively selecting or have started to contribute content for the 280 campaign.

Ingestion

The ingestion process also started during this period and has been ongoing for those countries that have finalised choices and submitted the relevant metadata and images. The goal is that all promised content will be submitted and ingested by end February 2016.

Development of public engagement

In addition, work has also been ongoing to define the public engagement activity. This is to a large extent dependent on the quality and openness of content submitted. Consequently, developing the approach has been an ongoing process as a clearer picture of the content and licenses available has emerged. As a main goal of the campaign is to use as many of the nominated artworks as possible in communication activities, liaison work has also included efforts to persuade institutions to provide more open rights statements where feasible.

Work has been ongoing to further the engagement activities that can be defined in the following key areas.

Engagement through partnerships:

- Partnerships have been agreed with two social media platforms/apps that target culture enthusiasts with an interest in art. [Artstack](#) is an online platform for people to discover, collect and share art and [Daily Art](#). During this period, a promotional programme of Europeana 280 content has been agreed with each platform/app according to the nature of: its engagement with its community; the content submitted to 280; and related 280 events, such as The Bridge and Jumping Jacks (see below) and work is ongoing to provide content to schedule. These programmes will run from 1st March (Daily Art) and 1st April (Artstack).

- A partnership has also been agreed with the Wikimedia community. A pan-European competition on Wikipedia and Wikidata will be held to support the Europeana 280 campaign with the goal to create around 8000 Wikipedia entries in around 30 languages. This will be the largest translation campaign in Wikipedia's history and the first cultural outreach campaign to focus on Wikidata. During this period, work has been ongoing to support the identification and submission of content for this event.

Engagement through interactive digital public events:

Two main options for public engagement have been explored and started development during this period:

- *The Bridge Europe* (working title) is an interactive cultural media event planned for public squares in nine European cities over 8 weeks in spring summer 2016 as part of the *Europeana 280* campaign. It is a collaboration between Europeana, eight Dutch Embassies* across Europe, the Netherlands Institute for Sound and Vision and the Dutch design studio DROPSTUFF.nl Hosted by the Dutch Embassies in each of the eight cities, each event invites the public to use a virtual reality app to share a cycle journey with others in a different European city as they race through virtual cities, populating them with centuries of art along the way.
- *Jumping Jacks*: During this period Europeana has been in discussions with Danish design agency Spild af Tid to conceive a series of 280 public engagement events, to be held in cultural institutions across Europe, that will allow people to engage with 280 artworks through the interactive digital installation *Jumping Jacks*. The installation combines art with interactive technology and moving, dynamic human bodies. These events are planned for late summer and autumn 2016.

Tender process for PR agencies

In January 2016 the tender process was initiated to engage PR agencies to generate media coverage and raise awareness of the 280 campaign public engagement events related to *The Bridge*, with a contract to be awarded in February 2016.

Virtual Exhibition

A virtual exhibition featuring selected Europeana 280 content from each country and curated with a pan European perspective is a key part of the Europeana 280 campaign. Country selection choices have been submitted and confirmed work has been ongoing in this period to develop a theme and narrative around content.

Europeana 280 Pro Blog series

As the first countries have finalised their choices and submissions, a weekly blog series has been introduced to promote interest in the forthcoming campaign. From January 2016, weekly blogs have been published. During this reporting period the series has featured four countries [Denmark](#), [Lithuania](#), [Norway](#), [Portugal](#).

Task 8.4 Support EU Presidency events with Latvijas Nacionālā bibliotēka (LNB) and PLURIONet, Koninklijke Bibliotheek (KB)

The last event under Task 8.4 will involve the Koninklijke Bibliotheek during the Netherlands Presidency (January 2016 - June 2016). The purpose of the event is to revisit the [Research recommendations](#) designed in July 2014, evaluate their implementation level and project the next major milestones for a concrete forward development. The event entitled “*Digital heritage - Current questions in Policy & Research opportunities*” will be organised in the premises of the National Library of the Netherlands in The Hague on April 25-26, 2016. It will feature three tracks: current recommendation status and ambition, practical use-cases among EU researchers/digital humanists and a round-table featuring all players in the research field in the Netherlands (research policy makers, ministry & research organisations). These three tracks will help Europeana and the KB to design the next phase of the Research recommendations.

Task 8.5 Develop the Europeana Communicators Group

To address ongoing challenges facing the Europeana Communicators Group a Europeana Network Association Communicators’ Group Task Force was established in 2015 to create recommendations for a workable and sustainable future approach. During this reporting period, the final meeting of the Europeana Communicators Group Task Force was held to coincide with the Europeana Network Association AGM in November 2016 and recommendations for the future development of the Europeana Communicators Group were finalised and submitted to the Europeana Members Council Board and published on [Europeana Pro](#). These recommendations will start to be implemented under DS11.

Task 8.6 Explore the Partnership in Awards programme with Heritage in Motion

As outlined in a Memorandum of Understanding signed by the European Museums Academy, Europa Nostra and the Europeana Foundation, Europeana supported Heritage in Motion with communications, promoting the 2016 Awards, and with the development of a new brand and website.

In terms of developing the new brand for the awards, from November until January Europeana: designed and facilitated a brand positioning workshop; started developing the new Heritage in Motion logo; finalised wireframes for the new interface; and started to develop the backend of the new website.

With regards to supporting communications about the 2016 Awards, between November and January, Europeana promoted the awards via its Network, Labs and Communicators Group newsletters, LinkedIn group and Twitter. In the run up to the awards 1 December 2015 submission deadline, Europeana published an interview with last year’s winners on the Europeana Pro blog. Following the deadline extension announcement, Europeana issued countdown reminders on Twitter, which received 20,000 impressions and 120 engagements. The awards were also presented at Europeana’s Network Association AGM in November.

WP9 People and Business Support

To operate the Europeana DSI, it must have people and resources including a physical work environment. This work package is designed to cover those needs and manage the total financial needs of the Europeana Foundation across all EU-funded projects and the development of revenue, generated from new activities.

This work package is in place to support the team that is responsible for:

- Human resource management
- Programme control
- Financial management
- Business support

Description of work carried out and achievements:

Task 9.1 Human resource management

Huge effort is spent on recruitment in the period November 2015 - January 2016. In December 2015, Europeana Foundation had 10 outstanding vacancies.

Effective from January 2016, we have made a change in the organisation. David Haskiya (former Product Development Manager) joined the Directors team as Product and Services Director. His main responsibility is for Aggregation, Infrastructure, Development and Products. Furthermore, we have strengthened the End-user/Collection team and the dissemination for Europeana is moved to the Communications team. By changing the organisation we must be able to put more focus on the activities and created smaller units with more cross-functional teams.

Task 9.2 Programme and Project financial control & coordination

The main activities in this period relates to the formal delivery of the financial costs claims from all partners for the period April 2015 - October 2015. We achieved to have all the information in from the partners within 14 days after the end of the reporting period. These reports has been checked by employees from the Finance unit as well as from the Programme unit. All reports are converted to the EU reporting templates. These templates have been sent back to the partners to sign off. On the 20th of November 2015 we have sent those templates to the Commission for checking.

The financial report for the coordinator (Europeana) has been audited in November 2015. Therefore the financial statement has been sent later (24 of November 2015). All the signed financial statements has been sent to the PO on the 17th of December 2015.

Main outcome of the total financial overview is an underspend in the project. This underspend is due to the following reasons:

- Europeana (P1) started from June 2015 instead of April with the main activities, after the end of the project Europeana v3.
- The monthly costs per PM for Europeana (P1) is much lower compared to the budget.
- Europeana (P1) had several outstanding vacancies.

- Many partners started later, because the advance payment from the Commission was received in the 2nd week of June 2015.

Task 9.3 Financial management for the Europeana

On the 19th of November 2015 we have had the Europeana Governing Board. The presented financial papers are:

- Revised Annual report 2014
- Cash flow position
- Funding update
- Financial report up to September 2015
- Budget 2016

All financial documents were approved by the Europeana Governing Board.

To improve the control on finance, we internally report on cash flow and DSI reporting on a monthly base.

Task 9.4 Business support

Europeana moved back to the Dutch Royal Library mid-December 2015. The staff is divided between the 4th and the 5th floor of the building. The movement went smoothly.

To improve on processes and to increase the transparency, Europeana has worked on the preparation of the Europeana Playbook. Furthermore we have made improvement on the subcontracting processes.

4. Cumulative financial overview (April 2015 – January 2016)

The financial overview presented in the table is based on the total period from April 2015 up to January 2016. Up to date three partners did not deliver their financial report up to January 2016 and in total four partners did not deliver a forecast for the coming period up to the end of the project (June 2016).

Expenditures by costs category			
	Budget project	Expenditures	In %
Personnel costs	€ 5,767,660	€ 3,203,373	55.5%
Subcontracting	€ 1,676,341	€ 522,226	31.2%
Other Direct Costs	€ 983,423	€ 237,244	24.1%
* Travel costs	€ 597,230	€ 188,259	31.5%
* Other costs	€ 386,193	€ 48,985	12.7%
Overhead	€ 472,576	€ 173,539	36.7%
	€ 8,900,000	€ 4,136,382	46.5%

With still 5 months to go in the project the expenditures are 46.5% of the total budget of €8,900,000, which is an underspend of 15%. In total we foresee an underspend of around €280,000. For the three missing partners we have reported the numbers up to October 2015. More details are presented in the overall financial report on page 53.

Budget changes

Based on the reporting up to October 2015 we foresaw a large underspend in the project, especially for Europeana Foundation. Two actions has been taken to reduce the large underspend;

1. Extension of the project period by one month
2. Re-allocation to partners

WP	By partners	1 PM costs	total personnel	7% overhead	Total budget increase
WP1	NISV	5,300	26,500	1,855	28,355
WP1	DIF / ACE	5,300	26,500	1,855	28,355
WP1	eFashion	5,500	27,500	1,925	29,425
WP1	AthenaRC/CARARE	3,500	17,500	1,225	18,725
WP2	F&F	7,200	7,200	504	7,704
WP3	Platoniq	2,800	19,600	1,372	20,972
WP3	AthenaRC/eResearch	3,500	14,000	980	14,980
WP4	DEN	6,100	12,200	854	13,054
WP3	ONB	4,800	9,600	672	10,272
WP6	PSNC	4,700	18,800	1,316	20,116
	TOTAL	179,400	179,400	12,558	191,958

A total amount of € 191,958 is reallocated from the Europeana budget to partners. This will be made effective in the new version of the DoA and needs to be approved by the Commission.

Furthermore we have received an approval from the Commission regarding a re-allocation of the Europeana budget from personnel staff and other costs to subcontracting. This to invest more in specific expertise and to invest in the Europeana 280 project.

Based on these re-allocations the budget for Europeana will change from €6,213,296 to €6,021,388.

Europeana DSI new budget				
	Old	New	Difference	PM
Personel staff	3.923.550	3.785.044	138.506-	23,00-
Subcontracting	1.266.500	1.410.500	144.000	
Other Direct costs				
* Travel costs	395.930	300.456	95.474-	
* Other direct costs	303.693	223.693	80.000-	
Overhead	323.622	301.644	21.978-	
TOTAL	6.213.295	6.021.337	191.958-	

Forecast

Based on the information received by the partners and the current information from Europeana Foundation we expect an underspend of € 280,000 (3%). Only a few partners expecting a small overspend, the rest of the partners expecting an underspend.

Total budget 8,900,000
 Total forecast 8,620,000
Underspend 280,000 (3.1%)

More information will be available after we have received all information from all partners.

Europeana DSI financial report (April 2015 - January 2016)

Participant No.	Short Name	Total budget	Re-allocation	New budget	Personnel costs	Sub-contracting	Travel costs	Other direct costs	Indirect costs (7%)	In total	In %
1	EF	6,213,296	191,958	6,021,338	2,129,494	367,891	90,759	38,640	94,522	2,721,306	45.2%
2	ACE	86,084		86,084	24,271	0	2,521	400	1,903	29,095	33.8%
3	DIF	185,252	28,355	213,607	86,780	0	5,047	0	6,428	98,255	46.0%
4	MICHAEL	229,589		229,589	87,572	25,000	2,570	8,119	6,878	130,139	56.7%
5	FUB	270,276		270,276	109,001	28,560	10,158	127	8,350	156,196	57.8%
6	2CULTURE	59,350		59,350	27,576	151	4,774	73	1,617	34,191	57.6%
7	ATHENARC	180,260	33,705	213,965	13,048		8,803		1,530	23,381	10.9%
8	Efashion	270,980	29,425	300,405	122,575	5,315	11,351	1,068	9,450	149,759	49.9%
9	NISV	286,411	28,355	314,766	117,863	57,867	4,319	0	8,553	188,602	59.9%
10	IALHI	243,091		243,091	136,121	0	16,519	174	7,877	160,691	66.1%
11	EUN	44,914		44,914	5,361	19,575	248	49	396	25,629	57.1%
12	Euroclio	46,062		46,062	19,266	0	935	0	1,414	21,615	46.9%
13	SHT	45,959		45,959	30,582	10,365	1,822	0	2,268	45,037	98.0%
14	DARIAH	29,853		29,853	2,953	0	600	0	249	3,802	12.7%
15	CLARIN	37,771		37,771	18,637		447		1,336	20,420	54.1%
16	Plurio.net	26,215		26,215	7,933	0	1,051	0	629	9,613	36.7%
17	EMA	28,355		28,355	14,000		0		980	14,980	52.8%
18	KBNL	22,359		22,359	0	0	1,331	0	93	1,424	6.4%
19	LNB	7,811		7,811	2,982	2	1,806	335	126	5,251	67.2%
20	CT	71,818		71,818	28,587		2,373		2,167	33,127	46.1%
21	SE1	37,450		37,450	29,873	0	1,242		2,178	33,293	88.9%
22	DEN	29,220	13,054	42,274	19,045	0	21	0	1,335	20,401	48.3%
23	KL	88,249		88,249	39,698	0	4,739	0	3,111	47,548	53.9%
24	F&F	59,599	7,704	67,303	20,829	0	2,056		1,602	24,487	36.4%
25	Platoniq	71,438	20,972	92,410	17,509	7,500	1,442		1,327	27,778	30.1%
26	ONB	39,269	10,272	49,541	26,951	0	5,334	0	2,260	34,545	69.7%
27	PSNC	189,069	20,116	209,185	64,866	0	5,991	0	4,960	75,817	36.2%
		8,900,000	-	8,900,000	3,203,373	522,226	188,259	48,985	173,539	4,136,379	46.5%