Europeana DSI 2 – Access to Digital Resources of European Heritage

DELIVERABLE

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FINAL TECHNICAL REPORT

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1. Publishable Summary

Introduction

Europeana DSI-2 was the project that operated the Europeana Core Service Platform between July 2016 and September 2017. With 34 participants and Europeana Foundation as its coordinator, the project has delivered interoperability and connectivity of digital cultural heritage at a European level.

Key objectives

The key objective of Europeana DSI-2 project was the continued operation of the Europeana DSI infrastructure to achieve the aims of the Europeana Strategic plan. The project therefore served to operate a multi- sided platform for access, enrichment and distribution of multilingual and multi-domain resources for application in five markets: Cultural Heritage Institutions (CHI), the European citizen, Education, Creative Industries and Academic Research.

Key results

Europeana DSI-2 ended on 31 August 2017 with good results and its work will continue under the Europeana DSI-3 Service Contract with the European Commission.
This final report documents the activities, outcomes and impact of Europeana DSI-2 during the full project period.

'A call to culture': strategic update

Arguably the most important achievement of this project is the update of the Europeana strategy. After a yearlong consultation with stakeholders such as users, the European Commission, MEPs, curators, creatives and member states' ministries, the revised strategy highlights three key priorities to have more impact as a Digital Service Infrastructure:

1. Making it easy and rewarding for Cultural Heritage Institutions to share high-quality content
2. Scaling with partners to reach our target markets and audiences
3. Engaging people on our websites and via participatory campaigns

Getting alignment for this course of action was key to reinvigorate the existing strategy as it expresses explicitly where Europeana should focus on to maximise its impact: support cultural heritage institutions with a solid technical infrastructure, policies, frameworks and advocacy to share their material widely and in interoperable and reusable formats. And by improving the customer experience on the Europeana websites, as well as reaching out to users via participatory campaigns like the 1914-18 collection days and through partners who are better positioned to reach deep into our

key markets such as education. This gave the project more focus and has allowed us to create tighter product development loops during the DSI-2 project[1].

Progress towards goals and objectives

The project had, according to the Description of Action, eight objectives that were grouped into four overarching goals. Each of the nine work packages integrally worked towards these goals and objectives.

1. Create Value for Partners

To achieve this first goal, we continued to investigate the needs of the users and their customer journeys in our key markets. This led to interesting insights, some of which we were able to translate to product during DSI-2. While each market has key characteristics and dynamics, our research showed for example that our professional audiences often have similar needs. This led to the integration of Europeana Research and Labs into the new Europeana Professional website which was released in beta in early September.

1.1. Objective 1 – Create a better customer experience

To improve the customer experience on the Europeana sites the product and design team (WP6) worked closely with the market facing teams (WP2, WP3) to investigate user needs and translated these into product requirements. This led to a number of substantial improvements in Europeana Collections and a complete overhaul of the professional websites. Each new feature was introduced using easy feedback mechanisms (hotjar) to solicit feedback.

New Pro: towards a seamless user journey for our professional audiences

For the professional audiences, Europeana has developed a **new Europeana Pro**, incorporating Europeana Research and Europeana Labs. It highlights a new and fresh visual design and integrated backend functionalities, but it's primary aim is to create improved user journeys (highlighting our key services for each audience).

Europeana Collections

Europeana Collections is our main content discovery mechanism for all user groups. A continuous known problem we face is the erratic way that Google indexes the Europeana material, reducing the number of end-users reaching Europeana and its content directly through search-engines. While we do what can be done to optimize for search engines (Google, Yahoo, Bing) our active strategy to improve customer value is qualitative; improve uniqueness and relevance of the material by interlinking (entity

[1] The project Europeana DSI-2 was written prior to the process of strategy revision, but its four goals are covered in our Business Plans to implement strategy. The Business Plan 2017 was delivered in the project, as the project deliberately allowed for change of strategy during its lifetime.

pages), curation (galleries, exhibitions), thematic organisation (Thematic Collections) and time limited campaigns.

During the project we have seen the launch of **Europeana Photography, Europeana Fashion and the integration of Europeana 1914-1918** as full-fledged curated thematic collections. All launches were successful and the efforts translated into consistently higher engagement levels (three times higher than average) and Net Promoter Scores between 20 and 30. Unfortunately the launch of Europeana Newspapers as a thematic collection had to be postponed until later this year as it requires a lot of development capacity that was needed in other areas with higher priority. But as the thematic approach had proven so successful we started a pilot to see if we could scale this approach in areas with a more automated approach to curation. The current results are promising.

To improve the way users can navigate between **searching and browsing for Fashion objects** and reading blog posts about Fashion we have integrated display of such blog posts into the thematic Fashion Collections. This will later be done also for all the blog posts we write that are about objects in our collections and new features - regardless of theme (WP2 and WP6).

We have found that we are often most successful when we package our efforts in 'seasonal' approaches. We have for example seen much success from the **"Art Nouveau" season** which ran from February to June 2017. The season included a newly created exhibition featuring almost fifty Art Nouveau art works, accompanied by new Pinterest boards and social media outreach to users (WP2). The feedback was encouraging: users reward the exhibition with a Net Promoter Score of over 50[2].

Image galleries went live on Europeana Collections in April 2017. Galleries present a relatively small curated selection of images on a certain theme. Some bring together artworks from across Europe, while others focus more on just one country. Most of the galleries connect to our thematic collections: Europeana Art, Europeana Music, Europeana Fashion and Europeana 1914-1918. Galleries bring together between 6 and 48 images (all of which are Tier 2+) on a specific topic, curated by the Collections team and our thematic collections partners.

A conceptual design for the **image discovery service** has been made. It focuses on exploration of high-quality imagery via image similarity (so-called Content Based Information Retrieval) computed by analysing the features and colours of the images.

[2] Net Promoter Score (NPS) measures the loyalty that exists between a provider and a consumer. For Europeana, it will ask a similar question like '*How likely is it that you would recommend* [this service] *to a friend or colleague?*'

1.2. Objective 2 – Embed network-centric thought

This objective is reliant on the interaction between the Europeana Foundation and the Europeana Network as well as on the effectiveness of the instruments we deploy to co-create. The **Europeana Network Association** is therefore an integral part of how the Europeana DSI operates. During the project the Members Council and Management Board have been driving forces for innovation through task forces and working groups (IIIF, Impact, IPR) and the management and interaction with the network at large. It is worth mentioning for example that the Members Council was heavily involved in the setup and development Europeana Network Association's response to all the sections of the EC Draft Europeana Evaluation Roadmap.

Several task forces have been set-up by the Europeana Network and they continue to provide valuable insights, advice and consultation on Europeana's business. The key question we are facing now is how to turn more of these recommendations into actionable results. It is worth noting that the Members Council has raised the bar substantially for taskforce proposals to be admitted. The Members Council in close cooperation with the Europeana Secretariat has organised a very successful AGM and are in full preparation for a **large conference in 2018** and the **AGM 2017**.

EF also launched a **Member States section on Pro** that features Country Reports and all relevant documentation.

2. Improve Data Quality

This second goal aims to improve the data quality in Europeana, as defined in the Europeana Publishing Framework. The direct results have been very positive. We have been improving a great number of data sets resulting in an increase of 3.2 million items in the higher tiers, well above target. The development of an improved organisational and technical infrastructure has proven to be complex and have experienced some delays, while new quality frameworks such as IIIF[3] that Europeana is a founding member of have gained considerable traction.

2.1. Objective 3 – Innovate the way we aggregate material

With all aggregating partners (WP1) we have developed a **data quality plan** and identified the most promising improvements to be made. All domain aggregators are participating in these efforts to improve data quality, e.g. by fixing broken links, repairing thumbnails and updating metadata to new standards which have led to the said increase in tier 2, 3 and 4 material. On the organisational side good progress has been made to transition to a new and more efficient aggregation infrastructure. As can be read in the white paper agreement was found on a number of crucial topics. In particular that in countries where a national aggregator is in place, data will flow via the

3 International Image Interoperability Framework.

national aggregator. The domain aggregator will in those cases act as a facilitating expert. Furthermore, DSI funding will fund only one central aggregation infrastructure. On the technical side, progress was made with Metis, but the acceleration came late in the project due to inconsistencies in views on the relationship between Metis and Operation Direct that needed to be solved first. A report of an independent consultant (Richard Padley) brought clarity on these issues which are now being adopted and implemented.

2.2. Objective 4 – Implement quality frameworks

We published the new **Europeana Content Strategy**, which will guide our content acquisition process for the coming years. In addition we updated the Europeana Publishing Framework and Europeana Publishing Guide, to help with the implementation of the content strategy (WP1).

A major result of Europeana DSI-2 is the development of a new quality framework to measure **impact** (WP4, also with support of partners in WP2). Europeana initiated a Task Force to support the development of a toolkit which includes a Playbook to design, assess and narrate impact as a cultural heritage organisation.

3. Open the Data

Following the three strategic objectives we are making the data available through the most appropriate channels. On the Europeana stack via community segmented services and/or via third party channels. The Europeana thematic sites have been successful in deepening the engagement levels of the users (time on site, number of pages viewed, Net Promoter Scores) while third party channels including social media have had much wider reach than expected. We have lowered our ambitions this year for the creative industries but invested extra in the Education market with some very promising results.

3.1. Objective 5 – Develop community-segmented services

Europeana Collections (WP2) allows all users to see what is available on Europeana and shows clear information on how it can be used and re-used. For Europeana Collections and our thematic collections (art, fashion and music) we develop new features (WP6), based on user-demand or data partner request (also see section 1.1, WP2 and WP6.

Campaigns

While we are gearing up for the migration campaign starting in the fall we ran a smaller #AllezLiterature campaign to promote the written and spoken word elements of our cultural heritage. An interesting area of success remains the Europeana 1914-1918 initiative. Under DSI- 2 we have been working with the **Wikimedia** community to increase the level of engagement with the subject in the Member States we intend to reach new users for the **Europeana 1914-1918** service. Furthermore, the Transcribathon project is spinning off as a new initiative in its own right. Designed to make the

handwritten documents machine- readable, it is not only doing that (currently 8.000 document transcribed) but it is proving to be a very attractive format for teaching environments.

Scaling through Partners

We can sometimes reach levels of engagement through partnerships that we would never be able to have as a standalone initiative. A great example of this is the **ArtUpYourTab** Google Chrome extension. Developed in partnership with Kennisland and a development firm it allows people to see a work of art each time a new tab is opened in Chrome and recently Firefox. It very quickly grew a user base of over 2500 users and over 1.7 million views.

Europeana Research: the annual grants programme (WP2) was very successful with over 140 applicants. The three winners of the grant are now running their projects. The Europeana Research Advisory Board selected for the Research Grants Programme three finalists, based on best fit to the call for proposals, the detail of project plans, and the planned budget of each proposal and awarded funding to these projects. The final three were clearly the projects of the highest quality of the submitted proposals, as assessed by the Europeana Research Advisory Board.

Under the header of **Europeana Education**, we position ourselves in the education market. Together with European Schoolnet (EUN), we conducted a pilot on the reuse of digital cultural content in education. The pilot concluded with the publication of a pilot validation report on use of Europeana for teaching and learning (D 3.4). Our other key educational partner, EUROCLIO, launched a new learning environment on their online platform Historiana which allows history educators to find sources, explore learning activities and create online their own learning activities in their own language.

To actively support the development of **new distribution partnerships in education**, we created a dedicated education area on Europeana Pro. Interested parties can now explore our partnerships, browse case studies of educational applications, resources and platforms featuring Europeana content, and get practical help from our collection of useful resources.

For the **creative industries**, a grants programme for match funding has been implemented to support high potential reuse projects. In February 2017 we launched Europeana's first match funding call "Strike a match for education" in close cooperation with our partner crowdfunding platform Goteo.org. The call for creative projects in secondary education resulted in 18 applications from across Europe, of which three projects were selected as winners and ran their crowdfunding campaigns. Two of these were successfully funded in the crowdfunding stage and therefore received match funding from Europeana.

3.2. Objective 6 – Champion interoperability

As has been outlined in 2.2 (Objective 4) we continue to develop new frameworks that support interoperability. Mature frameworks are then applied, integrated and further developed in the Europeana infrastructure. This includes **EDM** to allow interoperability cross-domain and cross-language. Our Research and Development team (WP6) has been successful in advising other projects and consortia on the implementation of this model, supported by **Europeana Tech.** Europeana Foundation has been elected in the **IIIF Executive Board,** on behalf of the DSI and the Network. The Europeana licensing framework has been turned into a service for cultural heritage institutions via **Rightsstatements.org.**

4. Strengthen the Europeana ecosystem

The final goal of the Business Plan is to strengthen the Europeana ecosystem. Within this goal, we make best use of the Europeana ecosystem, including the Europeana Network Association, the Member States, the European Commission, Europeana Foundation, and our partnership in the project.

4.1. Objective 7 – Achieve long-term funding

Building on the **Council Conclusions of 2016**, Europeana furthered its efforts to raise awareness of the continued need of long-term funding.

The **Europeana 280 campaign**, which was launched to promote and engage people with Europe's art heritage, came to a close at the end of 2016 (WP8). To mark the end of the campaign, our communications approach was to share and celebrate its success with those who participated through: this included targeted mailings, a dedicated Europeana 280 Slidebean that provided an overview of the campaign's success and was designed to allow participants to use it to promote their own participation and contribution to that success; a closing blog and a final social media rally.

Under WP4, we communicated and promoted the **Europeana Generic Services** opportunities with partners, resulting in three funded projects **(Migration in the Arts and Science, Rise of Literacy and Byzantine Arts)** for new thematic collections on Europeana. In addition, Europeana supported several Horizon 2020 projects from external partners. Work with these projects has been prepared and will start from 1 September 2017.

4.2. Objective 8 – Transform the organisation from good to great

With support of the Network Association EF prepared the **Europeana Business Plan 2017**, which was published early February 2017. It contains all plans for Europeana (DSI) in 2017 and is aligned with the revised Strategy 2020 and the Europeana DSI-2 DoA (insofar the project runs during 2017). Preparations have started to develop the Business Plan 2018, making use of the continued funding for Europeana DSI-3 and the

revised strategy. This Business Plan will be set up in accordance with the impact framework.

List of project beneficiaries, with the corresponding contact name and associated coordinates:

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2. Response to recommendations from reviewers (April 2017)

Recommendation 1: Given the high complexity of the current aggregation landscape, the large diversity of relevant stakeholders' interests and the numerous external and internal interdependencies, as well as the importance of the aggregation model and content/data acquisition mechanisms for the quality of all of Europeana's products and services, Europeana should try to minimize, when possible, the time required for the cycle of strategy – consultation – experimentation - decision-making - plan of actions - implementation. Clear goals and relevant KPIs about expected aggregation-related achievements (both in terms of policy-making and technology) by the end of DSI-2 and further future projects funding Europeana should be attempted.

During the course of the project we paid extra attention to the interaction with our users and stakeholders in all markets, each time trying to improve the feedback loops between consultation, experimentation, validation and implementation. Embedding design thinking deeply in the organisation and becoming fully Agile within a project environment is not an easy thing, but where applied well we are reaping the benefits. This iterative process has become the foundation of the Impact Playbook that was developed during the project, and maximising impact the cornerstone of our annual business plans.

Recommendation 2: Issues related to data quality should remain very highly prioritized. Relevant consultation activities at working group level should be accelerated to achieve a minimum agreement on what data quality is and how it can be measured. It is urgent to move forward with the relevant practical work and technology for data quality improvement together with aggregators. Questions related to the motivation of aggregators for working on data quality should also continue to be prioritized.

In addition to consultation at working group level, we work in a systematic way with consultations at individual aggregator level to agree data quality improvements. That data quality planning on individual level helps a lot to accelerate agreements on necessary quality improvements and their implementation. In addition, the Data Quality Committee continues its work to define data quality cross-domain.

First results are very promising: we made for example a lot of good progress with the collections provided by MICHAEL (Athena, LinkedHeritage, AthenaPlus, Museu). This progress is also very much connected to the motivation of aggregators. The success of our thematic collections is efficiently motivating aggregators to prioritise data quality improvements to make their data work for the thematic collections. Thematic collections

are seen as a very important return on investment for the work on quality improvements. But we also tap into other areas of motivation: aggregators like OpenUp! (FUB) provide a very cost- efficient channel for their partners to reach a non-scientific audience. That potential alone is motivating enough to increase partners and improve data quality.

Recommendation 3: Task forces, working groups and other consultation bodies have been shown to be useful means to collect advice and valuable feedback and direction from the community. However, the topics, mechanisms, timing and other relevant elements of the consultation process should be very carefully selected and planned so as to minimize complexity and time necessary from decision-making to action-taking.

EF as well as the elected body of the Network Association (Members Council) fully recognise the opportunities offered by the work done by Working Groups and Task Forces. Both forms of practical engagement have been successful and regularly improved in their set-up, reporting and compositions.

Having said that, the implementation level and its awareness still requires some work. The EuropeanaTech Task Force recommendations have always been / are still easily identifiable in the work Europeana does. Other more "soft oriented" TFs, such as Connecting Networks (2015) are more difficult to implement because of various factors including the fact that the recommendations ownership are not necessarily clear. We are addressing this issue in two ways:

The Europeana Members Council and EF are a lot more careful during the TFs activities. A series of peer-reviews will closely look at the feasibility of TF recommendations. This is work in progress and is captured in the new Terms of Reference previously mentioned

The implementation level and transparency is our main 2017 challenge. We are looking at it closely through the work of Network Participation Framework TF alongside the Governance Working Group. We are very hopeful this will be resolved in the coming months with a clear translation in the update of the existing Terms of Reference.

Recommendation 4: The Consortium could improve the visibility of achievements. For instance, the high profile (Europeana 280) and the interesting http://www.europanoramabook.com/ could be more adequately showcased on the Europeana portal with other promotional activities.

Europeana is always looking for ways to improve its communication to audiences across relevant platforms and channels, which are not limited to the Europeana Collections site.

Europeana Collections and the thematic collection sites such as Europeana Art, European Music, Europeana Fashion and Europeana Photography are for the end-user audience. We direct that audience there to explore and engage with content, and complement this with 'off site' activity on owned channels such as Facebook and Twitter and our public facing newsletter, and external platforms such as Pinterest, Daily Art, and Giphy. Of course, this end-user community is layered: it is not just "the general public", as it involves also teachers, students and amateurs of various degrees, including the so-called "pro-ams" so relevant for creative industries. The Thematic Collections, curated with the help of Expert Hubs, are fully aware of this diversity and maximize impact by tuning the different components to meet these audiences' needs. The possibilities for exhibitions and galleries will also address this recommendation.

Europeana Pro, including its blog channel, is our site for our professional and stakeholder audience for the exchange of knowledge and information, and promotion of achievement. This is also supported by communications on for example our Network newsletter, LinkedIn, and Twitter and dedicated mailings where appropriate.

For example, in the case of the Europeana 280, the message for the public audience was not to celebrate the achievements of the campaign but to create awareness of, enthusiasm for and engagement with it. To that end, the Europeana Collections and Europeana Art platforms were used throughout the campaign to engage users with the campaign and related content. This was done through the ongoing presence of a landing page, dedicated browser entry points, exhibitions, hero images etc. This was supported by and reflected in a strategic approach to other user-centric communications and engagement activity on our Facebook and Twitter accounts, end-user newsletter and end-user blog, and complementary activity by participating institutions across their owned platforms.

The audience for the achievements of the campaign was the professional audience of campaign partners, cultural heritage institutions and political and policy making stakeholders. This message was conveyed throughout the campaign to help boost support for and participation in it by institutions and policy makers, and in turn boost its final achievements.

For this professional audience the Europeana 280 campaign was promoted through the Europeana Pro site with a series of dedicated blogs, in the Europeana Network Newsletter, and on Twitter, as well as featuring in external presentations, including for example to the CULT committee at the European Parliament.

At the end of the campaign a series of activities aimed at user and professional audiences celebrated, and shared the success of, the campaign. This included creating and sharing a dedicated Slidebean for the professional and stakeholder audience which was designed to encourage them to share in turn, and to promote the benefits of their participation to their own stakeholders where relevant.

Again focusing effort on relevant audiences, Europanorama, which was the result of a research project, was promoted on both Europeana Labs and Europeana Pro and relevant social media and it performed very well on Twitter.

With regards to maximizing visibility of specific topics on Europeana Pro, we have identified issues and areas to improve – e.g. the site's linear character, limited opportunities to feature topics, the short lifespan of featured content. These have now been fully explored and the results fed into broader development work to improve the site. The new version of the professional site, due in September, will address these issues and also provide an easier and more obvious connection between the end-user Collections portal and the Professional site. This should allow us to more clearly make the link between end-user facing activities and organisational achievements, whilst respecting the communication purpose of channels and the expectations of visitors.

Recommendation 5: Recommendations already expressed in previous review reports on defining clear and measurable KPIs for the various Europeana activities, products and services are still valid. Similarly, the recommendation of the previous review report about reporting back to the communities (and the EC) how the feedback loop is closed (i.e. if and how feedback received from the communities has been considered in Europeana's work) is also valid. The repetition of these recommendations is, as noted above in recommendation 1, forward-looking, and does not imply in any way that the good progress achieved

We continued to work with the KPIs as set in the DSI-2 DoA and align them with the business plans that are covered in the DSI-2 period. A major challenge for the next period is to benchmark the KPIs to make sure that they measure the intended progress. The work to monitor digitisation in cultural heritage of ENUMERATE and the work for the impact assessment framework will continue under DSI-3. To get feedback on our work, our Network is our most prominent means to gather input and feedback from the communities we serve; next to the Aggregator Forum and the new Collections Forum, they have a prominent influence on what we do and how we plan our business (e.g. when designing the annual Business Plans).

Recommendation 6: Activities already implemented and planned for the next months for creating value for partners, by ensuring a better User Experience and incorporating a network-centric approach, have already started generating positive results and feedback. The process is under development and should continue to get the highest priority, with more emphasis on a shared strategy between partners and other stakeholders.

We indeed see positive results on the work that we have been doing since the beginning of the project, especially with regards to the development of Europeana Collections and the thematic collections on Art, Music, Fashion and Photography.

> Recommendation 7: It is advised to explore alternative reusable layouts and/or formats for future exhibitions. Collections and exhibitions reached very good results in terms of the quality of the curation and of the overall quality of the selected content. The replication of almost the same kind of galleries structure, organization and layout could limit the engagement of visitors (new and returning); the introduction of variability in the publishing formats would be very helpful to reduce this risk. Several inspiration sources from existing valuable initiatives (insights from

We are continuously exploring, improving and incorporating new ways of engagement with the curated content whilst simultaneously making the content available in formats which are as accessible as possible. The new exhibitions platform (beta) launched mid 2016 was designed as a storytelling tool. It offers the exhibition editor a variety of ways to layout and enrich their narrative. For example, audiovisual material can be embedded from different sources. In order to tell a story of Leonardo da Vinci's monumental never-completed equestrian bronze, Museo Galileo included their own 3D animations in their exhibition, The Colossus of Leonardo da Vinci. We also keep investigating new ideas of presenting content. For example, new platform includes a feature called slider, which provides a possibility of comparing two images. Users have been praising this "sliding screen" used, for instance, by Europeana Fashion in their exhibition Past to Present exploring how historical fashion influences contemporary outfits.

However, while creating a story-based exhibition requires a significant amount of time and effort from partners, some users are interested in more image oriented presentations. That is why, this year, we have introduced another feature in europeana.eu: galleries. A gallery displays for a user a curated set of images within a certain theme and it allows editor to focus strictly on selecting visual materials.

We are working with curation partners on the development of new exhibitions and galleries and record their feedback about the use of the tools for further improvement. Hotjar surveys are run continuously and audience feedback is recorded and analysed.

It is our intention to combine the wealth of our thematic collections in cross-domain galleries and exhibitions that can be entertaining as well as adventurous. However this requires specialist multidisciplinary curation. To explore the possibilities for this we plan to organise workshop and consultation rounds inside as well as outside or network. A good example of this is the upcoming Europeana Transcribathon Campus in Berlin (June 2017) where we will explore the combined use and research of the World War I related content and expertise coming from the Europeana Newspapers and Europeana 1914-1918 projects.

The new crowdsourcing initiative Transcribathon.eu builds further upon the successful engagement of Europeana 1914-1918. It's competitive nature as well as its educational potential have already proven to be effective, appealing and inspirational in terms of engagement.

3. Progress and achievements under each work package

Work package 1 Data Partner Services

This work package is responsible for the enhancement of the data and the aggregation infrastructure to preserve access to content that is already accessible, to improve metadata and content quality, and work with the aggregators to ingest new or updated content. The WP includes a much more proactive outreach to new content holders to join Europeana, with more openly accessible data, and fosters their active involvement.

Participants in this work package are:

- Europeana Foundation (EF)
- Association Cinématiques Européenes (ACE) and Deutsches Filminstitut (DIF), on behalf of EFG (representing the film archive domain)
- 2Culture Associates and AthenaRC, on behalf of CARARE (representing the archaeology and historic buildings domain)
- Netherlands Institute for Sound and Vision (NISV), on behalf of EUscreen (representing the television and audiovisual archives domain)
- Freie Universität Berlin (FUB), on behalf of OpenUp! (representing the natural history domain)
- MICHAEL Culture AISBL (MCA) (representing the museums domain)
- Collections Trust (CT) (representing the museums domain)
- Europeana Fashion International Association (eFashion) (representing the fashion heritage domain)
- Archives Portal Europe Foundation (APEF) (representing the archival domain)
- International Consortium for Photographic Heritage PHOTOCONSORTIUM (PHOTOCONS) (representing the photographic heritage domain)

These domain and thematic aggregators are complemented by three technical partners:

- National Technical University of Athens (NTUA)
- Poznan Supercomputing and Networking Centre (PSNC)
- Knowledge Integration Ltd (K-INT)

Associate partners (non-funded) comprise several national aggregators or national libraries from the following countries: Austria, France, Germany, Italy, Romania, Lithuania, Slovenia, Spain, Slovakia, Serbia, Norway, Bulgaria, Belgium/Flanders, and the

Czech Republic. Associate partners provide data to Europeana and are involved in discussions on the innovation of the infrastructure.

The objectives of this work package are:

- Innovate the data and aggregation infrastructure by developing business requirements for a shared workflow and toolset (task 1.2);
- maintain a data and aggregation service: Europeana DSI-2 will run aggregation services for 10 domains and themes (libraries, sounds, archives, museums, natural history, film, television, archaeology, fashion, and photography), including their technical services (task 1.3);
- increase knowledge of and expertise on the use of Europeana DSI with the aim of increasing the participation of cultural heritage institutions in Europeana (task 1.4);
- implement and develop expert hubs: Europeana DSI-2 looks to the implementation of two expert hubs based on two domain aggregators, and sets up a best practice network with national aggregators (task 1.5); and
- improve data quality, according to the Europeana Publishing Framework tiers; Europeana DSI-2 will add 2,8 million records in tier 2 and above. In addition, Europeana DSI-2 will normalise and enrich metadata, such as provider names, date and language information (task 1.6).

Description of work carried out and achievements

Task 1.1. Manage the work package

All WP1 partners reported monthly to EF. Monthly calls were also used to align the work on tasks with several partners involved and helped to find synergies between the work of the partners. The Aggregator Forum Basecamp project was used to keep the national aggregators that are associate partners up to date.

Task 1.2. Innovate the aggregation infrastructure for the Europeana DSI

The main focus under this task was to develop the business requirements and to do the market research and planning for a new set of ingestion workflows and tools.

A Task Force was established at the Europeana DSI-2 Kick-off meeting to work more closely with **ACE, 2Culture, eFashion, NISV, APEF, PHOTOCONS** on innovating the aggregation workflow and the activities for expert hubs (see T1.5). Chaired by **NISV**, this Task Force met three times: on 23 September 2016 in The Hague, on 5 October 2016 in Frankfurt (alongside the Aggregator Forum meeting) and on 25 October 2016 in Hilversum. In these meetings the Task Force worked on a recommendation for shaping and moving to a shared technical infrastructure. The task force discussed the development of Metis and the proposals for Operation Direct and shared services. The

aggregating partners agreed to help **EF** to evaluate and test these services by involving their data partners where appropriate.

The technical design plan for Metis v2 was shared with partners and presented at the Aggregator Forum meeting in October 2016. Use cases for the product were reviewed along with additions related to development progress. The requirements work was also pursued with users from EF and TEL. The designs of dashboards for Metis (dataset dashboard, user dashboard) were developed as the result of a continuous collaboration between EF users of the tool, EF's UX designer and the Product Owner of Metis.

In February 2017 ingestion workflow business requirements update (MS1.1) was published, which gives an overview of the user requirements for Metis. A third iteration of the technical design plan for Metis was produced for this milestone document. **EUscreen**, **Photoconsortium**, **Europeana Fashion**, and the other MINT-powered aggregators provided feedback and suggestions to the further development and iteration of these documents and the Metis workflow.

A stakeholder consultation with the **EFG** partners was held in Pisa on 22-25 November 2016. Both Europeana and EFG data ingestion workflows were analysed at length and requirements identified for future features for Metis. A similar consultation was held with **OpenUp!** partners in Graz on 6-7 March 2017. EF also held a one-on-one meeting with **APEF** to prepare the Metis pilot of APEF on 31 January 2017.

A release of the alpha version of three shared services for Metis (validation, preview, statistics) was carried out at the end of November 2016; with this release, technical documentation was produced, enabling the prototyping with **K-Int** to start. For more details about the development of Metis, see T6.2.

During the development of Metis, **K-Int** tested the validation and preview shared service components at alpha and beta testing stages, providing advice and feedback to the Metis team, much of which has been taken on board. K-Int subsequently tested the revised services prior to implementation. As a result of successful testing, the K-Int development team proceeded to integrate these services into Culture Grid and their own 'dark aggregator' platform. K-Int also provided advice and support to **Collections Trust** on future options for aggregation in the UK museums sector. The work undertaken in Europeana DSI-2 was presented to the user group for K-int's Collections Information Integration Middleware product (CIIM) which includes many high-profile Europeana contributors including Imperial War Museum, National Maritime Museum, Manx National Heritage and Science Museum. Following discussions on the group's online forum, K-Int agreed to enhance both the Culture Grid/ Dark Aggregator and CIIM products to take advantage of current and planned innovations to the METIS aggregation infrastructure.

Other Europeana DSI-2 partners also worked on testing and integrating the Metis services in their infrastructure. **NTUA** tested the Metis validation and preview services

with satisfactory results. **AthenaRC** collaborated with **2Culture** in testing ways of integrating the MORe aggregator with Europeana, completing pilot testing of the eCloud storage API, reporting the results to **PSNC** and **EF**. **APEF** also started a pilot with Metis. The **EF** and **APEF** technical teams exchanged information on how to connect the Archives Portal Europe to Metis.

In addition to the work on Metis, some partners were involved in the Operation Direct project and/or invited to test the prototypes developed during this project. **AthenaRC** successfully pilot tested the Operation Direct API demonstrating the feasibility of using the API to publish content directly from the CARARE MORe aggregator to Europeana. **2Culture** and **AthenaRC** initiated discussions between the Deutsches Archaeologisches Institut (a CARARE data partner) and Europeana concerning pilot testing of the Operation Direct API. **NTUA** also tested the metadata ingestion functionality of Operation Direct, which proved to be working fine. **CT** also encouraged collections management system providers to take part in the test of the Operation Direct push API. **APEF** has been working on offering its content providers the possibility to publish their content as Open Data via API services and has fully documented the use of these services on its Wiki. Based on these APE API services **APEF** and Europeana conducted an Operation Direct pilot, which resulted in a successful live demonstration of a Operation Direct prototype fetching Archives Portal Europe content within minutes via the APE API services during the Europeana AGM in Riga on 8 November 2016. A recording of this live demo is available.

MINT users (including **NISV** (for EUscreen), **eFashion, MCA, PHOTOCONS, AthenaRC** and **2Culture** (for CARARE), and **MCA** (for MUSEU) have actively participated in fruitful discussions about the aggregation landscape and how the development of the MINT platform fits into this view. After a dedicated meeting with the MINT development team, further meetings were held via online conferencing tools. **NTUA** developed a user survey to steer its MINT development based on the user perspective, which **NISV** reviewed in October 2016.

Collections Trust (CT) has been to seeking to innovate the national aggregator CultureGrid, through which much of Europeana's UK content is contributed. CultureGrid was set up a number of years ago with project funding that ran out long ago, and is currently maintained by CT without any UK funding, and relies on pro bono technical support from Knowledge Integration. The innovations needed are not primarily technical: rather, the business model of the UK national aggregator for museums needs to be rethought from first principles, and the political will generated to sustain the core infrastructure needed over the long term.

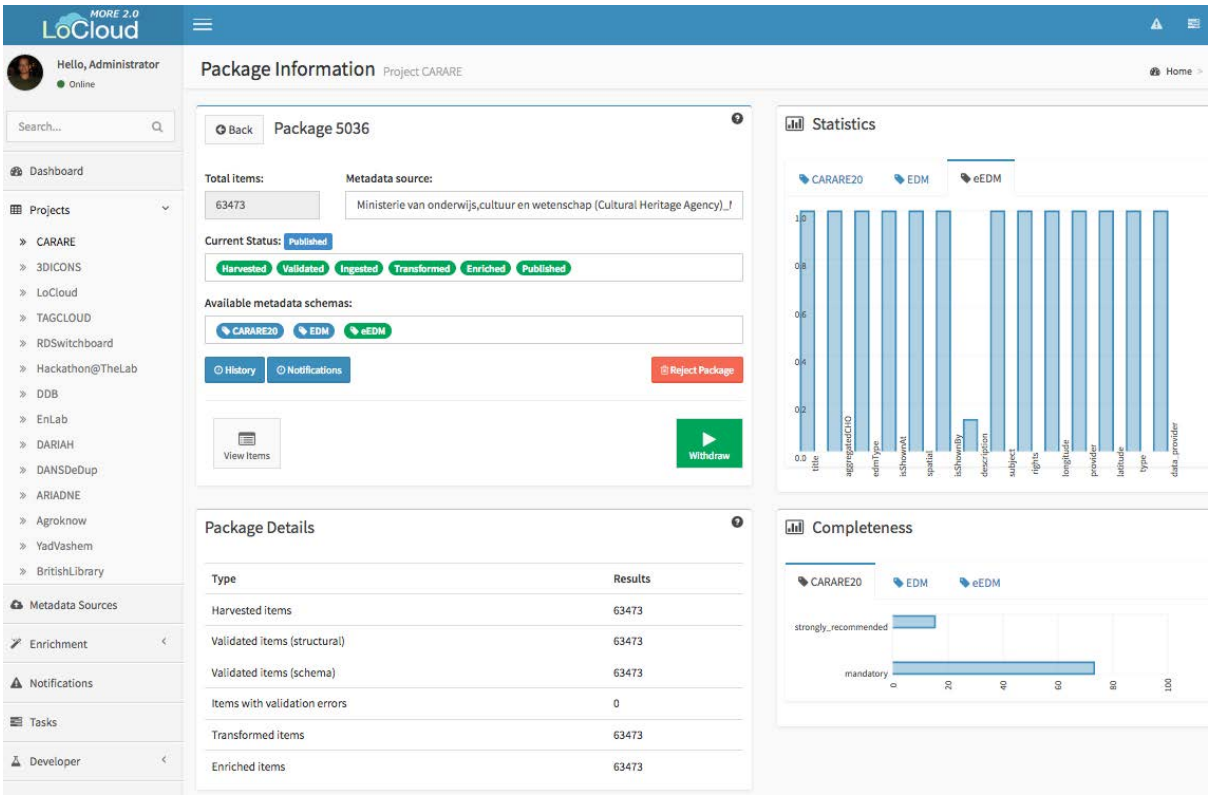
Task 1.3. Maintain and run data and aggregation services of DSI aggregating partners

The work of EF to maintain and run the Europeana data ingestion tools and services is reported under T6.2.4, including the work of re-indexing the database in October 2016 and July/August 2017. EF also coordinated the work of the DSI aggregating partners towards the technical infrastructure maintenance plan (MS1.2).

TEL as a library aggregator was shut down at the end of 2016. As of 2017 all the TEL partners that were direct data providers are providing Europeana compliant data for ingestion via Europeana UIM instead of TEL UIM. All the relevant information on partners and their datasets were passed over to Europeana to assist data operators in working with the former TEL partners.

The aggregation infrastructure for CARARE consists of MINT and MORe. MINT is provided by **NTUA** and is used by some CARARE partners to complete metadata mappings to the CARARE schema, EDM or to LIDO; content is then published for harvesting by MORe. **AthenaRC** maintains the MORe aggregator (see screenshot below), which provides the infrastructure for harvesting content directly from data partners, from MINT, Omeka and LoCloud Collections; ingestion services; metadata validation and enrichment services; quality assurance; and services to enable remote harvesting by Europeana and others. Throughout the project, **AthenaRC** continued to maintain and develop the MORe aggregator for CARARE. This includes maintenance of the infrastructure and the aggregator operation, monitoring the repository and harvesting services.

AthenaRC and **2Culture** work together to support data partners and the Europeana content ingestion team, and to maintain and develop the CARARE metadata schema and its mapping to EDM. During the period, the schema and its XSD have been updated to take into account the introduction of the new Europeana rights statements, which were developed in collaboration with RightsStatements.org.



DIF (for EFG), Together with the technical service provider has continuously invested work in revising and adjusting import filters for EFG data providers to be able to contribute new data or data improvements seamlessly. Revision of a number of import filters became necessary, as many of them date back from over 5 years and archives have changed local database structures and/or export interfaces over time. To date, EFG handles around 120 import filters for individual collections coming from its 38 partner archives. They allow the ingestion of data from local databases to EFG by transforming the partners' local data structure to the EFG format during the ingestion process. Adjustments of import filters became also necessary due to more recent requirements of EDM and the Europeana Publishing Framework. Under Europeana DSI-2, DIF, EFG partner archives and the technical subcontractor worked on data sets from 17 EFG partner archives to fix issues that formerly resulted in the rejection of EFG records by Europeana and to considerably improve the data quality of around 300,000 EFG (mostly legacy) records.

APEF maintains the fully automated ingestion, processing and publishing framework of the Archives Portal Europe, which also has a possibility to automatically convert information on digitised archival material to EDM records and forward these to Europeana which is described in detail in the Europeana DSI-2 report MS1.2 Technical Infrastructure Maintenance Plan**.**

APEF is constantly getting new partners and content providers on board and tries to interest those in forwarding content to Europeana using the aggregation functionalities of its framework. At the same time APEF is constantly updating its framework to the

needs of Europeana. With its portal release of the 29 July 2017 it has improved its apeEAD to EDM conversion fine-tuning functionality by offering the incorporation of the new rights statements before creating EDM records and after its new portal release on 30 August 2017 it will also have implemented a way to fully automate the forwarding of proper rights statements via adapting its apeEAD and apeMETS functionality, thus indirectly promoting the use of the new rights statements via its apeMETS standard, via which the new rights statements will be enforced. In addition: as a result of the successful pilot with Europeana's Operation Direct based on its API services version 3, APEF has improved its API services, so after the API version 4 release on the 31 May 2017 descriptions of archival material can now be filtered on the availability of links to digital objects via all API search services. Finally: per the release of the 29 July 2017 APEF has moved its entire Portal (front-end) and Dashboard (back-end) source code to its Github account, so its framework can now be re-used and contributed to by anyone.

Photoconsortium, with support of NTUA and photography metadata and indexing expert partner CRDI, restarted the use of the EP-MINT tool. This tool includes special features expressly designed for photographic archives databases and particularly including a multilingual vocabulary about photography process, techniques and themes, that enriches metadata with multilingual labels of selected concept terms.

As it was understood during the preparation of the infrastructure for the Europeana Photography thematic collection, next to enriching the metadata, this thesaurus could be very useful for implementing search mechanisms by facets, that would be very welcome.

Photoconsortium participated in the DSI for the first time and was not involved in the previous DSI-project. For this reason, this was the first occasion for Photoconsortium to operate on Europeana datasets since 2015 (the time of the last ingestion by former EuropeanaPhotography project). In the course of the project Photoconsortium has been, and is still currently, providing new associates who are interested in aggregating new datasets to Europeana with proper assistance in database refinement, use of EP-MINT aggregation tools, procedural support for Europeana DEA and Publication Framework. Also, refreshment about the MINT procedures is offered to former EuropeanaPhotography partners for metadata improvement.

MCA maintains the MUSEU MINT aggregation service set up by NTUA within the Europeana DSI projects that includes the mapping and publication web tools and the OAI-PMH repository for metadata storage and harvesting. This tool implements LIDO as intermediary schema for museums towards EDM. The LIDO to EDM mapping is always kept under control in order to assure that it is compliant with the evolution of the Europeana schema. A helpdesk service supports the data providers in using MUSEU MINT.

The MUSEU data aggregation infrastructure (MINT for MUSEU) is constantly updated according to evolution of the Europeana technical requirements e.g. the latest EDM developments, the update of both LIDO to allow the publication of pictures in IIIF standard and the LIDO to EDM mapping. It is now easily possible for data providers to submit IIIF resources from their own services through LIDO similarly than other web resources, just by qualifying them in a standardized way. Having integrated this pattern into the MINT customization for MUSEU, the required representation of IIIF resources in EDM is generated from the LIDO records.

The overall MUSEU contribution sums up now to 290,290 records from 7 countries and one dataset of 302 records from Italy published under AthenaPlus. Over 682,656 records are under publication (cf. Task 1.6).

FUB: Technical developments for switching from harvesting the data provider's BioCASe web service record-by-record to harvesting the aggregated standard dumps of biodiversity repositories have been pursued further. The advanced *Berlin Harvesting and Indexing Toolkit* (B-HIT) offers the potential of harvesting collection metadata *via* batch processing, which becomes a necessity because of the steadily increasing number of data providers and data records processed through OpenUp!. The new ingestion workflow has been tested successfully with large quantities of data. The OpenUp! data and enrichment procedure has been adapted to the new BioCASe pipeline. The installation of the new B-HIT version was concluded, the required software changes in both the user interface as well as the PENTAHO transformation process have been implemented.

FUB and subcontractor AIT Graz have explored the service extension to process LIDO based multimedia content in the natural history domain, assessing the potential for further metadata enrichment. The OpenUp! aggregator generally uses ABCD XML standard or, since 2016, also the Darwin Core standard (DwC-A). These community standards were designed to fit mainly biological specimen collections, so they won't support to the full range the descriptive information needed for multimedia objects of different nature.

A data mapping schema for LIDO metadata was established for the OpenUp! aggregator. To provide metadata to Europeana via the OAI-PMH protocol the OpenUp! Pentaho transformation routine was extended to support the LIDO metadata schema. For this a stylesheet transformation from Lido to EDM metadata schema was created. A ZIP extractor was added to the Pentaho program to read the LIDO data deliveries. First test of LIDO data delivery were carried out in spring 2017. A first set of LIDO data from the BGBM museumPlus database was delivered to Europeana in summer 2017. This newly implemented transformation routine in the OpenUp! aggregator opens up the ingestion of museological objects from the natural history domain to Europeana.

With the new B-HIT versions integrated into the aggregation process, the OpenUp!

aggregation platform now can handle regularly several data standards to ingest content: 1) *via* ABCD metadata OAI-PMH harvest, 2) DwC zip import and 3) LIDO zip import; the first LIDO-mobilized content from museum databases went live this August. By the end of the project, an overall of 3,240,400 records collected from 31 institutions, 99% of them depicting images, 1% sounds, have been harvested until August 2017 for OpenUp!

The Europeana Fashion International Association (**eFashion**) maintained, in collaboration with NTUA, the fashion thematic aggregator, collecting both metadata and digital content from 40 active fashion GLAMs publishing more than 870,000 Tier 2 records to Europeana and hosting more than 1 million digital objects. This included the maintenance of the ingestion platform MINT, the OAI metadata publication to Europeana, the digital repository, where almost one million digital objects are hosted as well as the portal front-end (http://www.europeanafashion.eu) that in May 2017 has been migrated to the Europeana Collection platform. These last two modules are running in a cloud infrastructure that is monitored regularly.

eFashion maintains a team of two people dedicated to the ingestion and metadata mapping support for content providers and also maintain a Basecamp group where it offers online support for content ingestion related issues. eFashion also offers to all its content providers a cloud digital repository service based on Amazon AWS.

NISV, for **EUscreen,** further developed and improved its aggregation workflow and welcomed new content partners to the network. It worked closely with Norwegian broadcaster NRK on mapping its rich, EBUCore-based metadata schema to EDM[4] and with the Albanian Film Archive ASQHF to bring 300 items from its collection online to European audiences for the first time.[5] Throughout the Europeana DSI-2 project, **NISV** ran bi-weekly updates with EUscreen's technical partners Noterik and NTUA in order to resolve outstanding bugs and implement AV Toolkit improvements. NTUA was in close contact with the team to support overall improvements and findability of the EUscreen materials. Playout and metadata improvements were kept track of in a dedicated platform (Mantis) hosted by Noterik, while EUscreen data partners communicated about the status of the service via a dedicated Basecamp project environment. The team finalised in close collaboration with the EF data team, a project to recover, update and combine old EUscreen, new EUscreen and EUscreenXL project content published on Europeana. External requests and updates were monitored via the online contact form and the shared info@euscreen.eu mailbox.

NTUA has worked in collaboration with all the DSI aggregating partners that use MINT (MCA, eFashion, Photoconsortium, EUscreen, eSounds, CARARE) in finalising the requirements for the MINT4ALL platform. MINT4ALL converges all MINT instances into a

[4] for details, see: http://blog.euscreen.eu/2017/03/norwegian-television-history-on-europeana/

[5] see: http://blog.euscreen.eu/2017/08/the-albanian-film-archive-part-of-european-heritage/

single installation, in order to de-duplicate organisations and published datasets and provides several backend and frontend improvements. In addition, NTUA has tested technologies developed in Operation Direct. A couple of records have been ingested using the Operation Direct functionality. All the findings of this process have been reported to EF. NTUA has integrated Operation Direct functionalities in MINT4ALL. Finally, NTUA in collaboration with EF tested the available alpha version of Metis services. In particular, NTUA tested the preview and validation services and integrated them in the MINT4ALL instance, which can be found in http://mint-projects.image.ntua.gr/mint4all/

NTUA supported and maintained the MINT infrastructure for eFashion, EUscreenXL, Photoconsortium, eSounds, Carare and LoCloud aggregators.

After setting up the MINT4ALL instance, the next step is to migrate the data, organisation and mapping from the old MINT instances to the new instance. In order to do so, we need to involve users, so the move to MINT4ALL is triggered by participants.

- This will help clean legacy data and mappings. Users will only move what they need.
- Organisations and users that participated in multiple Mints will merge themselves as needed, the developers don't need to hunt down people. Deduplication of users and org by users, not by developers.

New features of the MINT4ALL instance to assist the migration task include:

- Good support for search
- Organisation stats, Project stats, Project in organization stats
- Preview on Europeana works for everybody
- Dataset rename should be made possible
- Find item organization wide
- Project management functionality - adding organizations to projects
- ID management - tracking duplicate ids inside and organisation.
- Re-schema of a dataset, allows simpler dataset transfer (schema free transfer and later assign schema)
- Re validate schema, in case schema or restrictions change, or edits / group edits were done.

Task 1.4. Optimise relations with data partners, domain, thematic, and national aggregators

The Aggregator Forum Basecamp is active and continuously used for reaching out to aggregating partners. The main activity of **EF** under this task in this reporting period was the preparation and execution of two Aggregator Forum meetings. The first was co-organised by EF and the German Digital Library (DDB) in Frankfurt am Main from 5-6 October 2016. Sixty-five colleagues representing 28 aggregators and EF attended these one-and-a-half-days long workshops in the German National Library. A summary of the

main goals, the agenda, key outcomes, and actions of the meeting can be found in a separate report. The second Aggregator Forum meeting was held from 18 to 19 April 2017 in The Hague. A summary of agenda and key outcomes together with the slide decks used during the meeting can be found in a separate report.

Key performance indicator 1.5 expects that at least 10 major cultural institutions will be added to the Europeana DSI. EF carried out two strands of work towards this KPI (see also DSI-1 D1.2 for details of this work). (1) Definition of major institutions: EF has asked Member States to validate their major institutions and 50% of the countries have completed this step. As soon as the validation is completed, we can analyse this list against the normalised list of institutions that published in Europeana to identify the gaps and reach out to some of them. (2) Outreach to major art institutions: EF is reaching out to major art institutions to publish in Europeana or improve their collections in Europeana. For the Art Nouveau season EF was reaching out to and working with 12 major art institutions. Two were new institution for Europeana (Museum für Kunst und Gewerbe, Glasmuseum Hentrich), five of them significantly improved their existing collections (new items, larger images, open licenses), five contributed in other ways (e.g. blogpost) to a successful season. In addition, 12 more institutions were contacted to contribute to Europeana Art, eight of them have never published in Europeana, but the process is not completed yet. Even if we did not add 10 more major institutions, EF reached out to those with relevant collections for Europeana Art, engaged with them and worked towards improved data and tangible benefits for the institutions. This was acknowledged by the partners and the feedback was very positive.

EF, on behalf of TEL has maintained extensive relations with its partners as a part of its transition process, following the decision of Conference of European National Librarians (CENL) of May 2016 to discontinue TEL services by the end of 2016. To prepare for discontinuation of its services TEL has contacted all the libraries which have used TEL services over the years to establish new aggregation routes for them. Out of 91 partners, nine libraries now perform the functions of national, local or sectoral content aggregator. Nineteen TEL partners use alternative aggregation routes to publish in Europeana, mostly national aggregators. Forty one libraries will publish directly in Europeana. The rest of the libraries either lack the necessary resources to deliver their data directly to Europeana, or have no interest in further collaboration with Europeana. During the transition process TEL has provided extensive assistance to most of its partners, mostly in-detail metadata assistance to the libraries becoming direct data providers, but also general information on technical and legal requirements of Europeana. Concentrated efforts were directed towards increasing awareness and understanding of EDM among TEL partner libraries, including running a survey about EDM competence and training preferences, publishing relevant documentation on TEL Basecamp, and organising a data workshop for libraries in Central and Southeastern

Europe.

DIF and ACE (for EFG) held a partner meeting in Bologna on 28 June 2016. The meeting had to be carried out before the official start of Europeana DSI-2 on 1 July 2016 as the film festival in Bologna is attended by representatives from all European film archives, and many film archive representatives from other continents, so it offered a perfect opportunity to disseminate information about Europeana and EFG. Aim of the meeting was to update EFG partners and interested archives about the activities under Europeana DSI-2, the general strategy of Europeana and the implications it has for the aggregators. Among other things, DIF presented the Publishing Framework as well as rightsstatements.org and talked about the relevance of good metadata quality. The meeting was attended by 37 representatives from 25 European film archives. Documentation of the meeting is available here.

Following the meeting, DIF prepared a short questionnaire about possible further data contributions from the film archive sector, which was circulated by ACE to its members. Seven archives replied and contributed new collections under Europeana DSI-2. In addition to the archives contributing new collections, DIF talked to further EFG partners to enrich and clean legacy data under Europeana DSI-2.

ACE organised the workshop "Metadata Management in Film Archives" that took place in Potsdam, Germany on 29-30 March 2017. The workshop targeted individuals responsible for collection management applications in film heritage institutions, cataloguers and filmographers as well as information professionals from related cultural and media heritage communities. Aim of the workshop was to share the practical experience of film archives working with the Cinematographic Works Standard EN 15907 and to introduce tools and manuals which help to create better cataloguing and metadata records. During the workshop, a FIAF (Fédération Internationale des Archives du Film) Task Force on Linked Open Data (LOD) was set up. The Task Force will look into how the FIAF glossary of filmographic and technical terms in use in most film archives can be turned into LOD. The topic was further discussed at the follow-up workshop "Collection management systems in the 21st century", which took place in Bologna on 27 June 2017. Seeing that the film archive domain has been without a standard before EN 15907, discussions around and the actual implementation of the standard are key to improving data quality and data contribution to Europeana. EF was invited to present Europeana's work and achievements in terms of data enrichment and data quality. The workshop was attended by 80 representatives mainly from the film archives community. It proved to be the perfect opportunity to familiarise film archives that are not represented in EFG with the work of Europeana and to allow the representative of the EF ingestion team to meet with EFG partner archives in person.

ACE Workshop "Metadata Management in Film Archives, Potsdam, 29-30 March 2017

2Culture and AthenaRC continue to maintain and develop relations with the network of CARARE content and technology partners. In October 2016, 2Culture worked with the Discovery Programme and the FabLab Nerve Centre to organise two days of Digital Heritage events for CARARE in Derry, Northern Ireland. A workshop enabled school children and teachers to get hands-on experience of 3D capture, 3D printing and augmented reality. This event was followed by the "Upcycle Digital heritage" workshop, which brought together CARARE members, people from the creative industries, community, tourism and education to discuss opportunities for re-using digital archaeology heritage data. In June 2017, 2Culture collaborated with Europeana, the Netherlands Heritage Agency and the Archaeology faculty of the University of Leiden to organise a workshop for CARARE on "Archaeology and Architecture in Europeana". Both events were well attended by CARARE members and others, and provided excellent opportunities for networking and to discuss future trends in heritage data.

CARARE association member Prof. Alberto

Sharing expertise at CARARE Upcycle Digital

Sanchez presenting Iberian archaeology collections in Europeana, Leiden, June 2017.

Heritage event, Derry, 2016

2Culture continues to keep the network informed about developments in Europeana, to share news and expertise and to plan events. A dedicated Basecamp group is maintained for the CARARE network and a regular monthly newsletter update is disseminated to members and followers of CARARE. 2Culture also maintains and develops the CARARE websites (www.carare.eu and a document wiki pro.carare.eu), and shares news with the wider community via the CARARE twitter feed and other social media channels. The CARARE metadata schema and other reports have been published on Zenodo, a service established by the OpenAIRE to enable open access publication of EC funded research results.

2Culture, with staff at **AthenaRC**, the Ministry of Brussels capital region and Vilnius University, organised sessions at the European Association of Archaeologist's conferences in 2016 and 2017 (in Vilnius and Maastricht respectively) on a theme relevant for CARARE. "Towards digital infrastructures for open, participatory, public archaeology" in 2016 and 2017 brought together researchers and professional archaeologists with an interest in the use of digital heritage datasets, produced for archaeology conservation, to support public archaeology.

In addition to these activities, **2Culture** and **AthenaRC** took part in meetings of the Europeana Aggregator forum and the Europeana AGM, representing CARARE and networking with other members of the Europeana community.

MCA is reorganising its network of data partners and re-established contacts with data partners that were not able to manage their records in Europeana DSI. MCA also looks for new data providers through the participation in workshops.

MCA supported Europeana in clarifying the relationship among cultural institutions and their local/national aggregators. This happened in the Barcelona and Budapest workshops (see below), where representatives of both domain discussed on the workflow toward the aggregator and Europeana, but also via email; for instance, our major provider Bildarchiv FotoMarburg explained why, at present, it is preferable to use MINT/MUSEU to join Europeana instead of the German national aggregator.

MCA is seeking to strengthen the policy relationships with the European museums through the cooperation with the Network of European Museum Organisations (NEMO), which was set up during Europeana DSI-1 - signature of a partnership agreement - and through participation in international conferences.

MCA disseminated information and surveys toward communities thanks to its networks and partners such as NEMO and ICOM Europe and International. The awareness of museum communities concerning why and how to get involved in Europeana is the first step to get CHIs involvement In Europeana and improve data quality and new content

providers. They need to be supported both on the challenges and on the technical aspects. Work meetings with relevant museums networks such as NEMO and ICOM Eu & INT were held on dissemination of Europeana DSI-2 activities and MUSEU hub as well as on dissemination of surveys and relevant information aiming to increase awareness and involvement of their numerous members. MCA also insured the follow-up of information with the participating museums and national institutions from WS organized during DSI1 (Italy, France, Germany).

MCA organised in cooperation with CHIs from its member's two workshops "Publishing on Europeana & Tools to make your collection widely visible", aiming at increasing the knowledge and awareness of museums concerning the Europeana platform and digital tools to manage online collections; and get new content providers or new collections/data from current providers. The Europeana Thematic Collections are an important topic for the workshops, as it is an interesting incentive for communities to publish in Europeana. In addition, it allows liaising providers to Europeana thanks to workshops. In February 2017 a workshop in Barcelona (Spain) was co-organised with GenCat and CRDI (Europeana data partners). The objective of the workshop was to push a data aggregation workflow from Catalan cultural institutions toward Calaix, the Catalan museum aggregator managed by GenCat, toward Europeana throughout MUSEU. More than 80 representatives of cultural heritage institutions attended to the meeting. The second workshop was held on April 2017 in Budapest (Hungary), co-organised by Michael Culture Association, Petőfi Literary Museum and Schola Graphidis Art Collection (both Europeana data partners).

MCA Workshop in Barcelona, February 2017

MCA Workshop In Budapest, April 2017

FUB is focused on outreach activities and networking in the natural history scientific community. FUB participated in relevant community meetings to further disseminate the Europeana idea of publishing content. Presentations have been given for example at the Digital Library conference DigBib 2017 in March in Graz, the annual SPNHC conference (Society for the Preservation of Natural History Collections) in June, and the

BioSyst.EU_2017 in August in Gothenburg, the latter with an emphasis on using Europeana content in training and education. FUB also was taking part in the National Meeting of Museum herbarium custodians in February in Berlin and joined the GBIF European Nodes Meeting in Stockholm in May. FUB developed a presentation introducing Europeana to a mixed, broader audience at Berlin's Open Night of Science (LNdW) on June 24 this year ("Virtuelle Museen und Bibliotheken - lassen wir uns begeistern!?").

An OpenUp! Europeana DSI-2 dissemination workshop had been organised at the Austrian national conference for digital libraries, 4 March 2017 in Graz to instruct and encourage also smaller institutions to join and publish their digital collections via Europeana. The aggregator-in-residence session, a joint meeting of OpenUp! with Europeana Officers Pierre Edouard Barrault, Henning Scholz and also remote Cecile Devarenne online, took place at AIT in Graz March 6-7, 2017.

During the project, FUB promoted the supplementary inclusion of Darwin Core (DwC-A) as ingestible standard data formats in OpenUp! in addition to ABCD/BioCASe, making it more attractive for a wider range of potential data providers to join the network. Moreover, the use of LIDO, an ICOM-CIDOC XML-standard for museum objects, was also added to mobilize content after a thorough investigation period. This will provide benefits for Europeana users and providers by widening the scope of multimedia content in OpenUp! beyond biological specimens.

The **FUB** helpdesk was engaged in troubleshooting with new entry providers (e.g., DSMZ), but also supported OpenUp! network members tracing problems and finding a solution for harvesting problems (mapping or format errors at MfN for example) or working on broken thumbnails (at NHM e.g.). The OpenUp! website was used to offer first relevant information to potential new providers, easing communication with interested institutions. Test of new data (including guidance in data mapping and quality improvement) have been conducted, delivering to the new providers a test protocol and a preview of selected data in Europeana. The preview view is generated using the Europeana Metis preview service.

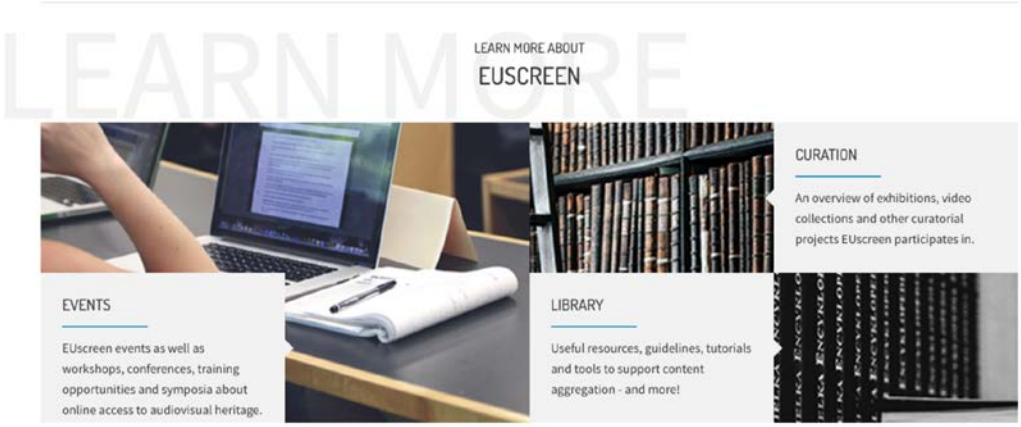
eFashion maintains and curates a dedicated Basecamp group where 40 fashion data provider institutions are registered and where all the relevant news and activities are disseminated.

eFashion also regularly maintains a blog aimed at the fashion heritage community (publishing three or four blog posts a week) and engages its community through social media (Facebook, Twitter, Tumblr, Pinterest and Instagram) reaching more than 30,000 followers. eFashion also manages a LinkedIn professional group with more than 220 members, mainly fashion specialists (curators, scholars, designers, etc.). Since July 2016, eFashion publish a bi-weekly newsletter with more than 1,600 subscribers.

Sabine de Guenther, Humboldt University, at Fashion Digital Memories, Europeana Fashion Symposium 2017, Photo by Sebastiaan ter Burg, All Rights Reserved

On the 22-23 May 2017 **eFashion** organised at the IUAV - University of Venice its yearly international symposium on "Fashion Digital Memories", with the participation of renowned speakers in the international fashion heritage arena and the participation of more than 130 attendees from Europe and the United States. After the symposium the yearly General Assembly of the Europeana Fashion Association took place, with the participation of more than 20 member institutions.

NISV, for **EUscreen**, strengthened and consolidated the existing EUscreen network and actively show the validity of Europeana's work. It improved the relationship management workflow and actively pursued organisations who showed interest in the network in the past to engage them in the network. A survey was set in place for new partners to better understand how they prefer to participate, which led to the development of: an updated EUscreen training environment for video aggregation, a EUscreen training and network meeting (held in Paris in March 2017), a monthly public newsletter as well as bi-monthly updates to keep the network participants up to date on developments in Europeana DSI-2, the audiovisual archival domain, the Europeana Network and the network's plans for the future. The network's communication channels, such as the expert hub blog and the newsletter, received an upgrade and the website's content strategy was updated to reflect on topics relevant to cultural historical audiovisual interests.



Images: the training & education section on EUscreen's expert hub website & images from the Paris network meeting and symposium in collaboration with FIAT/IFTA's Media Studies Commission

Collections Trust (CT) took part in meetings and workshops of the Europeana Copyright Community. This has included the presentation of a case study on the updated Rights management procedure of the SPECTRUM collections management standard. In addition a Europeana Pro blog post was written, setting the work in the context of Europeana.

APEF updates the network constantly via newsletters (once a month), mailings and during the two face-to-face meetings with the Country Managers (the national contact persons of the network). Usually these CM meetings take place twice a year: one in the Spring/early Summer and one in the Autumn/early Winter. During the last two years these were the dates/locations for these meetings, always held in connection with the meetings of the EBNA/EAG (European Board of National Archivists and the European Archives Group of the EU) to enable participants for both events to save costs), thus in a venue of a country that holds the EU presidency:

- The Hague, Nationaal Archief, 8 June 2016
- Bratislava, State Archives, 30 November 2016
- Rabat/Malta, National Archives, 26 April 2017

Photoconsortium is widely disseminating and providing support and information about Europeana Collections, the Europeana DSI and, the benefits of being showcased online and the process of aggregation. Photoconsortium since last year runs a small blog (and connected social media activity) dedicated to the theme of photography and digital

technologies, which is hosted in the Association's website www.photoconsortium.net. Overall, about 30 blog posts have been published in these 14 months, telling stories, events and achievements of the Europeana DSI project and Thematic Aggregators. The users of the website since the kick-off of Europeana DSI-2 (period July 2016 to today) have been about 10,000 from all over the world.

New partners joined Photoconsortium exactly because of the opportunity of providing datasets to be aggregated to Europeana and to be shown in the Europeana Photography thematic collection (such as the Digital Heritage Research Lab of Cyprus University of Technology, Archivo Jalon Angel in Zaragoza, the Israel Museum) and discussions are ongoing with others. A Metadata Task Force was recently created at Photoconsortium to provide support to content providers in the aggregation process and all the preliminary actions.

A public event of Photoconsortium was organized in Girona on 9 June 2017, that was focused on illustrating the benefits of aggregating data and publishing in Europeana. At this event, Europeana was invited to discuss and present aggregation tools and requirements with potential new content providers. The presentations showed at the event are available on Photoconsortium's website.

A new section on Photoconsortium website dedicated to training was developed, including access to information about Europeana and how to join.

Pierre Edouard Barrault at the Girona event

Task 1.5. Develop aggregators into Expert and National Hubs

A Task Force was established at the Europeana DSI-2 kick-off meeting to work more closely with some domain and thematic aggregators (**ACE, 2Culture, eFashion, NISV, APEF, PHOTOCONS**) on innovating the aggregation workflow and the activities for expert hubs. Chaired by **NISV**, this Task Force met four times during Europeana DSI-2. In these meetings the Task Force worked on recommendations for shaping a and moving into a shared technical infrastructure. In addition, the Task Force worked on a definition for expert hubs and refined the roles and responsibilities of an expert hub.

In February 2017, a second Task Force was set up, to work with representatives from all types of aggregators representing different countries, domain and themes how we might give access to cultural heritage in the future (including from the DSI aggregating partners **eFashion, MCA, APEF**). A white paper was delivered that gives an overview of the current status of the aggregation landscape and gives recommendations for technical and organisational solutions. It also includes the outcomes of the work of the Domain Aggregator Task Force. With the publication of the white paper, MS1.7 (Expert hub sustainability plan) and MS1.8 (Expert hub development plan) are completed.

National aggregators were associate partners in Europeana DSI-2. They were working on a Memorandum of Understanding, which is supposed to clarify - among other things - the role of national aggregators within the Europeana ecosystem. Aggregators worked together on this the last time during the Aggregator Forum meeting in October 2016 . With that MoU, national aggregators joined the Future Access to Cultural Heritage Task Force to work on a common understanding between all stakeholders what the future aggregation landscape should look like. Until this work is completed, the MoU between all national aggregators will not be completed and signed.

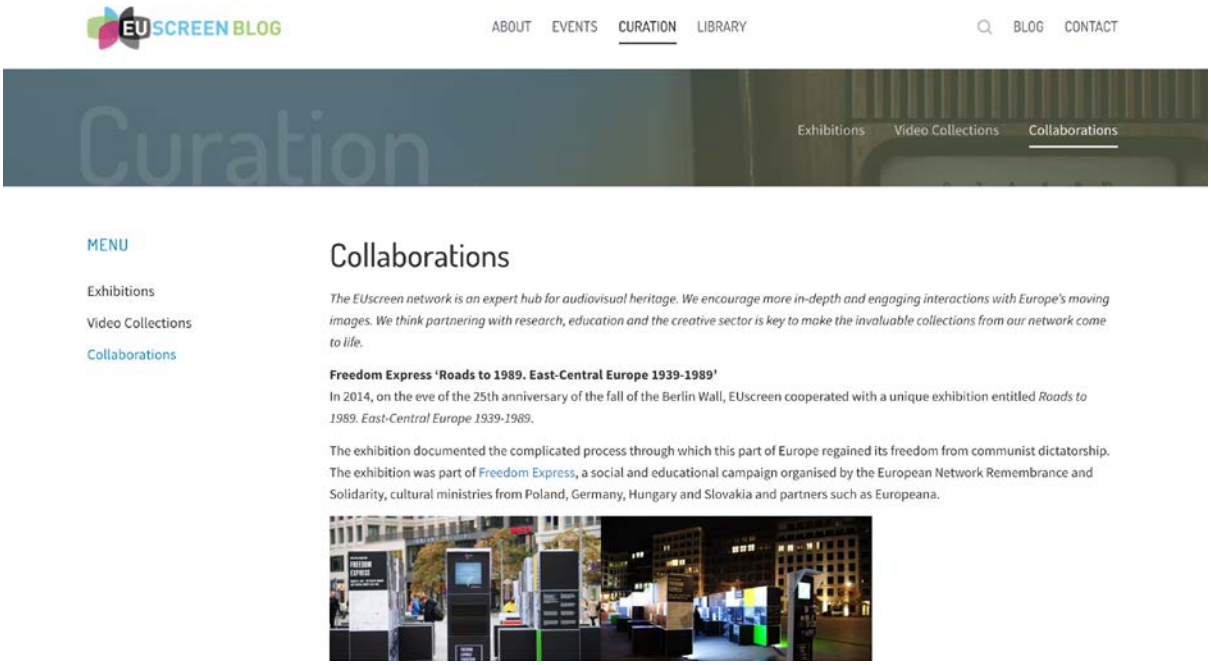
Although no expert hub is formally launched, the DSI aggregating partners are acting as expert hubs and doing what expert hubs are expected to do. **DIF** actively supported partners from the film archive sector regarding all questions raised about data contributions to Europeana, including issues such as rights labelling and implementation of OAI-PMH interfaces. **MCA** gives constant support to old and new content providers via e-mail, skype and telephone services. MCA has launched MUSEU hub website, to make information on aggregation, LIDO and MINT documentation, metadata quality requirements, enrichment etc. available to partners. This activity is undertaken in cooperation with the University of Marburg. The MUSEU HUB website also provides documentation - PPTs, videos - from each workshop organized by MCA during DSI-1 and Europeana DSI-2.

2Culture has taken steps to establish a legal entity under Irish law for the CARARE association. With support from the **AthenaRC** and sixteen CARARE network members, a non-profit association “Connecting Archaeology and Architecture in Europe” was registered in Dublin in December 2016. The memorandum and articles of association clarify CARARE’s aims and objectives, enable the network to grow, and will help to support expert hub activities such as the delivery of documentation, workshops and training. **2Culture** continues to maintain and develop “CARARE pro” as an expert resource making information available on the CARARE metadata schema, documentation, MINT and MORe, and training materials. The “pro” website will support the implementation of the expert hub as the concept evolves. A regular monthly briefing is produced for CARARE members and followers to communicate news and information about developments in digital heritage, such as historic buildings information modelling, 3D, the forthcoming year of cultural heritage, and developments at Europeana. The core

CARARE communication website continues to be maintained and developed to provide a communication platform for general public users and researchers interested in archaeology. During the year, **2Culture** and **AthenaRC** have provided support and archaeology domain expertise to data partners from LoCloud. Expertise from the CARARE hub has also been shared with the wider archaeology community at EAA and the events in Derry and Leiden.

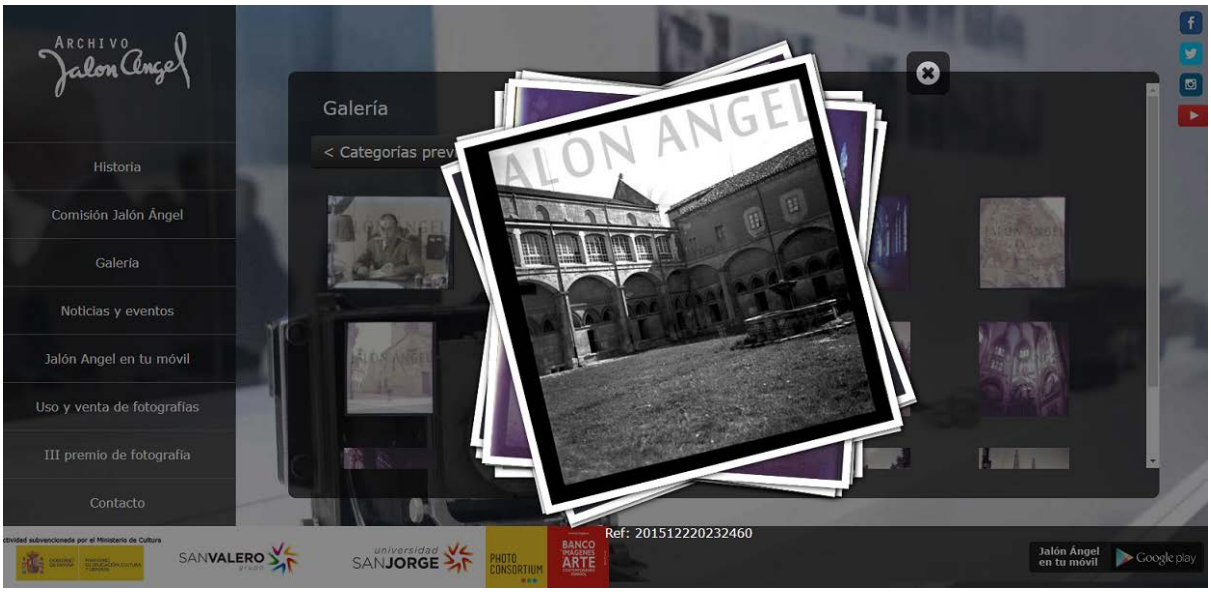
eFashion representatives joined the discussion on the role of expert hubs and brought to the table the conclusions of the Task Force on sustainability models it coordinated for aggregators. In the meantime, Europeana Fashion regularly maintains a Basecamp communication group (for supporting members), a LinkedIn group open to fashion professionals and its blog for a wider audience, in order to sustain and build its expert hub role in the fashion heritage domain, organising also yearly events attracting a wide audience of fashion heritage specialists.

NISV, for **EUscreen**, clarified and improved its communication channels in order to be clearly visible to the community. A renewal of its core communication platform (the EUscreen expert hub) and a parallel content strategy were developed. The training materials for the aggregation workflow were streamlined and posted online, while a series of interviews and blog posts was rolled out and continuous updating of the social media channels is ongoing. The network is kept up-to-date on possibilities for collaborative projects and curatorial opportunities, while liaising with fellow aggregators happened on various levels.



Photoconsortium is currently supporting several members who are willing to provide datasets to Europeana but who are in the status of having very small images available online and/or non appropriate metadata. These potential content providers are assisted

by Photoconsortium in the transition to policies where materials of higher quality are made available, as a crucial requirement for being ingested in Europeana, and also supported in database and metadata creation.



An image from the Archivo Jalon Angel website: they are currently working in close collaboration with Photoconsortium's Metadata Task Force to prepare for the publication of their collections in Europeana, particularly with the creation of an appropriate database and with image quality improvement.

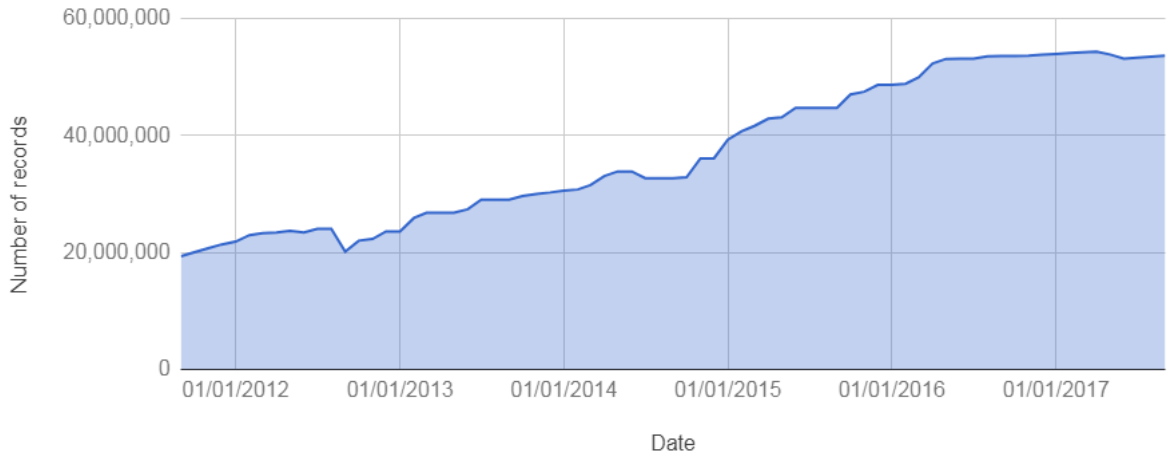
Task 1.6. Improve the Europeana DSI data quality

The Europeana Content Strategy was developed during Europeana DSI-2 by EF and four domain experts (including DSI partners NISV (EUScreen) and APEF). Key elements were presented and discussed at the Aggregator Forum meeting in Frankfurt. No significant concerns were raised, so the content strategy team moved forward to finalise it. In early March 2017 EF published the Europeana Content Strategy, which will guide the content acquisition process for the coming years. In addition EF updated the Europeana Publishing Framework and Europeana Publishing Guide, to help with the implementation of the content strategy. A key part of this update were the technical criteria for each tier per media type. DSI aggregating partners were involved in this work to consider their requirements (NISV, eFashion).

Since the start of Europeana DSI-2 in July 2016, the Europeana database grew in total by about 518,700 (end of Europeana DSI-1 - 53,110,475; end August 2017 - 53,629,175). This increase is smaller than 3.5 million records that were indicated in the Europeana DSI-2 DoA for the expected growth in Europeana DSI-2. This is also clear from the figure below, showing the growth of Europeana since 2012. This low increase is due to lower number of data aggregating projects and our efforts to clean up and improve the database, which includes depublication of datasets. In Europeana DSI-2 we have altogether depublished about 3.7 million records from Europeana, all in consent with the data partners. All of these 3.7 million records where in one way or another not

compliant anymore with our minimal requirements as specified in the Europeana Publishing Guide. These 3.7 million records were then replaced by records that are at least compliant to tier 1, but many of the new records we published were compliant to the higher tiers of the Europeana Publishing Framework.

The progress against the tiers of the Europeana Publishing Framework over the duration of Europeana DSI-2 is very positive. Instead of a total of 2.8 million more records in tier 2-4 we have added 3.4 million records.



Growth of Europeana since 2012.

As a part of the **TEL** transition plan, all the datasets to be reprocessed were carefully examined in collaboration with respective data providers for possible improvements. The main focus was on direct links to objects and better thumbnails. As a result, 29 TEL datasets have been moved up the Europeana Publishing Framework tiers. Altogether, TEL has worked so far with 21 out of 91 TEL partners, helping them to prepare and deliver their data directly to Europeana, instead via TEL, and 9 providers have datasets in acceptance.

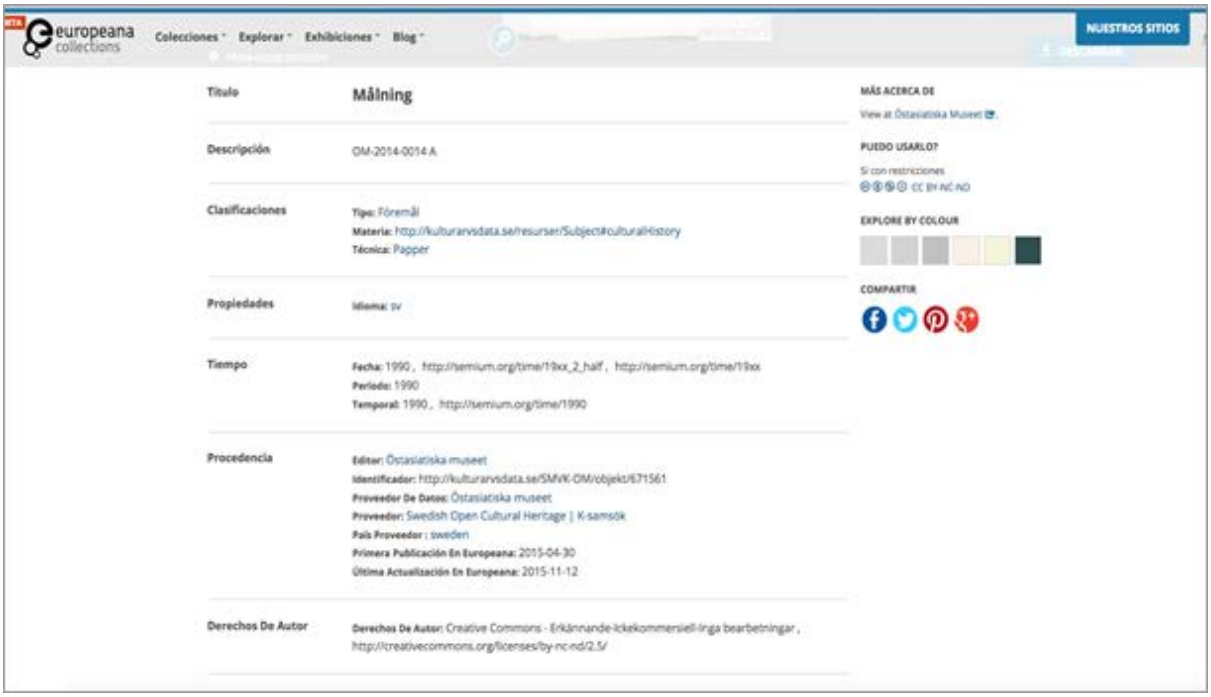
Below a few examples of achievements from the reporting period of work EF is doing with non DSI aggregating partners. The achievements of DSI aggregating partners are reported under each of the partners.

Rich heritage collections of countries in South-eastern Europe have not been available in Europeana until recently. The CSEEE (Collections of South and East Europe in Europeana) project provided the opportunity for national libraries in countries such as Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Moldova, Serbia and Slovenia to bring in new content and to familiarise themselves with the data requirements of Europeana. In the context of this initiative, TEL published 14 new collections, and raised awareness for good quality data with these contributors by re-using their records to records to create and publish a new exhibition of vintage postcards The exhibition highlights interesting facts and details about the cities of the regions presented on vintage postcards that showcase their cultural and natural heritage. Additionally,

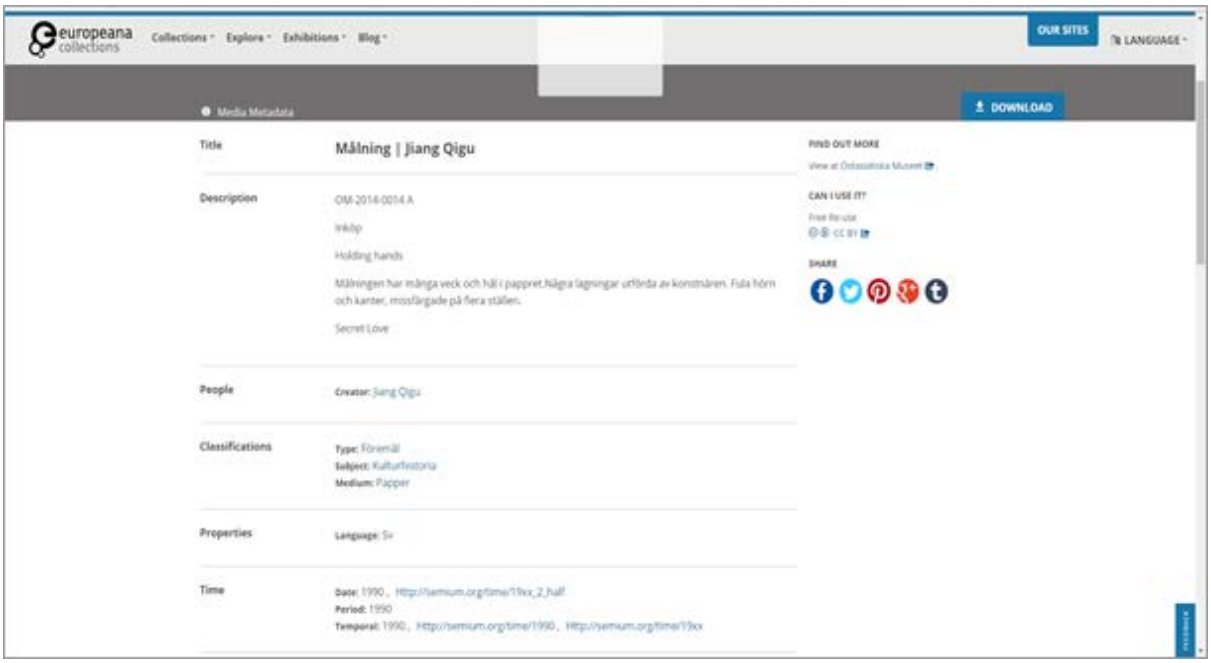
Europeana saw great value in this exhibition and developed a mini campaign that ran over the summer months, to involve the Europeana and respective library audience to contribute their current pictures of the places featured in the exhibition. For more details, see WP2.

IALHI is one of the domain/thematic aggregators that is not part of the Europeana DSI but still active and regularly publish in Europeana. The International Institute of Social History is an IALHI partner that published a new dataset in Europeana that is compliant with Tier 4 of the EPF.

EF worked with the Swedish National Heritage Board (SOCH) in a one-on-one manner to improve their data and the first improved data have been published in Europeana DSI-2. A good example is the data from the Östasiatiska museet, which are now published with richer metadata and better access to digital media (see screenshots below). The improvements EF is working on with SOCH lead to more and better values for types, subjects, creators, titles, geo-information, and rights but also additional views of digital objects.



Original record (before the update) from the Östasiatiska museet.



Updated record from the Östasiatiska museet, with richer metadata.

EF is coordinating the content acquisition more efficiently in order to ingest high-quality material or improve existing datasets to make them fit for thematic collections. One important addition in Europeana DSI-2 was the collection of the Museum für Kunst und Gewerbe (via the German Digital Library). We also updated the collection of the National Library of Spain (rights statements) to allow parts of the collection to be used for an online exhibition. The #AllezLiterature campaign is not a thematic collection but followed a similar approach. To celebrate World Poetry Day, for example, we have worked with several libraries to improve or open up their data to feature them on social media. The National Libraries of Iceland and Croatia are just two examples that provided Public Domain poems to be used in this campaign.

EF also worked with new data partners in a one-on-one way to publish their data in Europeana. One example is the National Documentation Centre (EKT) in Athens that is working on a new aggregation platform and started to submit data to Europeana in Europeana DSI-2.

As a preparatory work towards improving data is an in-depth data analysis of what is published in Europeana. This will then inform the necessary steps to improve the data. The data analysis for some national aggregators was completed during Europeana DSI-2 (e.g. Digitale Collectie), but EF also analysed the data of former EU-funded projects that were not updated for several years, and is about to revive the relationship with the data partners from these former projects to improve their data.

In early 2017 a data quality plan was drafted and shared at the Aggregator Forum meeting. Following from the work on user scenarios by the Data Quality Committee and keeping the Europeana DSI-2 targets in mind, a set of objectives for quality improvements was defined. These objectives are general objectives for all aggregators,

but the actual targets will be different for every aggregator. Therefore, the targets will be agreed on a one-on-one basis with aggregators.

In Europeana DSI-2 **EF** aimed to normalise and deduplicate organisations providing data to Europeana. The initial clean-up and deduplication has been completed. Some organisation names have also been manually corrected and deduplicated in production. The full normalisation was planned to be implemented as part of the development of Metis. The delay of Metis also delayed the completion of the data provider normalisation. However, the list of normalised and deduplicated organisations is ready for the Metis team to work with in 2018.

In Europeana DSI-2 **EF** worked on a vocabulary to normalise dc:type. The terms in this vocabulary are aligned with DBpedia, Wikipedia and the Getty AAT and are not only restricted to use for dc:type but also other fields, like dc:subject, dc:format and dcterms:medium. The proposed vocabulary is currently being reviewed and amended by partners and will be made available for partners later this year.

As part of Data Quality Committee activities, Europeana worked with Péter Király to further develop the completeness measure based on the Metadata Quality Assurance Framework. The current completeness measure takes into account mandatory elements, and unique descriptiveness in other elements. The completeness measure in development will weigh the importance of certain elements as well as multilingual information, and take contextual classes into consideration. Much work was done on multilingual completeness (referred to as multilingual saturation), mainly to establish measures for determining the multilingual richness of the metadata. Furthermore several iterations of display of the completeness measure were considered. This is not yet implemented in Europeana services as there are still discussions on the measures themselves and their display, which will lead to further refinements of the measures.

EF and some partners currently invest to improve data that are suitable to benefit from IIIF. The Universitätsbibliothek Heidelberg was one of the partners to implement IIIF in Europeana. Their content is now displayed in the IIIF viewer and a case study was published to provide more details about this work: "Designing extensive EDM records - the Universitätsbibliothek Heidelberg case study". Alongside the data from Heidelberg, also other data are now available in IIIF: e-codices, University College Dublin, the Biodiversity Heritage Library, Nationalmuseum Sweden.

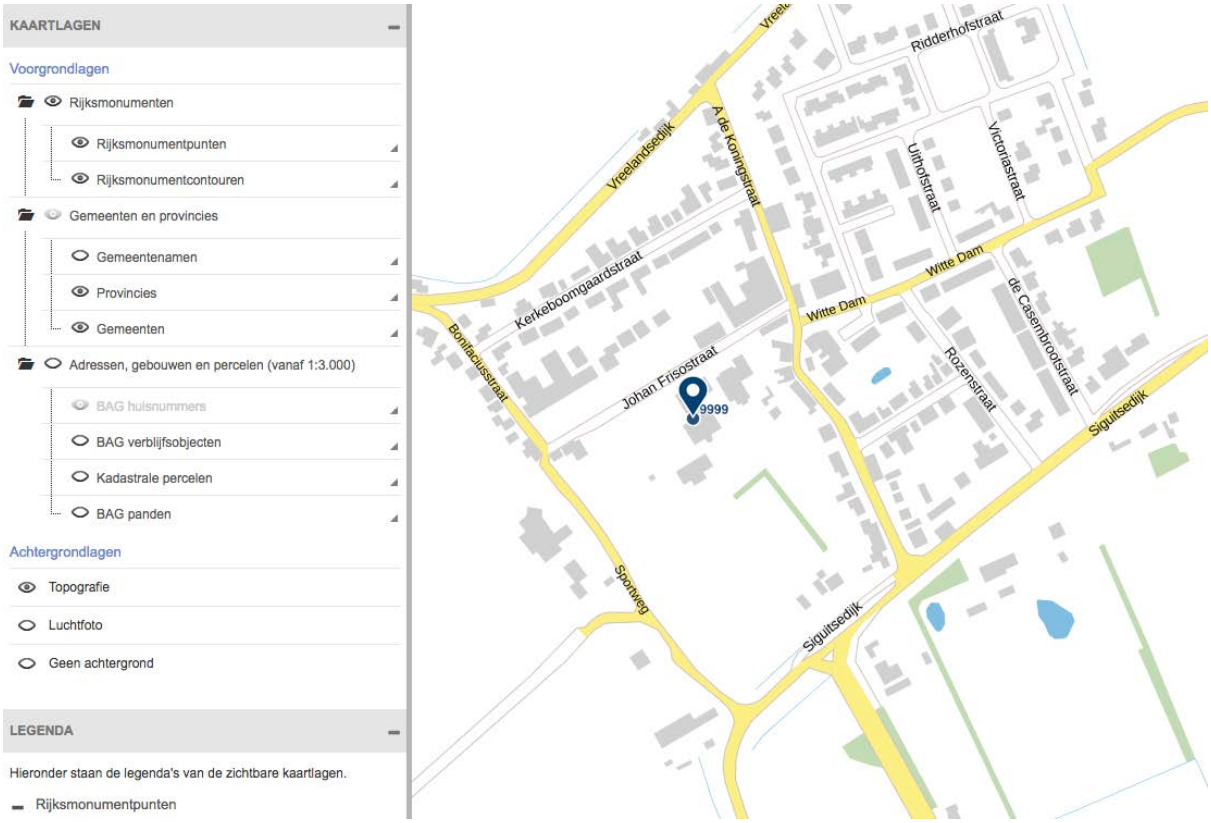
Europeana Sounds, as subcontractor to this project through the **British Library (BL)**, has improved the quality of the data. As part of the subcontract BL was working on metadata improvements (genres, georeferences), increase directly linked content and work on tier 2 compliant content with data providers outside the Europeana Sounds consortium. During Europeana DSI-2, 2914 records from the Statsbibliothek and 750 records from the British Library were given appropriate genres. More than 40,000

records from the British Library were georeferenced. Two British Library collections were made embeddable from the BL website: The Peter Cooke Uganda Collection (1312 records) & Rolf Killius' Music from India (103). These 1,415 records will be the first from the BL's World and Traditional Music section to be available on Europeana. It is hoped this will encourage other collectors to give their permission for their recordings to be embeddable as well. BL is working with the National Library of Scotland about getting their special collections of printed music onto Europeana. This work is still in progress. BL also identified around 10,000 records in Europeana that are of high quality but not yet included in Europeana Music. A change of the search filter for the thematic collection will help to feature these items in Europeana Music.

2Culture and **AthenaRC** work together to provide aggregation services for CARARE, providing expertise on domain metadata standards, ontologies, data quality and data enrichment, and in the data partners' user requirements. 2Culture continues to be in contact with existing CARARE partners to discuss the publication of updates, the provision of new content and quality issues. During the reporting period 2Culture and AthenaRC have worked actively with the Swedish National Heritage Board, the Cultural Heritage Agency of the Netherlands, the Deutsches Archäologisches Institut, the Discovery Programme: Centre for Archaeology and Innovation Ireland, Heritage Malta, the Cultural and Educational Technology Unit of the Athena Research Centre, Vilnius University Faculty of Communication, the University of Jaen, Archäologie und Museum Baselland and Biblioteca Judeţeană „O.Goga" Cluj. Data providing partners have been offered support in the use of the CARARE aggregation services (MINT and MORe), expert assistance in completing metadata mappings to both the CARARE metadata schema and EDM, advice and support on ontologies, in the normalisation of national grid coordinates to the global coordinate system used by Europeana, and in the use of the metadata enrichment services available on the MORe aggregator.

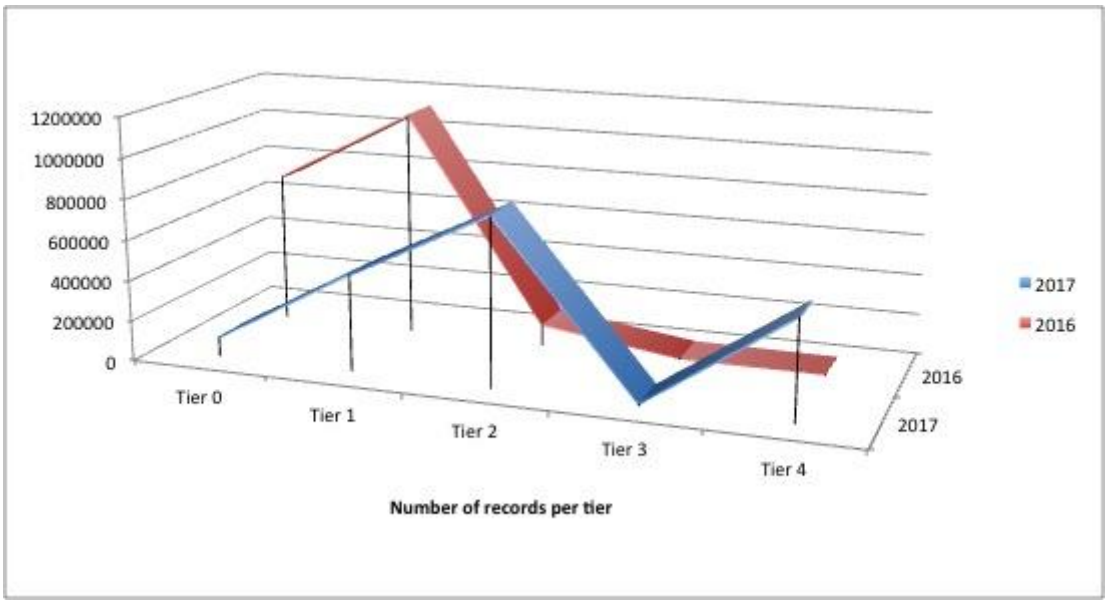
Some highlights from CARARE content published during the period includes 3D content from the Discovery Programme (Ireland) of 4th century AD inscribed Ogham stones. A collection of the Aerial Photograph Archive of Romania (created in a research partnership between the University of Glasgow, the University of Exeter and the National Museum of Transylvanian History) was also made available by the Discovery Programme thanks to funding from the Archaeolandscapes project. An update to the photographic collection from the Nederlands Architectuurinstituut and to the Swedish National Heritage Board's Riksantikvarieämbetet collection significantly increased the amount of tier 2 and above content. During the period CARARE has also provided support to data partners in the LoCloud project enabling the publication of new 3D content of archaeological objects from the Technical University of Cluj-Napoca amongst others.

2Culture and **AthenaRC** continue to worked together to plan work with data partners to address quality issues such as broken links and missing thumbnails. Work with the Cultural Heritage Agency of the Netherlands on re-harvesting and re-mapping their metadata resulted in their Rijksmonument collection being re-published in Europeana with thumbnails. This open access text collection provides direct access to a downloadable pdf file and a direct link to the web-GIS Monuments register for the Netherlands (see image below).



Following discussions with Europeana concerning the thumbnail caching process for several CARARE datasets has been reinitiated.

2Culture has been presenting Europeana's new publishing framework to partners and discussing the possibility of making content available at Tier 2 or above. At the start of the reporting period, 95% of CARARE content was at Tier 0 or Tier 1 (1,868,902 records). By the end of June 2017, 70% of CARARE content was at Tier 2 or above (1,307,600 records). At the time of writing 26% of CARARE content is now at Tier 4.



Change in the number of CARARE records by tier between 2016 and June 2017

This is a significant improvement in data quality. Work that is currently underway with the Deutsches Archäologisches Institut to develop a new EDM export from their Arachne database will raise the quality of the metadata and enable larger format images to be made accessible (lifting the content from Tier 1 to Tier 2 or above) and add new content. Work is also underway with Heritage Malta to re-map their dataset, which should also result in larger format images being made available. Broken links, caused by the use of non-persistent identifiers, are the main reason why some 5% of CARARE content is currently at Tier 0. **2Culture** continues to work to identify new content partners and content at Tier 2 or above.

The CARARE collection includes 1,676 3D objects, which are not included in the tier monitoring. This is because the Europeana Publishing Framework does not yet include specifications for 3D.

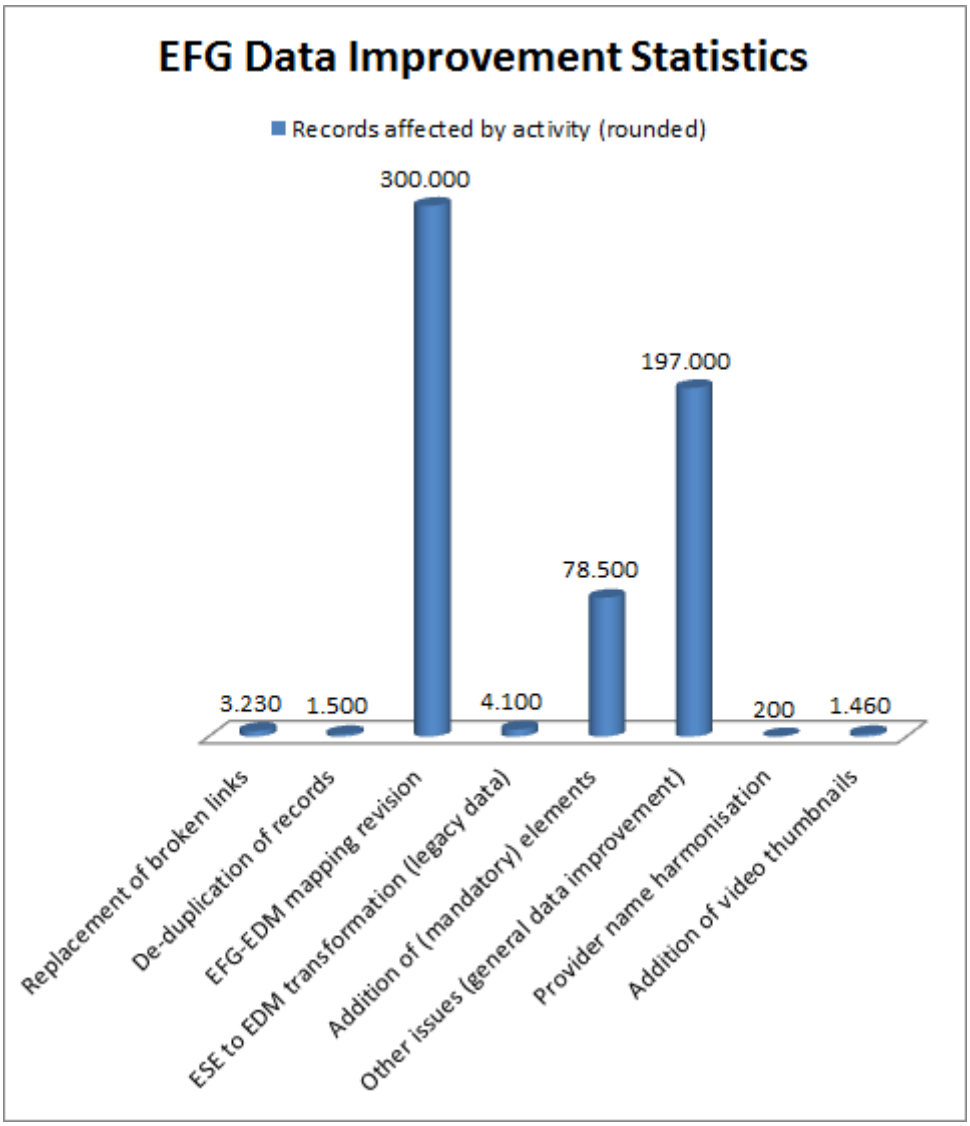
2Culture participates in the activities of the Data Quality Committee contributing expertise on geospatial data, period and temporal data, the use of event data in archaeology, controlled vocabularies used in the archaeology domain, etc. It has commented on the Europeana Content Strategy, and promotes data quality and the Europeana Publishing Framework to members of both the CARARE and LoCloud networks. **AthenaRC** makes a series of metadata and content validation and monitoring tools, and metadata enrichment services available to CARARE data partners via its MORe aggregator. During the reporting period we have worked with **EF** on the normalisation of the provider name for both CARARE and LoCloud data partners.

DIF (for EFG) carried out an in-depth evaluation of data sets in EFG that needed to be improved and compiled a detailed plan of tasks to be looked into and improved jointly by DIF, the EFG partner archives and the technical service provider of EFG. The improvement of data quality focused mainly on

- Updating rights statements and aligning them to the values on rightsstatements.org,
- Fixing broken links and providing thumbnails for video items
- Providing missing (partly mandatory) elements, such as dc:title, dc:subject, dc:language, etc., that either raise the quality of data or now allow for previously rejected EFG records to be successfully ingested into Europeana,
- Harmonising existing values for object types, language attributes, and provider names.

Under Europeana DSI-2, **DIF** and its partners have carried out individual data improvement for a total of 17 archives. This list provides more details on the actual work carried out. The improved data sets often include contributions from several source databases, which meant the efforts undertaken to fix issues around these 17 data sets included revisions of over 25 individual collections (image, video, text). As some of the data quality issues EFG is faced with, result from bugs in the EFG-EDM mapping, DIF completely revised the EFG-EDM mapping. It now mostly complies with EDM and provides the best possible data quality as well as formerly rejected records. Some remaining bugs that were tackled under Europeana DSI-2, but could not be fully solved will need to be addressed after the end of Europeana DSI-2 and are expected to be resolved by the end of 2017 the latest. Improvement activities carried out under Europeana DSI-2 affected around 300,000 EFG (mostly legacy) records in total and bug fixing activities as well as new contributions from 6 EFG partner archives resulted in 34,100 new EFG records provided to Europeana. Where possible, DIF prioritised improvement activities that were relevant across EFG data sets, e.g. updating old right statements or adding language attributes to all text collections, etc. However, many issues were specific to individual and sometimes smaller collections as well. The improvement work done under Europeana DSI-2 tried to account for as many different issues as possible.

This graph gives a rough overview of EFG data improvement activities in the various categories:



EFG made it a prerequisite for all new data contributions that they meet at least Tier 1 objectives and encourages archives to provide videos with direct links so that they meet the Tier 2 objectives. To date, EFG provides Europeana with records in the following Tier categories:

Tier	Object Type	Number of items
Tier 1	Video	24,000
Tier 2	Video	5,600
Tier 4	Video	240
Tier 1	Image	530,700
Tier 2	Image	62,000

Tier 1	Text	1,360
Tier 2	Text	40,110
Tier 4	Text	510
Tier 1 TOTAL		**556,060**
Tier 2 TOTAL		**107,710**
Tier 4 TOTAL		**750**

APEF has been working on a new policy for forwarding digital archival content to Europeana, based on Europeana's new Content Strategy, to which it also contributed. The focus of this new APEF policy was on following Europeana's switch from quantity to quality. After discussing with the Europeana team the feasibility of the basic principles APEF came up with itself, it managed to get an understanding with its Country Manager network about these principles during its Country Manager meeting in Bratislava. The main principle is to not forward all digital archival content to Europeana anymore, but only a selection of digital archival content on which both parties (APEF's content providers and Europeana) agree that it is content suitable for publication in Europeana. This entails a focus shift from quantity to quality, which is fully in line with Europeana's new Content Strategy and Publishing Framework. In more detail this means only forwarding digital archival content with:

- No restricted access to digital objects (no paid access),
- No watermarks in digital objects,
- Correct rights statements (incl. rightsstatements.org),
- Dedicated thumbnails, preferably 800+ pixels wide (EPF tier 2),
- Preferably connected to the Europeana Thematic Collection themes.

An official content policy document was presented and approved during the last APEF Country Manager network meeting on Malta on the 28th of April 2017 (see:). At the moment the existing Archives Portal Europe - Europeana content contributions are already evaluated according to these new principles and also according to the recommendations of the DQC. With the content policy now officially approved and the functionalities, which have to support this, fully implemented via the Archives Portal Europe a regular and automated flow of content from the Archives Portal Europe to Europeana can be expected, which will lead to a new phase in the Archives Portal Europe – Europeana aggregation and more support for this from the European archival community. The first signs of this are already visible via the enthusiastic responses of Archives Portal Europe content providers to the appeal of the APEF and Europeana teams to provide content – in line with the principles of the new content policy – for a PR

campaign highlighting documents about the history of democracy in Europe (#AllezDemocray), which will run from September 2017. This campaign can be regarded as a pilot for the new content policy principle of being able to select, forward and publish Archives Portal Europe content in Europeana for a specific Europeana theme or collection. The experience during the content selection process for the campaign will be used to draft specifications on how to adapt the Archives Portal Europe's framework functionality in the last quarter of 2017. While this is still in progress **APEF** is working on aligning its existing "topic/tag cloud"-functionality to Europeana's thematic collections and aims at enabling its content providers to easily select content for these thematic collections and forward EDM records for them including this information.

The main motivation for including **Photoconsortium** in Europeana DSI-2 was to develop and curate the Europeana Photography thematic collection (WP2). For this reason, it was necessary to improve the data quality of European Photography's old datasets (last ingestion in 2014) in order to make materials suitable and available for the thematic collection. This meant that the activities of Photoconsortium in WP1 were principally driven by the needs of the thematic collection, and the focus has been on improving the quality of those existing datasets/providers selected to be part of the collection, for which subcontracts were established with content holders, for their active participation in the curation of the Photography collection and for the provision of content for the exhibitions, galleries and blogs. Further, in addition to this, batches of new materials (tier 2 or above) were ingested to Europeana.

As preparatory activity in the task dedicated to improving data quality, Photoconsortium reviewed the "old" EuropeanaPhotography datasets, particularly to identify and solve major issues (e.g., broken links, missing thumbnails etc.) with the collaboration of the technical partner NTUA, the Europeana Data Partner Services team and of course the relevant data providers. The information was collected in different Google docs which constitute the main reference for both Photoconsortium and Europeana officers. The main report (working document) is available online.

Metadata improvement (accuracy of titles and description)

Below, two items from NALIS collection. Originally from 2014 ingestion, all the items had the title "photograph" and description in Bulgarian only. A metadata improvement action is ongoing for adding at least English titles to the collection: currently 2.000 items are more readable and searchable now.

 photograph Сава поп Христов Кършовски с първата си съпруга Анастасия, сина си Панайот и майка си баба Райна.	 **Armenian national scout camp | фотоателие "Кавказ". Арам Амиров** Арменска общност в България. Общ скаутски лагер по случай 30-годишнината от гибелта на Кристапор Микаелян – основател на Арменската революционна организация „Ташнагцутюн" и по повод откриването на паметника на Яворов в Борисовата градина.
Status of NALIS metadata from 2014.	Status of NALIS metadata after Europeana DSI-2 improvement

Adoption of the Europeana Publishing Framework

Complementary to the technical requirements of the Europeana Publishing Framework, it would be very welcome that images are as much reusable as possible. Thus, in addition to promoting an open approach in terms of rights labelling, the issue of non-obtrusive watermarks was also tackled by Photoconsortium with two important providers such as Parisienne de Photographie and TopFoto.

One item as published by TopFoto in 2014-2015	*The same item updated by TopFoto in 2017*

In addition to such specific actions, the whole EuropeanaPhotography collection was double-checked, the name of aggregator was changed from "Europeana Photography" to "Photoconsortium", and some updates and corrections were done at Europeana side. Cases of visualization issues were solved (e.g. MHF) and inconsistencies were identified (e.g. institutions' names for Lithuanian content providers, ca. 20,000 records).

Overall, the work done was extremely important not only to identify the corrections and

improvement needed in the old datasets but also to align with a proper workflow and procedures. The experience of this first review of the datasets, the resulting observations, the developed process in collaboration with Europeana and the opportunity of upgrading the features and the use of the photography thesaurus to improve search mechanisms constitute the basis of the next work of Photoconsortium and the newly-constituted Metadata Task Force in the DSI3.

CT has mainly been working with the EF DPS team to try to fix broken links to Culture Grid hosted content. This has led to a small number of collections being removed from Culture Grid, and therefore Europeana, for example MAK (Austrian) records, and collections from the Europeana Inside project.

They have also been working to add content from: UK Royal Collections library; Southwark Heritage (Cuming Museum); Ure Museum of Greek Archaeology; Royal Albert Memorial Museum, Exeter; HMS Challenger collection; and eHive collections.

CT has also been developing its terminologies offer, with especially the ICOM Costume Committee's Vocabulary of Basic Terms (VBT) now available in Spanish, as well as English, French and German.

The overall MUSEU contribution sums up now to 290,290 records from 7 countries plus one dataset of 302 records from Italy published under AthenaPlus. MCA data partners supplied Europeana with 221,103 records in Europeana DSI-2; 682,656 more records are under publication.

Over 95% of the records published under MUSEU are legacy data that needed to be improved and republished: setting up a control process of the old data was the priority for Europeana DSI-2.

MCA checked the status of all datasets published under the ATHENA, Linked Heritage, AthenaPlus, Europeana DSI and Europeana DSI-2 projects. 369 datasets summing up to 7,237,022 records were controlled to check the status of thumbnails and broken links, the presence of links to digital objects and which ones are included in the thematic collections. MCA started up to discuss the situation of the problematic datasets with the single providers.

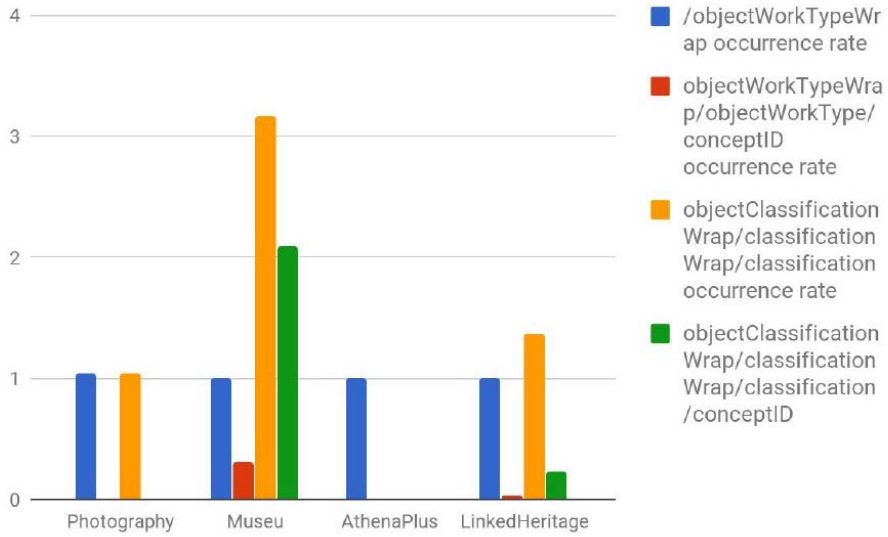
The first step of improvement is the switch from ESE to EDM records. At the beginning of Europeana DSI, MUSEU managed over 3.1M ESE records that now decreased to around 2.4M.

MCA in cooperation with Europeana also discovered and removed from the live portal 663,725 records of digital collections whose requirements were not inline anymore with present Europeana parameters or containing broken links that couldn't be replaced.

Other improvement actions concerned the switch to tier 2 or above, the inclusion of the value of the intermediate provider for the aggregators, the adjustments of the rights value, and fixing broken links (see Annex for details on quality improvements).

MCA subcontracted to the Institute of Communication and Computer Systems (ICCS) of Athens the technical report "Quality evaluation of the LIDO and EDM Metadata that ATHENA, Linked heritage, AthenaPlus and MUSEU supplied Europeana with" to check the quality status of the LIDO metadata stored in the MINT repositories. Four categories were investigated: Digital Objects – Web Resources, Geo-spatial information, Vocabularies, Events.

The records MUSEU provided have as a whole a more meaningful and complete information in comparison to the ATHENA, Linked Heritage, and AthenaPlus ones, apart from the use of vocabularies that was one of the key points of the past projects. This document will be the basis to move forward for the data cleaning and improvement in Europeana DSI-3.



LIDO Repository spatial elements occurrence rates per project

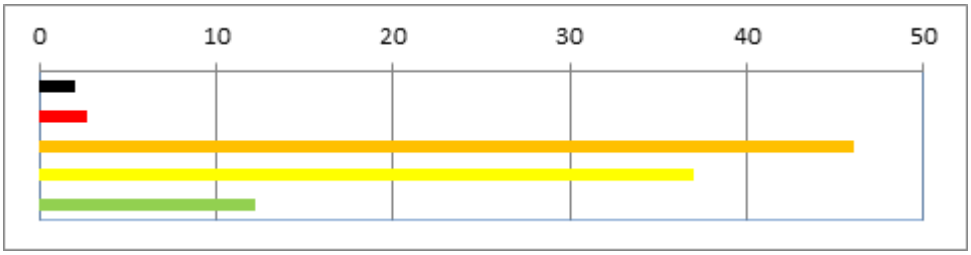
Over 390,000 records that MCA manages (legacy + MUSEU items) are distributed in all Europeana thematic collections apart the fashion one. MCA covers around 17.5% of the content of the Art Collection. In fact, MCA agreed with the Collections Manager of the Europeana Art Collection a strategy to facilitate the data providers to provide even small but valuable datasets so that they can be featured in the collection.

MCA promoted the Europeana Publishing Framework by its data partners through online channels and in presence during the MUSEU workshops.

MCA, in cooperation with Nationalmuseum Sweden and Bildarchiv Foto Marburg, put a large effort in implementing in the LIDO intermediate profile of MINT the possibility of publishing IIIF records and updated the mapping towards EDM. The Nationalmuseum in Stockholm then updated over 3,000 records of high resolution images in IIIF. This was the first IIIF dataset published in Europeana.

FUB (for OpenUp!) is focussed on natural history, a very distinct type of content in Europeana with a high above average level of tier2+ content (cf. Report on automated

thematic collection pilot, Europeana 2017). FUB has maintained the proportion of high quality metadata with nearly 50% of OpenUp!'s content ranging in Tier 3 or Tier 4 respectively, even with the substantial increase of over-all data provision in that period (figures from project mid-time below). In addition, the proportion of data belonging to Tier1 or being unusable has decreased substantially. All the multimedia objects have policy-conformant rights statements and provide titles to ensure that the digital cultural heritage object can be discovered easily.



	n° records	%
Provider's collections actually not useable via Europeana	57079	2,1
Europeana 'as a search engine' (Tier 1 material)	74975	2,7
Europeana 'as a showcase' (Tier 2 material)	1272057	46,0
Europeana to enable 'non-commercial re-use' (Tier 3)	1022266	37,0
Europeana to enable free re-use (Tier 4)	339259	12,3

Metadata quality according to the Europeana Publication Framework in % of records provided by OpenUp!

With work invested both on Europeana's and OpenUp!'s side broken links as well as missing thumbnails have been reduced substantially. Only two of the smaller partners remain affected by both problems. Data quality issues about the presentation of OpenUp! geodata information were forwarded to Europeana and the process of improvement is currently ongoing. End of August 2017, OpenUp! is serving 43 dynamic and 24 static data sets of natural history information from all over Europe. New datasets have been integrated from the Plant Science institute at the University of Graz (A), the Alfred Wegener Institute (D), and the Botanic Garden and Botanical Museum Berlin-Dahlem Observations (D), eight more candidates are in the pipeline, waiting for last problems to be solved (licensing unclear, minor technical adjustments, etc.). For the first time a museum dataset has been integrated via the Openup! aggregation platform that was delivered in LIDO metadata format (MuseumPlus BGBM), example under: http://www.europeana.eu/portal/de/record/11635/_MuseumPLUS_BGBM_GERMANY_MP_B890001041.html?q=europeana_collectionName%3A%2811635_Ag_EU_OpenUp%21_MuseumPlus%29

FUB had been in contact with several natural history institutions in Europe, for which administrative process have been initiated to enter the Europeana portal (e.g. Naturalis, the Royal Botanical Garden of Madrid, Musée national d'histoire naturelle of

Luxembourg). In addition, we have updated the data set of the Research Group for Biodiversity Informatics and Digital Archives at the University of Tartu.

OpenUp! has processed in three major harvests during the project year each time about 5.7 to 5.9 million records. The amount of data delivered to Europeana has increased during the project year by 362.350 records, from 2.878.050 records in August 2016 to 3.240.400 records in August 2017.

FUB and NHM Vienna are engaged in improving the accessibility of scientifically named objects by synonyms and multilingual common names, one of the value-adding services in the context of Europeana. This metadata enrichment facilitates access to digital objects by synonyms and multilingual common names. NHM Vienna continued and updated the development of the CommonNames web service. Now requests from several external web sources can be responded in parallel, which shortens the overall response time. The subcontractor integrated additional web sources into the CommonNames web service to facilitate the access to natural history content in more languages. Web sources from Japan (Flora of Japan Database), Hungary (Új magyar füvészkönyv. Magyarország hajtásos növényei.), France (Tela botanica), Indonesia (JAMU – Indonesia Herb Database) and several sources more have been added, as well as Catalan names, names from the Thai Forest herbarium and a list of spices by G. Katzer. All newly added sources are validated for their scientific quality and reliability by experts. A good example of how this looks is this record, showing metadata enrichments by CommonNames web service, GeoNames and the BHL biodiversity library.

A state of the art monitoring service was set up for the common names web service. Incinga2 was used to set it up and is now constantly monitoring the availability of both the server and the service itself. In addition, the server resources are monitored to be alarmed of possible bottlenecks in time.

eFashion has ingested 50,000 new high quality records (minimum tier 2) in Europeana, and its whole datasets has been published in the Fashion Thematic Collections, which is curated by the Europeana Fashion International Association (100% of eFashion content is at least tier 2). More than 40 public and private institutions contributed to the thematic collection, which is online since May 2017, and gives access to more than 860,000 fashion records.

eFashion also continued a systematic activity of improvement of metadata mapping for all the already ingested and published datasets (see Annex for details). This activity is supervised by two eFashion content officers and carried on in collaboration with the data providers.
The main achievements in this area are related to the normalisation of dates and creator's names and places. A member of the eFashion ingestion team is also participating to the Data Quality Committee and is implementing its guidelines (see Annex for details).

Also a new version of the fashion multilingual thesaurus has been published, which included new terms and new terms translations, the new terms has been submitted to Getty Institute for addition to the ATT thesaurus.

eFashion has also promoted the new Europeana Publishing Framework among its data providers, encouraging the delivery of content in Tier 3 or above (more than 95% of the eFashion content is already Tier 2 or higher).

Also **eFashion** promoted in its network of fashion heritage institutions the Europeana Publishing Framework, and as stated before, already the totality of its aggregating content is at least tier 2, and a growing part is becoming tier 3 and 4.

eFashion is also promoting and maintaining the EDM-fp (Fashion profile) metadata schema in the fashion heritage community.

NISV for **EUscreen** worked with **EF** on normalisation of the Provider name (merging of different EUscreen collections), ensuring that dc:source (EUscreen) has been added. NISV is also analysed and mended broken links - for example RTÉ, where a change in the local streaming infrastructure resulted in approximately 970 broken links on Europeana (these still play out on the EUscreen portal but the backlink does not work). NTUA created a data dump spreadsheet which allows the provider to simply add new link URI which would allow an update of the isShownAt information. Data cleaning work: cleaning of html tags and duplicate titles for some providers (notably RTÉ and SASE). Close co-operation with the Norwegian broadcaster NRK led to the re-publication and quality enrichment of their Fjernsysnteater set. This encompasses 565 episodes from the broadcaster's classic TV-drama series. In spite of the rich source data, only the mandatory elements had previously been mapped (title, general series description, type, creation date, provenance). NISV worked very closely with NRK, NTUA and EF to improve the discoverability of the set. Within three weeks, these records had been significantly enriched to also contain series/episode information, episode as well as series description (with cast), contributors, subject thesauri, local keywords, duration, spatial information, and language information. Additional new sets include that of Albanian Film Archive ASQHF, who was willing to implement the new educational licenses, which upon inspection deemed not usable for this use case.

Work package 2 End-user products & services

This work package provides end-users with an attractive experience via Europeana Collections and the Thematic Collections and to deliver data to end users on external platforms (such as Wikipedia). The work package is responsible for publishing Europeana Collections and the Thematic Collection websites, with improved search and presentation of results (to be specified in this WP and developed in WP6).

Participants in this work package are:

- Europeana Foundation (EF)
- AthenaRC (AthenaRC)
- Netherlands Institute for Sound and Vision (NISV)
- Europeana Fashion International Association (eFashion)
- International Consortium for Photographic Heritage PHOTOCONSORTIUM (PHOTOCONS)
- Facts and Files (F&F)
- Stiftung Preußischer Kulturbesitz - Staatsbibliothek zu Berlin (SBB),
- National Library of Latvia (LNB)
- Clarin ERIC (CLARIN)
- University of Glasgow (UoG)

The objectives of this work package are the following:

- Publish Europeana Collections (task 2.2);
- Publish the Europeana Thematic Collections on art, fashion, newspapers, photography, 1914-1918 and music (task 2.3);
- Run and develop for each thematic area one case study that shows the value of the Europeana Publishing Framework (task 2.4);
- Show the value of Europeana to partners by publishing the Europeana Statistics Dashboard (task 2.4); and
- Publish Europeana Research as the main access point for the use of Europeana by Digital Humanities to researchers (task 2.6)

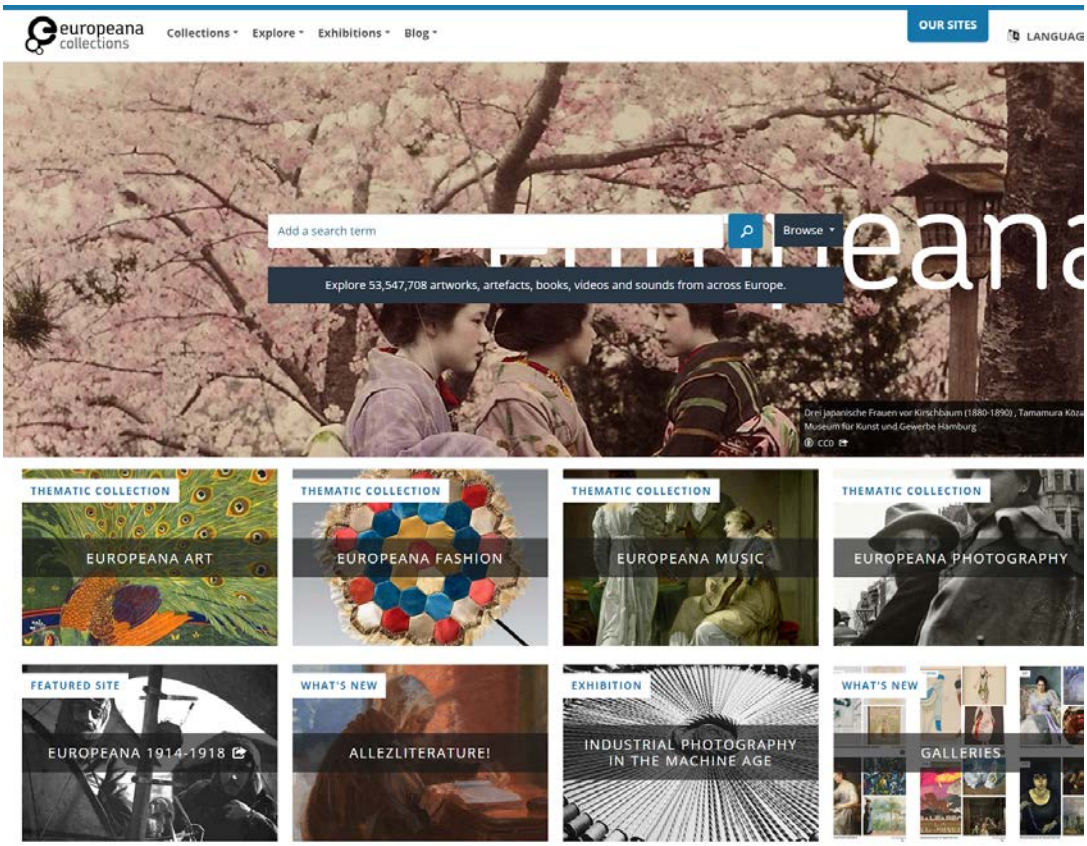
Description of work carried out and achievements

Task 2.1 Manage the work package

The partners of WP2 were all invited to participate in Europeana DSI-2 kick off meeting in Vienna in September 2016. Partners attended and actively participated in dedicated WP2 break-out groups. The WP was further kept informed by email, basecamp and phone calls. Follow-up meetings with partners took place during the Europeana AGM in Riga, as well as individual meetings between EF and partners.

The thematic collection partners (**eFashion**, **Photocons**, **SBB**) worked closely with the Europeana's Collection Team to discuss, plan, schedule work and activities. We learned throughout Europeana DSI -2 the importance of sharing best practices and we initiated a new forum for discussion and collaboration; Europeana Collections Forum. The 1st Forum with our partners was held on 20 April in The Hague (following the Aggregator Forum) with the aim to discuss and share best practices to run thematic collections as effectively as possible. A Basecamp space was established to continue to share best practices and plan editorial work as efficiently as possible.
Europeana Research partners (**CLARIN**, **AthenaRC**, and **UoG**) stayed in touch via a dedicated Basecamp space.

Task 2.2 Publish Europeana Collections



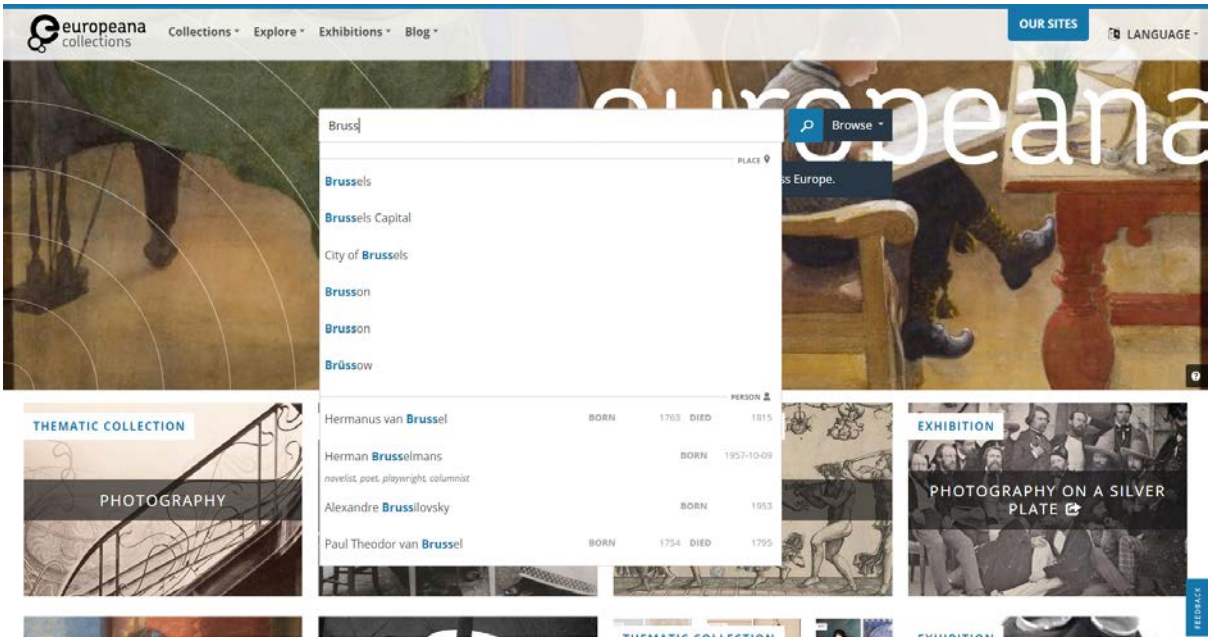
Europeana Collections continued to run actively during the duration of the project. Europeana Collections Plan (D2.1) was developed and delivered and includes the ambitions and activities for Europeana Collections including thematic collections development. During this project period, several new functionalities, features and editorial outputs were developed to present Europe's cultural heritage in new ways and bring content closer to users. Understanding of users' needs and feedback from users were strengthened. Europeana Collections was rated satisfactory or above by more than 80% of users in several surveys spanning the Europeana DSI-2 project period.

New functionalities and features

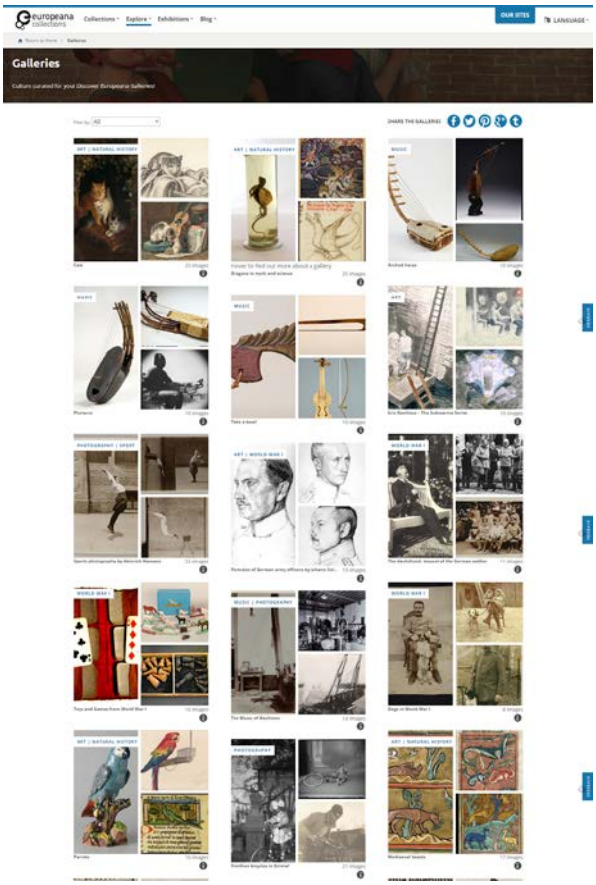
Entities

To improve search and discovery on Europeana Collections, new functionality based on an Entity API are being added. Entities include persons, places, topics (subjects, genres, styles), types, periods, events and works. The first release of entity functionality focuses on the first 4 types listed here.

This API has been incorporated into Europeana Collections search function to auto-suggest entities as potential search results to users, helping users find material on well-known and verified search terms. This functionality appears on the main search bar on Europeana Collections, on thematic collections and on a smaller search bar on object pages. This ensures a more satisfying and reliable search experience, so that users can know they will find the content they are searching for. Entity autosuggest functionality has been finalised (see designs below) and will be deployed to live in September 2017 Further entity functionality will be added shortly.



Galleries



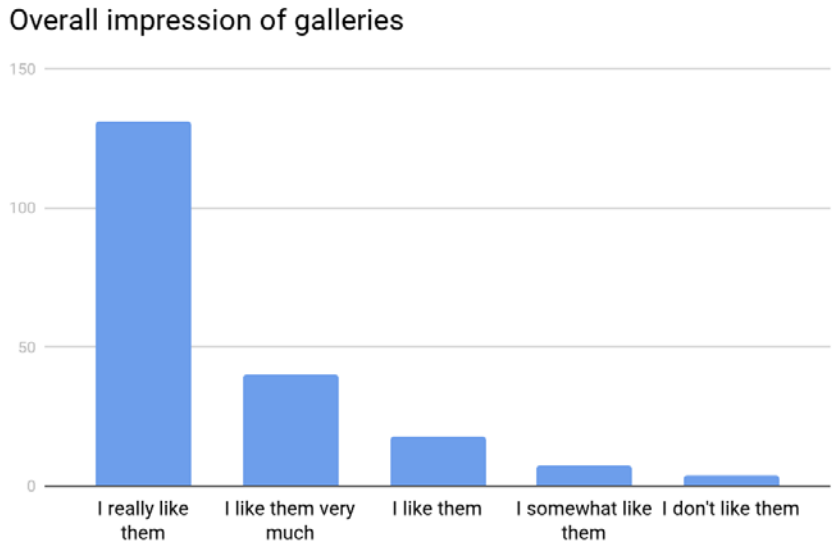
As part of the development of Europeana Fashion, image galleries were launched on Europeana Collections in April 2017. Galleries present a curated selection of between 6 and 48 images on a theme (all of which are Tier 2+). Some bring together artworks from across Europe, while some focus more on just one country. The galleries connect to our thematic collections topics, and are now a key element of thematic collections' editorial plans.

100 galleries have been published on Europeana Collections to date. Galleries have been promoted on social media during summer 2017, with a #GalleryOfTheWeek hashtag.

The 5 most popular galleries thus far are:

- The Magic Lantern [Europeana Photography]
- Art Nouveau posters [Europeana Art]
- Artists' self-portraits [Europeana Art]
- Wilhelm Weimar [Europeana Photography]
- European landscapes and landmarks [Europeana Art]

A user satisfaction survey for galleries in May-June 2017 found that the vast majority of users enjoyed galleries, with 95% rating them 3 out of 5 or higher.



I really like them	131
I like them very much	40
I like them	18
I somewhat like them	7
I don't like them	4

Multilingual access

Europeana Collections is currently available in 27 European languages. During Europeana DSI-2, Europeana Collections was published in an additional 5 languages (Czech, Estonian, Irish, Slovakian, Slovenian), ensuring that Europeana Collections is published in the 24 official languages of the European Union, as well as Catalan, Norwegian and Russian.

Editorial output

Blogs

69 blog posts have been published on Europeana Blog, addressing time-relevant and thematic topics. End-user promotion and awareness raising is reported on in WP8 Task 8.4 / 8.4.1. Research was carried out on the end-user blog to ensure impactful blogs reaching out to the end-user. Work has in progress to migrate Europeana Blog from WordPress CMS to Bolt CMS, consolidating the number of systems used to manage content.

Exhibitions

The new exhibition platform for Europeana Exhibitions is a dedicated platform for partners to present most interesting items from their collections in a new, visually appealing format as well as an instrumental tool to further enhance thematic collections.

While Europeana Collections provides the space to showcase the content, Europeana Exhibitions aims to encourage partners to share their invaluable curatorial knowledge by creating engaging stories. Exhibitions focus on including top quality materials with

captivating narrative and high-resolution images. The opportunity to create and publish a high-quality exhibition can be an incentive for partners to provide higher quality material to Europeana. The platform also supports enriching the story with external sources, like embedded audio and video files.

Between 6 July and 31 August 2017 Europeana was running a photo competition inspired by exhibition Picture this! Vintage postcards of Southeastern Europe. Users are invited to send their own photos of places illustrated in the exhibition. The photographs can be submitted easily via Twitter, Instagram or Facebook using the hashtag #PicThisEurope. The competition allows for highlighting possibilities of online exhibitions, especially particular functionality, called slider, which was introduced in 2016 during the update of the exhibition platform. Slider allows for a visually pleasing comparison of two images creating a before-and-after effect. By using the slider, winning photographs will be featured in the online exhibition next to the vintage postcards. The competition aims to connect users to European heritage by encouraging them to look at landmarks of the region and compare their current state with images of how they looked decades ago. By showing a linkage between 'now' and 'then' Europeana hopes to increase engagement with cultural heritage material.

Ten exhibitions from a previous platform (in multiple languages) have been migrated to our current exhibition platform with redirects in place.

With the introduction of the current platform, we have started measuring user satisfaction with Net Promoter Score (NPS)[6].

During Europeana DSI-2, eleven new exhibitions were published:

- Academic art and new directions (Faces of Europe: chapter 5) - fifth chapter of the exhibitions series about European art, called Faces of Europe; stories of 19th century artists who went against academic neoclassical styles (NPS=20).
- Painting modern lives (Faces of Europe: chapter 6) - more stories about European art after the Industrial Revolution, examining realism, the status of female artists, and new directions at the end of the 19th century (NPS=54).
- Towards abstraction (Faces of Europe: chapter 7) - last chapter of the series Faces of Europe talking about artists who deployed avant-garde styles in the genres of portraiture, landscape and folk art, on a way to a total abstraction (NPS=25).
- The Colossus of Leonardo da Vinci - the story of Leonardo's monumental never-completed equestrian bronze (NPS=37).
- Sausages and Cigars for Christmas: the story of Max Kranz and the men from Hatzenport in World War One (NPS=35).

[6] Net Promoter Score (NPS) measures the loyalty that exists between a provider and a consumer. An NPS that is higher than zero is considered to be good, and an NPS of +50 is excellent.

- Art Nouveau: A Universal Style: presenting an overview of Art Nouveau in its historical context and highlighting important examples of the style (NPS=53).
- Picture this! Vintage postcards of Southeastern Europe: highlighting interesting facts and details about the cities of the regions presented on vintage postcards that showcase their cultural and natural heritage (NPS=42).
- Past to Present: Fashion Reinterpretations - showing historical garments alongside outfits and items by contemporary designers to illustrate how fashion uses its own past to rewrite its story (NPS=45).
- Industrial Photography in the Machine Age - exploring industrial photography of the early 20th century (NPS=56).
- Seven Man, One Leg - various stories about the reintegration process of soldiers after World War I (NPS=57).
- 1946 Ogooué-Congo Mission: story of ethnomusicological expedition to Middle Congo (the current Republic of the Congo) and Gabon (NPS=71).

Europeana will continue to publish new high quality online exhibitions, giving priority to topics connected with one of the Thematic Collections.

Hero images

Each month, a new large banner image is added to Europeana Collections homepage ('hero image'). This image is themed to align with to promote thematic collections, exhibitions, campaigns, data partners or other relevant content. Hero images are always sourced from openly-licensed content. Since February 2017, the choice of hero image is given to Europeana's social media followers (choosing from a shortlist of 4). Research, undertaken in December 2016, shows that views increase for any object used as a hero image on Europeana Collections, Europeana Art or Europeana Music. Increases range from twice as many views as to more than 70 times as many.

Working with partners

We have developed user profiles for Europeana Collections CMS to allow Europeana DSI -2 partners to curate and prepare thematic collections. A comprehensive Collections CMS manual and guidelines were prepared and circulated to partners. Subsequently, Europeana Collections' editorial calendar was improved and circulated to all partners through a dedicated Basecamp. A Collections Forum for thematic collections partners was held in April 2017, detailed under Task 2.1 above.

User satisfaction and research

Europeana Foundation have embedded regular user satisfaction surveys and feedback gathering in our user consultation activities. A user feedback form is now displayed on Europeana Collections at all times. As part of user consultation, Europeana Foundation run user satisfaction surveys for two weeks every two months. Throughout the

Europeana DSI-2 period, six surveys were run on Europeana Collections with a total of 5197 responses. A summary of the surveys and their responses can be seen below.

Date	Respondents	Rating 3 out of 5 or higher	Respondents	Net Promoter Score
Europeana Collections				
September 2016	877	81%	278	23
November 2016	699	83%	356	29
January 2017	688	83%	216	35
March 2017	440	81%	236	37
May 2017	498	81%	190	21[7]
August 2017	505	84%	214	35
Thematic collections				
Europeana Music (September 2016)	223	80%		n/a
Europeana Music (January 2017)	121	91%		23
Europeana Fashion (May - June 2017)	102	96%		20

The average rating above - 82% - exceeds Performance Indicator 6.2 that 60% of users responding to user satisfaction surveys will rate their experience of using Europeana Collections satisfactory or above. An NPS that is positive (i.e., higher than zero) is felt to be good, and an NPS of +50 is excellent[8].

Europeana Foundation also run shorter polls and surveys to assess usage and feedback for specific features, functionalities and thematic collections. Polls and surveys were

[7] This Net Promoter Score surveyed coincided with a week where server issue caused some downtime and slower server response, explaining the lower score

[8] https://en.wikipedia.org/wiki/Net_Promoter

undertaken to assess galleries and two thematic collections (Europeana Music in January 2017) and (Europeana Fashion in May-June 2017), with the results listed under the Task 2.3 below. User satisfaction metrics from these surveys (Rating 3 out of 5 or higher and Net Promoter Score) are included in table above. Many of these surveys generate qualitative feedback (as well as quantitative), 10 examples of which are listed below.

"A beautiful resource that highlights the depth of European Culture and widens one's appreciation of art from other EU countries." - Academic user in United Kingdom
"It's a treasure trove for researchers like us who cannot easily travel abroad. Please keep on uploading rare material from more libraries and archives." - Academic user in India
"The very fact that this site gives me easy (and cheap!) access to international sources makes it very helpful." - Academic user in Japan
"I like the fact that it's possible to search pretty much everything. I think I've found things I wouldn't have found somewhere else." - Academic user in Estonia
"It's a wonderful project. Please do keep it flourishing, it's just endlessly useful." - Academic user in United Kingdom
"Thank you infinitely for this extremely valuable site on behalf of international researchers." - Cultural heritage professional in Turkey
"It is great to have so many sources for research, it is easier to place a topic in an international background. It is good to find things which otherwise could not necessarily be found." - Cultural heritage professional in Hungary
"It is a great way to learn new things related to European culture and heritage." - Teacher in Spain
"The site is very important for my genealogical researches. I find a lot of books there. Thank you for what is done."

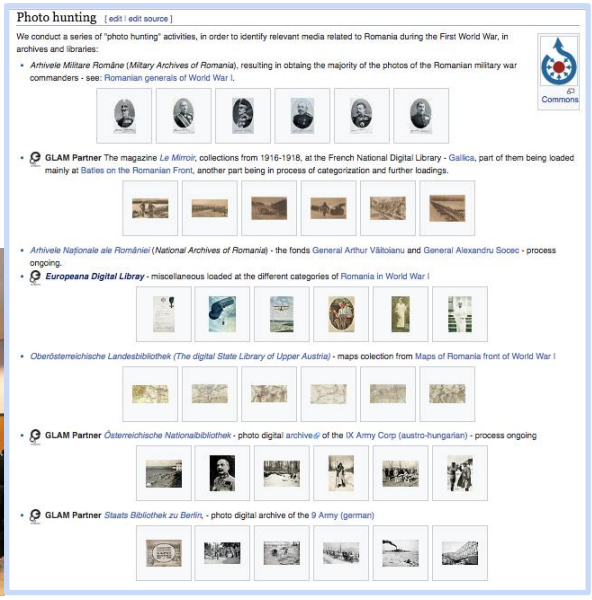
- Cultural heritage enthusiast in France
"It is a useful site, and opens many new doors - allowing the user to explore other avenues as yet unknown" - Cultural heritage enthusiast in Slovenia

Statistics Dashboard

Automated dashboards for individual institutions have proved to be more difficult to develop and maintain than expected due to the data structure. Many dashboards have bugs that require significant development efforts while the take up of individual dashboards is relatively low (a couple of dozen are active). We have therefore decided to re-evaluate the Statistics Dashboard. Automated dashboards for individual institutions have been disabled. We continue to share overall statistics of Europeana now through a dedicated space on Europeana Pro, which includes overall usage, downloads, media use, social media activity, Wikimedia activity and tier statistics.

Participating countries now receive overall country reports twice a year. One set (detailing 2016 overall) has been produced in early 2017. The second, detailing the first half of 2017, will be produced shortly. Individual institutions and researchers that require statistics receive automated google analytics report or other statistics on request.

Wikimedia activities



Left: Presentation of developments in Wikidata at the European GLAMwiki Coordinators meeting, hosted at UNESCO

Right: Excerpt of the portfolio from the Wikimedia association in Romania

Over three days in mid-February, Europeana convened the second "European GLAMwiki Coordinators meeting", hosted at the UNESCO headquarters in Paris. This attracted self-funded designated representatives of 30+ Wikimedia national and regional affiliate organisations across the Continent to share best practices (report). Organising this gathering, at no cost to the organisation itself, ensures Europeana has a central role in the coordination of third-party reuse of open-access cultural heritage activities - downstream from the institutions themselves. It also enabled Europeana to showcase its major activities with targeted campaigns. Notably this includes the Europeana 1914-18 'Wikimedia challenge' which launched during the period.

In 2017, as part of the centenary of WWI commemorations, Europeana is asking Wikimedia affiliates to create a portfolio of their past and current activities relating to the theme of 1914-18. These portfolios will be judged by jury, submissions closed on 31 July 2017. A total of 13 affiliates submitted a portfolio of their past and current activities relating to the theme of 1914-18 (list of portfolios). The jury will judge these portfolios throughout the month of August and winners will be announced late September.

Europeana will showcase the collection of portfolios to demonstrate the diverse, innovative, and high-quality ways that this important period of Europe's history can be understood through open-access heritage, with an emphasis on working with its partner cultural institutions across the continent.

In relation to the Wikimedia Challenge a Europeana 1914-1918 Transcribathon workshop was held in Oslo on 18 June. Representatives of Norwegian cultural heritage institutions were invited to work a selected manuscripts by prominent Norwegians from the period. The event was organised by the Norwegian Wikimedia chapter in close cooperation with the Norwegian Arts Council. Ad Pollé (EF) attended this workshop and presented the Transcribathon tool.

Invited keynote presentations on developments in the field of European museum collaborations with Wikimedia were delivered at the National Museum of Warsaw (report) and the State Archives of North-Rhein Westphalia (report).

Task 2.3. Publish and Market Europeana thematic collections

Thematic Collections continue to be an important part of Europeana Foundation's publishing strategy. Europeana Art and Europeana Music continued to run actively and were further developed and promoted during this project period. New thematic collections Europeana Fashion and Europeana Photography were published (in April 2017 and May 2017 respectively) Europeana 1914-1918 was migrated from a stand-alone site to a thematic collection on Europeana Collections platform in June 2017.

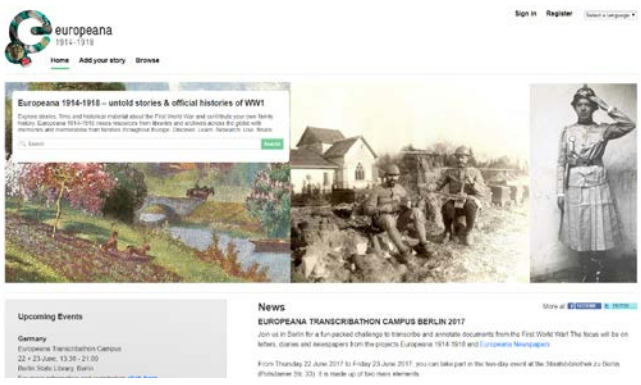
Monthly statistics collected throughout the Europeana DSI-2 project period continue to show that thematic collections have a higher level of audience engagement than Europeana Collections. Users are more likely to return to a thematic collection and, due to higher quality material, are less likely to immediately leave thematic collections. Users

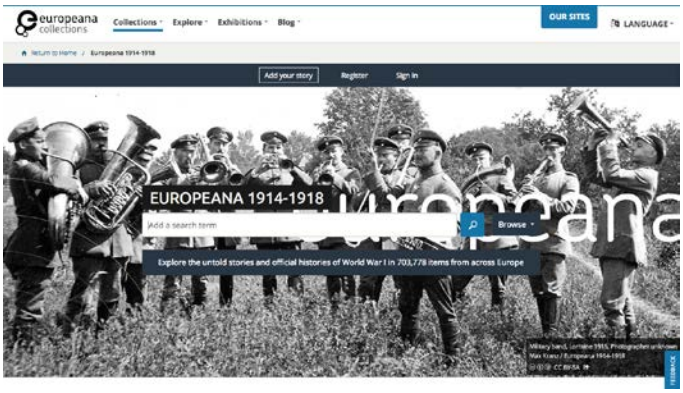
browse three time as many pages on thematic collections, staying three times longer browsing these pages.

To build on the success of thematic collections and assess new models for their curation and publishing, a pilot of thematic collections with less curated content began in July 2017. The pilot - which lasts for three months - will examine whether three thematic collections (on Maps and Cartography, Natural History and Sports) will have greater levels of user engagement than the portal, but less than the curated thematic collections.

Europeana 1914-1918

Europeana 1914-1918 continued to run on its original platform in the first half of Europeana DSI-2 offering access to stories, films and historical material of the First World War from across Europe. In June 2017, it was fully migrated to the Europeana





Collections platform.

Europeana 1914-1918 maintains (and grows) its online community by active posting on social media (e.g. Twitter: weekly posts have led to a 20% increase in followers since the start of 2016 [now 5931}; Facebook: biweekly posts have led to a 5% increase in followers since the start of 2016 [now 24.845]; newsletter: quarterly new issues in English, German and French sent to over 5,000 subscribers).

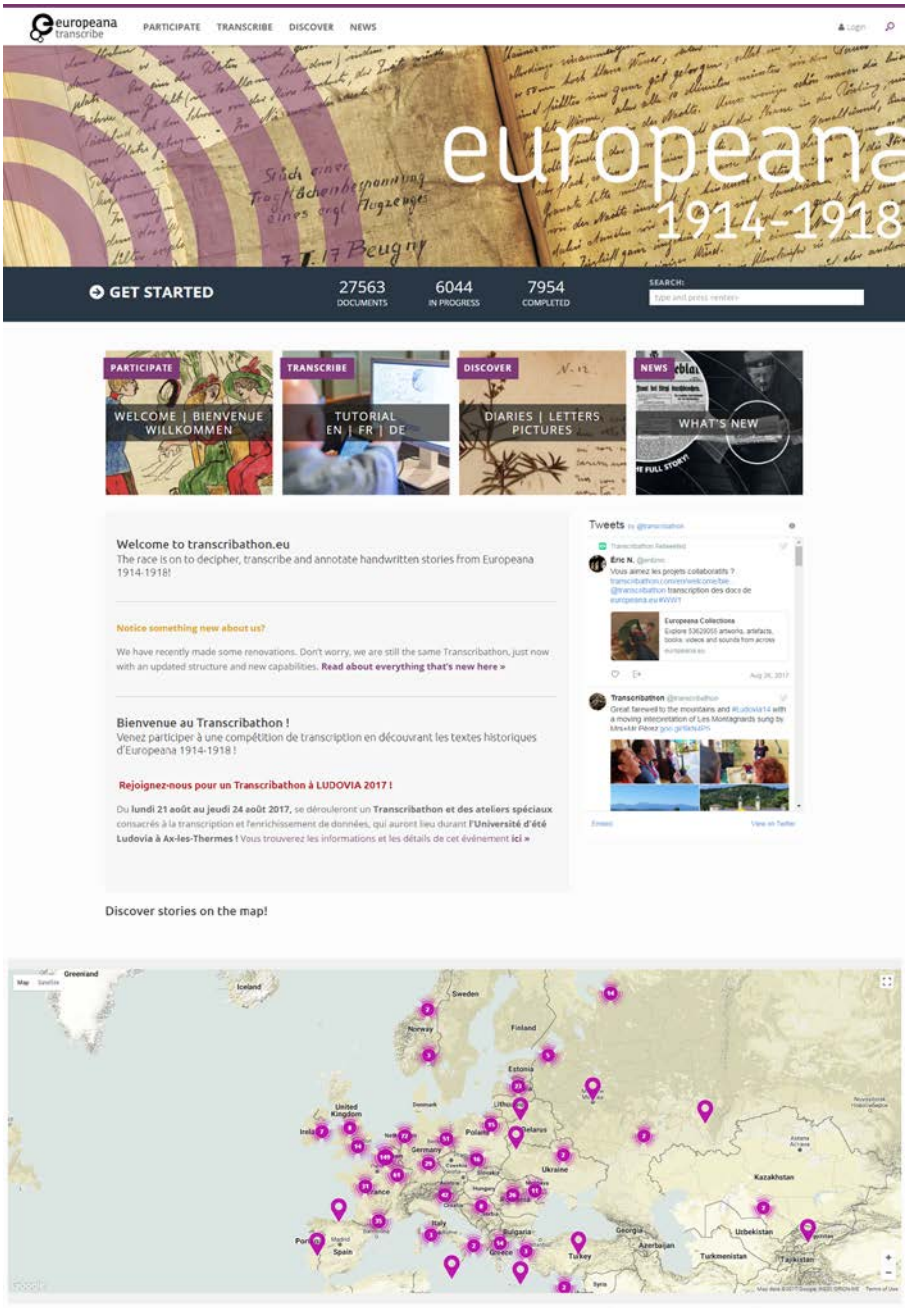
Online exhibitions are a great way to highlight the unique and striking content of Europeana 1914-1918. During the course of Europeana DSI-2, two exhibitions were published

- Sausages and Cigars for Christmas: the story of Max Kranz and the men from Hatzenport in World War One.
- Seven Man, One Leg - various stories about the reintegration process of soldiers after World War I.

In order to support the overall development and direction of Europeana 1914-1918 Collections going forward, an Advisory Board was established during DSI2. This Board includes representatives of various European cultural heritage institutions as well as First World War and digital humanities experts to help ensure community building as well as coordination of communication and events. The Board met two times, once virtually and once physically.

Transcribathon

Europeana Transcribe (www.transcribathon.eu) launched in November 2016, a site invited users to help with crowd-sourced transcription of historical material. Initially, this serves to transcribe user-generated material from Europeana 1914-1918,



Throughout the course of Europeana DSI-2, Transcribathons were organised in Belgium, Latvia (including collection days), Romania (including collection days in Sibiu), The Netherlands and Germany, all in collaboration with **F&F**.

A transcribathon is an online crowd-sourcing initiative to unlock important testimonies of the First World War by transcribing handwritten texts that are otherwise difficult to read and cannot be searched or translated automatically online.

Since its launch during the Europeana Annual General Meeting at the National Library of Latvia in November 2016, 27,553 new documents were added to the Transcribathon site, of which 7,897 have been completed. Per August 2017 1,014 people have subscribed. In total 8 Transcribathons have been organised of which 4 events and 4 online.
For all Transcribathons, participants were invited to take up the challenge on the Transcribathon website, adding their own transcriptions, geo-tags and other

annotations to digitised versions of the handwritten texts, enabling greater understanding and access to these originals letters.
Since its launch in November 2016 the online transcription tool has attracted a large number of participants (1,014 registered users per August 2017). As the statistics below indicate they are very dedicated to their transcription work.

Statistics 16 January (start date measuring traffic on Transcribathon.eu) - 31 August 2017

Events - Transcribathons organised

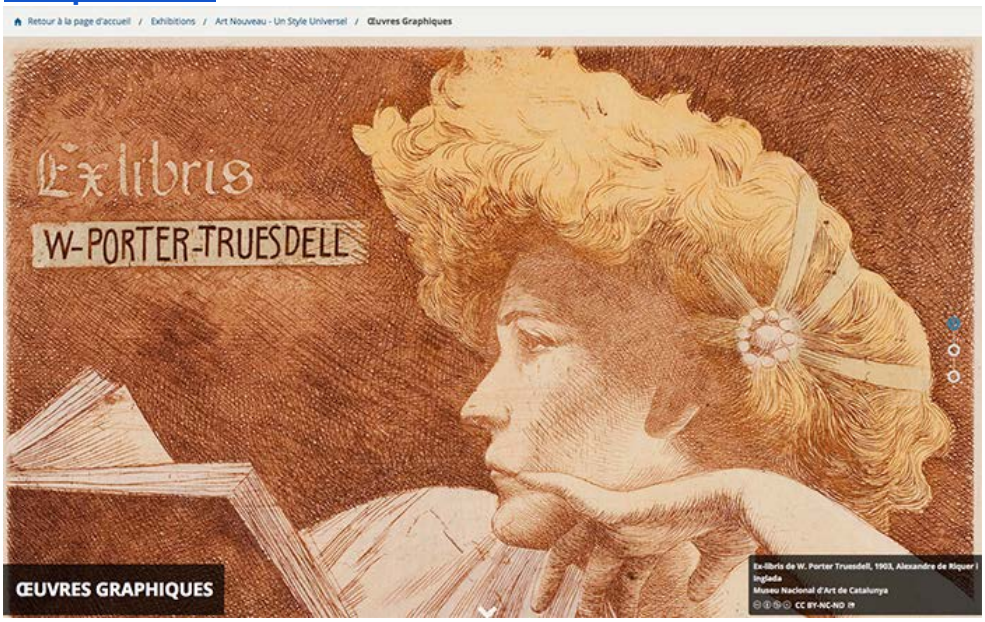
Date	*Event/Campaign*	*Type of Event*	*Description and results*
16/10/2016 - 19/10/2017	*Public Libraries Generation Code*	*Transcribathon workshops*	Introduction of the Transcribathon online tool during an interactive exhibition at the European Parliament http://www.publiclibraries2020.eu/content/generation-code
7/11/2016-9/11/2016	*National Library of Latvia, Riga*	*Transcribathon Event*	The first International Transcribathon at Latvian National Library. The event was held during the course of the 2016 Europeana Network Annual General Meeting (AGM).
13/12/2016 - 15/01/2017	*Christmas Transcribathon*	*Online Campaign*	See the full results of the Christmas Transcribathon Run 2016 here.

14/02/2017 - ongoing	*Love Transcribathon*	*Online Campaign*	Love Transcribathon is an ongoing online challenge 40+ love stories told in letters from WW1 in 7 languages. \ For more info: https://transcribathon.com/en/runs/love-run/
21/03/2017 - ongoing	*WW1 Poetry online Transcribathon*	*Online Campaign*	The WW1 Poetry Run officially kicked off on World Poetry Day 2017 (21 March) and will be ongoing. For more details and results see here.
21/03/2017 - 25/03/2017	*Transcribathon Romania*	*Online Campaign & Events Transcribathon Tour with events at National Library of Romania and Public Libraries in Brasov, Sibiu and Cluj*	Transcribathon Romania is an online competition for the transcription of personal documents from Romania from the First World War. The Transcribathon kicked off in Bucharest at the National Library and continued with events in the public libraries of Brasov, Sibiu and Cluj. In each city, teams competed in 48-hour runs transcribing Romanian manuscripts from the period. In just one week all volumes all Romanian content was transcribed - in total over 1 million characters - by all 66 participants of the 23 teams. For more info: http://transcribathon.com/en/romania/
03/04/2017	*Presentation on Transcribathon and Europeana 1914-1918*	*15th East West European Memorial Seminar, Poland*	Frank Drauschke, F&F gave a presentation on Europeana Transcribe to the audience (mainly WW1 historians) of this seminar; full details can found here.

15/05/2017 - 27/05/2017	*Transcribathon The Netherlands*	*Online Campaigns & Events at Huis Doorn*	Transcribathon Netherlands was a citizen-science competition between transcribers from across the Netherlands. The competition started online at 3pm on Monday 15 May 2017 and ended with an award ceremony at Huis Doorn on Saturday 27 May, as part of their Living History program. Participants transcribed over 250 documents. Results can be found here.
05/06/2017 - 09/06/2017	*Presentation*	*F&F Presentation Europeana 1914-1918 and Transcribathon*	5-9 June Mr Frank Drauschke (**F&F**) attended and presented Europeana 1914-1918 and Transcribathon at the in Ravenna, Italy. See here for more details.
18/06/2017	*Transcribathon Norway*	*Transcribathon at Norwegian Arts Council*	In relation to the challenge a Europeana 1914-1918 Transcribathon workshop was held in Oslo on 18 June. Representatives of Norwegian cultural heritage institutions were invited to work a selected manuscripts by prominent Norwegians from the period. The event was organised by the Norwegian Wikimedia chapter in close cooperation with the Norwegian Arts Council. Ad Pollé (EF) attended this workshop and presented the Transcribathon tool.
22/06/2017 - 23/06/2017	*Transcribathon Campus + Launch Europeana 1914-1918 thematic collection*	*Transcribathon at Berlin State Library*	On 22 and 23 June, the Europeana Transcribathon Campus took place at the Berlin State Library, gathering people from across Europe to enrich the Europeana 1914-1918 digital archive. Over two days, various

	+ *2nd Europeana 1914-1918 Advisory Board meeting*		teams competed with each other to digitally transcribe as many documents as possible, and link them to other historical sources. On the second day, workshops invited the audience to share their experiences about transcription, data enrichment and the linking of various historical sources. A report can be found here.
21/08/2017 - 24/08/2017	Presentation, workshops and Transcribathon (for Ludovia participants only)	*Transcribathon, workshops and presentations at Ludovia*	Europeana and F&F presented Europeana 1914-1918 and Transcribathon at Ludovia#14, a Summer University for professionals in education in France. Along with an info stand an ongoing mini-Transcribathon was held for participants, as well as a workshop and a presentation in cooperation with the French Ministry for Education outlining the main aspects of a partnership centred on increasing the number of French educators using Europeana's content for education. See here for more info on the event and here for the results of the Transcribathon.

Europeana Art

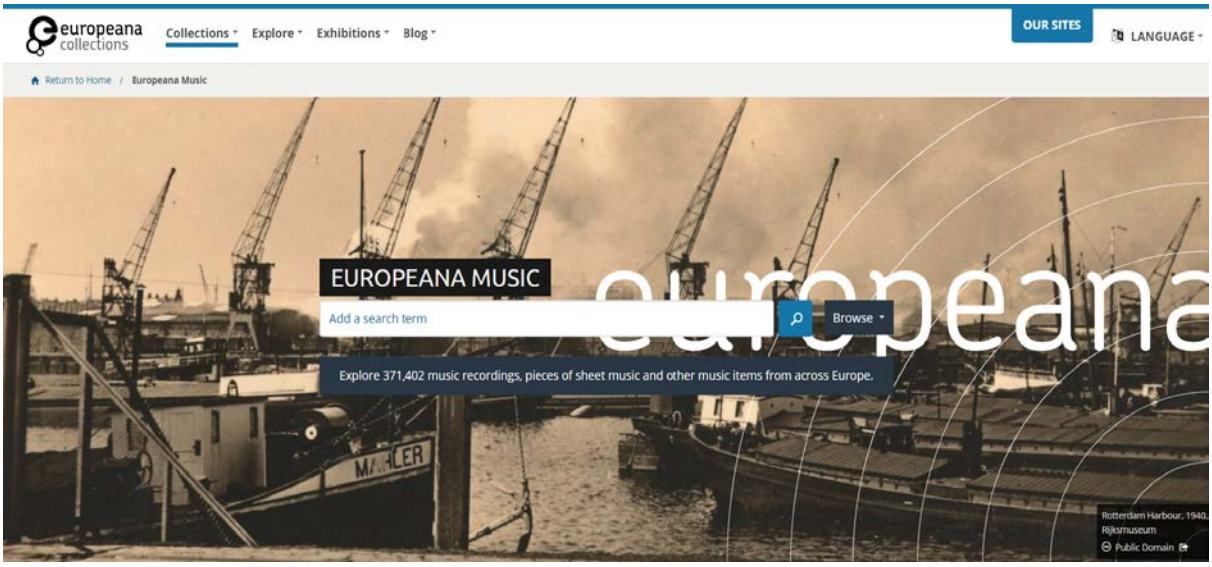


Europeana Art features a variety of regularly updated editorial content, including blog posts, online exhibitions, and highlighted collections. Europeana Art's editorial activity is focuses on thematic campaigns ('seasons') which promote high-quality art from partners across Europe. The purpose of seasons is to encourage partner collaboration and inspire audience engagement.

An extensive Art Nouveau season was published on Europeana Art from 21 February - 10 June 2017. This included a major exhibition Art Nouveau - A Universal Style in six languages with 50 artworks from 20+ museums, 10 guest blogs by season partners, guest blogs by Europeana published on DailyArtDaily.com, 21 Art Nouveau boards on Pinterest and an Art Nouveau colouring book. The season was extremely well received by both audiences and partners, many of whom improved their data in Europeana specifically for the season.

During the reporting timeframe, outreach to major institutions included the Victoria & Albert Museum, the Mauritshuis, the Pinakotheken, the Van Gogh Museum and the Finnish National Gallery. The Collections Manager of Europeana Art presented and participated at external events including the international art history hackathon Coding Dürer in Munich and Sharing is Caring in Hamburg. Europeana Art continues to be actively supported by an Advisory Board of cultural heritage professionals from Europe's leading art museums.

Europeana Music



Europeana Music features c. 320,000 music recordings, pieces of sheet music and other music items from across Europe.

New features and functionality

Europeana Music was officially launched as a non-beta product on 4 November 2016 during the Europeana Sounds conference at the Vilnius University in Lithuania.

Europeana Radio was officially launched in January 2017. Europeana Radio gives users access to listen to a vast collection of more than 200,000 tracks, using technology to bring Europe's musical heritage to new audiences. Its interactive approach means that it is much more than a radio as users can both enjoy the recordings and enrich the experience for others.

Editorial and social media

Social media activity supported the launch of both Europeana Music and Europeana Radio. On 23 November 2016, a sounds 'share day' was organised by members of the Europeana Sounds consortium with the aim of bringing music content to other platforms, in particular Soundcloud and Wikipedia. There was a lot of interest on social media and the collaborative playlists have been shared widely In January 2017, users were invited to take part in #TagDayThursday – a twitter call for listeners to tag the music they hear on Europeana Radio.

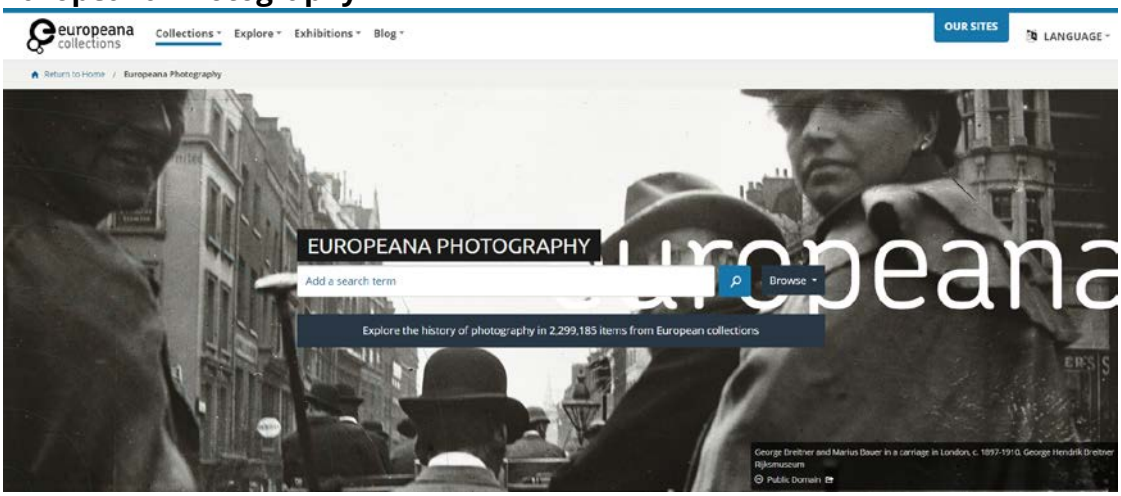
Monthly curated editorial content is published on Europeana Music through blog posts, online exhibitions and content highlights. Editorial plans are arranged in a calendar and currently rotated by member organisations on a monthly basis. Each month, partner institutions' curated content highlighted collections on Europeana Music through browse entry points and galleries as well as giving more context by publishing one or more blogs. A new online exhibition - 1946 Ogooué-Congo Mission: story of ethnomusicological expedition to Middle Congo (the current Republic of the Congo) and Gabon - was published in July 2017. It has been very well received by users, with a high

Net Promoter Score of 71. A user satisfaction survey was held in January 2017, with Europeana Music rated Good or Excellent by 77% of users. Users appreciated Europeana Music content (with 80% rating this as Good or Excellent). Europeana Music received a Net Promoter Score of 30.

Sustainability

Europeana Music was managed by the Europeana Sounds consortium until the end of the Europeana Sounds project in January 2017. A subcontract was made available to the **British Library** (the lead partner in the Europeana Sounds consortium) to continue activity on Europeana Music throughout Europeana DSI-2 as well as to develop a plan for ongoing sustainability. This plan was delivered in June 2017, aspects of which will be incorporated into Europeana DSI-3.

Europeana Photography



Launched in May 2017 (see task 2.4), the Europeana Photography thematic collection includes more than 2 million historical photographs from European collections in 34 countries, with a specific focus on the first 100 years of photography. Europeana Photography is managed in partnership with Photoconsortium, a non-profit which aims to promote photographic heritage and which works on metadata improvement and curation with its data providers (see WP1 for details). The D2.3 Europeana Photography Collections Plan, outlining its business model, audience analysis, data improvement and editorial plans, was delivered on schedule in M4.

Europeana Photography features blog posts, curated exhibitions and galleries. It is already proving very popular, drawing significant visitor numbers and featuring widely in the photographic press. Its debut exhibition Industrial Photography in the Modern Age has received excellent reviews and a large number of photographic galleries have been published online. The collection has also been presented to educational audiences in international conferences.

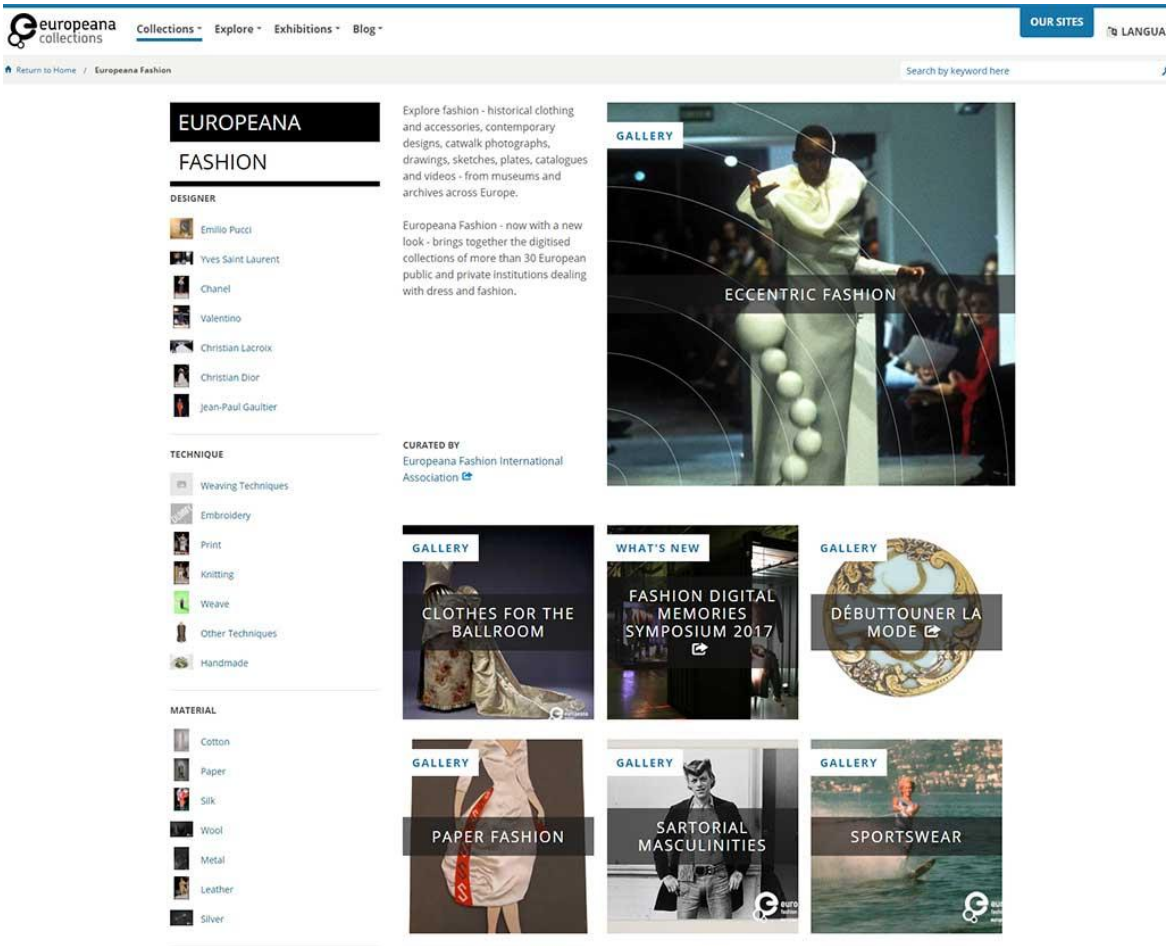
A launch event was organized by Photoconsortium in collaboration with Europeana in Pisa on May 20th hosted by the Museum of Graphics at Palazzo Lanfranchi, accompanied by a conference and a photographic exhibition both in print and virtual.

Also, the event included an interactive experience based on the Pop-Up Museum technology, which allowed the visitors of the exhibition not only to contemplate vintage photography but also to engage with it via their own smartphones. More details about the event are provided in the Dissemination section of the report.

For the content provision, curation coordination and scientific work, subcontracts have been made to KU Leuven (scientific coordination, curation coordination), CRDI (photography expertise and metadata consultancy), TopFoto (photography expertise and content), Parisienne de Photographie (content), United Archives (content) and GenCat (content). Also Promoter has been subcontracted with tasks related to WP1 (metadata improvement) that were principally oriented at feeding the collection in Europeana Photography. Other content providers were involved in the realization of the website, virtual exhibitions and the galleries, such as Alinari Archives and the Israel Museum.

Metadata improvement has been coordinated by Photoconsortium, for which a metadata officer has been appointed and a dedicated taskforce has been created within the group of expert members of Photoconsortium. Curation was done by Photoconsortium in collaboration with Europeana.

Europeana Fashion



Europeana Fashion was migrated to the Europeana Collections platform and launched as a thematic collection in May 2017 and was formally presented during the Europeana Fashion International Symposium in Venice on the 22 May 2017.

Europeana Fashion showcases almost 1,000,000 records from nearly 40 institutions from across Europe, including historical clothing and accessories, contemporary designs, catwalk photographs, drawings, sketches, catalogues and videos.

Europeana Fashion thematic collection was published implementing a series of new technical features and functionalities as outlined in D2.2 Europeana Fashion Collections Plan. These are designed to bring fashion content closer to the users: fashions curators, academics, students and enthusiasts.

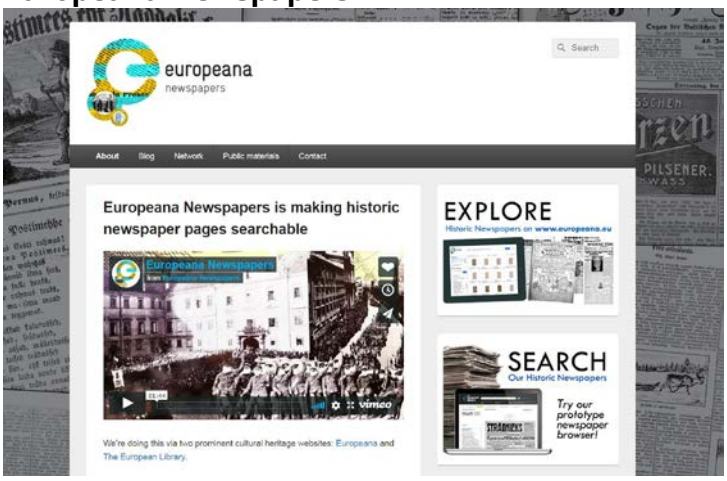
A new landing page was designed which encourages content browsing and positions editorial features more prominently than previously. With the introduction of custom facets on Europeana Fashion, users are now about to tailor the content themselves. They can access exactly what they are looking for by using new facets including designers, techniques, materials, types of clothing, and searching by time period.

Europeana Fashion launched with new galleries curating the collection by themes, such as fashion illustrations, sportswear, prints, or Haute Couture. The collection also features editorial content, including blog posts and online exhibitions. The first exhibition was launch, “Past to Present: Fashion Re-Interpretations”, explores the inspiration and influence of historical costumes on contemporary fashion. This exhibition was well-received by users, with a Net Promoter Score of 45. Object record pages now show more prominent links to the providing partners, displaying the logos of cultural institutions. This functionality has been piloted with Europeana Fashion before being adopted throughout Europeana Collections.

Europeana Fashion communication team regularly engaged a fashion community of more than 30,000 followers, by curating content and publishing regular blogs and social media content. Editorial content is curated with a monthly theme that guides the choice of articles, which all relate to and feature objects of the collection. Two to three blog posts per week were published, which were then advertised on Europeana Fashion Twitter and Facebook accounts. On these two platforms, European Fashion published new content twice a day, as well as on Europeana Fashion’s successful Instagram which has gained new followers every day. The Pinterest page served as an archive of all the themes developed on the blog, providing the space to create thematic pin boards gathering all the images used to illustrate the blog posts; these pin boards could then be turned into Europeana Fashion galleries. The European Fashion Tumblr page showcases monthly content curated by European Fashion’s partners. The newsletter, featuring the extended biography of one object from the archive and mentions of the other activities, was issued twice a month, reaching about 1300 subscribers.

A user satisfaction survey held between May and June 2017, with Europeana Fashion rated Good or Excellent by 75% users. Users appreciated Europeana Fashion content (with 80% rating this as Good or Excellent) and editorial content (rated Good or Excellent by 67% of users). Europeana Fashion received a Net Promoter Score of 20.

Europeana Newspapers



The Europeana Newspapers thematic collection provides access to >10 million pages or 3.5 million fully searchable issues of around 1,000 historical newspaper titles from all over Europe. It is managed by the Berlin State Library (**SBB**) and will be launched as a thematic collection in 2018, featuring curated editorial content through blog posts and virtual exhibitions as well as various other entry points to the collection. Curation activities will specifically address the needs of researchers, for whom it constitutes an outstanding resource to conduct transnational digital scholarship. Over the course of 2017, most effort has been put into the migration of the collection from TEL to the Europeana infrastructure, and the updated product development planning as provided in Deliverable D2.4 Europeana Newspapers Collections Plan that was delivered in February 2017.

The www.europeana-newspapers.eu website has been renewed and restructured to make it easier to use and to find information and resources. Furthermore, the collaboration with EUDAT and CLARIN about making Europeana Newspapers content available via these European infrastructures has produced first ingests and experimental data releases.

In June 2017, Europeana Newspapers was part of the Europeana Transcribathon Campus Berlin.

Task 2.4 Develop user engagement projects

NISV coordinated the work plan and partner responsibilities for the Task with EF (especially the relation to the Thematic Collections). This lead to a first timeline - aligned to the launch dates of the various Thematic Collections) and inventory of possibilities for user-engagement projects within the various themes. Together with EF and **NISV** aligned the user-engagement projects to the Impact Framework that is being developed in the context of Task 2.5.

NISV met with **EF** and **F&F** to coordinate their specific involvement in the Task and to clarify the relation to the Collection Days for 1914-1918. This lead to the plan to test the 'transcribathon' format EF and F&F are developing for 1914-1918 as a 'proto' user-engagement project during the AGM in Riga. This plan was executed as the *Transcribing Europeana 1914-1918* event that ran parallel to the AGM.

NISV first presented the concept of the user-engagement projects during the kick-off, in order to brief the Thematic Partners on the aims of the Task and their expected

involvement. This lead to various ideas for possible user-engagement projects in the various themes. This process was supported through a dedicated Basecamp environment. Especially within the domain of 1914-1918 (based on the experiences during the AGM), Photography and Fashion, NISV and the Thematic Partners worked with concrete ideas for the user-engagement projects. NISV developed concepts for three user-engagement projects related to Photography, Fashion and Research making use of 1914-1918 material as well as the Newspaper corpus.

The activities of NISV resulted in the three user engagement project that have been elaborately reported on in MS2.1, along with some related activities. To summarise them here these outcomes were:

1. A pop-up interactive exhibition on Belle Époque at the Europeana Photography Launch at the European Night of Museums in Pisa.
2. An interactive fashion educational quiz at the Europeana Fashion Symposium in Venice.
3. A crowd transcription competition at the Transcribathon Campus in Berlin.

Apart from these three user engagement projects, NISV also performed concept development for user engagement activities that were not executed within the Europeana DSI-2 timeframe. Next to that NISV also performed impact assessment of the abovementioned user engagement projects through surveys. And finally NISV arranged for audiovisual documentation of the abovementioned user engagement project in photography and video.

As a major new user-engagement project, **EF** and **Facts & Files** developed and launched Europeana Transcribe 1914-1918 (see also Task 2.3 Europeana 194-1918) at the Europeana AGM in Riga at the National Library of Latvia (**LNB**) on 9 November 2016.

Europeana Transcribe 1914-1918 is an online crowdsourcing initiative for the transcription and annotation of this unique, unpublished material. and runs as an ongoing online challenge to encourage members of the public to transcribe digital versions of the unique letters and diaries of those who experienced the First World War, found at Europeana 1914-1918.

The first International Transcribathon took place from Monday 7 November 2016 till Wednesday, 9 November 2016 in Riga at the National Library of Latvia **(LNB)** venue and provided a Transcribathon event in Riga. **LNB** supported the local organization of the transcribathon and collaborated with the Latvia War Museum to provide suitable digitized materials referring to 1914-1918 for transcription. **LNB** also worked with partners in educational sector to ensure participation of Latvia teams in the transcribathon event.

Coinciding with the AGM and the first Transcribathon, the 1914-1918 Community collection days were held on 6-7 November 2016 at the National Library of Latvia venue. More than 50 stories from 25 people were collected in two days. To attract media interest, the press conference with participation of representatives from EF and **F&F**, **LNB** and story keepers was organised on 25 October. It is worth highlighting that Latvian

National TV and Latvian National Radio broadcasted news and interviews directly from the Community Collection Days event. **LNB** continues to receive stories and artefacts from the Latvian community. Most of the people were 60 years or older, and had investigated their family's history and were relatively well-informed on memorabilia they had brought along.

Throughout Europeana DSI-2 numerous Europeana 1914-1918 related events (Transcribathons, Collection Days have been organised by our Facts &Files and EF (for an overview of all events see Task 2.3 Europeana 14-18). Most notably **Transcribathon Romania,** an online citizen-science competition between transcribers from across Romania, which kicked off in Bucharest at the National Library on Tuesday 21 March 2017 and a **Transcribathon Campus at the Berlin State Library,** a 2 day event featuring a Transcribathon Competition with a focus on letters, diaries and newspapers from both Europeana Newspapers as well as 14-18 and workshops on data-enrichment, annotation, geo-tagging, LOD and Wikimedia. Europeana Transcribathon Campus Berlin 2017 was organised by EF, Facts & Files and the Berlin State Library, in cooperation with the German Digital Library and Wikimedia.

Facts & Files and Olaf Baldini/piktoresk continued to advance and develop the online tool for the transcription of documents from Europeana 1914-1918. In line with the new PR materials for Europeana 1914-1918, **Facts & Files** and Olaf Baldini also developed and printed PR materials for Europeana Transcribe. These include folders, postcards and banners.

Task 2.5 Develop case studies and impact

In parallel with the development of the Impact Playbook three case studies were developed to test the methodology in practice. The three cases were Europeana Photography, Europeana Fashion and Europeana Research. The results of the surveys will be folded into a report which will be published with the Impact Playbook in October 2017 during the event on Impact of the Estonian Presidency.

Task 2.6. Publish Europeana Research

During Europeana DSI-2 Europeana Research continued to offer access to datasets of relevance for research, featured collections, blog posts and actively maintained its growing dedicated Twitter (@EurResearch) account (1643 followers). Most notably Europeana Research successfully launched its first Grants Programme in September 2016.

The Europeana Research Advisory Board has been actively involved in the Europeana Research Grants Programme and has been instrumental in the assessment and grants awarding process.

The Board keeps in regular contact via Basecamp and email and is coordinated by the Chair of the Board, Professor Lorna Hughes (UoG). During Europeana DSI-2, two physical and two virtual meetings took place.

Subtask 2.6.1 Coordinating the Europeana Research Advisory Board (UoG)

Europeana Research has set up an Advisory Board who is responsible for creating the business plans and editorial plan of the channel and monitoring their progress annually.

The aim of the Advisory Board is to firmly situate Europeana Research in Digital Humanities research: the Board has therefore brought in experts who are major figures in the world of digital research across the disciplines, as well as inviting participants from other humanities research infrastructures.

The Advisory Board has been instrumental in scoping the concept of the Europeana Research Grants Scheme, identifying the ways that this scheme will have an impact on the DH research landscape by identifying strategic research that can be carried out within the Europeana Ecosystem, both addressing a clear research question and also providing a valuable use case of the use of metadata, digital content, and tools and services for research. The Europeana Research Advisory Board has held three physical meetings since its establishment in 2015: in Europeana DSI-2, on 2 December 2016 in The Hague, and on 28 August 2017 in Glasgow. UoG chairs the Advisory Board, and collaborated with AthenaRC and EF in preparing for the meetings, including the agenda and meeting papers and following up actions.

The December 2016 meeting was an opportunity for the Board to agree a process of selection of the grant winners. The task of agreeing a long list of 30 was subsequently delegated to a subsection of the Board, and representatives of EF. The longlist was published on Europeana Research in order to generate interest in the scheme, and to make clear the sort of projects that are possible when elements of the Europeana Ecosystem (content, tools, and methods) are used to address humanities research questions. Based on best fit to the Call for proposals, the detail of project plans, and the planned budget of each proposal, the subgroup then developed a process by which they selected three finalists and awarded funding to these projects. The final three were clearly the projects of the highest quality of the more than 150 submitted proposals.

Feedback from the Board was documented and will contribute to shaping the template application form, guidelines on dissemination and process of selection of the second Europeana Research Grants programme, scheduled to launch in September 2017.

Subtask 2.6.2 Improving (and surfacing) Europeana collections via Europeana Research

Europeana Research continues to expand, providing the best quality datasets from Europeana partners to researchers. These datasets are chosen for their value to researchers in terms of depth, subject matter, and having licenses that make them usable in research. An analysis has begun of the ca. 190 datasets currently being offered, to have a balance in the types of data available so that we cater to many different fields of study. Accordingly, we are in the process of surfacing datasets to fill these vacancies.

Europeana is actively advocating the implementation of IIIF for digitized cultural heritage collections. Acknowledging the importance of this protocol for research based on digitized material, Europeana Research is spending extra attention on this through the Research blog and publishing datasets to highlight this material. This work is in

collaboration with the following Europeana team: R&D, the IIIF Taskforce, and Data Partner Services. Not only are blogs being written on IIIF; Research is continuously working on commissioning blogs on interesting collections, data quality work, and other relevant topics.

Work continues on a firmer implementation of research specific data requirements. This is in line with recommendations that derive from the Cloud project and general improvements of data quality with the researcher needs in mind for surfacing research relevant material. A document is being drafted to describe more specific data requirements; these will help Europeana data providers in marking their data as being suitable for research and will be fully incorporated into Europeana workflows.

Subtask 2.6.3 Data sharing with third parties (CLARIN)

EF first met with CLARIN at the start of Europeana DSI-2, September 2016 in Utrecht to discuss activities. CLARIN then produced a work plan for the task, in which several subtasks were defined, focussing on inclusion of relevant data sets from Europeana in CLARIN's processing pipeline with the goal to present the included resources and make them findable in the Virtual Language Observatory (VLO)[9] [1], and allow for easy processing using tools provided by CLARIN centres. At the end of Europeana DSI-2, over a million records sourced from Europeana have been included in the VLO, as a result of which the described cultural heritage resources can now be discovered, accessed and processed by the CLARIN community and other users within the CLARIN infrastructure.

CLARIN reported on the result and impact of disseminating Europeana data through its infrastructure in milestone report MS2.2. The report covers the selection of relevant, high quality data sets, the implementation of a conversion mechanism from EDM to CMDI (CLARIN's Component Metadata Infrastructure), the harvesting, conversion and indexing of Europeana metadata and technical issues encountered. In the report, the results are assessed on basis of a set of requirements that build on the FAIR data principles. The report also presents a set of recommendations for Europeana DSI towards better serving the needs of research communities in terms of content and infrastructure. Finally, a number of concrete usage examples each demonstrating a full workflow from resource discovery to linguistic processing is included.

During the course of Europeana DSI-2, CLARIN has also undertaken various outreach efforts, in order to raise the awareness of Europeana and the adoption of its resources within the community: a hands-on session for CLARIN developers, aimed at connecting new language processing tools to the Language Resource Switchboard (LRS)[10] took place during the CLARIN centre meeting in May 2017, making use of Europeana resources; the

[9] https://vlo.clarin.eu

[10] A service that allows users of CLARIN services and resources to easily find and apply tools for a given resource, see https://office.clarin.eu/v/CE-2016-0881-CLARINPLUS-D2_5.pdf

result of the integration efforts during Europeana DSI-2 will be presented at the 'bazaar' session of the CLARIN Annual Conference 2017. Furthermore, exposure to Europeana was provided to the CLARIN community through its communication channels such as its newsletter and social media accounts.

Subtask 2.6.4 Research Community Engagement and Scholarly Outreach (AthenaRC)

The Europeana DSI-2 kick off meeting in Vienna marked the launch of the first Europeana Research Grants programme. The Grants programme looked for individual research projects which make use of Europeana Collections for research purposes. The call for submissions was extremely well received, with an overwhelming amount of 160 proposals submitted (KPI was to get 15).

Late December 2016, the grants were issued to three grants winners according to the decisions of the Europeana Research Advisory Board (see Subtask 2.6.1). Two subcontracts were issued and one reallocation of funds from EF to **UoG** has been done to run the winning project.

The work of the Grants winners was actively promoted via Europeana marketing channels and the dedicated @EurResearch twitter account. Throughout Europeana DSI-2, a series of interviews with the winners was published on Europeana Research, an expert panel at DPASSH 2017 with the winners took place and the final reports of the winners were published in a series of blogs on Europeana Research.

As part of the dissemination activities, **AthenaRC**/DCU has been co-running the Europeana Research Twitter handle.

Overview of Europeana Research events/presentations/panels:

10/09/2016	Presentation	Agiatis Benardou (**AthenaRC**/DCU) alongside Lorna Hughes (**UoG**) gave a presentation on Europeana Research at the Digital Humanities Congress in Sheffield to an audience of approx. 100 digital humanities researchers.
24-28/10/2016	Presentation	Eliza Papaki (AthenaRC/DCU) attended and gave an oral presentation of Europeana Research at the DARIAH Winter School "Open Data Citation for Social Sciences and Humanities"
8/11/2016	Chef's Table	**EF** and **AthenaRC** chaired a Chef's Table with the title: 'Europeana Research: Make collections work for those who need them', during the Europeana AGM in Riga, Latvia.

01/12/2016	Presentation	Agiatis Benardou (**AthenaRC**/DCU) gave a presentation on Europeana Research at the University of Utrecht
24/01/2017	Keynote	Agiatis Benardou (**AthenaRC**/DCU) delivered a keynote speech at the DIXIT conference in La Sapienza, Rome, in which Europeana Research featured extensively and raised a series of discussion points.
20-21/03/2017	Presentation	Agiatis Benardou (AthenaRC/DCU) presented at and participated in the 1968 in the Media International Seminar organized by the FIAT/IFTA Media Studies Commission in cooperation with Institut national de l'audiovisuel, France. (http://bit.ly/2eohTX4)
13-14/06/2017	Presentation	EF presentations (data aggregation, education and research) at CARARE workshop, Leiden
14-15/06/2017	Panel	The three Europeana Research Grants winners participated in an expert panel at DPASSH 2017 conference, a collaboration between Sussex Humanities Lab, Digital Repository of Ireland) exploring the public value of Europeana.
4/07/2017	Europeana Research Panel	A panel proposal on the subject of Europeana Research was submitted for the DH Benelux 2017 conference in Utrecht, focusing on the importance of cultural heritage for research and how Europeana Research aims to help with this. The proposal was accepted and in July a successful Europeana Research panel was presented.
10/08/2017	Grant winner presentation	Tim Duguid, grant winner, presented on his research at the international DH conference 2017 in Montreal (funded externally by UoG).

Europeana Research Panel, DH Benelux Conference, 3-5 July 2017, University of Utrecht, The Netherlands

Subtask 2.6.5 Research in user requirements towards the increase of exploitation and expansion of the use of Europeana Research

With a focus on Europeana content, the aim of this task was to develop case studies employing a mixed methods approach (study of written sources or archival material, use of semi-structured interviews, direct observation - participatory or non-participatory – and/or study of physical objects) for research purposes. These case studies are thematic rather than user-centric.

The first case study, entitled 'Creating a narrative of children's literature books and illustrations' is reusing Europeana content on 'children's literature', 'children's illustrations' and 'children's drawings'. Our objectives were: 1. To explore a content-centric topic deploying as much of the Europeana data, 2. To employ a mixed methods approach that will ensure the triangulation of results, 3. To produce a visual representation of the results (thematic exhibition), 4. To document and discuss advantages and drawbacks in using Europeana content for research purposes.

This work built on previous work conducted in the context of WP1 'Assessing Researcher Needs in the Cloud and Ensuring Community Engagement' in the Europeana Cloud project. In a different context, Europeana content on children's literature was reused in the context of the project ARK4, In its new phase, ARK4 attempted to re-use digital content from the Cultural Heritage sector, mainly deriving from Europeana, to reach a wider audience through knowledge testing games.

Following the 1968 in the Media International Seminar organized by the FIAT/IFTA Media Studies Commission in cooperation with Institut national de l'audiovisuel, France, in which Agiatis Benardou discussed the potential offered by Europeana Research in the study of 1968-related content and metadata, AthenaRC developed a case study entitled '1968 in Europeana Collections' highlighting and exposing Europeana-hosted 1968 material, showcasing how it can be useful for research and creative industries. The possibility of an Exhibition with the support and consultation of experts is also being explored.

Subtask 2.6.6 Develop a network of research labs as a subgroup of the Europeana Network Association

After preliminary investigations it did not prove to be viable to develop a network of research labs as a subgroup of the Network Association during Europeana DSI-2, especially since dedicated library organisation LIBER (Association of European Research Libraries) set up a Working Group with a similar aim. Research Infrastructure DARIAH is also in the process of setting up a working group with a focus on the re-use of data. EF was invited to become a member of the LIBER working group and has preliminary been invited to be part of the DARIAH working group too. These two working groups will be a great way to stay close to the developments in this area and outcomes will be beneficial for furthering Europeana for Research.

Subtask 2.6.7 Demonstrate exploitation of NeDiMAH Methods Ontology for the Digital Humanities (NeMO)

The aforementioned case studies design (Task 2.6.5) was based on the NeDiMAH Methods Ontology (NeMO). Along these lines, the case study design and implementation followed the main entities/principles of NeMO and will accordingly be structured around the actors (researchers), the object's (content and metadata), the tools (various research tools) and the activities identified in the Ontology.

Work package 3 Re-user services

This work package serves to open the data provided by the Europeana platform (DSI) by improving and widening content distribution mechanisms to maximise the re-use of digital cultural content by developers and digital innovators. It will create value for data partners by connecting cultural heritage institutions to creative industries, smart cities and education.

Participants in this work package:

- Europeana Foundation (EF)
- AthenaRC (AthenaRC)
- EUN Partnership AISBL (EUN)
- Platoniq Sistema Cultural (Platoniq)
- European Association of History Educators (Euroclio)

The objectives of this work package are to:

- manage and build the Europeana Labs community with the aim of providing the best customer service to cultural heritage developers and digital innovators and developing strong relations with these communities (task 3.2).
- develop strong partnerships in the areas of education, creative industries and smart cities; in line with the Europeana Business Plan 2016 it aims to develop two new educational partnerships, during the project duration (task 3.3).
- develop growth services to support creative industries in building new products and services with Europeana platform data: it aims to support 4 new start-up projects (task 3.4).

Description of work carried out and achievements:

Task 3.1 Manage the work package (EF)

WP3 goals, deliverables, planned activities and timeline for achievement of the work package goals were discussed in more detail with each WP3 partner in face-to-face meetings and via Skype calls and email.

Task 3.2. Build the Europeana Labs community of developers and digital innovators (EF, AthenaRC)

EF has continued building the Europeana Labs community by enriching the content on Europeana Labs and building up the relations with our audiences of cultural heritage developers and digital innovators.

Subtask 3.2.1. Publish Europeana Labs (EF)

We have been enriching the content on Europeana Labs to make it a relevant online space for our target creative audiences. For the Europeana DSI-2 reporting period, we have published on Europeana Labs:

- 16 new datasets on the topics of photography, history, art and fashion
- 19 new applications using Europeana content
- Ongoing updates on the API documentation (in coordination with WP6)

Subtask 3.2.2. Investigate the inclusion of a marketplace for cultural heritage developers (AthenaRC)

AthenaRC conducted a market research into the potential size, functionality requirements, benefits and costs of an online marketplace for cultural heritage developers. A series of three questionnaires have been created and sent out prepared by AthenaRC in order to be sent out to technology experts, domain experts, creative industries and other stakeholders. Furthermore, a study of existing marketplace technologies has been carried out. The market research results are presented in the deliverable D3.1 Feasibility report on Europeana marketplace

Subtask 3.2.3. Develop interactive relationships within the Europeana Labs community (EF)

EF has been also promoting the Europeana Labs offer and maintaining regular communication with our target audiences via all relevant channels. Major highlights of this project period:

- Registered 4,145 Labs users on average per month (58,021 for the project period)
- Published 11 Europeana Labs newsletters (2016: July, September, October, November, December; 2017: February, March, May, June, July, August), each reached over 2,800 subscribers
- Growth of @europeanalabs followers (from 143 to 830 followers, 480.4% increase)

In addition, we delivered D3.2. Europeana reuse business plans (education and creative industries). This deliverable combines of the individual business plans for the education and creative industries markets and describes Europeana activities in these target areas in 2017. This document replaces the deliverable D3.2 Europeana Labs business plan 2017-2020, as originally planned in the DoA. This change was necessary due to the Europeana strategy update published in February 2017 and valid until 2020. Further explanation is available in the deliverable introduction.

Task 3.3. Develop partnerships for the re-use of digital cultural content (EF, EUROCLIO, EUN)

Subtask 3.3.1. Develop existing distribution partnerships in education

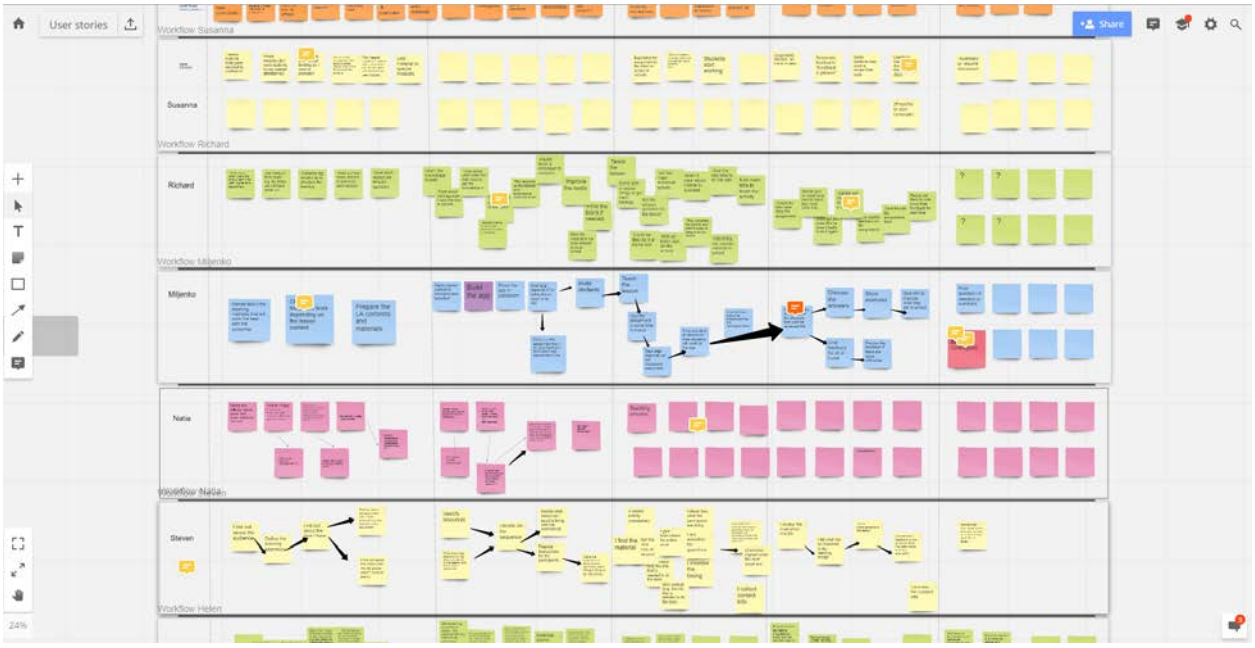
In Europeana DSI-2 period **EUROCLIO** launched a new eLearning environment on their history education platform Historiana which helps educators make the best use of digital cultural heritage's learning potential, regardless of their confidence with digital

tools. The new functionality enables educators to create and find eLearning Activities with the Europeana content on Historiana in their own language, using and rearranging building blocks specifically designed for history education practice.

The development process

The development of the new eLearning environment was done by EUROCLIO in partnership with Webtic and an international group of advanced history educators, who were representing the users community. It was the ambition of the team, to develop an online environment that would address the needs identified by (especially) history educators, in response to the analysis of visual sources tool, which was developed by EUROCLIO and Webtic, with the support of Europeana and the European Union, within the EuropeanaCreative project.

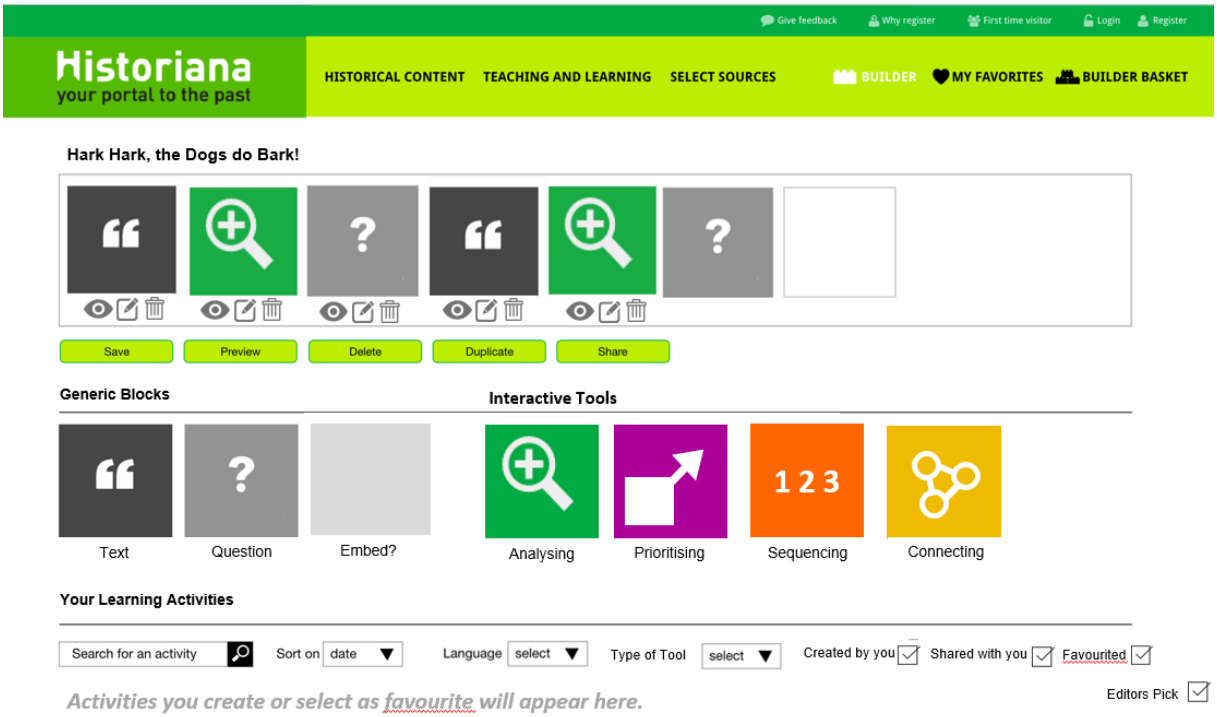
To ensure that the needs of the educators were met, a core group of advanced history educators, was consulted at every step of the design process. This process started with the mapping of the needs, and identification of the work flow that teachers normally



follow, using RealtimeBoard (see below).

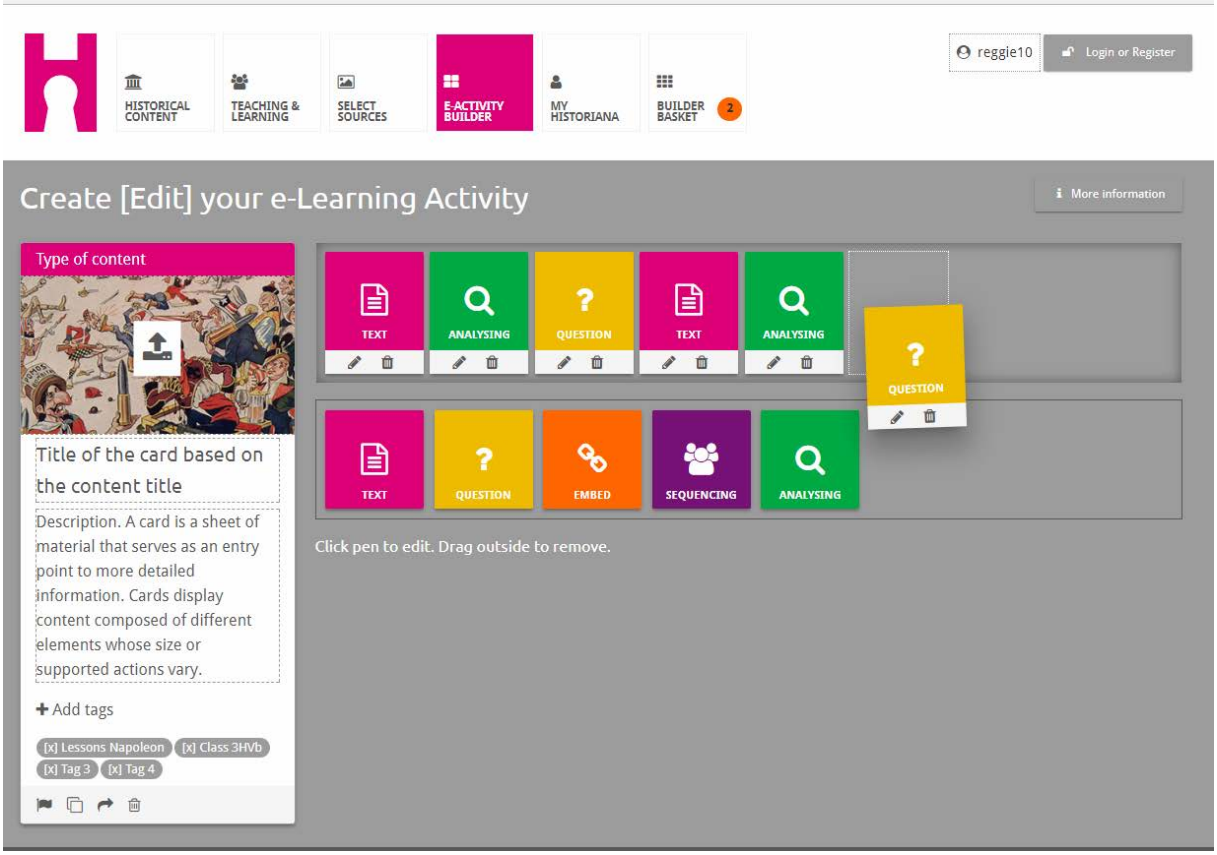
RealtimeBoard allowed the different team members to collaborate online in real time. On this screen the members of the core team explain the steps they normally follow when designing learning activities.

These sessions made clear that that educators need to have an online learning environment where educators would not only be able to have tools to create eLearning Activities for their students, but also could combine these tools in a sequence, share these with each other, review the answers of the students, and invite students via other means than email. The insights were used to discuss in person how these needs could be met, using the visualisation below.



The first visualisation of the e-Activity Builder, used to facilitate the communication the team of history educators and the web-developers (made by Steven Stegers, EUROCLIO)

After having got the feedback from the team of history educators, on this visualisation, EUROCLIO and Webtic worked together on the development of first a click model and then a prototype. This prototype is accessible under the http://thrive.historiana.eu under the heading “e-Activity Builder” and “My Historiana” (username: historiana, password: gimleml) and was used for feedback session (this time online) with the core team.



The eActivity Builder in the click model used to get further feedback from the user's community (made by Nique Sanders, Webtic).

After getting feedback from the core group of history educators, EUROCLIO and the web developers worked on the creation of a demo version of the eLearning environment. The demo version has been used for training and feedback session with users (see part on professional development below), including history teachers, trainee teachers and teacher trainers.

The version of the demo, that was used for the first round of training and feedback with real users, made it possible for users to create their own eLearning Activities, and edit them, but not yet share these (with their students or others). The use of the first version of the demo helped EUROCLIO and Webtic to identify wishes for further improvement, but also to collect further evidence that the Historiana eLearning environment is something that is matching a demand.

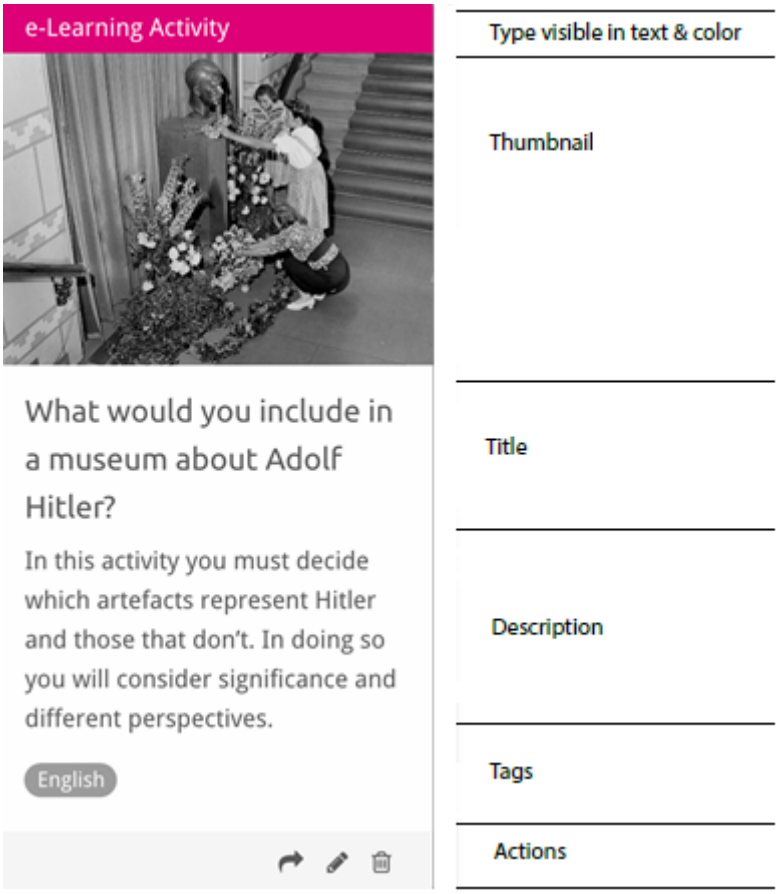
After this series of training and testing with real users, EUROCLIO and Webtic, worked to process the feedback from these sessions, made further improvements to the design, and worked on the final functionalities that were needed for teachers to use the online Learning environment in practice: the sharing with students/others, the option for selected educators to publish eLearning Activities, and the development of a place to feature published eLearning Activities.

The latest version of the demo is available at http://demo.historiana.eu.

Description of the functionalities of the demo version.

The eActivityBuilder makes it possible for users to both create and edit eLearning Activities in the language or their choice, using building blocks that all have their own

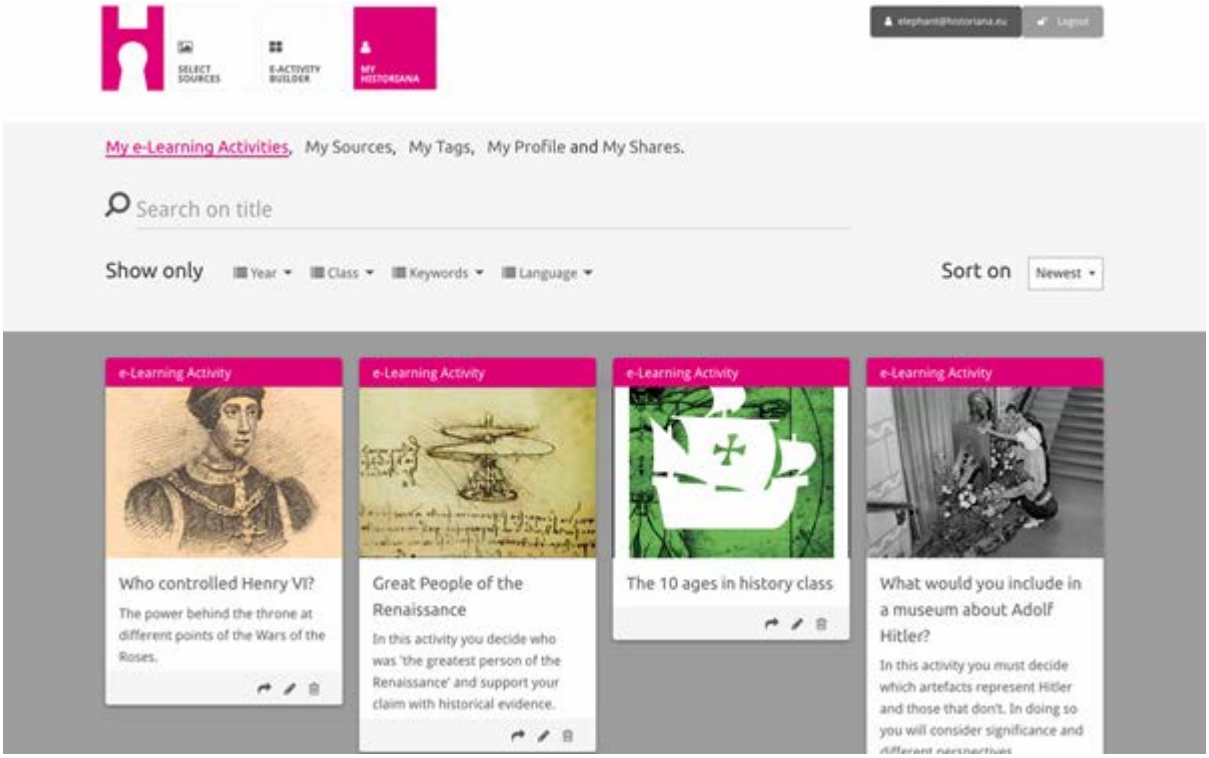
functionality (such as sorting, prioritising, analysing, presenting text, asking questions).[11] eLearning Activities that are created or copied are saved in the MyHistoriana section. The eLearning Activities are represented by Index Cards, with action buttons, which enable users to preview, edit, copy, share and delete eLearning activities (see example below).



An example of an index card for an eLearning Activity made with Europeana content.

Users can find the eLearning Activities that are imported in their MyHistoriana section. This eLearning Activity is a copy of the original, which means that users can adapt the eLearning Activity to their own need. For example, by translating the English text into another language. Users can make changes to the eLearning Activity they want by clicking on the edit [✎] button.

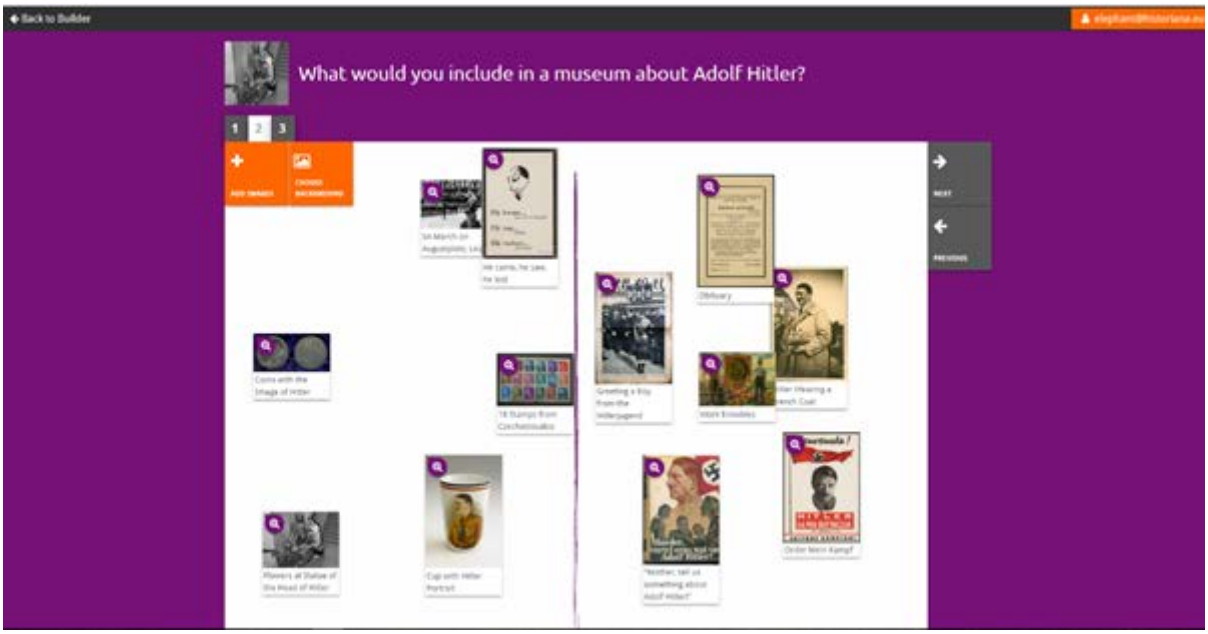
[11] The development of the building blocks that are available at the moment of writing, are made within the Innovating History Education for All project. The development of the eActivity Builder, which makes it possible to combine building blocks and put them in a sequence of choice, however, was not foreseen in this project and made possible through the efforts of the Europeana DSI-2 project.



MyHistoriana, the personal page of any user of Historiana.

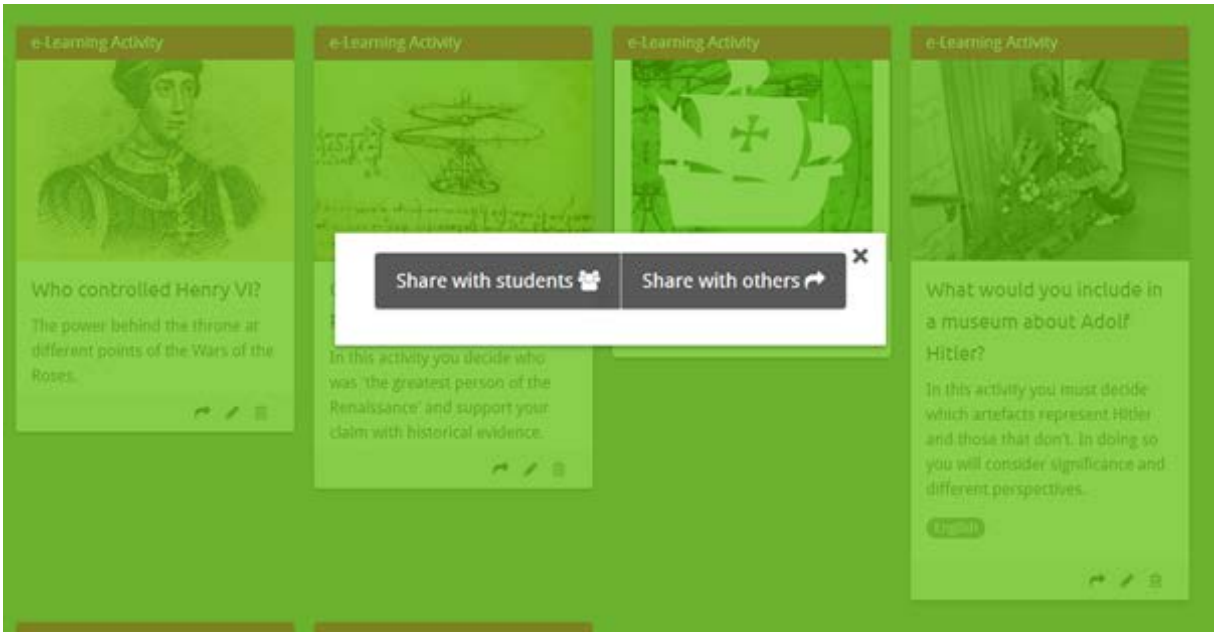
Clicking on the edit [✎] button of an eLearning Activity button in the MyHistoriana section, will open the eActivity Builder. Here users can delete, or add building blocks, change the order of the building blocks, or change its content. Users can also change the title, thumbnail, description and edit tags in their MyHistoriana environment.

Clicking on the edit [✎] button of a particular block makes it possible to change its content. In the example below, it is – for example – possible for user to change the descriptions of the sources, to add or remove sources, and to fix sources in certain positions.



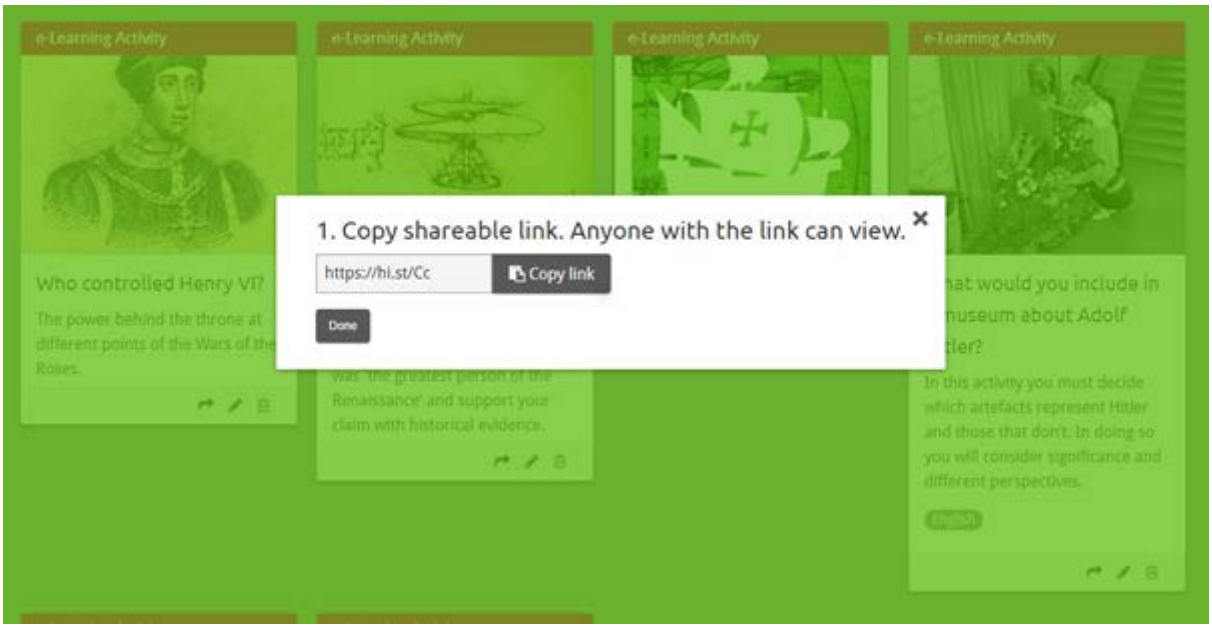
On the level of a building block, users can also make changes to the content. In this case, users - can add source, remove sources, or change the titles and descriptions of the different sources, or change the background.

Clicking on the share [↱] button on the index card will open a modal, where users can choose to share the activity with either students or others.



A screenshot showing what happens when users click on the share-button of an eLearning Activity.

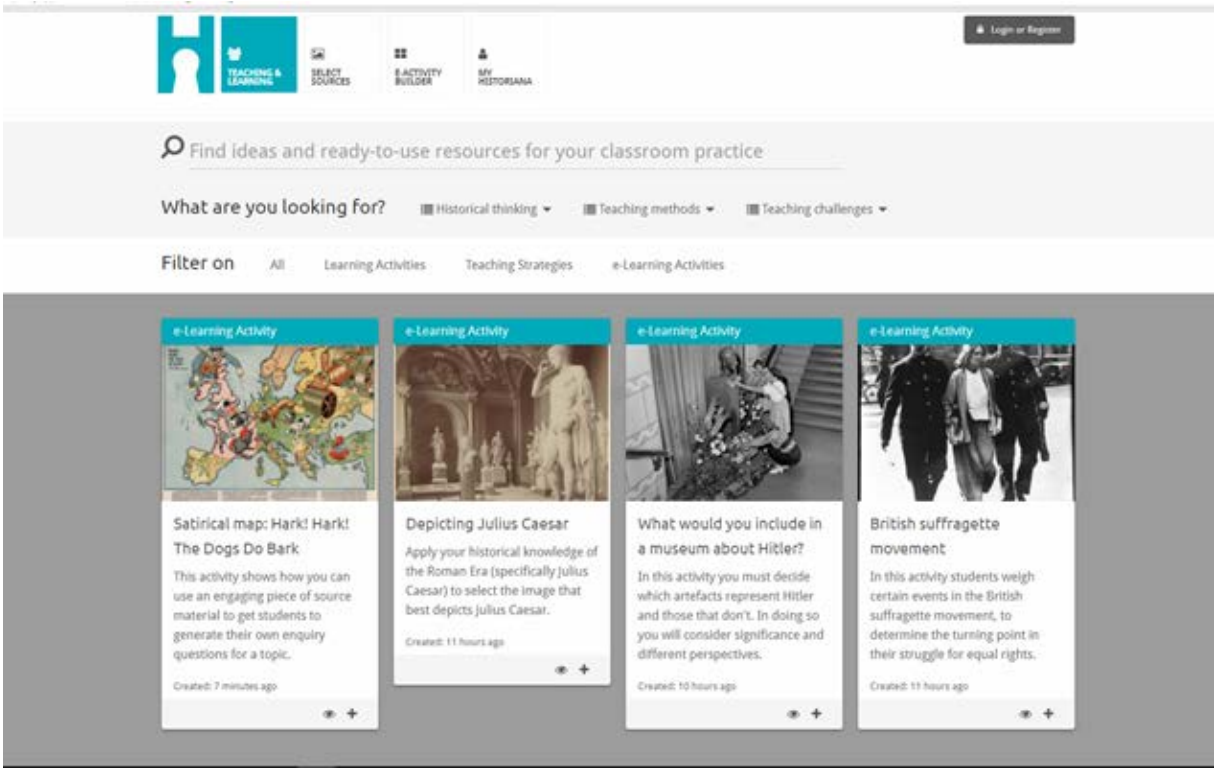
The link for students is different from others, as students - when they click on the link for students, are asked to indicate who they are, and their answers are saved and visible for the teacher, and others - when they click on the link for others, can “create a copy of the eLearning activity” for their own use. This is not relevant for students.
EUROCLIO registered the hi.st domain to support the future sharing of eLearning Activities using this domain as a short link. The hi.st domain is short for history and for Historiana and easy to remember and write up.



An example of a shareable link. Clicking on copy link, saves the link in the clipboard of the user.

Exemplar eLearning Activities

Within the Europeana DSI-2 project, the core team of history educators, worked on the creation of 20 exemplar eLearning Activities that demonstrate how the eLearning environment can be used with exemplar sources from Europeana. These eLearning Activities can be found in the Teaching and Learning Section of Historiana (see image below). Users can import the eLearning Activities of their choice by clicking on the [✚] add button.



The teaching and learning section of Historiana.

Users can find the eLearning Activities that are imported in their MyHistoriana section. This eLearning Activity is a copy of the original, which means that users can adapt the eLearning Activity to their own need. They can, for example, translate the English text into another language, or add, edit, or remove building blocks. Users can make changes to the eLearning Activity they want by clicking on the edit [ ] button.

The development of the eLearning Activities as well as a comprehensive list of these activities is available in deliverable D3.3. 20 online learning activities on Historiana.

Training and outreach

The eLearning environment of Historiana and the exemplar eLearning tools have been used during a series of training and feedback events, during online and face-to-face meetings with the core team, and meetings with (possible) partners and policy makers. These events have always been used to raise awareness of (history) educators of Historiana, to promote its use, and to get feedback on how to further improve, and decide what to prioritise for the next phase of development.

Training and feedback sessions took place at the conference of the Schools History Project in Leeds, at the EUROCLIO Annual Conference, and at several teacher training institutes for history educators in the Netherlands. Presentations for possible partners have taken place in Estonia (during the annual conference of the Lifelong Learning Platform), in Sweden (at the museums of world culture), in Germany (at a conference of Forum Transregionale Studien) and the Netherlands (at the Ministry of Education, Culture and Science and a meeting of the Dutch History Teachers Association).

In addition, EUROCLIO has published about the eLearning environment in various media, which targets (history) educators practitioners. These media include blogs on the websites of Europeana and EUROCLIO, but also printed magazines for (history) educators, and online newsletters and social media posts.

A complete list of the communication about the project, can be found in the Dissemination and Communication overview, which is also part of this report.

EUN has coordinated a small validation pilot involving 20 teachers from across ten different European countries (one primary and one secondary level teacher per country). The teachers were identified with the support of MoEs across the ten countries. The selected teachers developed and tested pedagogical scenarios and learning activities that incorporated Europeana content, between November 2016 and June 2017.

EUN prepared the groundwork for the twenty teachers to participate in the small validation pilot. This included a number of tasks, such as:

- Setting criteria for the selection of teachers from different curriculum areas: who are able to communicate in English; that have an interest in cultural content; are willing to share experiences and good practices; and have a good internet connection both in school and at home.
- Preparation of a detailed memo with the information on teachers' selection for the validation pilot (twenty teachers to be identified in total) for the MoEs interested to have teachers from their country joining the project. The memo was sent to all MoEs, which in turn had to express their interest to have teachers from their country joining the project. Interested MoEs were taken on board on a first

come, first serve basis. The interested MoEs were offered two options for teachers' selection: 1) to nominate or identify the two teachers themselves (one primary/one secondary school teacher); OR 2) EUN to launch a call for interested teachers from their country, the MoE chooses from the list of applicants and sends to EUN the final list of teachers;

- Regular contact with MoEs in order to identify the most suitable teachers to work on the pilot phases; seven out of ten MoEs preferred to identify the teachers themselves and sent to EUN the final list whereas 3 MoEs (from Finland, France and Hungary) chose the 2nd option;
- Launch of the open call for teachers in Finland, France and Hungary to join Europeana DSI-2 pilot; the open call was published through the EUN website, EUN social media, EUN Teachers' newsletter in October, Scientix website, Future Classroom Lab social media. The open call link was also shared with the MoEs in the corresponding countries for a further dissemination to their network of teachers.

Out of the 5 applications from Finland, 4 applications from France and 3 applications from Hungary, each MoE had to select 2 teachers, one primary and one secondary school teacher. Once the selection process was completed, an application form as well as the official invitation to join the project, was sent out through email to the selected teachers.

Kick-off pilot activities with the Europeana DSI-2 teachers

In order to officially start the activities in the project, teachers were asked via email to sign an Agreement for the work that would be carried out between November 2016 – May 2017.

The pilot activities started with the first workshop on 28-29th November 2016, in the European Schoolnet Future Classroom Lab. Travel and accommodation arrangements were organized by EUN for the teachers to participate in the first workshop.

Prior to the first workshop, regular contact through emails and Skype calls were conducted with an Europeana expert in order to plan a session on Europeana collections during workshop. Additionally, EUN set-up a Learning Management System called Schoology for participating teachers. The first workshop announcement was disseminated online through the EUN Teachers' newsletter, November edition.
During the first workshop the participating teachers received an in-depth introduction to the Future Classroom Toolkit, a set of resources and tools that help teachers innovate their classroom practices. The workshop also explored how teachers are currently searching for cultural heritage resources and will introduce them to Europeana collections. By the end of the workshop, teachers had enough knowledge in order to show Europeana data at school and work on the learning activities that incorporate Europeana content.
The evaluation methodology plan (i.e. design online questionnaires, set-up interviews, create blogs to collect feedback, etc.) was presented to the teachers during the last session of the workshop.

Screenshot of tweets posted during the first Europeana workshop, 28-29 November 2016 are shown in Figure 3.

Selection of tweets posted during the 1st Europeana workshop, 28-29 Nov 2016

Following the workshop, all participants received a thank you message email alongside a feedback form of the workshop and instructions for the first pilot phase (December 2016-February 2017).

After the first workshop, the teachers returned to their classrooms to further develop and pilot the initial scenarios and learning activities, as well as communicate about

Europeana in their schools and integrate in a classroom activity what they had learned. They also completed a questionnaire aimed at gathering information on: their teaching background and experience in using ICT; the school context in which they were implementing the pilot (innovation and ICT context); how they introduced the Europeana pilot and resources at their school; and their first experience in searching and using the Europeana website, tools and resources. The questionnaire also gathered teachers' ideas about how they planned to implement the project in second pilot phase.

The second workshop within the small validation pilot with EUN took place on 27-28 February in the Future Classroom Lab in Brussels. 19 teachers from ten EU countries came together to test pedagogical scenarios and develop learning activities using Europeana content. EUN collected their feedback on how they had used Europeana since the first workshop, including what worked well and where they needed more support. During the workshop the teachers also developed and presented learning activities using Europeana content. More information about the workshop and its results are included in our blog.

After the second workshop and during the second pilot phase, teachers were requested to fully develop or update their original scenarios and learning activities, or to pilot new learning activities that they produced during the second workshop. They were also asked to complete a second questionnaire that gathered feedback about the whole pilot implementation, including: the results of implementing the scenarios developed at the end of phase one; challenges and successes in the implementation; conditions for success and overall feedback on the Europeana website and resources after almost one complete school year of use.

Additionally, four example case studies were developed by EUN, featuring the pilot work of teachers who implemented innovative pedagogical scenarios using Europeana resources, in order to supplement the online evaluation questionnaire results. The example cases describe in more detail the innovative practices and the contextual conditions needed to successfully integrate Europeana in teaching and learning. The example cases are mainly informed by teachers' reports, presentations during webinars (one in each pilot phase), feedback of teachers on specific issues during working group discussion in the face-to-face workshops, and the analysis of the pedagogical scenarios developed by teachers.

All pilot activities and evaluation results are described in more detail in D3.4 Pilot validation report on use of Europeana for teaching and learning and the related brochure.

Subtask 3.3.2. Investigate new distribution partnerships in education (EF)

To actively support the development of new distribution partnerships in education, Europeana created a dedicated education area on Europeana Pro. Interested parties can

now explore our partnerships, browse case studies of educational applications, resources and platforms featuring Europeana content, and get practical help from our collection of useful resources.

Under the umbrella #EuropeanaEducation we run an informal community of policy makers to educators and welcome everyone who believes that digital cultural heritage can enrich educational experiences. We encourage the dialog and facilitate the exchange of best practices via a dedicated LinkedIn group and on Twitter by using the #EuropeanaEducation hashtag.

We established several new partnerships for the Europeana DSI-2 project duration in each of our target partner groups: Ministries of Education, educational networks and publishers.

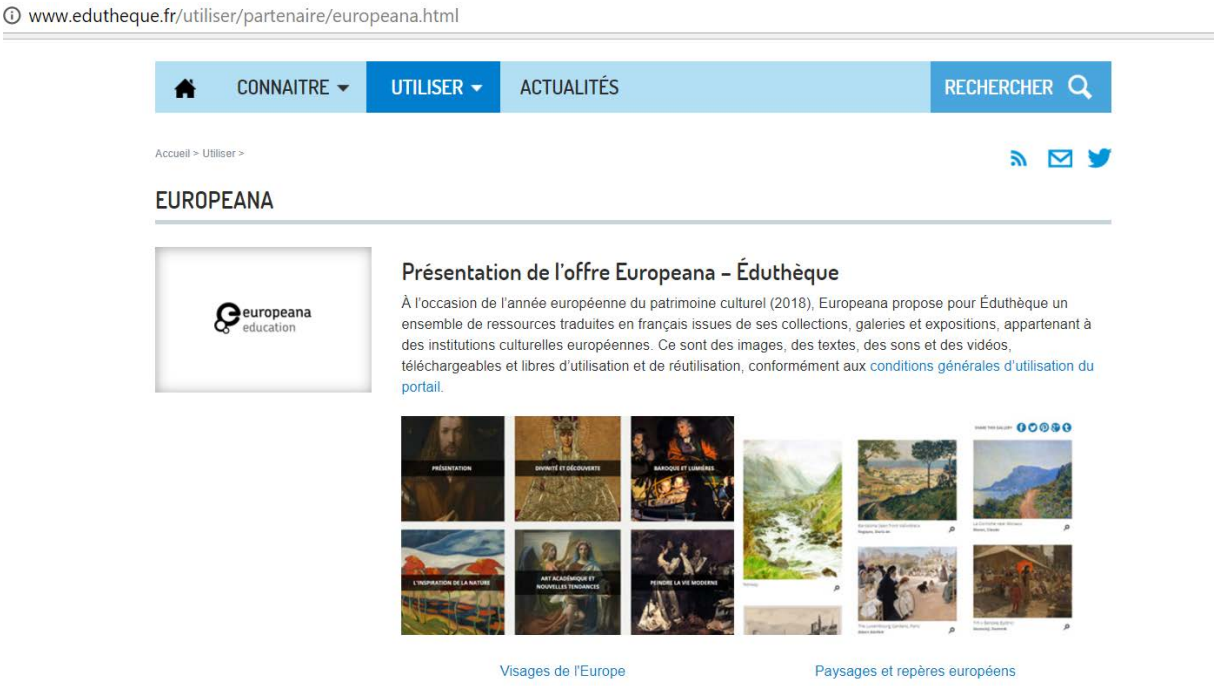
Our relationship with the French Ministry of Education started in summer 2016 and was formally celebrated at Ludovia13, a big educational summit on 23-26 August 2016 in South of France. The event was under the patronage of the French Ministry of Education and brought together 800 participants (educators, educational providers and policy makers). Europeana was the guest of honour and got great exposure to the French educational communities through sessions on each event day as well as at a dedicated stand. More on the event, in our blog.

The event was followed by a separate meeting between Europeana and ministry representatives on 26 September 2016 in Paris where we together outlined the possible areas of collaboration. We have further built up our partnership with the French Ministry of Education and launched a pilot for integration and use of Europeana Collections in the French educational systems which could later be replicated in other countries. The pilot includes the following activity areas:

- Creation of an Europeana dedicated space on the French national educational portal Edutheque (126 000 teachers / 850 000 (primary and secondary) subscribers)
- Integration of the Europeana Collections on Edutheque via the Europeana API so that Edutheque users can search and find relevant records from the Europeana Collections directly on the French portal.
- Facilitation of the collaboration with selected French teachers to develop new educational learning resources with Europeana content
- Introduction to key French educational publishers
- Cross-promotion (online and at relevant meetings)

A memorandum of understanding was signed between the French Ministry of Education, Reseau Canope, their technical and publishing partner, and Europeana to provide an official framework for this strategic partnership.

The dedicated Europeana space on Edutheque was launched at Ludovia14 (22-25 August 2017). It introduces Europeana to the French educators and provides them with curated Europeana resources on topics relevant for the French curriculum, including virtual exhibitions, galleries, a guide on using Europeana, etc.



Europeana is in discussion with Reseau Canope about the API implementation and the coordination of the collaboration with the French teachers.

The French Ministry of Education also introduced us to Maskott, one of the leading French educational providers whose platform Tactileo is used by 100.000 secondary education teachers and 2,5 million secondary education students in France. We are currently discussing with the Maskott team the integration of Europeana content in Tactileo.

In terms of promotion, Europeana representatives attended and presented our offer to educational audiences at the EduSpot in March 2017 in Paris. Representatives of the French MoE participated in the Europeana strategy meeting "Migration and Culture: how can our past educate our present" on 23-24 May 2017 in Malta and helped shaping the refined and updated Europeana for Education policy recommendations (to be published in autumn 2017). Finally, Europeana was represented for a second consequent year at Ludovia with a joint presentation with the French MoE and a transcribathon for French educators. More in our blog.

Europeana has been in discussions about possible collaboration with the Ministries of Education of Spain, Italy, The Netherlands and Finland and will continue the dialog in the new project period.

Europeana became a key partner in Tu Europeana project. The aim of the project, in collaboration with the Ministry of Culture in Poland and coordinated by the National Audiovisual Institute, was to raise awareness about Europeana and its collections in Poland and to introduce Europeana's potential to serve as a source of inspiration for Polish creators and educators. In the area of education, a workshop presenting Europeana's reuse potential to teachers, educators and publishers of digital educational materials took place on 21-22 October 2016 in Remikslab, Lublin. During the two-day workshop participants learned how to use a range of tools for analogue and digital reuse of cultural archival content for education purposes.

In the beginning of 2017 Europeana started a collaboration with the Open Education Consortium within their Year of Open program and can report two joint initiatives for the Europeana DSI-2 project period.

In March 2017 EF participated in the fifth Open Education Week, a series of approximately 130 education related local and online events. We presented Europeana's educational offer to educational institutions, publishers, academics, students and enthusiasts from across the world by publishing relevant online resources (guides, policy documents, etc.) and by giving two webinars on 29 March (for European and non-European audiences). More information in our blog.

As a next step, Europeana will host a one month long curated feature in September 2017 which will be dedicated to Open Culture with special focus on Education on their Year of Open platform. The feature will cover a series of interviews (incl. video) with policy makers and experts in culture and education from across the world.

Europeana has also joined the Educational Repositories Network (EdReNe) which facilitated access to potential educational partnerships and events. For instance, Europeana started a collaboration with one of EdReNe members, OER (Open Educational Resources) World Map, and is now part of its huge network of developers of open educational learning resources, policy makers, teachers and learners from across the world (665 organisations). The OER World Map profiles Europeana as organisation/repository and Europeana Collections as educational resource. Find out more in our blog. The access to the EdReNe network also allowed Europeana to attend DIDACTA 2017 on 27-29 September in Florence, a high-profile educational fair for 100 Italian exhibitors, 3,000 teachers, and 500 business operators of the sector.

Europeana also established contact with the eTwinning, the community for schools in Europe. We became a "Friend of eTwinning", a member of a small, exclusive group of NGOs and initiatives which are active in the field of education and aim to provide meaningful materials to teachers and share good practices. As a first initiative of this partnership, Europeana will hold a workshop for educators during the eTwinning annual conference between 26-28 October 2017 in Malta.

Europeana also approached educational publishers at relevant events and via campaigns.

During the Frankfurt Book Fair between 18 and 23 October 2016, we talked to education publishers from across the world to explore potential interest in integrating Europeana content in their digital educational resources. We were met with enthusiasm by education publishers and innovative digital educational resource providers, who quickly recognised the educational potential of our diverse collections. This includes publishers and educational resources like McGraw Hill Education, Itsi, Capstone Publishing, NETEX Learning, and MM Publishing. To this date, McGraw Hill Education has integrated a curated set of Europeana Collections (artworks from Rijksmuseum) in their database and registered first downloads.

In February 2017 Europeana executed a mailing campaign addressing key digital educational publishers in our six target countries (as outlined in our education business plan). As a result, we had introductory conversations (skype and physical meetings) with publishers in the Netherlands (Kennisnet) and Finland (Eliademy). As a result, Europeana Collections are featured as a resource for educators on the Eliademy platform. Established in Finland in 2013, the platform serves 350.000 students, has crowdsourced 70.000 courses and supports 30.000 teachers in 190 countries. More in our blog.

The email to the Spanish publisher led to introduction to Procomun, an open educational resources platform developed by the Ministry of Education in Spain. Procomun has integrated the Europeana API and is featuring relevant Europeana content related to each search on their platform.

Subtask 3.3.3. Develop distribution partnerships with creative industries intermediaries (EF)

EF has been forging and deepening the relationship with partners who are already working with the creative industries.

We built up our partnership with the Creative Commons and integrated 470,000 openly licensed images from the Europeana Collections in the new CC Search beta. The current CC search tool is used by nearly 600,000 people globally every month and we believe this partnership will greatly contribute to a wider outreach to creatives around the world.

In addition, Europeana initiated collaboration with a few art universities which presented a great opportunity to address both of our key markets (education and creative industries) by leveraging the creative drive of students and working together with educators at these institutions.

Within the Tu Europeana project mentioned earlier, Europeana partnered with the design School of Form in Poznan and launched a two month RE_MEDIA: EUROPEANA program in November 2016. The program was a series of weekly workshops on topics

related to various aspects of the creative re-use: content, IPR, and prototyping. The program participants were students selected from various countries and disciplines, including Communication Design, Industrial Design, Fashion Design and Domestic Design. They used the tools of design research, new media, application design, alternative thinking on arts and fashion design, music and cinema resources to explore the re-use potential of digital cultural heritage. The students got a detailed introduction into the rich and unique content of Europeana during a special workshop on 15 November 2016 and developed their own projects with Europeana content in the following weeks. The prototypes (applications, visualisations, art and new media) were showcased at a special event organized by the National AudioVisual Institute of Poland on 17 February 2017 in Warsaw and on Europeana Labs.

Europeana Collections have been used as inspiration and resource for student projects at LUCA, School of Arts in Belgium. The best ones were showcased in a special gallery on Europeana Labs and promoted on our communication channels. Europeana will continue the collaboration with the art school in the next project period.

Europeana also reached to creative professionals and strengthened its position as a resource partner for the creative industries at high-profile events.

An example is THE ARTS+ fair, a dedicated event for new business models for the creative industries during the Frankfurt Book Fair. The first event edition took place between 19 and 23 October 2016. In the first three days Europeana hosted the THE ARTS+ Lab, an interactive and interdisciplinary workshop, during which a team of 25 design students and experts worked to develop new products and services using Europeana Collections. The lab programme started with a co-creation workshop led by the Spanish consulting company Platoniq where the students experimented with Europeana data and prototyped their best ideas. On the second day, experts introduced participants to the relevant design thinking tools and helped them develop viable business models for their pilots. The Europeana Labs experience ended with a pitching skills training session and project presentations to a jury of selected investors and finance consultants on the third day. The investor panel evaluated the ideas and helped with advice for the next growth stages. The expert trainings and the investor forum were organised in cooperation with the pan-European investor network Media Deals. The three Europeana Labs days resulted in five prototypes, of which Fantasia, an app that helps fashion designers to create patterns from high-quality Europeana content, was announced a winner. More in our blog.

The collaboration with THE ARTS+ will continue for 2017, with Europeana co-hosting a dedicated Partner Experience Zone showcasing various engaging creative projects with cultural content, including our first challenge winner Storypix.

Europeana was also represented with a dedicated stand during the B.Creative tracks conference on 2 and 3 November 2016 in Namur, Belgium. The event brought together

creative professionals, investors and representatives of various creative networks from across the world and marked the launch of the Creative.tracks platform which connects and offers resources and services to young entrepreneurs in cultural and creatives sectors across the world. We set up Europeana profile on the platform and cross-promote our initiatives (challenges, etc.) We also made some useful contacts with investors, crowdfunding initiatives and entrepreneurs.

Subtask 3.3.4. Connect to Smart Cities initiatives (EF)

We followed up on the meeting with selected Smart Cities at the Major Cities of Europe conference in June 2016 in Florence and discussed possible next steps with the respective partners. However, the dynamics of the discussions and the relationship led to our decision to reduce the priority of the Smart Cities policy initiatives and participate in suitable Smart Cities projects on an ad-hoc basis.

Task 3.4. Develop and promote growth services based on the creative re-use of Europeana material (EF, Platoniq)

Subtask 3.4.1. Pilot subcontracting (EF, Platoniq)

Europeana worked (alone and with partners) on securing various types of financial support for high-potential reuse projects. EF ran the second Europeana challenge on the topic of Fashion in the last quarter of 2016 and provided direct funding of 20.000 EUR in a subcontract to the challenge winner, the Cypriot company NSAT for their project CRAFT. The work started in January 2017 and resulted in an early prototype. As next steps, the team will continue to develop the product and start contacting venture investors from Greece, USA (Palo Alto) and Hong Kong.

Europeana also explored the potential of match funding by launching its first match funding call in cooperation with the crowdfunding platform Goteo.org. The campaign aimed to allocate 10,000 EUR match funding to support up to three creative projects in secondary education. The call for applications ran from 1 February till 15 March 2017 and resulted in 18 applications from across Europe. After careful evaluation by both Europeana and Goteo representatives, we announced three winning projects on 31 March. The three projects received training from Goteo on how to successfully design their crowdfunding campaigns and ran those on Goteo.org between April and June 2017. Two projects - “Animals in Great War” eBook and MoMU fashion project - met their crowdfunding goals and received Europeana’s matching contribution of 6,500 EUR in total. The projects presented their prototypes by end of August 2017 and will deliver the final products by end December 2017.

In addition, Europeana supported with 5,500 EUR match funding the crowdfunding campaign “Lest We Forget” which aims to collect and deliver up to 10,000 digitized WW1 memorabilia from UK to the Europeana 1914-1918 thematic collection for reuse purposes.

Subtask 3.4.2. Co-creation services (EF, Platoniq)

Platoniq prepared, promoted and delivered two co-creation workshops for creative professionals.

On 18 October 2016 Platoniq was conducting a one day co-creation workshop for 25 students from European design schools within the THE ARTS+ Lab area. The workshop aimed to explore Co-creation Made #Agile methodology for co-designing and incubating designs of viable apps reusing Europe's cultural heritage. The participants were able to experiment with Europeana data and have co-produced prototypes, putting together data with ideas. They finished the workshop with a cut-throat elimination of the weakest prototype ideas, focussing instead on the development of the most robust 5 business proposals. Among the five pitches, Fantasia, an app developed by a student group from Italy and Poland, was selected as the winning project. In a concise and engaging pitch, the students proposed a prototype that aims to create patterns for fashion designers from high-quality content made available through Europeana. For more, check out the Flickr album and our Storify on THE ARTS+.

Platoniq and Europeana delivered a second, small co-creation workshop for makers "Heritage meets makers" on 22 - 23 June at the Artik Center FabLab in Palma de Mallorca. This was in line with the planned maker's pilot (as outlined in the D3.2 Europeana business plan for the creative industries) and aimed to encourage the reuse of digital cultural heritage content by these new creative audiences. The workshop ended with a showcase of culinary, fashion and two educational projects which all shared a strong 3D component (virtual reality or 3D print). As a next step, the project leaders attended a crowdfunding workshop offered by Goteo on 29 June in Palma de Mallorca where they learned how to design a successful crowdfunding campaign and secure vital funding for bringing their prototypes to market. Two of the projects - Cooking History and Heritage Avatars - planned to launch their crowdfunding campaigns on Goteo.org later in the year.

Platoniq has also been updating the co-creation materials on the wotify.eu platform, which is featured as a co-creation service on Europeana Labs. Specifically, the partner has developed a new design Canvas, looking at facilitating content curation for workshop participants. Namely, the Content Relevance Sheet defines the criteria for selecting the most relevant items or images and thus helps to select the best visual content for prototyping. The results of this exercise guides participants during the workshop, from scenario planning to collective decision-making, definition of personas and their relation to cultural objects, and finally, to group design and visual definition of ideas. Platoniq has also integrated the Europeana Publishing framework in their workshops.

Platoniq has been editing and publishing Europeana Pilots Case studies for the wotify.eu case studies section, and published a redesigned and reviewed version of the Co-creation white paper, originally written as part of the Europeana Creative project.

Regarding development related tasks, Platoniq has been building a json API to connect wotify.co dashboard used to keep track of the prototypes co-designed in Europeana DSI1 and DSI-2 co-creation workshops, with Wotify.eu pilots section.

Subtask 3.4.3. Services around financial capacity building (EF, Platoniq)

Europeana has explored two areas of financial capacity: match funding and classical (venture and angel) investment. We have collaborated with the crowdfunding platform Goteo (founded by Platoniq) with regard to the former and with the pan European investment network and consultancy company Media Deals with regard to the latter.

Goteo and Europeana designed a joint match funding program for re-use of digital heritage. Both organisations signed a framework agreement which outlines the purpose and main rules for all future match funding campaigns. In essence, Goteo provides the crowdfunding expertise and platform (Goteo.org) whereas Europeana defines the type of desired projects, supports their promotional campaigns and matches the accumulated crowd donations for the successful projects. The programme was introduced to the Europeana Network at Europeana AGM 2016 in Riga and promoted via several blogs on Europeana Pro, in the Europeana Network newsletter and on Vimeo. The first joint match funding campaign focused on reuse of digital cultural heritage in education and allocated 10,000 EUR for up to three creative projects. The campaign was launched in February 2017 and resulted in two match funded projects. Europeana and Goteo are currently in discussions about a possible second match funding call within Europeana DSI-3.

With regard to the second type of financial capability - venture & angel investment, Europeana partnered with the financial consultancy company Media Deals to organise two investor fora for Europeana high-potential reuse projects and help them reach their next growth stage.

The first investor forum took place on 21 October 2016 during THE ARTS+ fair in Frankfurt. A jury of selected international investors - Eugene Smyth (Allied Irish Banks Seed Capital Fund); Cathrin Frisemo (Nordic Female Business Angel Network); Xavier Huerre (Interim Executive, Business Consultant, Angel Investor); Dieter Staib (Education, BBA, MBA at ESADE Barcelona) - evaluated the prototypes developed during the Labs workshops on 19 and 20 October and provided their creators with constructive feedback to help them develop their ideas into a market-ready proposition.

In early April 2017 Europeana and Media Deals refined the investor forum idea and decided in favor of a more personalised approach. According to the new concept, Europeana would pre-select high-potential reuse projects and submit them to Media

Deals for review of their investment potential. As a next step, Media Deals would provide individual investment evaluation and private online coaching to the approved projects and organise an e-Pitch with relevant investors (depending on the project type e.g. early stage/mature, product/service, market, etc.) Based on investors' feedback and reported interest, Media Deals would then liaise between the investors and the project representatives for a follow-up personal meeting to discuss the investment in details. Europeana and Media Deals faced some unexpected difficulties in the concept realization, ranging from (investment) suitability of the pre-selected projects, to lack of interest in the service and change of the projects' business plans. An example with regard to the investor suitability is that the review of Media Deals showed that only one of the three Europeana match funding winners could quality for venture investment.

With regard to the interest in the service, Europeana issued a call for interested creative projects which didn't bring in any applications. In addition, one of the pre-selected projects declined the invitation for private coaching and e-Pitch because they felt that they had the necessary pitching expertise and because they preferred focusing on the product development at this stage. Another project had to withdraw as they decided to discontinue the product with Europeana content. Eventually, three projects received individual coaching from Media Deals and found it very useful but didn't attend the e-Pitch because they couldn't commit the time to finalise their investment proposal or because they realized in the consultation process that they would need more time (and leads) to strengthen their product offer to potential investors.

Work package 4: Policy and programme management

This work package is responsible for the full programme management of projects related to Europeana DSI (including Europeana DSI-2), making sure objectives and strategies align. This allows Europeana to adequately act on the progress of the project. In line with the progress of the project and needs of the consortium and the Europeana Network, the work package maintains and develops policies (such the Europeana Publishing Framework, the Europeana Licensing Framework, and Europeana Impact Assessment Framework). Europeana continues to be involved in copyright reform where it affects or prevents cross-border access and re-use of digital heritage material or the digitisation of twentieth century material and therefore its access. This work package aims to clarify and develop strategies, business models and policies for the further advancement of Europeana as a platform and access to European cultural heritage to achieve maximum impact.

Participants in this work package:

- Europeana Foundation (EF)
- Stichting Digitaal Erfgoed Nederland (DEN)
- Stichting Nederland Kennisland (KL)
- Österreichische Nationalbibliothek (ONB)
- Bibliothèque nationale de Luxembourg (BnL)
- James Lovegrove SPRL (Lovegrove)

The objectives of this work package are to:

- manage the full Europeana programme of projects with the aim of providing high-quality programme management and cross-project expertise sharing. (task 4.2)
- manage Europeana DSI as a project with 34 partners, to deliver the agreed outcomes of the project (subtask 4.2.1.)
- develop a mechanism to share knowledge on Europeana ecosystem (and beyond) to influence current and new policies, as well as measure impact of Europeana DSI (task 4.3)
- develop (and manages implementation of), based on the outcomes of its previous objectives, cohesive policies for digital cultural heritage for the use of Europeana platforms material (task 4.4)
- further develop and implements Europeana's impact, publishing and licensing frameworks with the aim to maximise uptake of Europeana and catalyse the cultural heritage sector in Europe (task 4.5.).

Description of work carried out and achievements:

Task 4.1. Manage the work package

The work package was managed without any notable issues. The Europeana DSI-2 Kick-off Meeting was held on 7 and 8 September 2016 at the Austrian National Library in Vienna. All partners were represented at the meeting. The individual partners, the overall project, as well as the individual work packages were presented, and work package meetings, Partner Board and General Assembly meeting were held.

Task 4.2. Manage the Europeana programme of projects

Subtask 4.2.1. Europeana DSI-2 technical project coordination

Under this task **ONB** and **EF** carried out the technical project coordination of the project: reporting, communication, administration of the project.

This task ensured effective financial administration, internal consortium management, coordination and communication, monitoring of project documents such as deliverables and milestones and liaison with the European Commission. Furthermore, it was responsible for effective quality and risk management and coordination in the project. **ONB** ensures effective communication and information flows between the project management team, WP Leaders and other project partners via the collaborative workspace Basecamp, Skype meetings, and so forth. Basecamp was the main working and communication platform. All partners are provided with templates and information, made available via Basecamp and Google Drive.

Project management issues are discussed during virtual meetings between ONB and EF once a week. Every six weeks there are in-person meetings, where the technical project coordinator (ONB) met all WP-leaders and EF directors in The Hague.

All deliverable and milestone documents of this reporting period are available in the Project Documents section on Europeana Pro, project partners can access all documents in the Project Documents section on Europeana Pro; confidential deliverables can only be accessed by project partners, public deliverables are publicly available (for view and download).
ONB has set up a risk register on Google Drive that was shared with all project partners; all partners are encouraged to indicate risks that they have identified during their work. ONB maintains very close and effective working relations with all partners; close collaboration and exchange with all partners, especially WP Leads and the Technical Lead, allows to identify risks and to define actions at an early stage.

Subtask 4.2.2. Convening the Steering Committee of Europeana DSI

The Europeana DSI Steering Committee (the Europeana Foundation Board) met five times during this reporting period. It discussed progress of the Europeana DSI-2 project, forecasts for finance and related matters, as well as strategic issues.

Subtask 4.2.3. Manage Europeana DSI's programme of projects and subcontracts

The programme management consisted of project management of Europeana DSI-2 (in relation with subtask 4.2.1) and related projects under FP7, CEF, Horizon 2020 and other funding programmes. Under this task, EF raised awareness of the Europeana Generic

Services (CEF) opportunities for the wider Europeana Network as well. Under this task, EF coordinated project commitments between all work packages and related projects.

Task 4.3. Improve knowledge sharing for Europeana Network Partners' and the cultural heritage sector

Subtask 4.3.1. Evaluate programme of projects that benefit Europeana's ecosystem

EF set-up a task force that will evaluate how Europeana and its related projects should be positioned in future funding programmes of the EU and member states. Its main task is to set up and agree on an agenda for innovation in the (digital) cultural heritage area. The task force is currently running and will deliver a report in late 2017.

Subtask 4.3.2. Run an ENUMERATE survey on digitisation in Europe

DEN created the final list of questions for the survey to inventory the actual status of digitisation in European and recruited the national coordinators for the core survey. The survey was translated into twelve European languages and programmed in Survey Monkey. The survey ran in May and June 2017.

The number of respondents in this survey was comparable to 2015: close to 1.000 institutions responded between May and July 2017.

Overall, the results of the 4th ENUMERATE core survey are in line with the findings in previous ENUMERATE surveys. This observation strengthens the ENUMERATE team in the assumption that the methodology and the conceptual framework of the ENUMERATE core survey is by now tried and tested. Some results of CS4 demonstrate a sure but steady increase of the impact of digitisation on the institutions (e.g. the number of staff and volunteers); some appear to be steady across all surveys; others may even show a small decline compared to earlier findings. This does not necessarily mean that the cultural heritage sector is regressing. One possible explanation for the lower outcomes could be the changes among the population of respondents. Some results from previous editions of the ENUMERATE survey were sometimes criticized for being too positive, as the respondents may belong to the group of frontrunners in the area of digitisation of cultural heritage. So the lower values in this survey report might indicate a small correction on previous findings.

Given the fact that the differences among the results of the four surveys are small (if at all present), the question is justified whether the distance in time between the surveys is significant enough. Perhaps the frequency of a biennial survey proves to be too high. The ENUMERATE team recommends to have a discussion with all the stakeholders of this survey (Europeana, EU-DG CONNECT, DCHE and the national coordinators) to decide whether the ENUMERATE core survey should be held every 4 or 5 years

The full results of the fourth ENUMERATE survey are reported in D4.4 Report on enumerate core survey 4.

Task 4.4. Develop and maintain cohesive policies for digital cultural heritage in Europe

Subtask 4.4.1 Awareness raising of Europeana in coordination with the Commission

Council Conclusions of May 2016 required that Member States could better understand and contribute to the value of Europeana, give permanent access to country specific user statistics and improve the accountability on project result and spending. This work required a constant dialogue with Member States and European Institutions and awareness raising of the existence of Europeana as a resource for education, creative industries, research and the cultural industry sector. Requirements for improvement of the platform and joint policies and recommendations created for the reuse of cultural heritage in the development of economic growth and jobs for the support of the single market. The outcome is a series of country reports and set of requirements for incorporation in subsequent Europeana Business plans so that Europeana DSI serves as a digital cultural heritage material platform for education, research, tourism and creative industry and fulfils the needs of MS.

Over the course of Europeana DSI-2 a number of activities were undertaken by **Lovegrove** and **EF**: meetings with European bodies and MS representatives; two presidencies events (Latvia and Malta); country reports for each country; active collection of feedback at MSEG/DHCE meetings and from CEF Committee members; a telephone survey of MS to discuss input to the Strategic Plan, set up of MS pages on Europeana; greater inclusion of MS in the Governing Board of Europeana Foundation; and increased communication via an MS newsletter.

Member States need for increased insight to Europeana activities

Progress has been made on the production of country reports including facts and figures for Europeana related activities per country in the EU. A dedicated space for Member States on the Europeana Pro website is taking shape and might be launched.

Europeana's Member States information (in relation with WP5) has been updated and improved. Lovegrove has also engaged in progressing the dedicated area for member states on the Europeana Pro website (collect input, discuss content and presentation).

In the field of EU policy making on copyright Lovegrove and Kennisland have taken part of the work of engaging with stakeholders and policy makers in discussing the Commission's proposal on copyright in the DSM promoting the needs of CHIs in the copyright reform. The mandate was renewed late 2016 on what the Europeana Network wanted to see come out of the reform proposal with agreement (except for 3 members, BnF, IFFRO and FEP) on the areas Europeana should concentrate on, as these are integral to the existence of Europeana and its ability to function as a platform.

Subtask 4.4.2. Support, review and maintenance of open data policies

KL and EF have attended a meeting to continue support of the train-the-trainer sessions on IPR. This was organised in Frankfurt 5 October 2016 (in close collaboration with WP1).

To support members of the Europeana Network in making cultural heritage more openly accessible, by sharing knowledge & best practices KL and EF have undertaken a number of activities to increase knowledge about IPR and open data competency. Along with data partners Europeana have prepared and published IPR training materials (presentations and videos). The work of the Europeana Copyright Community where DSI aggregating partners are heavily involved have used training material in workshops with data partners already.

Two national workshops, in January and February 2017 were run in Spain and the UK, to support the delivery of open data to Europeana. These workshops were run in conjunction with network and data partners, and invited experts from those countries to participate in discussions with cultural heritage institutions. In each 25 people attended, both policy makers and management of cultural heritage institutions.

A research brief was prepared by EF and KL to explore the compliance with the Public domain charter and the acceptance criteria for rights statements. This research will be undertaken in the months of April and May, with the analysis and results due September.

Subtask 4.4.3. Manage Europeana policy development on IPR and open data – coordinate the IPR working group

The European Commission has presented its long awaited copyright reform proposals during the project period. KL and EF have worked on analysing these proposals and have shared initial analysis with the network members through the IPR working group and the Europeana Pro blogs. In addition, Europeana and Kennisland have at the request of the Europeana Foundation Board prepared a discussion paper on future strategy in the field of IPR policy advocacy. This paper has been discussed during the EF board meeting on the 27 September 2016. The Board has reconfirmed Europeana's mandate to advocate for updated copyright rules and the Copyright Working Group of the network produced an updated version of the mandate that takes into account the Commission's proposal. Kennisland and Europeana have continued to reach out to various stakeholders to discuss Europeana's perspective on the Commission's proposal for a directive on copyright in the Digital Single market.

KL and **EF** have continued the efforts to coordinate with associations of library organizations active on the EU level (IFLA, EBLIDA, LIBER, CENL, public Libraries 2020). As part of these coordination efforts Europeana has contributed to a series of events during EU code week in the European parliament on 18 and 19 September 2016 (in collaboration with WP2). Concrete proposals on how to best address certain issues will

be discussed with as many stakeholders concerned as possible, including EU policy makers.

Subtask 4.4.4. International standardisation of rights information

Europeana has migrated its internal systems for use with rightsstatements.org (developed under Europeana DSI-1). This process was concluded in late October 2016 at which point the old Europeana specific rights statements were replaced by the new internationally standardised rights statements offered by rightsstatements.org (in close collaboration with WP1).

Furthermore, **Kennisland** and **EF** continued its work as a member of the steering committee and working groups which form the governance structure for rightsstatements.org. During the reporting period we have participated in 8 teleconferences and 2 physical meetings, and contributed to the drafting of a number of governance documents. In addition, Kennisland has coordinated the work on a translation and versioning policy which has been finalised at the end of November 2016. Following the publication of the translation policy a number of l translations are underway by partners (German, Spanish, Portuguese, Estonian, Finnish). They are due to be published late 2017.

Europeana co-developed the governance structure of rightsstatement.org and has taken steps to invite fellow international digital libraries and aggregators to participate in that governance structure.

Subtask 4.4.5. Coordinate communication of copyright knowledge to the Europeana Network

In this task, Kennisland, together with EF, have been working on improving communication and copyright knowledge of the Europeana Network and DSI-partners.

The 5th Europeana Licensing workshop took place in Luxembourg on the 24th & 25th November 2016 at the Forum DaVinci. The workshop is organised by the Bibliothèque nationale de Luxembourg, the Institute for Information Law (IViR) of the University of Amsterdam and Kennisland. The workshop is based on informal exchange between expert participants, following Chatham House rules. The workshop is invitation-only and welcomed twenty participants (practitioners, policy makers and academics). Both days were spent on in-depth exploration of a prepared and well-defined discussion list. This year's discussion was focussed on the European Commission's proposal for EU copyright reform, and specifically its effects on Cultural Heritage Institutions. Other discussion items were the implications of the recent "Soulier & Doke" ruling by the Court of Justice of the EU on ECL (Extended Collective Licensing) and similar mechanisms, practical implementation of the Marrakesh treaty, the future Out-of-commerce-works Registry and the rightsstatements.org service, based on a common project between Europeana and the DPLA (Digital Public Library of America). The discussion was moderated by Lucie Guibault (IvIR) and several other volunteering participants. All participants were well

prepared and discussions over the two days were intense and fruitful, as confirmed by participants.

The Europeana Network are informed on copyright developments through regular blogs & promoted through social media and newsletters, available via Europeana Pro, covering a range of topics from the work on advocating for EU copyright law reform through to sharing best practices from within the network.

The permanent resources and information published on Europeana Pro have been updated following the migration to international rights statements.

Subtask 4.4.6. Explore IPR implications of alternative data acquisition mechanisms such as crawling and indexing

KL has started this work in cooperation with the Europeana Foundation. A research brief has been created to identify several scenarios. This document will identify possible legal restrictions and possibilities. This document intends to inform all WPs of the Europeana DSI on the legality of new directions so due considerations can be made at appropriate points.

Task 4.5. Further develop and implement Europeana's impact assessment framework, business plans and strategy

Subtask 4.5.1. Manage the ENUMERATE Observatory

DEN is working on publishing guidelines for analysing and publishing other datasets and sources on the indicator pages, on the development of new indicator pages, creating an ENUMERATE group library on Zotero and on the migration of raw data sets from the data platform to the current observatory. Publishing Guidelines have been created in order to analyse and publish other datasets and sources on the indicator pages.

Subtask 4.5.2. Implement Europeana DSI's Impact Assessment Framework

EF has been working to develop the tools to enable the successful implementation of the Impact Assessment Framework. A Task Force was set up to guide the development of the tools, provide network partners feedback and perform user testing. A playbook has been developed to guide the first phase of undertaking an impact assessment, and will be published in October. An LinkedIn group has been founded to support the communication around the tools and share best practices. The development of the framework is communicated through blogs, a dedicated website, a community bi-monthly newsletter and the LinkedIn group.

To further test the framework a preliminary assessment of EF impact focusing on the Fashion, Photography and Research themes has been undertaken. This allows us to form a baseline for future impact assessments. The results will be published in October 2017.

Subtask 4.5.3. Develop Europeana Business Plan 2017

With support of the Network Association EF prepared the Europeana Business Plan 2017, which was published early February. It contains all plans for Europeana (DSI) in 2017 and is aligned with the revised Strategy 2020 and the Europeana DSI-2 DoA (insofar the project runs during 2017).

Work package 5: Network, events and sustainability

This work package covers the activities of the Europeana Network Association members who give time and expertise voluntarily to achieve the strategy of Europeana and to strengthen the role of cultural heritage in our society. As well as running and contributing to Europeana task forces, members of the Association disseminate the work and objectives of Europeana DSI. In 2016 and 2017, a major objective for the Association is to help ensure the long-term sustainability of Europeana through increasing public awareness and use. This will add to the goal of a strengthened Europeana ecosystem. Sustainability of Europeana comes from use and willingness to fund its existence.

Participants in this work package:

- Europeana Foundation (EF)
- Latvijas Nacionālās bibliotēkas - Latvian National Library (LNB)

Specifically, the work package:

- coordinates the Europeana Network Association with secretarial services for its governance, task forces, working groups, campaigns and regular meetings (task 5.2)
- to 8 Network Task Forces set up to allow Network Association members to take on specific subjects or areas of common interest and complying with Europeana's Strategy 2015-2020 (subtask 5.2.2)
- a new election campaign to appoint new Councillors on the Members Council; we target a 45% participation of the Network Association members (task 5.4.)
- manages and publishes Europeana Pro as the platform that supports all professional knowledge on Europeana DSI, its programme of projects and Network (task 5.3)
- organises and prepares the Europeana Network Association Annual General Meeting (AGM) and other plenary events (task 5.4)
- further aids the sustainability of Europeana by working with the Europeana Foundation Governing Board on its sustainability plan, in collaboration with the MSEG (currently DCHE), the Europeana Network Association members the European Commission and aligned with The Netherlands Presidency Council conclusions. (task 5.5)

Description of work carried out and achievements:

Task 5.1. Manage the work package (EF)

Work package management went according to plan.

Task 5.2. Nurturing and coordinating Europeana Network Association development and contribution (EF)

A lot of work has gone into preparing and executing the AGM and Elections 2016, organisation of 12 Management Board and 3 Members Council meetings, and coordination of Network Association's dedicated Working Groups and Task Forces.

2016 Voting and Members Council Elections

The 28 new (elected and re-elected) Members Council representatives who were elected by the Network Association members in November 2016 are Georgia Angelaki, Erik Buelinckx, Olimpia Curta, Francesca Di Donato, Wim van Dongen, Barbara Fischer, Sanja Halling, Karin Glasemann, Sergiu Gordea, Gill Hamilton, Susan Hazan, George Homs, Lizzy Jongma, Max Kaiser, Julia , Paul Keller, Vera Kriezi, Joke van der Leeuw-Roord, Jef Malliet, Johan Oomen, Lars Rogstad, Cristina Roiu, Merete Sanderhoff, Antje Schmidt, Sorina Stanca, Fred Truyen, Romain Wenz, and Uldis Zarins.

Each of the new elected representatives will be presented monthly via 16 dedicated "Meet your Councillors" blogs planned in 2017. The Councillors who completed their two-year term are René Capovin, Jiří Frank, Kerstin Herlt, Jana Hoffmann, Rolf Kallman, Breandán Knowlton, Aranzazu Lafuente Urién, Olivier Schulbaum, and Sašo Zagoranski.

Out of 1,523 eligible voters, 444 participated in the elections and voting, which represents a lower participation rate than in 2015 (30% in 2016 vs. 50% in 2015) - see Deviations section below for more information. The new Council started working on 1 January and elected the new Management Board (See below).

Elections reporting on Pro:

Blog 1 - May 2016: Never mind those other elections!

Blog 2 - September 2016: Come forward and become a Members Council 2016 candidate

Blog 3 - October 2016: Fabulous turn-out: 48 candidates in the starting blocks for 2016 MC elections

Blog 4 - November 2016: Bravo! Introducing your new Members Council representatives

The Management Board of Europeana Network Association was reappointed in January 2017. The two-year term of the six in the Network Association Management Board came to an end in December 2016. Eight Councillors from the Members Council came forward as Management Board candidates last December 2016. The Management Board elections took place in January 2017 and the new Management Board was announced on 20 January 2017. The new Management Board was elected for two years until 19 January 2019: Max Kaiser, Paul Keller, Joke van der Leeuw - Roord, Johan Oomen, Merete Sanderhoff and Uldis Zarins.

The Management Board elected the Chair: Merete Sanderhoff, the Vice-Chair: Max Kaiser, and the Treasurer: Paul Keller amongst themselves. Through a resolution in the

minutes of the 27 February 2017 meeting in The Hague, the Europeana Governing Board formally re-appointed Max Kaiser, Paul Keller, Joke van der Leeuw - Roord, Johan Oomen, Merete Sanderhoff and Uldis Zarins as Europeana Foundation Governing Board members (directors) for a period of two years from the Board meeting, in which they were appointed, until the Board meeting that is closest to the end of their two year term, i.e. 27 February 2017 to 26 February 2019.

The 1st physical meeting of the Members Council in 2017 took place on 21 and 22 February at the Europeana Office in The Hague. During the meeting, the new Management Board was formally introduced to the Council, and Councillors were presented with the new Europeana strategic positioning, Business Plan 2017, Association budget, and Association Activity Plan 2017. They were also presented with and discussed the Europeana 2017 #AllezCulture campaigns, including the new #AllezLiterature campaign, and the Association's input for the European Year of Cultural Heritage proposed for 2018.

Europeana Vision and Mission were revised in 2016/17 to comply with the revised Europeana Strategy; a Working Group composed of Association Management Board and Foundation Governing Board was put together. The Working Group on Europeana Vision and Association Mission considered that it would make sense to have a common vision statement for both Foundation and Association with different mission statements that detailed the scope and remit of each organization, and therefore how they relate to each other. The group initiated their work in July 2016. They met again in September and submitted their work progress in form of Europeana Vision and Association Mission statement to the Members Council meeting in Riga in November 2016. During their meeting on 25 January 2017 they finalized the statement that is now called "Joint Europeana Aspiration and Europeana Network Association Approach". The Joint Europeana Aspiration was slightly revised, and Europeana Foundation Governing Board and Staff came up with their own Approach in June 2017.

The Members Council then endorsed the joint Aspiration and Network Association Approach during their 1st physical meeting in February, and discussed the best ways to increase the Association engagement and the Council Representation. A large part of the February meeting revolved around the overview and evaluation of the existing and proposed Task Forces and Working Groups and their contribution to 2016 and 2017 Business Plans. The Council went through the voting and approval of 4 Task Force proposals (listed below), and planned to set-up a new Library Working Group.

The 2nd Members Council meeting of the year took place on 6 and 7 July at the National Gallery of Denmark - Statens Museum for Kunst in Copenhagen. The Council welcomed Ms. Catherine Magnant from the Commission's DG EAC, responsible for the organization of the(EYCH), who expressed a strong interest in actively involving ENA in organisation of the EYCH. Ms. Magnant presented Commission's plans to mobilise European citizens

throughout 2018 through a series of projects, events, campaigns and actors. The Councillors gave feedback on the organisation and design of the EYCH and put forward ideas about legacy, campaign format, and how to best approach various target audiences.

The meeting then addressed other topics such as Members Council's engagement, Association budget, Europeana Business plan 2018, Membership Campaign 2017, and governance-related matters. The Council went through the approval process of Task Force proposals and evaluated the final recommendations of recently ended Task Forces. The Councillors were also presented with the current and upcoming Europeana #AllezCulture campaigns. The Council reviewed and formally approved the current Joint Europeana Aspiration (revised in June), together with Association, Europeana Foundation Governing Board and Staff Approach statements. The final process of approvals will take place in September 2017 following the Governing Board meeting.

Subtask 5.2.1. Driving Europeana Network Association secretariat

During the reporting period, the Office organised 12 Management Board meetings. Minutes and actions of those meetings are available on Europeana Pro page.

The 2nd physical meeting of the Members Council in June 2016 in Vienna was organised during the previous reporting period; the reporting blog was published in July 2016.

The 3rd 2016 Members Council physical meeting was held prior to the AGM in Riga (Latvia) on November 7, 2016. The Agenda covered Europeana Strategic repositioning, the Association Vision & Mission, Task Forces and Working Groups submission and CEF Thematic Collections.

The 1st physical meeting of the Members Council in 2017 was organised in The Hague - see above - and reported in form of minutes and blog. The Agenda covered Europeana Strategic repositioning, the Association Vision & Mission, Task Forces and Working Groups submission and CEF Thematic Collections.

The 2nd Members Council meeting was held in Copenhagen in July 2017 - see above - on 5 and 6 July, with the reporting blog published in July and minutes available on Europeana Pro page shortly. The meeting agenda covered preparations of 2018 European Year of Cultural Heritage, Association budget, Business plan 2018, Membership Campaign 2017, Association's engagement and governance, Task Forces and Working Groups and Europeana campaigns.

Subtask 5.2.2. Coordinating task forces and working groups

Task Forces tackle issues and challenges affecting the digital heritage field. They are set-up to allow our members (with the aid and supervision of the Members Council) to take on specific subjects or areas of common interest to the digital heritage field and

Europeana 2020 strategic update. They run for a limited period of around six to nine months and result in the delivery of a set of recommendations on their subject.

Working Groups on the other hand are set-up to address ongoing activities and issues of continuing relevance within the Europeana Network. There is no limited timeframe for Working Groups; they can remain in existence whilst their purpose is required. Working Groups are proposed and led by a member of the Members Council.

Task Forces and Working Groups overview are being kept up-to-date. Several Working Groups have been very active during the reporting period.

The Europeana Pro Working Group led by Aubéry Escande has been consulted for and involved in preparations and launch of the new Pro website in September 2017.

The Governance Working Group/Voting & Elections Committee led by Joke van der Leeuw-Roord has prepared the Voting requirements for the elections 2016. Those were communicated in September and October through the various dedicated channels (network newsletter, specific mail chimp campaigns, Europeana Pro blogs, LinkedIn and Twitter). Since the beginning of 2017, the Working Group has addressed various governance-related issues in the Association Statutes, Bylaws and Procedures, reviewed the new Terms of Reference for Councillors, approved the 2017 Membership Campaign, and has started planning 2017 elections.

The 2016 AGM Working Group led by Uldis Zarins and Johan Oomen was very active in preparing the AGM Agenda and identifying the appropriate speakers. Here again, the WG outcomes were further communicated in September and October through various dedicated channels (network newsletter, specific mail chimp campaigns, Europeana Pro blogs, LinkedIn and Twitter).

EF coordinated the work processed by the above working groups and set-up the communications plan for both Elections 2016 and AGM 2016, and is planning to do the same in 2017.

The Copyright Working Group lead by Paul Keller has been active in ongoing copyright advocacy activities with EU institution and published the Rightsstatements.org factsheet in July 2016. The WG published several more blogs including: Publishing a joint position with libraries on copyright reform in July 2016, Copyright reform: a first look at the Commission's plans for cultural heritage institutions in September 2016 and A better solution to making out of commerce works available online in September 2016, and Copyright reform: the IMCO committee accepts changes advocated by Europeana in June 2017.

In 2016, the #AllezCulture Working Group published a summary of the work done through the following blog. Outcomes were impressive; people from 37 countries around the world have been sharing their heroines and heroes of cultural heritage, using the phrase 'I am @Europeanaeu' and the hashtag #AllezCulture. 2,500 tweets were

sent out, reaching almost 1,000,000 people. In 2017, the focus has been on two active campaigns - #AllezLiterature running from February to July 2017, and #AllezDemocracy, starting in September 2017. The #AllezLiterature campaign focused on libraries and archives highlighting textual resources on Europeana, with a special focus on love letters (on the occasion of Valentine's Day), poems (World Poetry Day), and books that have marked literature across Europe (World Book Day). The campaign invited users to interact with the content on social media, and received an encouraging response from users: 354 tweets from 202 contributors reaching over 600,000 people on Twitter; and 596,413 people reached on Facebook, with 23,263 users engaging with the content. Next major #AllezCulture campaigns will be the Migration campaign and EYCH 2018 launched at the AGM 2017 and implemented in 2018.

In the light of dissolution of TEL an idea to establish a permanent library working group under the Europeana Network Association was discussed first within TEL community and then during the meeting of Europeana Network Association Members Council in Riga on 7 November 2016. The written proposal to establish the Library Working Group was voted on and approved during the 1st Members Council meeting in January 2017. The Working Group started its work in spring by forming its group membership and reaching out to Network members to create a Europeana community for the library sector.

There are currently 5 active and 3 recently ended Task Forces.

Task Forces that were submitted to the Members Council for approval in November 2016 and approved during the Members Council physical meeting in February 2017 are:

- Benchmarking Europeana
- Preparing Europeana for IIIF involvement
- Advanced documentation of 3D Digital Assets
- Network Participation Framework
- Impact Assessment
- Europeana Resource Citation and Object Identity Standardization
- Europeana Local Communities
- Campaign "Migration" in Germany and Austria

The Council rejected the proposals for Campaign "Migration" in Germany and Austria and Europeana Local Communities, and approved the rest of the proposals. Europeana Local Communities Task Force proposal was re-submitted and evaluated at the following Council meeting (see below). The Campaign "Migration" in Germany and Austria proposal was then integrated into the #AllezCulture Working Group and turned into a successful initiative in relation to the #AllezCulture campaign.

The Audiovisual Media in Europeana TF that was running since May 2016 ended in February 2017 and delivered its recommendations, which were evaluated during the physical meetings of the Members Council in February and presented again in July 2017. Two more Task Forces recently ended and are in process of final review: TF on Benchmarking Europeana, and Preparing Europeana for IIIF involvement TF. Their final reports were submitted and evaluated by the Council members.

Task Force Terms of Reference were updated and approved by the 2nd Members Council meeting in Copenhagen in July 2017. The new ToR provide a clearer selection, evaluation and approval process and communication rules towards the Association, taking into consideration the timing and scope of the future procurement service funding. The Council then voted on 2 newly proposed Task Forces: the Council rejected the re-submitted proposal for Europeana Local Communities TF, and approved the proposal of Creation and Governance of EDM mappings, profiles and extensions TF, initiated by the EF.

The running Task Forces that are approaching their mid-term review are Advanced documentation of 3D Digital Assets, Network Participation Framework, and Impact Assessment TF. The Europeana Resource Citation and Object Identity Standardization, whose start has been postponed because of a missing Europeana Office representative, will be starting its work by the end of August/September 2017.

Subtask 5.2.3. Coordinating Members Council campaigns

Most of the Members Council campaigns during the reporting period focused on AGM and Elections. Here are the main published blogs:

- Call for Councillors candidacy: Come forward and become a Members Council 2016 candidate
- Call for AGM participation and programme: "Show us what you've got" – The AGM Programme unveiled

More campaigns will take place in 2017 and will comply with Europeana Business Plan 2017. Those are subject to changes but have been encapsulated in Europeana Network Association Activity Plan 2017.

The #AllezCulture Working Group supports the currently ongoing #AllezLiterature campaign driven by EF.

It is worth adding that the Members Council was heavily involved in the set-up and development Europeana Network Association's response to all the sections of the EC Draft Europeana Evaluation Roadmap and was submitted on 18 January. The evaluation of Europeana by independent experts will be presented to the EU Council by October 2017, providing clear orientations for the mid and long term development of Europeana.

Task 5.3. Managing and publishing Europeana Pro website

Europeana Pro site was instrumental in the dissemination efforts of the Association. To better monitor Pro development, a Europeana Pro Working Group was set-up chaired by Aubéry Escande. The purpose of the WG is to identify business needs and priorities with relevant stakeholders and communities.

The Association uses various tools for communication among its members (Basecamp) but Europeana Pro is chief among these. This is the platform for all information and knowledge exchange for Europeana's network of cultural heritage professionals, technology specialists and projects.

- Europeana Pro Blogs feature specific highlights of Europeana Network Association activities, Task Force recommendations, Working Group deliverables and all kinds of initiatives of network members and campaigns. Blog posts are relayed through various other communication channels. We keep a very close monitoring workflow on Europeana Pro Blog publication to avoid bottlenecks and ensure content quality; the publication overview is kept in our MS5.3 - Europeana Pro blogs plan
- A monthly Network Update is sent to all Association members. It includes the latest developments within the professional community and is endorsed by the Members Council with each Councillor taking their turn as Editor-in-Chief. Specific campaigns (elections, General Assembly, etc.) were also sent out through the same channels (Mail chimp, Zoho CRM). All those Network Updates are being archived on Europeana Pro.
- The Europeana LinkedIn Group provides an easy way for Network Association members and others to interact with each other and with the Europeana Foundation. It is open to anyone interested in Europeana; approval is granted upon request.

We aim to revamp Europeana Pro in Q3 2017. The platform will encompass Europeana Research, Europeana Lab and Europeana Pro under the same umbrella. The new platform was designed following the input of survey feedback and Europeana Pro Working Group's input. The soft launch of the new platform is scheduled in September 2017.

Task 5.4 Coordinating and facilitating Network & Community building events

Association members come together once a year, for the Europeana Network Association's Annual General Meeting (AGM), which comprises the annual meeting of the General Assembly.

The 2016 AGM, Show us what you got, took place in Riga (National Library of Latvia) on 8-9 November 2016 (201 registered participants, 117 paying participants). Speakers included Mia Ridge (British Library), Lora Aroyo (VU University Amsterdam), Markus

Kröztsch (Technical University Dresden), Effie Kapsalis (Smithsonian Institute Archives), Dan Cohen (DPLA), Federico Milani (European Commission), Joan Cobb (Getty Research Institute), Shawn Averkamp (NYPL Labs) and several representatives of Europeana Foundation. This year's AGM also featured the first Europeana Transcribathon (WP3), and the EMA awards ceremony. 21 Ignite Talks, 9 Chef's Tables and 2 panel sessions (IPR and "What if we had to do it all over again" with Europeana, DPLA, BL, DDB, NYPL Labs and Getty Institute) complemented the programme. All presentations are available on Slideshare.

At the 2016 meeting of the General Assembly, 28 new Councillors were elected. Association Members were also asked to vote on the approval of amendments to the Association's statutes, the 2015-2016 Annual Report, the 2015 Financial Report, the 2017 Association Activity Plan (MS5.1 - Network, events and sustainability activity plan update) and the 2017 Provisional Budget. The voting and elections process took place from 8 until 14 November 2016, and was overseen by a Voting Committee consisting of Rolf Källman (chair), Laura Carletti and Emmanuelle Bermès.

The AGM followed a Comms Plan (MS5.4 AGM Brief and communication plan); all calls-to-action were relayed through Twitter @EuropeanaEU and LinkedIn; 89 accounts produced 211 tweets that reached 128,266 people. You can reread the tweets #AGM2016, #AllezCulture. The 2017 AGM event will be held in December 2017 in Milan, Italy (see below Task 5.4.1.).

The next community building event will be the Europeana Aggregator Forum taking place on 2 and 3 November 2017 at the Croatian State Archive in Zagreb, Croatia. The Ministry of Culture has proposed to focus on the evaluation of the Croatian National Aggregator; and clarify the process of being an aggregator to Europeana, Data mapping and Data reuse.

Elections

444 Association members participated in the elections (30%) and appointed the new Councillors. They also approved the 8 submitted papers. The full elections results were made available on November 21, 2016. The 2016 elected representatives complement the Councillors elected in 2015 who still have a year term to fulfil: Vladimir Alexiev, Stephan Bartholmei, Emmanuelle Bermes, Laura Carletti, Reyes Carrasco Garrido, Marco De Niet, Ellen Euler, and Marcin Werla.

René Capovin, Jiří Frank, Kerstin Herlt, Jana Hoffmann, Rolf Källman, Breandán Knowlton, Aranzazu Lafuente Urién, Olivier Schulbaum, and Saso Zagoranski completed their two-year term and did not come forward for this year's elections. This is mainly due to commitment requirements of the MC position. Breandán Knowlton was not re-elected.

The #EuropeanaElects hashtag was used 277 times, reaching a total audience of 304,805 people. The 2016 election campaign followed a Comms Plan (MS5.2 Elections campaign communication plan M9). All calls-to-action were relayed through Twitter

@EuropeanaEU and LinkedIn. The General Assembly 2016 minutes were published on November 18, 2016.

This KPI percentage of voters in Europeana Network MC elections of 50% was not met. We registered a 30% participation level. Lesson Learnt is currently being compiled; correcting measure will be implemented in 2017 to meet the 2015 engagement level (50%).

There is a general consensus among Councillors that the elections campaign needs a more active input from elected representatives and candidates rather than EF push; Councillors communication with their own community still lacks efficient mechanisms and tools, which we will address within the Network 2017 Activity Plan. It is also worth noting that we recorded a 25% Association members growth between 2015 (1,200) and 2016 (+1,500) despite very close monitoring both from the office and the Management Board; this increase in numbers also influences the challenging elections results in 2016 where engagement is more deluded.

The elections 2017 will start with an elections campaign on 20 September. The Network members will have time until 1 November to confirm their membership and thereby to actively participate in the elections. The deadline for candidacy submissions and elections campaign will be 20 November and the candidates will be announced on 26 November. The voting period will start on 6 December during the AGM event with a #EuropeanaElects hashtag and will run until 14 December. The results of the elections will officially be announced on 17/18 December 2017.

Subtask 5.4.1. Prepare and organise the Annual General Meeting 2016 and 2017

During the reporting period LNB has been working with EF and ENA (AGM Programme Committee) to prepare for the Annual General Meeting of Europeana Network Association. Virtual meetings were taking place on regular basis to discuss AGM agenda and the facilities and technical support necessary to accommodate it. LNB has secured the availability of hotels for the guests of AGM, secured the venue for the social event, coordinated with providers of catering services, and prepared information package for guests of the event. Before and during the event LNB supported the event with local promotional activities. The AGM started on Tuesday 8 November and finished on Wednesday 9 November and the pre-conference meetings took place on Monday 7 November.

The AGM brings together representatives of the Europeana Network Association to inspire each other, transfer knowledge, and make recommendations for the future of Europeana. The 2017 Europeana AGM will be held on 6 December at the Leonardo da Vinci's Science and Technology Museum in Milan, Italy. Prior to the AGM, on 5 December the Members Council will hold its 3rd meeting of the year. The AGM will be followed by the European Commission cultural event - European Culture Forum - on 7 and 8

December. This year's AGM will therefore be an opportunity to position Europeana as a partner in the 2018 European Year of Cultural Heritage.

Subtask 5.4.2. Prepare Europeana Plenary event

The Europeana Plenary is an important event for Europeana and its Network which occurs every other year. Besides the fact that 2018 will be the Year of European Cultural Heritage, 2018 will also mark the 10th anniversary of Europeana.

The Europeana Plenary will be held on 15 and 16 May 2018 at the SS Rotterdam in Rotterdam, the Netherlands. Pre-conference meetings will be held on 14 may 2018. The ambition is to host 350 cultural heritage professionals including various Europeana Network Association communities such as EuropeanaTech and R&D, Europeana Research or Europeana IPR. There will be 4 main areas of special interest: engagement, value, protection and innovation.

Subtask 5.4.3. Organise EU Presidency parallel meetings or events and publish results

During The Netherlands' Presidency of the EU, EF and the KB, National Library of the Netherlands organised an event 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" was organised in the premises of the KB, National Library of the Netherlands in The Hague on 25 and 26 April 2016. As we move away from the pilot stage of Europeana Research, we developed an updated and streamlined set of recommendations for action:

- implementing more digitisation of cultural heritage,
- enforcing copyright reform to make best use of the public investment in digitisation and
- advocacy on benefits of Digital Humanities Research for Society.

The recommendations are now available on the Europeana for research visual report that we have circulated from October 2016.

Unfortunately, organising a parallel meeting during the Slovak Presidency was not possible due to time constraints at the Ministry of Culture of the Slovak Republic.

On 23 and 24 May 2017, together with the Ministry of Education & Employment of Malta and National Archives we organized an event entitled "Migration and Culture: how can our past educate our present". The event was an opportunity to bridge European Ministries of Culture, Ministries of Education and CHIs with a focus on migration and raise awareness about what Europeana does in culture and education. Our objective was to revise the 'Europeana for Education Policy Recommendations' designed in May 2015, including 'Recommendation II. Prioritise the provision of 'Fit for Education and Learning' content by cultural heritage institutions and ministries' and prepare a new set of recommendations to better fit the current "migration in education" thematic.

The event gathered 40 participants from the Expert Group on Digital Cultural Heritage and Europeana and European Ministries of Culture and Education. A workshop was led

to identify the needs of educators as well as the implementation requirements for stakeholders (policymakers, CHIs and Europeana).

Recommendations and stakeholders actions are currently being tested among event participants; this process will allow us to tweak our final visual report delivery scheduled in September.

The next event will be part of the Estonian Presidency and will be held on 4 and 5 October 2017 in Tallinn, Estonia. The topic for this event will be "the impact framework tool" and how any library, museum or archive can assess impact and make use of the tool to take informed strategic decisions. Participants from the new DCHE group together with Education and Culture policy makers will be invited to participate in this one and a half day strategy meeting at The Health Museum In Tallinn.

Task 5.5. Broaden Europeana's sustainability structure

Following the Council Conclusions publication in June 2016, Paul Keller - Treasurer of Europeana Network Association - and Jill Cousins - Executive Director of Europeana Foundation - published 2 blogs detailing the implications for Europeana.

- Good news (and some homework) for Europeana
- Owning our position

We also launched a Member States, in accordance with Council Conclusions of May 2016 dedicated space on Europeana Pro that features Country Reports and all relevant documentation. We also publish a Quarterly Member States Newsletter that sheds light on Europeana news of special interest to Member States. Each quarter the newsletter will be pitched by one of the Member States to get them actively engaged. The 1st issue was launched on 12 April.

Work package 6: Development

The goal of this work package is to maintain and develop products to support the business in providing services for our data partners, end-users, re-users, researchers, the Europeana Association Network members and other professionals in the European Cultural heritage sector. Its development scope encompasses both short-term needs as well as more experimental developments that may not result in working product within the timeframe of Europeana DSI-2.

Participants in this work package:

- Europeana Foundation (EF)
- Netherlands Institute for Sound and Vision (NISV)
- Österreichische Nationalbibliothek (ONB)
- Instituto de Engenharia de Sistemas e Computadores Investigação e Desenvolvimento em Lisboa (INESC-ID)
- University of Sheffield (USFD)
- AIT Austrian Institute of Technology (AIT)
- Instytut Chemii Bioorganicznej PAN - Poznań Supercomputing and Networking Center (PSNC)
- Humboldt-Universität zu Berlin (HUMBOLDT)
- Semantika d.o.o. (SEMANTIKA)

Specifically, the work package:

- Designs and develops a new and improved set of data ingestion workflows, services and tools (task 6.2)
- Incrementally improves and extends public APIs for search, retrieval and user contributions (task 6.3)
- Improves and extends the Europeana Collections platform and the user experience of the sites (general Collections, thematic collections) built on it (task 6.4)
- Maintains, develops and consolidates the community sites Pro, Labs and Research (task 6.5)
- Maintains and improves the Europeana Statistics Dashboard (task 6.6)
- Coordinates the EuropeanaTech community and activities (task 6.7)
- Improves the Europeana search engine and better monitors the quality of the metadata it builds upon (task 6.8)
- Improves and extends the data interoperability framework and EDM (task 6.9)
- Innovates data publication on Europeana (task 6.10)

Description of work carried out and achievements:

Task 6.1 Manage the work package

In terms of design and development methodology Europeana has adopted a Scrum + User Centred Design process. This means that user research and evaluation is continually performed in parallel with development (user research 1-2 sprints ahead, evaluation 1-2 sprints behind). Software development is iterative and incremental with new major services or features typically passing through prototyping (paper, HTML, working), alpha (internal, external), and beta (invitation, open) stages before entering versioned production.

At any point in these stages and evaluations the direction of development may change somewhat, pivot radically, or even stop. The Work Package description thus represent the plans as of March 2016 and is subject to change.

Development and software maintenance of all components of the data platform (ingestion, storage, indexing, APIs, Collections) are developed primarily in-house and/or by partners. Development of Pro, Labs, and Research are fully outsourced as Europeana wants to focus its in-house development team fully on the platform and services for data aggregation and distribution, not on off the shelf CMS-development.

Subtask 6.1.1. Improve our Product Development and Design methodologies

We started exploring Design Thinking as a practice to follow. When we deliver a product we first outline and decide on the minimal viable product (MVP) we will develop. What functionalities will satisfy the core business need? We first deliver an MVP and then validate if the MVP satisfies the customer need that it was meant to solve.

Subtask 6.1.2: Improve our Software Development methodologies and practices

We tightened up our Scrum practices bringing our implementation closer to the traditional methodology. We now follow all rituals and introduced a refinement session before the planning session allowing our team to be responsible for how the tickets are executed. This is a more collaborative approach that empowers the team and makes them accountable for the velocity of the sprint.

Task 6.2: Design and develop a new and improved set of data processing services

Subtask 6.2.1: Requirements analyses and user research

Requirements analyses and user research performed with users from Europeana and TEL and potential future institutional users of the new ingestions tools and services.

Subtask 6.2.2: Technical design and development of data processing services

This task will develop data processing services for use by Europeana. The data processing services will be designed to maximise the quality, consistency and richness of ingested metadata.

To improve the experience of our data partners our new process services will be equipped with a dashboard giving them insight into the status (in the publication workflow) and quality of their datasets. The same dashboard will empower Europeana operations officers to process and perform quality assurance on datasets.

The precise list of services to be developed cannot be definitively defined as they are developed in response to continual user research and analyses.

Subtask 6.2.3 Improve and adapt LoCloud Collections (PSNC)

The goal of this subtask is to further develop the existing LoCloud Collections service into a generic collections and exhibitions management service for very small/local data partners (e.g. local museums, libraries and history societies).

PSNC has outlined a product release roadmap for LoCloud Collections. Market and user research has been initiated, interviewing both existing customers and potential customers. LoCloud Collections first version EDM output is now in review by the Europeana Data Partner Services team (WP1), further steps will be taken in relation to the outcomes of the analysis of the ingestion infrastructure. Upgrade to Omeka 2.5 initiated and nearly completed.

Subtask 6.2.4: Maintenance of existing data ingestion tools and services

To maintain current ingestion services the existing ingestion tools and services will be maintained. No investment in new or improved functionalities was made to the existing tools as they are slated for deprecation.

Task 6.3. Incrementally improves and extends public APIs for search, retrieval and user contributions

Subtask 6.3.1. Develop, maintain and integrate existing APIs

During the reporting period, several notable improvements were made to the Europeana REST API, namely: 1) added support for querying for objects in Europeana that have IIIF compliant web resources and retrieve them in such a way that clients can consume them; 2) added support for querying and retrieving Rightsstatements.org based facet values; 3) a new API console was published based on Swagger; 4) support for SSL was added; 4) storage for thumbnails and sitemap was improved.

Release notes for the Europeana REST-API for search and retrieval are available on Github.

Subtask 6.3.2. Improve and extend the coverage of the Entity API

An alpha version of the Entity API has been developed and is publicly available. It has been integrated to Europeana Collections and in Pelagios.

With regards to extending the coverage and as reported in Task 6.8 of this report, the EF has produced a curation strategy for the Entity Collection, guiding the sourcing of more external data to include in the Collection which is externally exposed via the Entity API. From this curation plan, two new thematic vocabularies were added 1) a music genres, forms and composition vocabulary obtained from Wikidata; and 2) the Europeana Photography Multilingual Vocabulary[12] developed by the Photoconsortium[13].

Subtask 6.3.3. Improve the Annotations API

The Annotations API has been made available as a public alpha and is now being used in the production versions of Europeana Collections and Europeana Radio. In the former to display annotations contributed by users in Wikidata, Wikimedia Commons, and Europeana Sounds and in the latter in allowing users to add genre tags to the played tracks.

During the reporting period, improvements were made at the functional level to the API which include: 1) improved search capabilities and search profiles for annotations; 2) added support for relating transcriptions from the Europeana 1914-18 to Collections items; 3) added support for asynchronous updates of large amounts of annotations primarily aiming at client annotation tools such as Pundit annotation tool (a partner in Europeana Sounds project).

With both the Europeana Collections and Radio now relying on the Annotations API, a significant focus was taken to improve it as a service by further stabilizing the production environment, including regular monitoring & tests, and further technical debt improvements and bug fixes.

Finally, all Annotations API release notes are available in the Europeana GitHub. Note that development of the Annotations API was until end of January 2017 formally part of the Europeana Sounds project.

Subtask 6.3.4. Develop image discovery services

As reported in D6.1, the development of the image discovery services started with the selection of appropriate content to be served through the image similarity API. A first batch of high-quality imagery that aligns with the Art, Fashion and Music themes have been selected and harvested for inclusion in the service (c.a. 120 000 images). This

[12] http://www.digitalmeetsculture.net/article/europeanaphotography-multilingual-vocabulary-released-and-disseminated/
[13] http://photoconsortium.net/

selection and harvest is based on the Europeana Search API and its media search capabilities.

This was followed by the technical and functional evaluation of the existing state of the art solutions. In particular, we were interested in assessing the search accuracy of the alternative approaches, but also in the maturity and scalability of implementations. Within the scope of this work a public demonstrator was built and additionally, an enhanced graphical user interface was implemented to facilitate the user evaluation. The results of this evaluation are presented within the deliverable document, and the test version of the similarity API was deployed to Europeana test environment. The API uses the LIRE Solr plugin which aligns well with the existing system architecture, by offering a Solr based implementation.

Subtask 6.3.5. Develop a user content contribution service

An architecture proposal for a UGC solution was composed containing both a complete and an MVP approach. A decision is yet to be taken as to whether and which proposal we go forward with.

Subtask 6.3.6. Improve the Newspapers API

No progress has been made on the development of the Newspaper API beyond the initial design discussion and principal decisions (like e.g. that the Newspapers API will aim for full IIIF compliancy) given the Collections decision to push the Newspapers thematic collection to DSI3.

Subtask 6.3.7. Improve APIs management

During the reporting period, a new centralized service has been developed for the API key management and authorization to be used by all Europeana APIs. This service will help gain better insight and control on the use of all Europeana APIs by client applications beyond the main API (Search). Its integration will happen within DSI3 and will start with the more recent APIs such as Annotations and Entity APIs in order to assess its performance, and act as a benchmark for its full integration. In the meantime, logging and regular reports of active API key statistics for the Search API have been put in place and are now used to assess KPI 3.1.

Besides the development of this service, the following improvements were made to all APIs: 1) the software builds automatically test and analyse projects using Jenkins which now also include SonarQube for code quality inspection; 2) Runscope is used for functional API testing, in particular, for regression and acceptance testing, regular/daily testing and upon deployment; 3) NewRelic was also used for performance monitoring. Finally, documentation regarding dev-ops was made available in Google Docs.

Task 6.4. Improve and extend the Europeana Collections platform (EF, AIT)

Subtask 6.4.1. UX research, design and evaluation (EF)

Based on business needs defined by WP2 we performed user research, user centred design and user evaluation of products, components and features.

During the reporting period, the following aims were fulfilled with designs:

- A visual design for the new Fashion collection to showcase popular content
- New item page designed to reduce organic search bounce rate
- Entity page designed to add context to results and improve SEO
- Autosuggest design to aid users in finding valuable results

Evaluations of complex designs were carried out through internal workshops.

Subtask 6.4.2. Maintain and develop Europeana Collections components and features (EF)

Under this task, the Europeana Music, Europeana Art and Europeana Fashion Collections were improved and extended.

Prioritised features for development were:

- Improved and extended browsing via entities (persons, places, topics)
- Auto Suggestions in search based on entities (persons, places, topics)
- Development of a new landing page design to showcase visual content (Fashion)
- Integration of UGC platform into collections for 1914-1918 microsite via an iFrame
- Continuous optimisations of code and platforms to improve uptime and speed

Together these planned features contribute to a Europeana Collections that is better balanced between search and browse, items and context, and that will provide the means for users and partners to contextualise content and for users to assist in improving the content and its discoverability.

All features were developed on the APIs maintained and developed in T6.3.

Subtask 6.4.3. Develop custom features for three new thematic collections (EF)

Based on the Europeana Collections platform two more thematic collections, Newspapers and Photography, were developed and the existing Europeana 1914-1918 microsite was migrated and consolidated into the platform.

Task 6.5. Consolidate and incrementally improve the community sites Europeana Pro, Europeana Labs and Europeana Research (EF)

This year we redesigned and redeveloped our organisational website. The aim of this was to house all our services under one roof and show our customers all the activities Europeana does for the cultural heritage sector. On the new pro.europeana.eu one can see what Europeana offers to all its target markets and how they can benefit from Europeana.

Subtask 6.5.1. Maintain and perform minor feature developments of the Pro, Labs and Research sites and underlying softwares

Since we designed and developed a new website this year the current sites were only maintained. We did not invest any development resources here as the sites will be deprecated and the URLs redirected to the new site.

Subtask 6.5.2. Begin the implementation of COPE across Pro, Labs and Research

The new pro.europeana.eu is ready and will be launched begin September. It will replace the current pro.europeana.eu, labs.europeana.eu and research.europeana.eu. It will have all the functionalities the current websites have including additional functionalities that give the editors more freedom in how to present their content.

Task 6.6. Improve and maintain the Europeana Statistics Dashboard (EF)

A new beta version of the Statistics Dashboard was developed and released. This version did not add any new features, instead it was focused on improving the underlying code quality of the software.

Developing the new beta version proved costly in effort. After having developed this new version and reviewing the total product development commitments we took the decision to deprecate the Statistics Dashboard and find a lower development cost/effort alternative to reporting Europeana usage statistics. This was the only way to safeguard development of functionality in Europeana Collections of greater value to end-users.

Usage reports and high-level content reports will instead be published regularly on pro.europeana.eu.

Task 6.7 Coordinate the EuropeanaTech community and activities

As reported in D6.2, NISV and EF have continued coordinating the activities of the EuropeanaTech community, reporting and engaging on Twitter, Europeana Pro, the community mailing list and during the Europeana AGM in Riga. The EuropeanaTech mailing list now features 962 subscribers, while the EuropeanaTech twitter account has now 3.000 followers. NISV has published 2 issues of the EuropeanaTech Insight journal and 4 newsletters. EF and NISV have published 8 special EuropeanaTech blog posts on Europeana Pro. NISV has begun revamping the Who's Using What? Developer Spotlight blog column. These allow for appropriate dissemination of the technical R&D work done

by Europeana DSI-2 partners within the wider Europeana Network, as reported for tasks 6.8 and 6.9, but also to share information about other relevant efforts (e.g. LODLAM, IIIF)

NISV and EF have adapted existing EuropeanaTech material into the new version of Europeana Pro.

NISV began research for a FLOSS White Paper (incl. a survey that will be launched in DSI3) and prepared FLOSS engagement for the IIIF Event in October 2016.

Finally, as reported in the dissemination part of this report, the EuropeanaTech umbrella activity triggered and/or supported partners of tasks 6.7-6.9 to present EuropeanaTech and their work at 19 conferences, workshops and other kind of seminars, deliver 6 non-blog publications and get 5 additional papers/presentations accepted, which will happen during DSI-3.

Task 6.8. Improve (multilingual) search and metadata quality

As reported in D6.3, we worked on **improving search** on many fronts. Several options have been delayed because of external dependencies. We managed to redistribute efforts and deliver on significant contributions: EF has rationalized our Solr schema and continued efforts on deploying the Entity Collection in search, enhancing the coverage of the collection and devising a ranking algorithm that can be used in auto-suggest feature to be integrated in the Europeana Collections portal. EF has improved logging of user actions on Europeana Collections to support machine-learning of field weightings for future enhancement of ranking as well as evaluation of search in general.

UoS has reviewed evaluation literature and Europeana's previous work in order to formulate and plan search evaluation activities, especially focusing on identifying and understand the users and their needs when using the Europeana search system: types of queries, reformulations, etc. **UoS** (with help from EF) has designed a framework for evaluating the various Europeana components that are part of the user's search experience. Novel user research has also been done alongside this design work: we analysed query logs, **UoS** and **EF** have collaborated on running an online survey of Europeana.eu users, which was a success with 240 answers (which was accepted for publication at the TPDL 2017), and UoS has run a task-based user evaluation. Finally, EF has carried out the evaluation of various methods for object recommendations based on metadata with Facebook's chatbot.

As reported in D6.4, AIT has applied the Peripleo time-and-place search interface with selected Europeana datasets. Some extra development was needed, notably for connecting to the Entity Collection. This new kind of exploration can bring benefit, though it is probably best to keep it to focused datasets and audiences (e.g. Europeana Research).

As reported in D6.4, our work on **measuring and enhancing multilingual performance** relates to many Europeana DSI-2 efforts, such as the Entity Collection, the Data Quality Committee (see below) or the abovementioned user evaluations. Humboldt has provided input on these, and produced a framework for measuring "multilingual saturation" across the various parts of the Europeana services where multilingual issues show up. In particular, a score for measuring multilinguality in metadata has been implemented (in collaboration with Péter Király, Göttingen eResearch Alliance), as part of

the completeness measures designed by the Data Quality Committee; the first iteration of this is now tested and will be adapted based on the feedback received. D6.4 also reports on the contribution made by the work on the Entity Collection for enhancing multilinguality of Europeana's metadata and system.

INESC-ID has produced a normalization plug-in for the language metadata, which has been (successfully) evaluated by HUB and EF and is to be later integrated in the Europeana ingestion system Metis. HUB also started a multilingual analysis of queries (top 500) made on the Europeana portal.

Finally, EF has liaised with CEF AT (eTranslation building block DSI), communicating what relevant requirements Europeana could have for the language technology this DSI is developing. Participants to discussions validated our approach of focusing on enhancing and exploiting the Entity Collection for alleviating Europeana's multilingual issues.

Our work to **facilitate efforts for enhancing data quality** has focused on the coordination of the Data Quality Committee by EF, publishing the report of its first year and continuing the work on user scenarios, (multilingual) completeness measures, metadata problem patterns and the checking thereof.

EF also produced a curation strategy for the Entity Collection, guiding the sourcing of more external data to include in the Collection.

INESC-ID participated in discussions with EF on using natural language processing tools for data enhancement and identifying requirements regarding data normalization (leading to implementation of the abovementioned plug-in).

Task 6.9. Innovate data interoperability and exchange for Europeana

Regarding **EDM development**, EF has refreshed the EDM roadmap with the objectives related to Europeana's Business Plan 2017. As reported in M6.7, work has continued on EDM with regards to annotations, datasets and organizations, rights (for rightsstatements.org), supporting services for IIIF (see below) and new ways for validating EDM metadata. EF has implemented updates of the core EDM Schema, changing the occurrence constraints of several elements and supporting IIIF. We continue our efforts on positioning EDM as a standard for CH metadata, publishing EDM case studies (see dissemination report) and preparing a EuropeanaTech Task Force on EDM Governance, to be started in Europeana DSI-3. We have been involved in the W3C Data on the Web Best Practices[14], notably showcasing best practices for building vocabularies like EDM.

In Europeana DSI-2 there has been a strong drive to **explore and promote IIIF** in the Europeana environment. EF has made its metadata ingestion process as well as the Europeana Collections portal compatible with IIIF. ONB has launched the Task Force "Preparing Europeana for IIIF involvement", which has published its recommendations. Task force members interacted with the IIIF Community as well as the Europeana Network, especially by launching a survey for providers on IIIF and content publication technologies (67 answers). EF has hosted the 2016 IIIF Technical Working Group and has been elected into the IIIF Executive Committee

[14] https://www.w3.org/TR/dwbp/

EF also co-chairs a IIIF technical specification group on discovery, which is directly relevant to our work on **Linked Data and alternative data acquisition mechanisms**, and in which INESC-ID participates. After a preliminary investigation of technologies relevant for innovating Europeana's metadata aggregation channels, INESC-ID has published several case studies based on experiments with collections from selected providers harvested via these technologies (notably Sitemaps and IIIF). INESC-IF has implemented a client of the Linked Data Notifications protocol. INESC-ID and EF have started research on harvesting Schema.org data sources, notably the one produced by the project Linked Data for Special Collections.

Finally, EF has migrated from Ontotext's proprietary hosting of Europeana’s triple store to an open source installation based on Virtuoso, accessible via data.europeana.eu.

Work package 7: Technical infrastructure

This work package is responsible for the continuous maintenance and development of the technical infrastructure of the Europeana DSI. The Europeana DSI is becoming a full-fledged technology and business platform offering online products and services to various user communities. In that light, the overall goal of this work package is to design and develop new and adjust existing components of the platform to support this change as well as maintaining existing systems.

Participants in this work package:

- Europeana Foundation (EF)
- Poznan Supercomputing and Networking Center (PSNC)

Specifically, the work package is to:

- Ensure availability and stability of all Europeana systems and products (task 7.2)
- Harmonise, document and communicate the system architecture of Europeana's platform (task 7.3)
- Streamline operations of the Europeana DSI platform (task 7.4)
- Support development teams with DevOps services (task 7.5)
- Develop the infrastructure data layer (task 7.6)

Description of work carried out and achievements:

Task 7.1. Manage the work package

All the tasks within the WP is going as expected with no considerable deviations. The contracts are monitored and when action necessary to renew or check for alternatives are being performed.

A complete list of Europeana server and configurations are made available in a spreadsheet.

A complete list of Europeana server and configurations are made available in this report. During the second report period report has been used to keep the list of servers up to date.

Task 7.2. Maintain all Europeana systems and products to ensure that they are available and stable

Maintaining the subcontracts and making sure that all systems are available and stable is the main objective here. Maintaining the subcontracts and follow up when needed is ongoing process. When and where applicable an attempt is made to verify the contract value and if possible enforce a discount/better price for **EF**, which is now the case for subcontractor Neo Technologies providing Neo4J High Availability support, making sure EF data is never "lost". Here below are some statistics over Availability and response time of Services during this report.

In addition, a new security policy has been applied which manages access to backend systems more securely. To achieve this, servers has been armed with firewalls, which in-turn only accepts connection from VPN and the Europeana front end systems.

On 29 September 2016 API search functionality went down due to out of memory problem of Neo4J, which in turn is responsible of the hierarchies for our graph database. Since it happened in the middle of the night we were unavailable for 6 hours.

The overall uptime is conform the KPI. Here below are some statistics over Availability and response time of Services during this report.

Maintenance of test and production environments of eCloud services platform located in **PSNC** data centre inclusive operations support has been provided by **PSNC** cloud infrastructure team.

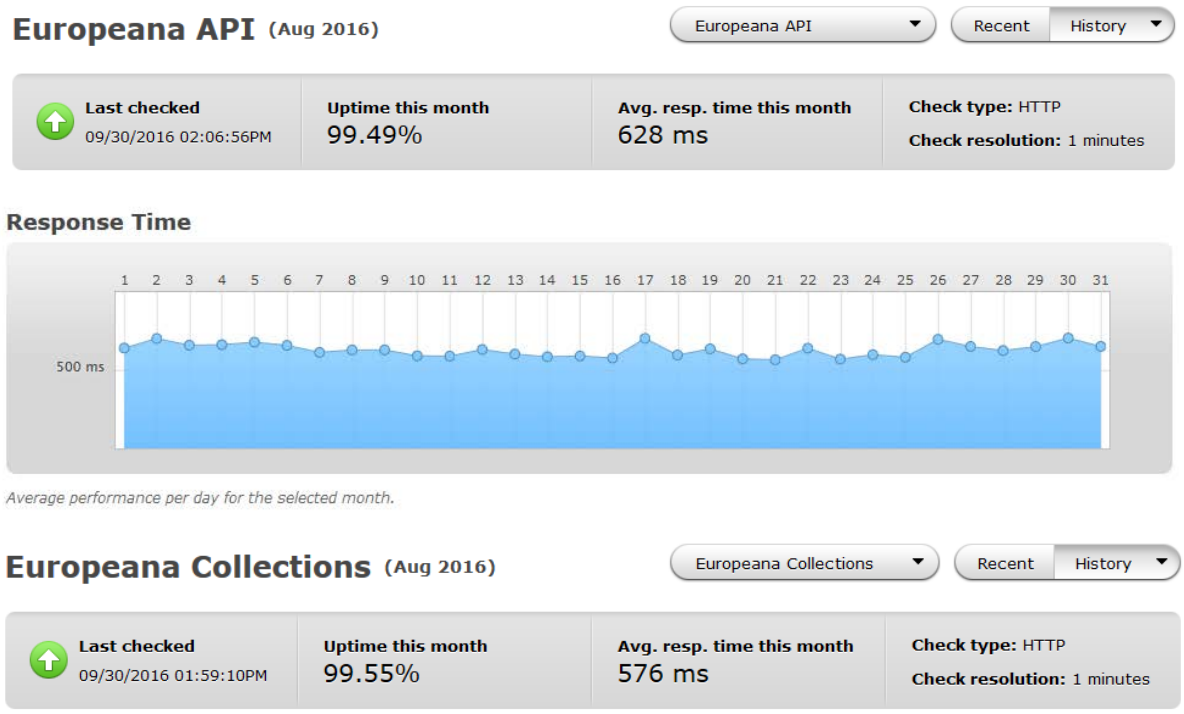
Image Service related developments:

- Implementation of JPEG to JPEG2000 conversion in Data Processing Service
- Created Image Server user documentation, rest of documentation was reviewed and adjusted.
- Performance related changes in s3fs.

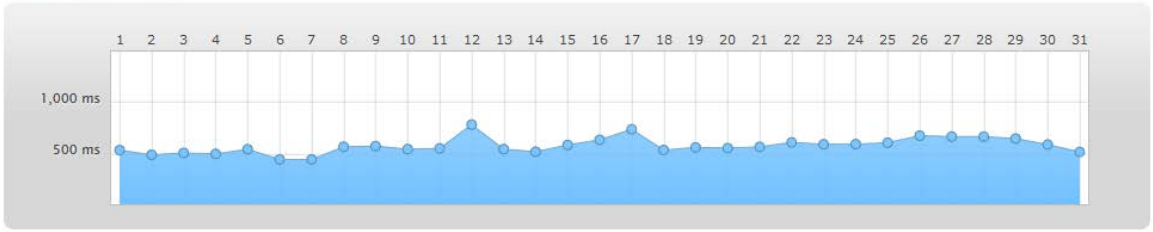
Data Processing Service related developments:

- Performance tests
- refactoring and improvements (e.g. refactoring of XSLT topology, batch requests support in Metadata & Content Service implemented. Usage of those implemented in Data Processing Service)

The overall uptime is conform the KPI. Below are some statistics over Availability and response time of Services during this report.



Response Time



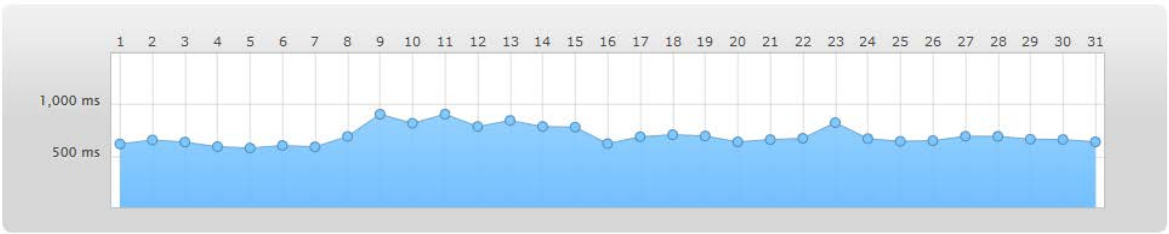
Average performance per day for the selected month.

Europeana API (Jul 2016)

Europeana API | Recent | History

Last checked	Uptime this month	Avg. resp. time this month	Check type: HTTP
09/30/2016 01:50:56PM	99.81%	698 ms	**Check resolution:** 1 minutes

Response Time



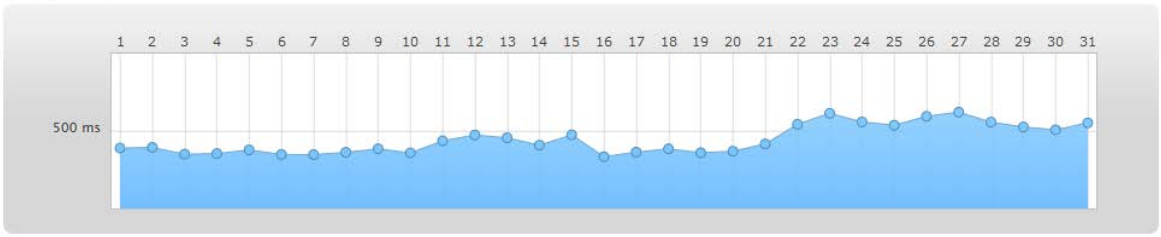
Average performance per day for the selected month.

Europeana Collections (Jul 2016)

Europeana Collections | Recent | History

Last checked	Uptime this month	Avg. resp. time this month	Check type: HTTP
09/30/2016 01:56:10PM	99.80%	452 ms	**Check resolution:** 1 minutes

Response Time



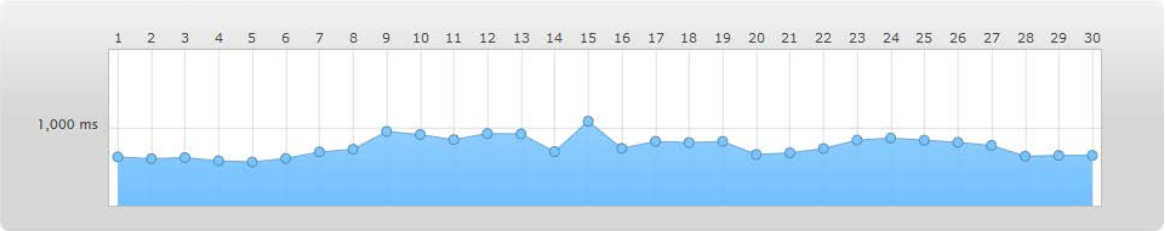
Average performance per day for the selected month.

Europeana API (Aug 2016)

Europeana API | Recent | History

Last checked	Uptime this month	Avg. resp. time this month	Check type: HTTP
09/30/2016 02:06:56PM	99.49%	628 ms	**Check resolution:** 1 minutes

Response Time



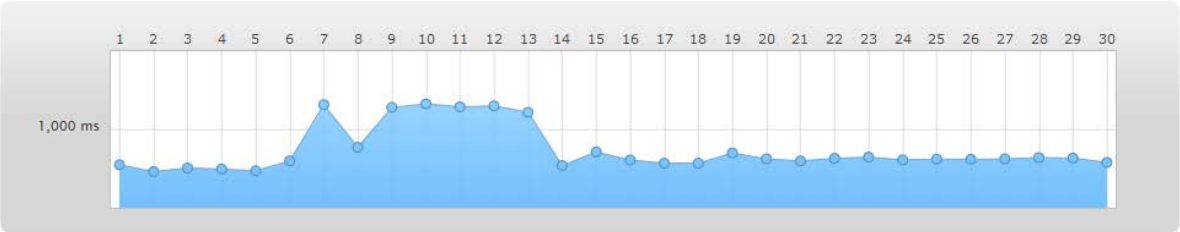
Average performance per day for the selected month.

Europeana Collections (Aug 2016)

Europeana Collections | Recent | History

Last checked	Uptime this month	Avg. resp. time this month	Check type: HTTP
09/30/2016 01:59:10PM	99.55%	576 ms	Check resolution: 1 minutes

Response Time



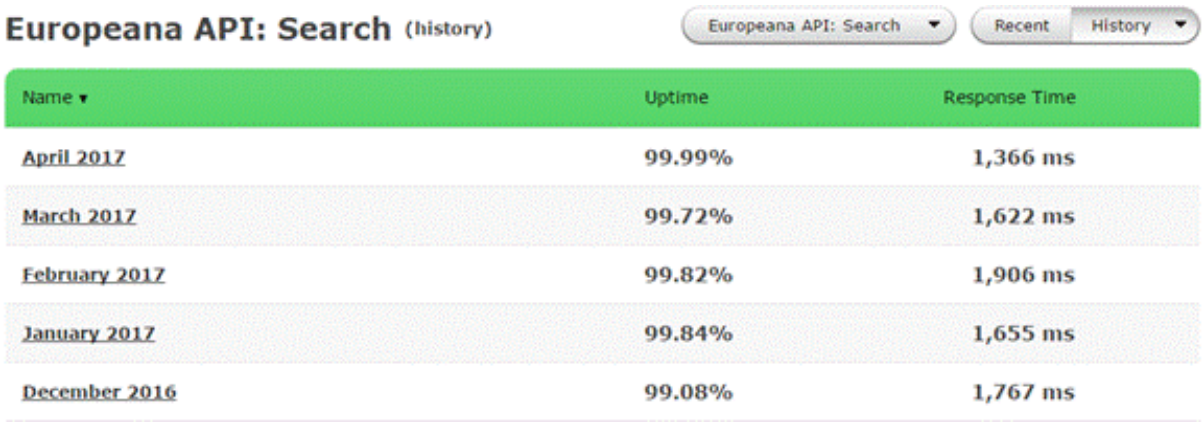
Average performance per day for the selected month.

Maintaining the subcontracts and making sure that all systems are available and stable is the main objective here. Maintaining the subcontracts and follow up when needed is an ongoing process. Availability and stability statistics for some applications are provided below.

Europeana Collections (history)

Europeana Collections | Recent | History

Name	Uptime	Response Time
April 2017	99.91%	789 ms
March 2017	99.12%	779 ms
February 2017	99.99%	766 ms
January 2017	99.89%	780 ms
December 2016	99.02%	807 ms



Task 7.3. Harmonise, document and communicate the system architecture of Europeana's platform

3-2-1 Strategy is being used for backup strategy of all critical data. Upon the Failover of last Provider (AnyNines) a complete critical strategy is revised and is in place. Backup strategy is extended to include not only critical data and the process to deal with strategy is explained in Backup policy.

We used tools such as Pingdom to stay on top of availability of all systems and components running within Europeana environments.

For simplicity and maintainability of system architecture, 17 servers were migrated from several environments into one backend environment (Hetzner).

Implementation of automated health checks for eCloud platform using NAGIOS (installation and configuration of needed software, implementation of health checks and custom plugins) has been provided by PSNC. Nagios monitoring solution has been added to detect performance anomalies and new relic for measuring user experience in the front end systems.

For simplicity and maintainability of system architecture, 8 servers were migrated from several environments into one backend environment (Hetzner).

New environments for test, acceptance and production have been implemented to support the development of Metis, Annotations API and Entities API. Metis, Annotations API and Entities API are also added Pingdom and also Nagios which are the tools already mentioned in the first report, used for monitoring solutions.

A new procedure to set up a central location (google drive) for all technical documentation and designs is set up and is in test phase to be able to communicate the system architecture and policies for entire Europeana's platform. This procedure is intended to make Europeana the owner of all technical documents.

Task 7.4. Streamline operations of the Europeana DSI platform

The DevOps progress by implementing automated jobs to make development life cycle faster and reliable.

Upon a change request or new functionality, a Developer makes code change or implements new code, upon a commit on the Github Jenkins is automatically triggered to deploy in the test environment. In addition to automated tests, manual tests are performed by Tester. Tester manually triggers deploy to acceptance environment for Product Owner to perform the acceptance test. Again a manual triggering action deploys the code to production environment.

Further automated scripts have been made to deploy server-setups with one click to any desired environment.

One of major steps in DevOps is ease of a disposable local environment. Docker technology has been introduced in API team as a pilot to experiment with faster setup of a local development environment. During development many aspects can go wrong which can corrupt the local environment. Repairing of this corruption can be a very time consuming effort.

The DevOps progress by implementing automated jobs to make development life cycle faster and reliable. As mentioned in previous report, automated scripts have been made to deploy server-setups with one click to any desired environment; the automation process is an ongoing activity for more than just local environment. Virtualization technology (Docker containers) has been expanded to include not only local environment but also being used in production environment. CRF is an example of Docker usage when deploying to production. And Europeana 1914-1918 is using Docker technologies for the currently ongoing migration process.

A new production environment has been implemented for SPARQL endpoint to eliminate downtime when a new dataset is needed to import.

Task 7.5. Support development teams with DevOps services

Central logging has been developed to make access to loggings from different components easy. The advantage of using Centralised logging now is that debugging the front end is rather a difficult task. It is not easy to see what has been going wrong as all the apps were producing millions of log records per day. Centralised logging removes this obstacle and saves developer search time (through filters) for the problem. The problem is now easier to reach and faster to fix. For the backend it is different since the problem of backend is the access to the log files of the backend system. A request needs to be made for access and wait for the log file to become available. Centralised logging provides these privileges so that the developer can easier find the problem and make an earlier attempt to solve the problem which in turn is the aim of DevOps to be able to shorten development lifecycle. Via http://statistics.europeana.eu/europeana statistics on API usage are communicated to our providers, stakeholders.

Upon the last report, Centralized logging has been improved to handle parsing of big amount of incoming logs. This will provide more insight to the developer to understand where the attention needs to be directed to solve a problem, i.e. shorten the development life cycle.

Task 7.6. Develop the infrastructure data layer

PSNC is building the infrastructure (cloud) with direct involvement of Europeana developers. Developers of Cloud PSNC will be at Europeana in the first half of October to streamline the activities to be done with products Metis (Europeana) and the infrastructure component being developed by PSNC. Upon the meeting in October new targets are defined. Many technical questions and answers from both sides and new understanding of how to continue further.

PSNC is building the infrastructure (cloud) with direct involvement of Europeana developers. Developers of Cloud PSNC will be at Europeana in the second half March to streamline the activities to be done with products Metis (Europeana) and the infrastructure component being developed by PSNC. Many technical questions and answers from both sides and new understanding of how to continue further.

PSNC's main focus was in improving the performance of the Europeana Cloud infrastructure and to adapt its functionalities before the integration with METIS services. To bust up the performance another way of storing files was developed. Now, files can be stored in different storages configured optimal for the file size.

PSNC has also worked on implementing revisions and tags to support the ingestion workflows. Major changes were introduced to the data model. In addition, a data migration to deploy the revisions and tags work to production has been set up.

We have also investigated the integration of Metis services into DPS. Existing DPS services were updated to support revisions and tags.

Work package 8: Promotion and communication

The objectives of this work package are to position Europeana as a catalyst and an innovator in the field of cultural heritage, and to support promotion and communication towards the target audiences of the end-user, reuser and professional services and products. This will promote a stronger Europeana ecosystem as well as increased use of Europeana.

Participants in this work package:

- Europeana Foundation (EF)
- European Museum Academy (EMA)

This work package is specifically responsible for:

- Supporting the strategic positioning of Europeana as a digital service infrastructure for cultural heritage in Europe. It will support Europeana DSI in realising its key objectives by fostering active engagement of stakeholders, such as data partners, the European Commission, Member States, and audiences including the general public (task 8.2)
- Running the Awards programme with Heritage in Motion (task 8.3)
- Promotion of end-user services (Europeana Collections, Thematic Collections and Europeana Research) (task 8.4)
- Promotion & Communication of Europeana re-user services (especially Europeana Labs and Europeana Research) (task 8.5)
- Promotion & Communication of Europeana Professional services (task 8.6)
- An overarching yearly European thematic campaign. In 2016 this was Europeana Art History 280; for 2017 the theme is Europeana Migration and the relevant communications work will be preparatory with a view to launch in DSI 3 (task 8.7)

Description of work carried out and achievements:

Task 8.1. Manage the work package

The WP-management followed to plan, with the exception of the change of date of the Heritage in Motion awards ceremony, which was put back to September 2017 in line with the EMA's organizational calendar and annual conference (see 8.3). All work took into account relevant collaboration, coordination and information sharing with other WPs, most notably WPs 2, 3, 4 and 5 and with the partner EMA/Heritage in Motion. It also reflects the strategic approach to communications set out in Milestone S8.2.

Task 8.2. Manage the strategic positioning of Europeana

The strategic positioning of Europeana as a leader and innovator in the field of digital cultural heritage was an ongoing task throughout the period of Europeana DSI-2, and

was reflected across the board in the direction and support provided to external communications (including branding), advocacy and stakeholder engagement.
An overarching approach to communications, including corporate communications, was developed to reflect the update to Strategy 2020. (MS8.2). It was devised to be able to respond to developments in the Europeana ecosystem as well as the broader technological, economic and political landscape over the course of Europeana DSI-2. Consequently it was structured in a working format that allowed work package members to more easily update and also to share it across the wider organization, to support our communication efforts. Corporate communications and promotional plans were developed in the context of MS8.2 to support key products, services and launches towards stakeholders and markets. These plans supported and therefore reflect D2.1, D2.2, D2.3 and D2.4.
The new Pro blog strategy outlined in 8.6 also supports Europeana's positioning as a leader and innovator. For example, a key element of the strategy is to broaden the scope of blogs in subject and audience. This helps connect both Europeana, the reader and contributors to relevant sectoral discussions and developments beyond the immediate context of the Network. During the Europeana DSI-2 we started testing this approach with blog articles highlighting best practice and inspiring initiatives for the Network.

Promoting leadership and Innovation

In October 2016 (in close collaboration with WP4) we communicated the publication of more focused recommendations for greater openness and reuse of Europe's digital cultural heritage in research. This promoted work by policymakers and digital humanities researchers during the Netherlands' Presidency of the EU. Audiences targeted were researchers, cultural institutions and relevant policymakers. Other EU level stakeholders included the European Parliament's ITRE and CULT Committees.

The first phase of communications activity focused on a call to action to support the recommendations; in line with Europeana's digital-first approach, an interactive visualization detailing the three key recommendations was created and shared through targeted and tailored mailings to key audiences. The format effectively communicated the core messages and enabled recipients to further share and communicate it. Subsequent communications phases included face-to-face meetings, engagement with key stakeholders and further promotion via our social media channels. It was also shared more widely with our Network on the Pro blog.

In December 2016 Nominet Trust, the UK's leading tech for good funder, named Europeana in their top 100 list. The NT100 is a global celebration of the most inspiring innovations using digital technology to drive social change around the world.

We worked with Nominet Trust to communicate and promote the award internationally in the context of the importance of digital innovation for social good. This included contributing to the Nominet Trust press and communications pack and related video. We also worked with the Europeana Network Association, and stakeholders including the European Commission (example) to share this message via a joint press release,

targeted mailings, our Pro blog channel and promotion via social media channels. Indicative coverage included Actualitte, Livres Hebdo and BBF

To reinforce Europeana's leadership in the digital heritage sector and commitment to its objectives for 2020, the Europeana Foundation published the Europeana 2020 Strategy Update on 23 February 2017. In line with our communications strategy our approach was a call to action to our audiences - partners, Network and stakeholders - to support the new focus, and to demonstrate its relevance to them. Following our digital-first approach, we published in a shareable online format, employing video, images, targeted mailings, blogs and social media posts to first sell the headline messages and then to invite our audiences to dive into the relevant detail, with a further call to help share it. The Europeana 2020 update has been visited more than 1,500 times to date.

To support coherent messaging we closely linked the Strategy Update to the Europeana Business Plan 2017, published March, communicating that this is how Europeana and partners would work together to support the implementation of the Strategy 2020 in 2017.

Europeana's annual report 2016 Collaborating for Culture was published 11 April in an innovative digital format allowing for easy access to information and for sharing via social media. Reflecting our goal of being seen as a trusted partner, our approach celebrated the contribution of Network, partners and stakeholders to Europeana's achievements in 2016, reaching out to those groups in advance of publication to underline that contribution and encourage them to share the report on publication.

In July 2017 we capitalized on the API World 2017 recognition of the Europeana REST API, to promote Europeana's innovation at the interface of technology and cultural heritage to sectoral and specialist press and via European Pro and Europeana Labs

August 2017 saw this work package curate an editorial for a month-long feature on and in partnership with YearofOpen.org - a website championing all things 'open' throughout 2017 as The Year Of Open. The aim is to raise awareness of the existence and importance of open culture and get people talking about it, while placing Europeana in the centre of a global discussion on leadership and innovation in this area.

Task 8.3. Run the Partnership in Awards programme

To implement and promote the awards programme EMA/HiM undertook visits to possible partner organizations and presentation opportunities at the Ziva Award Ceremony (Forum of Slavic Cultures) in September, the ViMM Advisory Board Meeting and EuroMed meeting in Cyprus in November and the Europeana AGM in Riga in November.

The new website was launched 10 January 2017 following development and beta testing in collaboration with WP6.

Pre-launch, a Pro blog promoted the upcoming awards competition to the Europeana Network, including a special early entry period for the Network.

The Partnership Awards programme was then launched beyond the Europeana Network by Heritage in Motion in December and promoted across Europeana owned social media. The submission date for applications was extended from March to 11 April 2017. This extension was a pre-planned approach built into the Heritage in Motion communications plan, based on predicted response rates and submission timings from applicants in previous years.

From X submissions (see MS8.3), there are 12 confirmed finalists from Belgium France, Greece, Italy, Netherlands, Spain, Sweden and the UK. In alignment with the EMA annual conference, winners will be announced in Skopje Macedonia, 29 September 2017 outside of the project period. No funds from the Europeana DSI-2 project grant will be used for the ceremony.

Task 8.4. Europeana end-user services promotion & awareness raising (Europeana Collections, Thematic Collections and Europeana Research)

Efforts to promote and raise awareness of end-user services centred on online promotion and social media engagement. Response to user feedback, the promotion of content related to Thematic Collections launches, and high quality and newly shared content and exhibitions were key areas of activity alongside the continued development of partnerships with external platforms.

Talking to our users

In direct response to user feedback, the Europeana 1914-1918 newsletter was made available in three languages in July 2016 in order to facilitate the engagement of the First World War community with Europeana 1914-1918. The 5,000 subscribers to this newsletter engage with a well above average open rate of at least 52% and click through rate of 7,7% (market average 20% and 4% respectively).

November 2016 saw further focus on direct user feedback; using the end-user newsletter and social media, we recruited a group of over 100 testers -'Europeana Improvers'- to help test and evaluate the Collections site and new or improved features.

Working in partnership

The successful external partnership created with DailyArt to feature and promote the #Europeana280 artworks was further developed to support and promote artworks from the Europeana Art Collections. This has seen Art Nouveau season works featured in the Daily Art app and additionally in five Europeana guest blogs on Daily Art's new website www.dailyartdaily.com.

Since April, Europeana Collections content has been promoted via the externally developed ArtUpYourTab Chrome extension, displaying a full screen image of selected content for each newly opened tab or window. Working with partners in Kennisland,

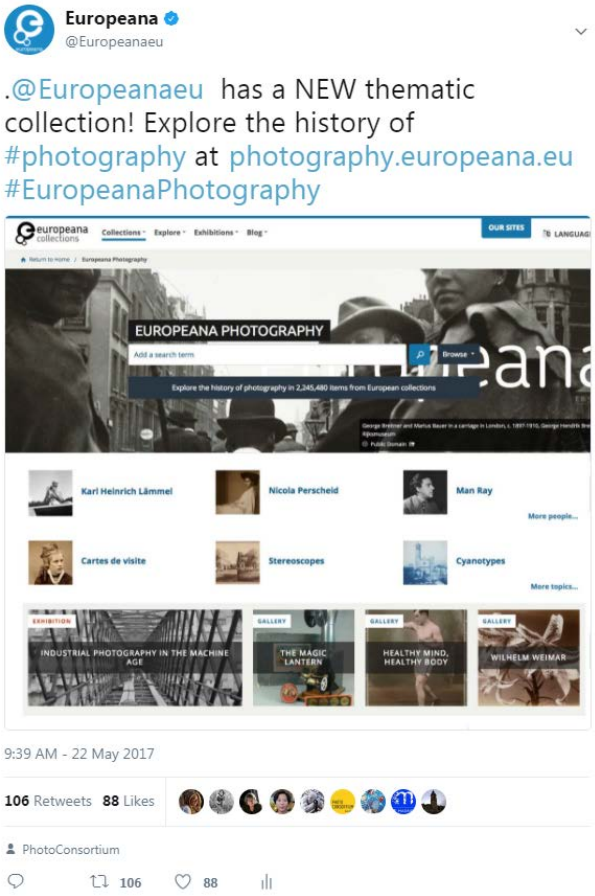
Studio Parkers and Sara Kostler, a joint online campaign was developed and implemented to encourage uptake of the extension. In the first two weeks more than 750 people installed the add-on, resulting in almost 100,000 impressions of Europeana content. The initial content pool has since been expanded and the add-on further developed for Firefox and Safari. Both developments were supported by further phases of promotion; 2731 people now use the add-on and impressions stand at 1.7 million.

Thematic Collection Launches

During the reporting period, Europeana launched two new thematic collections: Europeana Fashion and Europeana Photography, and relaunched Europeana 1914-1918 as part of thematic collections (See WP 2). For each launch, the approach reflected the nature and maturity of the respective community and site, and communication plans developed in collaboration with WP2 included toolkits (ready-to-use images and text) to facilitate partners' support for promotion via social media, newsletters and the press.

Europeana Fashion, which was an existing site shifting platform, launched as a thematic collection on 4 May 2017. In the two weeks following the launch, launch communications generated over 100,000 impressions on Facebook and Twitter and almost 2,200 social interactions.

Europeana Photography, which was a new site, launched on 22 May 2017, receiving almost 500,000 impressions on Facebook and Twitter and generating over 15,000 social engagements in the first two weeks post launch. The collection launch received a lot of media interest, with nearly 50 articles published in the UK, France, Italy, Spain, Portugal, Romania, the Netherlands, Hungary, Kazakhstan, Czech Republic, Poland, Ukraine, but also in the US, in Vietnam and in Brazil. The news was featured on the Daily Mail Online and Sky Italy.



Europeana 1914-1918 launched as a thematic collection on 22 June 2017, during the Europeana 1914-1918 Transcribathon Campus event in Berlin. As the Europeana 1914-1918 website was a well-established site with an existing community, we concentrated on informing existing users via the Europeana 1914-1918 newsletter and Europeana 1914-1918 social media. Additionally, a Facebook event encouraged people interested in WWI based in Berlin to participate in the Transcribathon campus event. Working closely with WP2, the approach built on the earlier promotion of Europeana 1914-1918 content and engagement around the 1914-1918 Transcribathon challenge launch at the Latvian National Library in Riga in November 2016.

Existing Thematic Collections

Europeana Music received a boost with the launch and promotion of Europeana Radio. Working with the Europeana Sounds Consortium we targeted music enthusiasts and specialists. Through a multilingual press release, (translated into French, Italian and Hungarian by the Sounds partners), a toolkit for partners, end-user and professional blogs, and direct outreach to music bloggers, we invited readers/listeners to visit the station and explore more than 200,000 tracks. A number of partners shared the story which secured coverage on sites such as IDboox, CNRS and Hyperallergic. To promote user engagement, a #TagDayThursday was created – a Twitter call for listeners to tag the music they hear on Europeana Radio. The launch saw almost 1,000 tags on day one. This currently stands at almost 6,000 tags and people continue to actively share links to the radio player.

Promoting Europeana Collections' curated content

Europeana Collections offers curated content via exhibitions, galleries and blogs.

Exhibitions: During the reporting period, 11 exhibitions were published. Six supported wider campaigns (Europeana 280, Art Nouveau Season) or new thematic collections launches, while the remaining five had their own promotional activities.

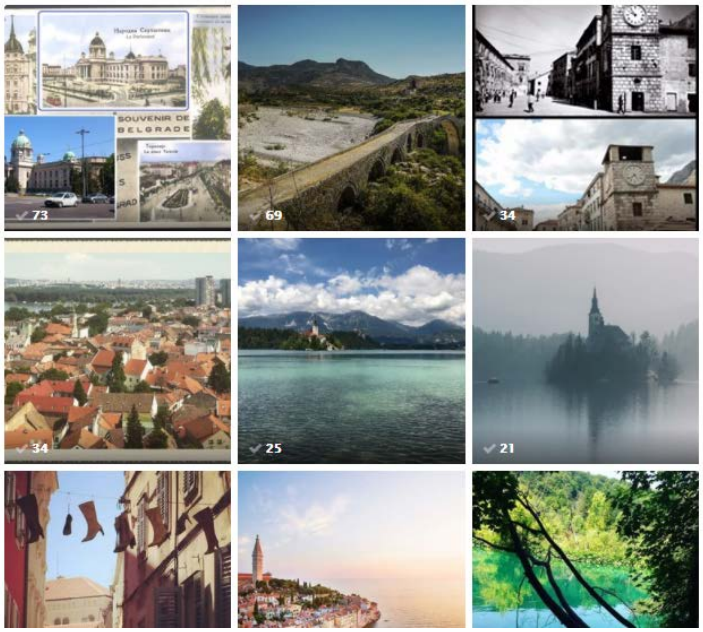
End-users were encouraged to visit Colossus of Leonardo Da Vinci and the Renaissance themed Europeana Art home page via Europeana's social media with the support of partners Museo Galileo (co-creator of the exhibition) and Biblioteca Nacional (content provider). The exhibition had over 4,000 visits in November; more than 40% of those as a direct result of related social media activity.

Picture this! Together with the National Libraries of Albania, Bosnia & Herzegovina, Croatia, Montenegro, Moldova, Macedonia, Serbia and Slovenia we organized a contest inviting visitors to take photos of places featured on the vintage postcards in this

exhibition. There were over 400 submissions and the exhibition received over 7,000 visits. The winners will be selected by the jury and through a public vote online.

What you will win
Winners will receive a hamper of smartphone camera accessories and have their images featured in the Picture This! exhibition. Runners-up will receive Europeana goody bags.

Closing date is **Thursday 31 August 2017.**



Galleries

Galleries were introduced on Europeana in April 2017, and promoted on social media over the summer, using a hashtag #GalleryOfTheWeek. Different themes and content from various cultural institutions across Europe were featured and linked to relevant events, such as the Estonian EU Presidency or Museum Week.

Blogs

69 end-user blogs have been published during the reporting period. Blogs are used to announce new launches and functionalities, feature high-quality datasets (e.g. Maggy's Picks series), and provide curated information about content available on Europeana Collections. Older and relevant blogs are regularly re-promoted on social media using popular hashtags.

As part of a wider editorial approach, we developed a 'Trusted Blogger' strategy to be implemented on the Collections website. Its objectives: to share and spread the content of Europeana Collections outside our platforms; reach new audiences; and establish long-term engagement with bloggers and readers by creating a network of Trusted Bloggers explicitly using Europeana materials. We developed this strategy directly with established cultural bloggers, introduced through the Europeana Network Association.

Social media - part of the wider conversation

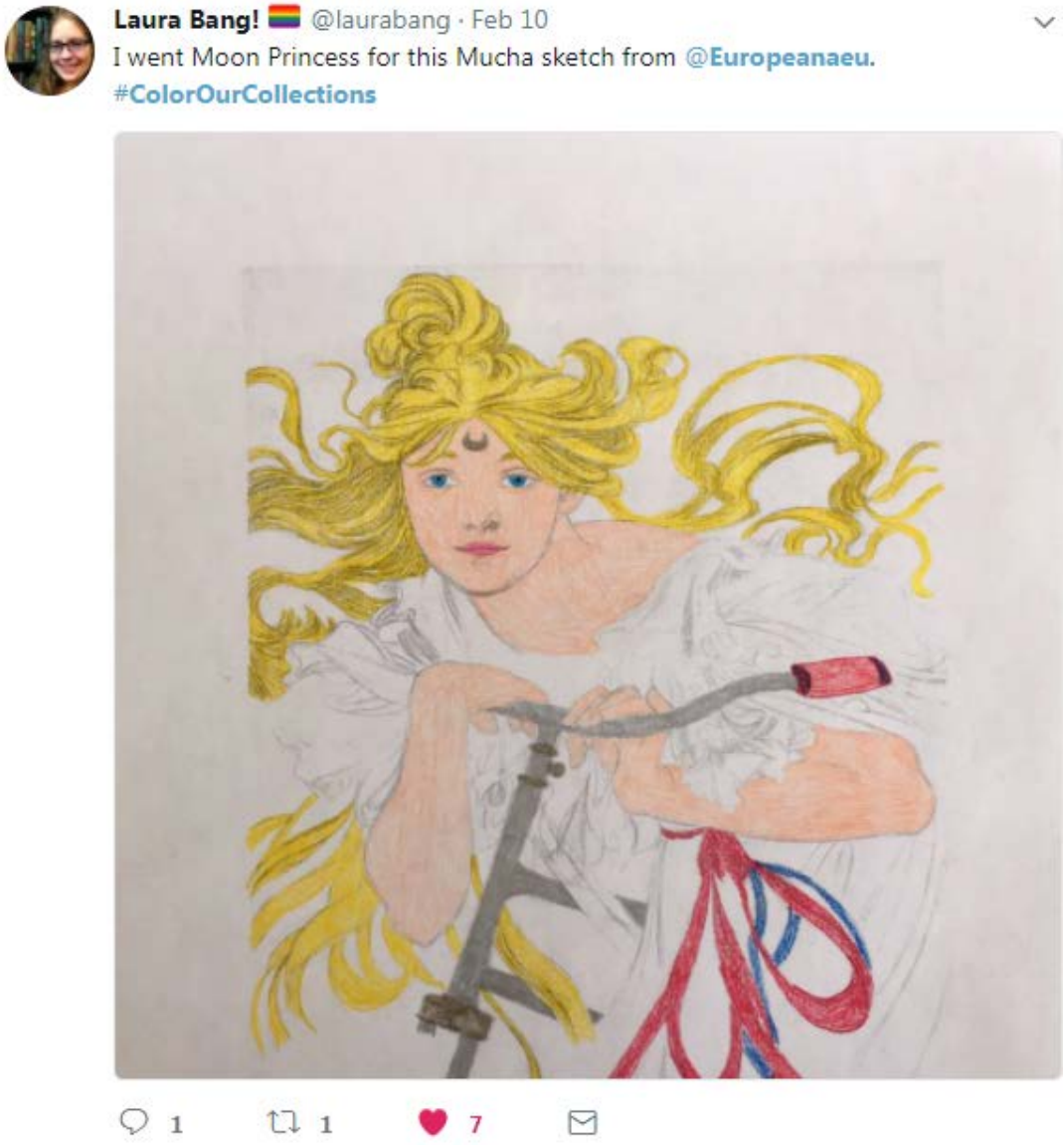
Europeana has over 103, 000 followers on Facebook, around 29,500 fans on Twitter and over 11,000 on Pinterest. Social media channels are used to generate traffic: over 4.6%

of traffic on Europeana Collections comes from social media, over 10% on the Europeana blog and over 31% on exhibitions and galleries.

A further social media objective is to actively encourage people to discover and engage with cultural heritage content on the social media platforms they visit. To this end, we present unique Europeana content in a wider context, using popular hashtags and linking to current events. Content and engagement then becomes part of a wider social conversation with exposure to a larger audience.

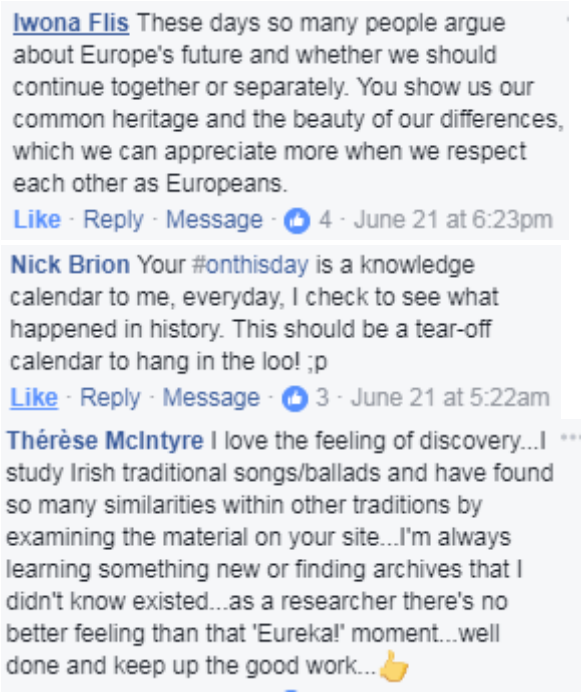
We adopted the hashtags: #OnThisDay, #WorldBookLoversDay, #InternationalMuseumDay, #WorldPhotoDay, #OlympicGames, #NationalBookLoversDay, #Movember.

We also participated in online events such as: #MuseumWeek/#WomenMW, #MusMoods and #ColorOurCollections.



Closer to home we encouraged discovery of newly shared content from Europeana Music by supporting #Sharesounds day (23 November 2017), organised by Europeana Sounds, which reached more than a quarter of a million people. We created a cyclical online activities such as monthly cover image voting - #GalleryOfTheWeek, #TagDayThursday - and participated in existing activities such as #FolkloreThursday.

During Europeana DSI-2, Europeana's score increased from 4.6 to 4.7/5 based on 199 reviews. Additionally, to celebrate 100,000 Europeana Facebook fans, we organized a give-away and asked people to name what they like the most about Europeana. We received over 40 answers and used this feedback to optimize our activities.



Task 8.5. Promotion and awareness raising of Europeana Reuser services (especially Europeana Labs)

Reuse of Europeana content in the key sectors of the creative industries (Europeana Labs) and education was supported and promoted through external events, social media campaigns, and the creation and targeted dissemination of tailored collateral.

Creative community (Europeana Labs)

The creative community was targeted with promotional activities online and via social media to develop a conversation about reuse and to showcase how quality content can be used online. We have capitalized on the network of institutions and representative organizations, built through our consultation and research, to improve awareness and use of digital cultural heritage content and of our incubation services. Europeana Labs' main communication channels are a Twitter account with over 800 followers and a newsletter with around 2,800 subscribers.

Events

THE ARTS+ Fair 2016 (Frankfurt, 19-23 October 2016) - a new annual event for the international cultural economy that attracted 120,000 visitors (See WP3). Promotion included: a programme of live tweeting at Europeana Labs workshops with creative design students; short promotional clips, live tweeting and the dissemination of reuse-focused collateral at Europeana's exhibition stand; showcasing the #BigArtRide virtual reality installation , and allowing visitors to engage directly with Europeana content. Europeana has been invited to return to run workshops in 2017.

To raise awareness of the Europeana resources available to makers, reuse of Europeana content was showcased at two key events: Makers Faire Enschede (20-21 May 2017) and Makers Faire Hannover (25-27 August 2017).

Other relevant events reaching creative professionals included: b.creative conference (2-3 November 2016, Belgium), Coding Duerer (13-17 March 2017, Germany); ; and The Next Web Conference (18-19 May 2017, The Netherlands).

Incubation services

Tailored and targeted communications supported Europeana Challenges. Over 75% of applications received were eligible for funding, suggesting that communications reached the right potential applicants.

Creating a mailing list of interested creative industries bodies has resulted in more targeted promotion to, and tangible connection with, potential participants in and partners for, Europeana Labs (e.g. ongoing discussions on a potential partnership with the University of the Arts, London, Fashion courses).

Tailored online promotional content in newsletters, blog posts and Twitter supported raising awareness of and participation in the Europeana Fashion Challenge.

The communications plan to promote the Match-funding campaign included partnering with the crowdfunding platform Goteo, and targeted specialist media.

Promoting the Makers campaign focused on a call to action and working with partners to multiply reach. Two supporting social media campaigns focused on content around Art Nouveau (April/May 2017) and Maps (July/August 2017).

Education:

Campaigns

The Europeana Education campaign aimed to develop partnerships with external organizations and to make Europeana part of the wider conversation on digital resources for education. It was supported by the development and dissemination of shareable promotional material and promotion via social media and Europeana Pro (see also WP3).

The online promotional campaign to launch an educational game for five to ten-year-olds featuring Europeana artworks (from Italian start-up and creative challenge winner 'Art Stories') included the testimonial of an eight-year-old user. Related promotional end-user and Labs blogs generated 2,268 visits and 133 shares.

Community

We continued to grow our Education community via the Europeana Education LinkedIn group. This has enabled direct conversations with more than 50 professionals on: Europeana resources and initiatives for digital learning; potential peer projects; and best practice and case studies on reuse of Europeana content in education.

In cooperation with Open Education Consortium, Europeana prepared a monthly feature on Open Culture with special focus on education which will run in September 2017 on their dedicated Year of Open platform. (see WP3)

Events and collateral

Europeana was represented at two consequent editions of the big French educational summer summit Ludovia. At the 13th edition of Ludovia Summer University, France (23-26 August 2016), EF was the guest of honour and presented Europeana Labs, Historiana, the Europeana 1914-1918 iTunes U course,, to more than 800 French teachers and educators interested in using technology and digital content in classrooms. At 14 edition in 2017 with ca. 1000 participants we held a joint presentation with the French Ministry of Education, launching our pilot and showcasing the new dedicated Europeana space on the French national portal Edutheque. We also introduced the new Europeana Transcribe tool as an engaging tool for French educators.

Other events included: EUN Pilot teachers events (November 2016 and February 2017), as well as EduSpot (France, March 2017)

Collateral produced included a leaflet in two languages (French and English) on how Europeana supports the education sector through its reuser services. This was used to showcase Europeana's work at the Canopé Niort exhibition in Paris (21 September) as well as in meetings with the French Ministry of Education. It is also available online on the educational page of Europeana Pro.

Task 8.6. Promotion and awareness raising of Europeana Pro services

Europeana Pro services are promoted through an ongoing programme of Pro blogs, newsletters and supporting social media that help keep the Network - and a wider community of GLAM professionals - connected around Europeana informed about events, opportunities and involvement in projects.

A blog strategy for Pro

During Europeana DSI-2 we developed a new editorial strategy for the new Europeana Pro blog. Its objectives are to clearly articulate the focus and purpose of the blog for readers, and to serve as a framework to guide Europeana Pro's content creation on an

ongoing basis. This strategy was devised to support Europeana's overall communications approach, in particular working in partnership and demonstrating the benefits of providing content to Europeana, as well as providing content that is educational and entertaining for its readers.

A key series in this period has been to introduce new Members' Council representatives with a dedicated weekly series of blogs on the Europeana Pro site providing profiles that give a human face and voice to the group their expertise and their motivation and ambitions to support the Network and Europeana.

Key services covered during Europeana DSI-2 include for example:

- Europeana's role in promoting Copyright reform
- Helping to improve and promote sector standards, e.g. the International Image Interoperability Framework (IIIF)
- Promotion and information sharing on the Europeana AGM and Members Council voting both in advance of and following the AGM, supported by a tailored and comprehensive social media plan and activity during the AGM.
- Europeana's new impact assessment framework.

We introduced the use of Europeana's new impact assessment framework- that cultural heritage institutions can inform and ultimately adopt -through a case study on the social and cultural impact of Europeana 1914-18 . Consequently part of the task was to also communicate the tools we and methodology that were used.

The targeted audience was cultural heritage sector institutions and professionals while stakeholders included the Commission, policy and thought makers, and Ministries of Culture. Given the topic addressed A tertiary audience was identified as the 1914-1918 community, given the topic assessed.

Our approach was to begin a conversation to get those within cultural heritage institutions to think about how the sector can assess the impact of its work. The case study was published as part of a package of information including a blog post and videos and shared primarily via social media (Europeana Twitter and Facebook, as well as Europeana 1914-18 platforms] with the associated video hosted on Vimeo.

Activity was split over a series of days in which we used Twitter to direct our audiences to different parts of the study. We built interaction by using graphics and ensuring our social media activity enabled two-way engagement - asking users questions about the content we were sharing and encouraged feedback. The video was viewed 100 times on the launch day, generated 80 retweets and 83 likes and 61,712 estimated impressions on Twitter from 26 @Europeanaeu tweets.

Other key topics promoted and highlighted during this reporting period have included Europeana content in Education; Innovation in the reuse of content including shining a spotlight on work done by partners in the Network; Europeana's strategic approach to

improving the quality of content through its content strategy; as well as work done to raise sectoral standards in areas such as sharing of high quality images on the Web through The Image Interoperability Framework (IIIF).

A new website for Pro services

A website bringing all the content from the Europeana Pro, Europeana Labs and Europeana Research sites was developed towards the end of the DSI-2 period, to be launched shortly afterwards. The intention - to make it easier for all audiences to find the information they are looking for and to make the purpose, work and services of Europeana clearer. This work package contributed to this by coordinating the collation and review of copy for the new site, and by working with editors to make sure that all copy reflects house style and tone of voice.

Europeana Communicators Group

This specialist group, formed in 2012, was reinvigorated with a new membership campaign. The aim - for Europeana to be seen as an expert resource for comms-related discussion in the European/global digital heritage world. The group now comprises 50 professionals from the cultural heritage sector across Europe who have a communications role or deep professional interest in communications.

Each month, the Europeana Foundation marketing and communications team send an email newsletter to the group. The update provides the latest information on Europeana campaigns, as well as comms-related news and events from the cultural heritage sector. It also shares tools and resources that are relevant to people working in communications, PR, marketing and social media. The format and content of the newsletter was revamped in response to a survey of members and the first edition sent to the group in August, and was met with a high open (69%) and click rate (31%).

Task 8.7. Run an overarching European thematic campaign

The Europeana 280 campaign activity was ongoing during the reporting period through online exhibitions, events, social media, online promotion and engagement.

Online

From July to September both content and institutional involvement in Europeana 280 were promoted by publishing 'Country of the Week' and 'Hero' images for the Art Collections on the Europeana Art Collections site using content from 11 different countries participating in Europeana 280. Facebook was also used to promote each country's involvement and the chosen Hero image.

Public engagement on Facebook was encouraged with a public vote for their favourite Europeana 280 images: four images a month relating to one theme during the reporting period.

The Faces of Europe exhibition continued from 19 July to 20 November with the publication and promotion of three more chapters: Academic Art and New Directions,

Painting Modern Lives, and Towards Abstraction. The chapters were promoted on Facebook and Twitter; 48% of 21,118 visits came from that social media promotion.

Across all of these activities and throughout the campaign we were in direct contact with contributing institutions to provide ongoing updates and advance notice of when and where their content would be used. This allowed them to promote the relevant activity via their own channels and to their own communities and audiences.

Events

#JumpingJacks events were part of Europeana 280 public engagement element in:

- Denmark at SMK (National Gallery of Denmark) on 26 August as part of the Gallery's programmed public engagement activities - mainly 'SMK Fridays' where innovative use is made of the Gallery for the public after hours. SMK promoted the event in the press generating good coverage. Institutional engagement was also encouraged via a Pro blog post written by SMK on their motivation to participate in #JumpingJacks and Europeana 280.
- Latvia at the Latvian National Museum of Art in Riga from 8-13 November. Again the Museum promoted the event in the press generating good coverage.

External partnerships

To encourage the reuse of high-quality openly licensed material submitted as a part of Europeana 280, we created a special #Europeana280 category in the international #GIFitUP contest run in conjunction with the DPLA and TROVE.

End-user blog posts were written, published and promoted via social media: one explaining the contest and rules and another containing practical information about GIF-making and useful tools. Nineteen gifs were created and submitted using #Europeana280 artworks. Hashtag #GIFitUP reached an audience of more than four million. In the main contest, general Europeana content was used for 57 of the total 128 entries to #GIFitUP 2016 - 45% of all entries - including the overall winner and two of the five runners-up. This success resulted in Europeana being invited to take an even greater role in #GIFitUP 2017.

Closure of the Europeana 280 campaign:

The Europeana 280 campaign, which was launched to promote and engage people with Europe's art heritage, came to a close at the end of 2016. To mark the end of the campaign, the communications approach was to share and celebrate its success with those who participated. This included: targeted mailings; a dedicated Europeana 280 Slidebean that provided an overview of the campaign's success and was designed to allow participants to use it to promote their own participation and contribution to that success; a closing blog and a final social media rally.

In addition to an on-going 'closed loop' approach to analytics during the campaign, we also gathered and reviewed specific lessons learned to feed into future campaigns.

Launch of the #AllezLiterature campaign:

In February 2017, Europeana launched #AllezLiterature, a social media based thematic campaign focused on libraries and archives, words and text. #AllezLiterature: highlighted the importance and beauty of text; fostered active engagement with both the general public and with libraries and archives across Europe; highlighted existing Europeana content and collected some specific high quality text; and emphasised that Europeana content is broader than visual images. The campaign spotlit important letters, poetry, books and archives in particular.

In line with placing unique European content in wider contexts, the campaign launch and its first phase was linked to Valentine´s Day (14 February) and the Europeana 1914-18 Transcribathon. The successful launch saw more than 7,500 visits on transcribathon.eu, the number of registered users increased by over 250 and over 1,200 documents transcribed in the initial period. 35 articles about the Love Transcribathon have been written in 10 languages, in 12 countries including the US, and Mexico. A selection can be found "In the news" on Pro.

Phase 2 of the campaign was linked to link to World Poetry Day (21st March) with works chosen and provided by National Libraries across Europe. This included existing and content specifically contributed for the campaign. We worked with participating institutions to share and promote their content and activities on platforms such as Facebook, Pinterest, YouTube and Twitter and included providing templates to allow institutions and the audience to share favourite quotes and works.

During this phase we also worked with the Europeana Members Council through its #AllezCulture working group to engage their proactive promotion of the campaign towards their communities. The campaign reached almost one million people across platforms and generated:

- Facebook - 474,963 impressions of Europeana #AllezLiterature and 11,720 engaged users.
- Twitter - 2,125,713 impressions; 352 posts from 200 contributors. The Transcribathon total is now more than 700 new transcribers and over 4,000 completed documents.

The campaign's Poetry phase proved more challenging than its first for a couple of reasons: poetry is a more niche subject than Valentine's Day, love letters and WW1, meaning that while it attracts a core audience of poetry enthusiasts, engaging a broader audience of more general enthusiasts is harder; more importantly the campaign has highlighted challenges relating to textual content. Libraries were the earliest contributors to Europeana and the online arena, and now suffer from legacy problems: what worked in 2008 does not meet the expectations of users today. The positive is that we now know better what to do with our library partners to improve the use of their material online. We have had direct, and ongoing, conversations on this issue with

participating institutions during the campaign, and have used these challenges as an opportunity to start this discussion with institutions more widely.

Migration

During Europeana DSI-2 we started preparatory work on the 2018 campaign Europeana Migration. To date this has included: developing a campaign brief; establishing a cross - function campaign team supported by regular meetings and dedicated communication channels; researching and creating a list of 70 migration museums, organisations, institutions and archive. We have also reached out to 42 migration museums across Europe; surveyed and begun a dialogue with interested museums on potential public engagement approaches via a dedicated questionnaire and 1-1 interviews; created an analysis of responses; and have started to build a Europeana Migration community - currently we have 1392 people interested in the topic who will help in choosing scope and give feedback on the new related Migration thematic collection.

Work package 9: Financial and HR management

Europeana DSI-2 needs people and resources including a physical work environment. This work package is designed to manage these resources and to control finance in terms of budget and reporting and the full compliance of the project with EU regulations. As the core project Europeana DSI-2 also manages all the other contributing projects and subcontracts. Close collaboration exists with WP4 which manages the project on a contents level.

Participants in this work package:

- Europeana Foundation (EF)
- Poznan Supercomputing and Networking Center (PSNC)[15]

This work package is in place to deliver

- Human Resource legal employment and Management (task 9.1)
- Financial control, and reporting of Europeana DSI-2 and other EU projects and subcontracts (task 9.2)
- Financial management of Europeana DSI (task 9.3)
- Business support (task 9.4)

Description of work carried out and achievements:

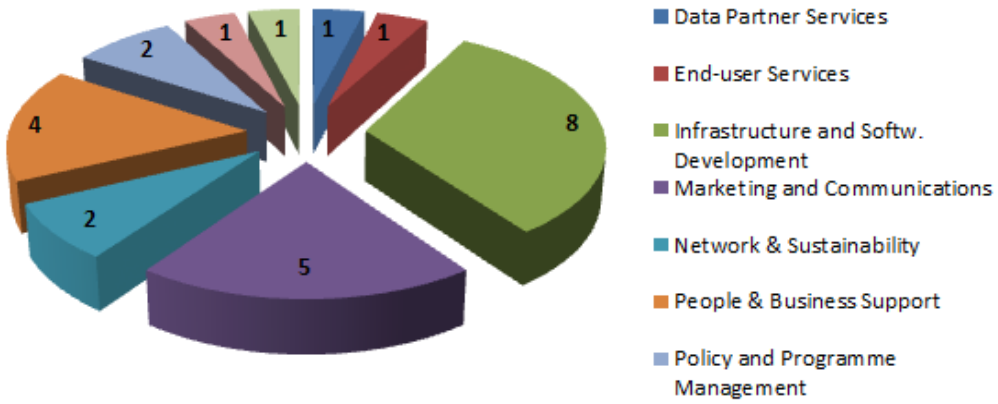
Task 9.1. Manage the work package

The work package is managed in close collaboration with WP4, Europeana Directors and all project partners. This management contains the overall control of the project including the Europeana DSI-2 finances, supporting partners in executing their tasks and to inform them about changes, highlights, successes and concerns within the project.

[15] PSNC is a participant in this WP since PSNC is required to have the project financially audited after project completion. No further work is envisioned for PSNC in WP9.

Task 9.2. Human Resource legal employment and management

In the period of July 2016 up to and including August 2017 25 new employees have joined Europeana. All employees are also assigned to the DSI-2 project.



From the 25 new employees, eight new employees are part of the infrastructure and software development team.

By having new people in, we also have said goodbye to 26 employees in total during the 14 months of the project.

No legal changes in Dutch labour law have taken effect in this period. In the period covering July 2016 to August 2017, we set up a payroll for two Europeana employees who are stationed in France and who started working for the project from the Bibliothèque nationale de France and set up payroll for one employee in Italy.

By the end of August EF has 5 vacancies. Under this task, all legal requirements for employment were managed by **EF**.

Task 9.3. Financial control, coordination and reporting of Europeana DSI-2

In close collaboration which Programme Management and project coordination (see also task 4.2) a communication structure, reporting structure and several formats for reporting were set up. The process improvement on subcontracting (started in DSI-1) is more improved in the first five months of DSI-2 and maintained for the remaining period. Preparation for the first reporting period to the Commission started from December 2016.

In close collaboration which Programme Management at **EF** and project coordination at **ONB** (see also task 4.2) a communication structure, reporting structure and several formats for reporting were set up. We have communicated the final financial figures to the Commission as requested and the request for second payment of the project has been sent to the Commission by April 2017. This payment is received mid-May 2017, the partners were paid 4 days after the receiving the total amount from the Commission.

By the end of March 2017 we have asked all partners to provide us a financial report for the period December 2016 - March 2017, including a forecast for the remaining period. Based on this we were be able to have a complete overview of the DSI-2 forecast. Based on this no budget changes were required.

By the end of August we have provided all partners the financial report template for the period December 2016 - August 2017. We are now in the process to collect all these reports to be able to send all the reports to the Commission. After the completion of the financial reports the process will start to have the final signature and approval from the Member States. As we know from the DSI-1 process, this will take a very long time to complete.

Task 9.4. Financial management for Europeana DSI-2

Financial reporting to Europeana Governing Board is based on a quarterly basis. The information is regularly provided to the Board and steering committee. Internally the financial reporting is based on a monthly base. The overall cash flow position has been improved compared to more than a year ago and we didn't have any cash flow issues by the end of Europeana DSI-2.

Task 9.5. Project and Business Support

Project knowledge sharing and management tools (basecamp, etc.) were maintained and updated if necessary.

4. Project management

The project was managed under the structure explained in the Description of the Action (DoA). All work package leaders and Europeana directors met at least once every month to discuss project progress and deviations. Day-to-day management of the project was performed through these meetings.

ONB and EF carried out the technical project coordination of the project: reporting, communication and administration of the project. The programme manager and programme coordinator met periodically with each work package leader to discuss the progress of the work packages against the Description of Action (tasks, deliverables, milestones, performance indicators) and if deviations occurred or could occur during the project and possible solutions. Project management issues were discussed during virtual meetings between ONB and EF once a week. Every six weeks there were in-person meetings, where the technical project coordinator (ONB) met all WP-leaders and EF directors in The Hague.

Project management (under WP4 and WP9) ensured effective financial administration, internal consortium management, coordination and communication, monitoring of project documents such as deliverables and milestones and liaison with the European Commission. Effective communication and information flows between the project management team, WP Leaders and other project partners happened via the collaborative workspace Basecamp, Skype meetings, and so forth. Basecamp is the main working and communication platform. All partners are provided with templates and information, made available via Basecamp and Google Drive.

Concerning the restructuring of work, the reallocation of budget and the preparation of the request to amend the Grant Agreement, technical project coordinator ONB was in regular contact with Europeana Programme Management.

Three progress reports were issued as follows

- First Technical report - 1 July 2016 - 31 October 2016 (D4.1)
- Second Technical report - 1 November 2016 - 1 April 2017 (D4.2)
- Final report - 1 April 2017 - 31 August 2017 (D4.3) (this report)

A set of processes and controlling mechanisms were established to ensure a proper management of the project. For example, regarding deliverables, an internal process was established in order to guarantee a proper reviewing, high quality documents and delivery on time.

Representatives of all partners were invited to join the Europeana DSI-2 Partner Board to discuss progress with Europeana directors and programme manager and programme coordinator. Because of the diversity of the partnership, the Partner Board meetings tended to be very procedural. Topical work and progress were discussed in work

package meetings between work package leaders and team members and the partners in that work package.

The Europeana DSI-2 Kick-off Meeting was held on September 7–8, 2016 at the Austrian National Library in Vienna. All partners were represented at the meeting. The individual partners, the overall project, as well as the individual work packages were presented, and work package meetings, Partner Board and General Assembly meeting were held.

Deliverable and milestone documents are available in the Project Documents section on Europeana Pro. Most deliverables were delivered on time, when not, this was clearly communicated to the European Commission with reasons

The Europeana DSI-2 Steering Committee (the Europeana Foundation Board) met five times during this reporting period. It discussed progress of the Europeana DSI-2 project, forecasts for finance and related matters, as well as strategic issues.

At the time of this writing financial results were not available yet. However, we expect the project to end with a small underspend.

5. Overview of project KPIs

No.	Task	Indicator	Method	Exp. prog	Result
1.1	1.6	Digital records accessible in Europeana (Tier 1)	Number of records	+3.5mln	+4.2mln
4.2 million records were added in the project period. However, 3.7 million records that were to complying to the EPF were de-published as well. The nett increase of Europeana records was therefore 0.5 million records. This is a clear example of our focus on quality records, as is also indicated by KPI 1.4.					
1.2	1.6	Records with direct links and good content quality (Tier 2)	Number of records	+2mln	+0.6mln
1.3	1.6	Records with direct links and reusable content of high quality (Tier 3)	Number of records	+0.5mln	+0.3mln
1.4	1.6	Records with direct links and freely reusable content of high quality (Tier 4)	Number of records	+0.3mln	+2.5mln
The outcomes of KPI 1.2, 1.3 and 1.4 are unexpectedly positive. Instead of adding much more records in tier 2 and 3 than in 4, we added the most records in tier 4. Instead of an expected total of +2.8mln for tier 2-4, we have increased by 3.4mln, of which 2.5 million in tier 4 alone.					
1.5	1.4	Major cultural institutions in the Europeana DSI	Number of institutions	+10	n/a
We did not measured the new major institutions in the Europeana DSI because the validation of major institution by Member States was delayed and is still not completed at the end of DSI-2					
2.1	2.4	Number of editathons and collection days organised	Number of days organised	3	10
2.2	2.6	Number of grant applications for Europeana Research	Number of grant applications	15	160
3.1	3.2	Number of active API keys (average number per year)	Number of keys	200	83

The API keys were measured by measuring how many API-keys were active for more than 5 days per month.					
3.2	3.2	Number of funded high-potential re-use projects	Number of projects	4	4
3.3	3.3	Number of new educational partnerships	Number of partnerships	2	5
We declared education our top priority reuse market and invested much in educational campaigns and relationship building. The partnerships are with the French Ministry of Education, eTwinning, Open Education Consortium, Educational Repositories Network and Eliademy.					
5.1	5.4	Number of attendees at AGM 2016	Number of attendees	250	201
The number of attendees of the AGM was below expectations. A reason could be the location (Riga) or the dates in the year. We have not specifically investigated.					
5.2	5.4	Number of candidates in Europeana Network MC elections	Number of candidates	35	48
5.3	5.4	Percentage of voters in Europeana Network MC elections	Percentage	60%	30%
The percentage of voters in the MC elections was below expectations. It is not clear why; however, remedial actions (such as increase promotion) have been proposed to avoid this in 2017.					
6.1	6.8	Percentage of all user searches matched to an entity from the Entity Database	Percentage	30%	
6.2	6.1	On a 1-5 Likert scale the no of respondents answers satisfactory (3) or above. Products to be evaluated in Europeana DSI-2: Pro, Labs/APIs, Collections, Art History Collections, Fashion Collections, Newspaper Collections, Photography Collections, Statistics Dashboard, Europeana Research	Percentage	60%	see below

		Pro		60%	79%
Does the website meet your expectations ?. Derives from NPS score that with limited results based on users that chose 6/10 or higher.					
		Labs/API		60%	n/a
Last measure was November 2016. Testing was postponed due to development of new merged site.					
		Collections		60%	84%
		Art (see below)		60%	65%
Art figures were derived from an NPS with limited results based on users that chose 6/10 or higher.					
		Fashion		60%	96%
		Photography (see below)		60%	71%
Art figures were derived from an NPS with limited results based on users that chose 6/10 or higher.					
		Newspaper (see below)		n/a	n/a
We do not have any results for Newspapers as we were unable to deliver the product within DSI 2.					
		Statistics Dashboard		Product discontinued	n/a
		Research			

Last measure was on November 2016.Testing was postponed due to development of new merged site for professionals.					
6.3	6.4	Number of developed thematic collections (in production)	Number of collections	5	5
7.1	7.2	Production systems are available of the time	Availability	99.50%	see below
			Europeana Collections		99.585%
			API Search		99.505
8.1	8.4	Number of downloads of media objects	Number of downloads	225,000	196,266
8.2	8.4	Number of impressions on social media	Number of impressions	14 mil	80,555,291
We started a partnership with GIPHY and a few GIFs using Europeana content went viral generating many more impressions than expected. The KPI was adjusted in the Business Plan 2017					
8.3	8.4	Number of impressions of Europeana's content on Wikimedia projects	Number of impressions	40 mil	132,485,115
Growth of the impressions on Wikipedia much higher than expected. The KPI was adjusted in the Business Plan 2017					

6. Overview of project deliverables and milestones

Deliverables July 2016 – August 2017				
Month	No.	Title of the document	Delivered Date	Planned date
Nov 2016	D2.1	Europeana Collections Plan	M4	M4
	D2.2	Europeana Fashion Collections Plan	M4	M4
	D2.3	Europeana Photography Collections Plan	M4	M4
	D2.4	Europeana Newspapers Collections Plan	M7	M4
	D4.1	First project report	M4	M4
	D5.1	Network activity and communications report	M4	M4
February 2017	D2.4	Europeana Newspapers Collections Plan	M7	M4
February 2017	D3.2	Europeana Labs Business Plan 2017-2020	M7	M7
March 2017	D4.6	Europeana Business Plan 2017	M8	M8
April 2017	D4.2	Second project report	M9	M9
June 2017	D6.4	Pilot for time-and-place-based discovery	M11	M11
	D3.1	Feasibility report on Europeana marketplace	M13	M11
August 2017	D3.3	20 online learning activities on Historiana	M13	M13
	D3.4	Pilot validation report on use of Europeana for teaching and	M13	M13

		learning		
	D4.3	Final project report	M13	M13
	D4.4	Report on ENUMERATE Core Survey	M13	M13
	D4.5	Analysis of IPR implications of other data acquisition mechanisms and brief for further research	M13	M13
	D6.1	Advanced image discovery report	M13	M13
	D6.2	Europeana Tech community activity report	M13	M13
	D6.3	Search improvement report	M13	M13
	D6.5	Report on quality metrics and improvement of multilinguality in Europeana	M13	M13
	D6.6	Task Force or Working Group report on IIIF coordination for the Europeana Network	M13	M13
	D6.7	Report on LOD and alternative data acquisition mechanisms for Europeana	M13	M13

Milestones July 2016 – August 2017				
Month	No.	Title of the document	Delivered Date	Planned date
Nov 2016	MS1.3	Aggregator Forum meeting	M3	M4
	MS5.2	AGM Brief and communication plan	M3	M4
	MS6.3	Advanced image discovery development plan	M4	M4
	MS6.6	Search improvement plan	M4	M4
	MS8.1	Overview of communication and promotion activity	M13	M4

	MS8.2	Corporate communication plan	M13	M4
January 2017	MS1.1	Ingestion workflows business requirements update	M7	M6
	MS1.2	Technical infrastructure maintenance plan	M7	M6
	MS1.5	First expert hub launched	n/a	M8
April 2017	MS5.1	Elections campaign communication plan	M9	M9
	MS7.1	Infrastructure Layer Version 1	M9	M9
Mai 2017	MS1.6	Second expert hub launched	n/a	M10
June 2017	MS1.4	Aggregator Forum meeting	M11	M11
	MS1.7	Expert hub sustainability plan	n/a	M11
	MS4.1	ENUMERATE survey launched	M11	M11
August 2017	MS8.3	Heritage in Motion awards ceremony	M13	M10
	MS1.8	Expert hub development plan[16]	n/a	M13
	MS2.1	Up to six user engagement projects	M13	M13
	MS2.2	Results and Impact of Sharing Europeana Data with CLARIN	M13	M13
	MS4.2	Policy document for reuse of Europeana	M13	M13
	MS6.1	Europeana Collections development report	M13	M13
	MS6.2	Europeana 1914-1918 integration	M13	M13

[16] MS1.5., MS1.6, MS1.7, MS1.8 have been combined as they have not delivered as foreseen. See WP1, task 1.5. for more explanation.

	MS6.4	Europeana Community sites development report	M13	M13
	MS6.5	Statistics Dashboard development report	M13	M13
	MS6.7	EDM development report	M13	M13
	MS7.2	Infrastructure Layer Version 2	M13	M13

7. Dissemination activities

The events during which the consortium members presented the project at external meetings and conferences along with online and offline publications and collaborations, produced by consortium members and related to the project are listed below.

7.1. Presentations at external events

Partner	Name of Event	Activity	Location	Date	Website
MCA	"Modern approach to museums management "ORGANISED BY THE COUNCIL OF EUROPE	MCA: presentation of DSI 1 & 2 & Museu-Hub Audience: museums from Georgian & Azerbadjian, Hungarian cultural institutions, EU experts, representatives of Council of Europe. MCA participant: Corinne Szteinsznaider	Budapest, Hungary	11-14/07 2016	*Not available*
ACE	EFG / Europeana Information Meeting	Organisation of meeting gathering ACE members and the wider film heritage network. Prepared presentation on rightsstatements.o	Cineteca di Bologna, Bologna, Italy	28/07 2016	http://www.ace-film.eu/?page_id=3882

		rg.			
NISV	NECS Conference	Workshop on journal publishing with audiovisual heritage sources with VIEW and EUscreen	Potsdam, Germany	26-30/07 2016	http://necs.org/conference/potsdam/
EF	PeriodO 2 First Workshop	(Invited) Representation of Europeana in discussions	Austin, USA	22-24/08 2016	*Not available*
FUB	Coordination Meeting	Joint planning meeting BGBM and AIT for OpenUp! DSI-2 contribution according to work plan	Graz, Austria	25-26/08 2016	
NISV	Coordination Meeting	Joint planning meeting	Graz, Austria	25-26/08 2016	
2Culture	European Association of Archaeologists conference 2016	Session organiser: „Towards digital infrastructures for open, participatory public archaeology“ and paper presentation Networking	Vilnius, Lithuania	31/08 - 04/09 2016	http://eaavilnius2016.lt/
EF & Humboldt	TPDL 2016	Manguinhas, Hugo, Stiller, Juliane: “Exploring Comparative Evaluation of Semantic Enrichment Tools for Cultural Heritage Metadata”	Hannover, Germany	05-06/09 2016	http://www.tpdl2016.org/
EF	NKOS2016	Presentation: Linking subject labels in Cultural	Hannover, Germany	09/09 2016	http://www.tpdl2016.org/nkos

		Heritage Metadata to MIMO vocabulary using CultuurLink			
SBB	OCR-D Workshop "Texterfassung historischer Dokumente"	Participation in workshop and presentation "Zeitungsdigitalisierung: Stand der Technik und Herausforderungen an Layout- und Strukturanalyse"	Berlin, Germany	06-07/09 2016	http://www.slideshare.net/cneudecker/zeitungsdigitalisierung-stand-der-technik-und-herausforderungen-an-layout-und-strukturanalyse
all partners	Kick-off Meeting Europeana DSI-2	Kick-off meeting DSI-2, including a presentation on the Europeana Newspapers thematic collection objectives and work plan	Vienna, Austria	07-08/09 2016	*Not available*
Lovegrove	Kick-off Meeting Europeana DSI-2	Presentation on Copyright Policy Advocacy Update with Paul Keller	Vienna, Austria	07-08/09 2016	*Not available*
UoG	Digital Humanities Congress 2016	Oral presentation	Sheffield, UK	08-10/09 2016	https://www.google.gr/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=digital%20humanities%20congress
DEN	GO Digitaal Erfgoed in de praktijk	Guest lecturer at Educational training for heritage professionals	Voorburg, Netherlands	13/09 2016	
Platoniq	Hackathon Ciutadana de Dades Obertes	Presentation of Goteo API	Barcelona, Spain	16/09 2016	https://www.eventbrite.es/e/registro-hackathon-ciutadana-de-

					dades-obertes-26419848478#
INESC-ID	CLARIN-PLUS workshop: "Working with Digital Collections of Newspapers	Presentation “Research use of the Europeana Newspapers corpus: past, present and future”	Leuven, Belgium	19-21/09 2016	https://www.clarin.eu/event/2016/clarin-plus-workshop-working-digital-collections-newspapers
UoG	Listening Experience Project Study Day	Presentation and discussion of Europeana Research and scholarly life cycle	London, UK	21/09 2016	http://www.open.ac.uk/research/main/news/uncovering-neglected-aspect-british-musical-culture
2Culture	Europeana Aggregators Task Force meeting	Participation in task force	The Hague, Netherlands	22-23/09 2016	
INESC-ID	Beyond EUDAT2020: Preparing the future of EUDAT	Presentation “Use cases for cultural heritage data based on EUDAT services”	Krakow, Poland	26/09 2016	https://eudat.eu/events/user-meetings/beyond-eudat2020-preparing-the-future-of-eudat-26-september-2016-krakow-poland
NISV	IASA Conference	Presentation on audiovisual archive engagement	Washington, USA	25-29/09 2016	http://2016.iasa-web.org
NISV	Culture 4D: Digitization, Data, Disruptions, Diversity	Keynote	Tallinn, Estonia	29-30/09 2016	
NISV	Waves Festival	Hackathon with EuropeanaSounds	Vienna, Austria	01/10 2016	http://www.ifs.tuwien.ac.at/mir/hackday/
MCA	IOCD 2016	Presentation of	Madrid,	04-05/10	http://datosabiertos

	Conference on Open Data	MUSEU-HUB During the pre-event meetings. Audience: museum & cultural european institutions MCA participant: Rossella CAFFO	Spain	2016	.sedic.es/presentation-open-data-and-culture/
2Culture	Europeana Aggregator Forum	Participation in working groups	Frankfurt, Germany	05-06/10 2016	http://pro.europeana.eu/event/aggregator-foruhttp://pro.europeana.eu/event/aggregator-forum-fall-2016m-fall-2016
ACE	Europeana Aggregator Forum Fall 2016	ACE participated in workshops and the meeting of the task force „domain aggregators next“	Frankfurt, Germany	05-06/10 2016	http://pro.europeana.eu/events?order=-end_event&page=8
NTUA	Europeana Aggregator Forum	Attending workshops & discussions	Frankfurt, Germany	05-06/10 2016	http://pro.europeana.eu/event/aggregator-foruhttp://pro.europeana.eu/event/aggregator-forum-fall-2016m-fall-2016
FUB	Europeana Aggregator Forum Fall 2016	Attending workshops & discussions	Frankfurt, Germany	05-06/10 2016	https://pro.deutsche-digitale-bibliothek.de/termine/europeana-aggregator-forum-in-frankfurt-am-main-germany
NISV	Europeana Sounds Edit-a-Thon	Organized & hosted	London, UK	08/10 2016	http://www.europeanasounds.eu/non-classe/the-bare-faced-go-away-bird-just-got-a-makeover
2Culture	How can	Assistance with	Derry,	11/10	http://www.carare.e

	education re-use data?	set-up and observation	Northern Ireland, UK	2016	u/evhttp://www.carare.eu/events/carare-discovery-programme-and-fablab-nerve-centre-discovery-programme-and-fablab-nerve-centre/ents/carare-discovery-programme-and-fablab-nerve-centre-discovery-programme-and-fablab-nerve-centre/
2Culture	Upcycle Digital Heritage	Participation in seminar; organisation of the event	Derry, Northern Ireland, UK	11-12/10 2016	https://www.eventbrithttps://www.eventbrite.com/e/upcycle-digital-heritage-tickets-6529611243#e.com/e/upcycle-digital-heritage-tickets-6529611243#
2Culture	CARARE AGM	Organisation and company secretary report	Derry, Northern Ireland, UK	12/10 2016	
NISV	FIAT/IFTA Conference	Panel on sustainability of European audiovisual projects: EUscreen and PrestoCentre	Warsaw, Poland	12-14/10 2016	http://fiatifta.org/index.php/fiatiftaevents/world-conference/
PSNC	Workshop “Public humanities and digital humanities: mutual inspiration and common (digital) tools”	Workshop for humanities researchers incl. presentation of Europeana and Europeana Research	Wrocław, Poland	15/10 2016	http://dariah.pl/warsztaty-public-humanities-and-digital-humanities-mutual-inspiration-and-common-digital-tools/

EF	IIIF Outreach Event	Presentation: Europeana & IIIF - what we have been doing with IIIF and why	Amsterdam, Netherlands	18/10 2016	http://pro.europeana.eu/event/the-iiif-working-group-meeting
NISV, EF	IIIF Working Group Meeting	Co-organizer	Amsterdam, Netherlands	18/10 2016	http://pro.europeana.eu/event/the-iiif-working-group-meeting
INESC-ID	IIIF Working Groups Meeting	Presentation "Making IIIF resources discoverable in Europeana"	The Hague, the Netherlands	19-21/10 2016	http://iiif.io/event/2016/thehague/
2Culture	Europeana Aggregators Task Force meeting	Participation in task force	Hilversum, Netherlands	24-25/10 2016	
DEN	EGMUS plenary event	Presentation about ENUMERATE and feedback round regarding new questions	Berlin, Germany	24-25/10 2016	http://www.egmus.eu/
F & F and EF	Press conference, Latvian National Library (LNB)	Launch of Europeana 1914-1918 campaign in Latvia, Frank Drauschke/ Ad Pollé	Riga, Latvia	24-25/10 2016	*Not available*
NISV	Open Media Archives	Keynote and workshop, Maarten Brinkerink, "Open Media Archives: An Introduction and Case Studies"	Coruña, Spain	27/10 2016	http://corunadixital.gal/en/about-coruna-dixital/
MCA	EuroMed conference	Presentation of Museu-Hub to several meetings, including "VIMM	Cyprus	30/10-05/11 2016	*Not available*

		kick off"; professional meetings, Dariah CY meeting. Audience : DCH communities MCA participants: Rossella CAFFO & PG Sola			
Euroclio	Netherlands Ministry of Education, Science and Culture	Steven Stegers and Nique Sanders, "Historiana"	The Hague, the Netherlands	03/11 2016	*Not available*
NISV	Europeana Sounds Unlocking Sound Collections Conference	Co-organiser & speaker Maarten Brinkerink, "Enrichment and participation"	Vilnius, Lithuania	04/11 2016	http://www.europeanasounds.eu/news/unlocking-sound-collections-in-vilnius
NISV	Transcribing Europeana 1914-1918	Co-organizer & participant	Riga, Latvia	07-08/11 2016	http://pro.europeana.eu/event/europeana-network-association-agm-2016#Transcribing
2Culture	Europeana AGM	Networking	Riga, Latvia	07-08/11 2016	http://pro.europeana.eu/event/europeana-network-association-agm-2016
FUB	Europeana AGM	The Europeana Network Association Annual General Meeting	Riga, Latvia	07-08/11 2016	http://pro.europeana.eu/event/europeana-network-association-agm-2016

F & F and EF	Europeana AGM	Ignite talk and launch of website www.transcribathon.eu, Frank Drauschke/ Ad Pollé	Riga, Latvia	07-08/11 2016	*Not available*
F & F and EF	Europeana AGM	Presentation of Europeana 1914-1918 & Transcribathon, Start of the first international Transcribathon, Frank Drauschke/ Ad Pollé	Riga, Latvia	07-08/11 2016	http://transcribathon.com/en/news/ready-steady-transcribe/
NISV	Europeana AGM	Co-organiser & speaker Maarten Brinkerink	Riga, Latvia	07-08/11 2016	http://pro.europeana.eu/event/european-network-association-agm-2016
DEN	Europeana AGM	Ignite talk	Riga, Latvia	07-08/11 2016	http://pro.europeana.eu/event/european-network-association-agm-2016#Ignite
ACE	Europeana AGM 2016	Annual meeting of the Europeana Network Association	Riga, Latvia	07-08/11 2016	http://pro.europeana.eu/events?order=-end_event&page=6
eFashion	EVA/Minerva XIIth International Conference	Marco Rendina, "Creative re-use of digital content, the co-creation methodology in Europeana Fashion"	Jerusalem, Israel	09-10/11 2016	http://www.digital-heritage.org.il/program2016.html
eFashion	EVA/Minerva XIIth International Conference	Marco Rendina, "We transform the world with culture!	Jerusalem, Israel	09-10/11 2016	http://www.digital-heritage.org.il/program2016.html

		Europeana present and future"			
NISV	Europeana Sounds Edit-a-Thon	Co-organizer	Rome, Italy	11/11 2016	http://www.europeanasounds.eu/news/21-experts-came-together-to-enrich-wikipedia-about-everything-verdi-related
MCA	Berliner Herbststreffen zur Museumsdokumentation	Presentation of Museu-Hub + technical meeting "Museu-Hub: Services and Tools to make your collections widely visible" Audience: German museums MCA participant: Maria Teresa Natale	Berlin, Germany	12/11 2016	*Not available*
MCA	Image and Research Conference	Presentation of next MCA DSI 2 WS in Barcelona in February. MCA participant: David Iglesias Franch (Spain) & Franc Zakrajsek (Slovenia), members of MCA	Girona, Spain	16-18/11 2016	*Not available*
FUB	Zugang gestalten! mehr Verantwortung für das kulturelle Erbe	Networking	Berlin, Germany	16-18/11 2016	http://www.zugang-gestalten.de/
NISV	Europeana	Co-organiser &	Berlin,	21-22/11	http://www.europea

	Space Final Conference	speaker Maarten Brinkerink	Germany	2016	na-space.eu/conferences/berlinconference2016/
FUB	MTSR 2016 - 10th International Conference on Metadata & Semantics Research	oral presentation Jörg Holetschek, Gisela Baumann, Gerda Koch, Petra Böttinger and Walter G. Berendsohn: "Natural History in Europeana. Accessing Scientific Collection Objects via LOD"	Göttingen, Germany	22-25/11 2016	http://mtsr-conf.org/
MCA	IV International Scientific and Practical Seminar: Digitized Heritage - preservation, access, representation	Presentation via Skype on "Museu Hub & tools to make your collection widely visible" MCA speakers: Maria Teresa Natale and Marzia Piccininno	Kiev, Ukraine	24-25/11 2016	*Not available*
EUN	Europeana DSI-2 workshop 1	2 day workshop with teachers from many EU countries with presentations and activities involving Europeana content	Brussels, Belgium	28-29/11 2016	
EF	SWIB 2016	Presentation: Improving data quality at Europeana: New requirements and methods for better measuring	Bonn, Germany	28-30/11 2016	http://swib.org/swib16/

		metadata quality			
ACE	Conference „Digitisation of Cultural Heritage and Orphan Works“	Workshop / Training for film archives how to use the FORWARD tool to assess right status, including orphans in the AV sector. Relates to the work in the IPR and copyright working group. Networking	Brussels, Belgium	30/11 2016	http://project-forward.eu/2016/12/06/conferenchttp://project-forward.eu/2016/12/06/conference-presentations-digitisation-of-cultural-heritage-and-orphan-works-available-online/e-presentations-digitisation-of-cultural-heritage-and-orphan-works-available-online/
EF	W3C Workshop Smart Descriptions & Smarter Vocabularies (SDSVoc)	Panel on Content Negotiation	Amsterdam, Netherlands	30/11-01/12 2016	https://www.w3.org/2016/11/sdsvoc/
DEN	Archief2020 conferentie	Presentation with ENUMERATE data about archives in the Netherlands.	Amersfoort, the Netherlands	01/12 2016	not available, general url https://archief2020.nl/
DEN	EDCR2016	Presentation about ENUMERATE	Glasgow, UK	12/12 2016	https://scotdigich.wordpress.com/events/symposium/
MCA	Meetings with French Ministry of Culture	Several Meetings with Departments in Charge of Digital Innovation, Cultural Heritage, and European Affairs MCA participants: R.Caffo & C.Szteinsznaider	Paris, France	12/2016-04/2017	

PHOTOCONSORTIUM	Meeting with Heritage institutions Bruges about their online strategy	President Fred Truyen showed Europeana DSI efforts as inspiration		09/12 2016	
DEN	EDCR2016	Presentation about ENUMERATE	Glasgow, UK	12/12 2016	https://scotdigich.wordpress.com/events/symposium/
MCA	ICOM International	Meeting with Icom Int: Presentation of Europeana DSI-2 and Museu-Hub MCA participants : R.Caffo & C.Szteinsznaider	Paris, France	15/12 2016	
UoG	Europeana Impact Workshop	Glasgow University RSE Heritage Workshop with harry Verwayen and Marco DeNiet	Glasgow, UK	16/12 2016	
Humboldt	Berliner Bibliothekswissenschaftliches Kolloquium	Presentation: Vom Suchen und Finden – eine unendliche Geschichte. Heterogenität und Mehrsprachigkeit als Herausforderungen für Kulturerbeportale	Berlin, Germany	10/01/2017	
Lovegrove	Informal event with rights holders, collecting societies and CHIs	Exchange of views on COM proposal, seek understanding of copyright issues from different perspectives, discuss possible	Brussels, Belgium	11/01 2017	

		solutions			
CLARIN	Meeting	CLARIN hosted technical meeting regarding metadata and infrastructure	Utrecht, Netherlands	19/01 2017	
F&F	Europeana 1914-1918 planning meeting	Europeana collections 1914-1918, Transcribathon events 2017	The Hague, Netherlands	18-20/01 2017	
Humboldt	Guest Lecture at University of Konstanz	Searching Cultural Heritage - Heterogeneity as a Key and as a Challenge.	Konstanz, Germany	20/01/2017	https://www.uni-konstanz.de/en/university/news-and-media/public-events/events/event-details/2017/1/20/event/23978-Searching-Cultural-Herit/tx_cal_phpicalendar/
PHOTOCONSORTIUM	Second meeting Heritage Institutions Bruges	President Fred Truyen showed Europeana portal and similar portals		23/01 2017	
INESC-ID	EUDAT Helsinki Meeting	Discussion meeting on the EUROPEANA Data Pilot, Networking and dissemination of Europeana Research	Helsinki, Finland	25-26/01 2017	https://eudat.eu/events/user-meetings/eudat-helsinki-meeting-23-27-january-
MCA	Forum Culture – Beyond The Obvious	Communication on MUSEU hub, the Europeana DSI -2 workshops,	Budapest, Hungary	26-28/01 2017	

		and the Europeana survey for content providers about Publishing with Europeana. Meeting with NEMO on those topics + coming Europeana DSI WS MCA participant : C.Szteinsznaider			
PHOTOCONSORTIUM	MID2017 in Maastricht organized by EADTU, in the context of Europeana Space MOOC	President Fred Truyen spoke about Europeana and he also mentioned current Europeana DSI-2 work and the Photography channel.	Maastricht	31/01 2017	
INESC-ID	CLARIN-PLUS workshop "Facilitating the Creation of National Consortia: Repositories"	Networking and dissemination of Europeana Research	Prague, Czech Republic	09-10/02 2017	https://www.clarin.eu/event/2017/clarin-plus-workshop-facilitating-creation-national-consortia-repositories
FUB	National Meeting of Museum herbarium custodians	Presentation on data provision to Europeana, community networking: Petra Böttinger, Jörg Holetschek, Gisela Baumann, Wolf-Henning Kusber, Anton Güntsch, Walter G.	Berlin, Germany	10/02 2017	

		Berendsohn: "Science and beyond - Natural History Collections meet the Arts".			
ACE	ACE Executive Committee meeting	Memo about the role of EFG as domain aggregator and it's role under DSI 3. Briefing of EC members on Europeana's position in the copyright reform discussion and the role of ACE	Berlin, Germany	13/02 2017	
2Culture	Digital Past 2017	Exhibition stand	Newport, Wales, UK	15-16/02 2017	https://rcahmw.gov.uhttps://rcahmw.gov.uk/digital-past-conference/digital-past-2017/k/digital-past-conference/digital-past-2017/
MCA	Europeana DSI Workshop: co-organised with GenCat and CRDI.	The objective of the workshop was to push a data aggregation workflow from Catalan cultural institutions toward Calaix, the Catalan museum aggregator managed by	Barcelona, Spain	23-24/02 2017	

		GenCat, toward Europeana throughout MUSEU.			
EUN	Europeana DSI-2 Second teacher workshop	2 day workshop with 20 teachers from 10 EU countries with presentations and activities involving Europeana content	Brussels, Belgium	27-28/02 2017	http://fcl.eun.org/europeana-dsi2 and http://pro.europeana.eu/blogpost/europeana4education-final-teachers-workshop-1
FUB	DigBib 2017: Future of Digitized Heritage	Oral presentation on Europeana and OpenUp!	Graz, Austria	02-04/03 2017	http://conference.ait.co.at/digbib/index.php/digbib2017/digbib2017/index
FUB	Natural history data in Europeana	OpenUp! DSI-2 Workshop for new providers	Graz, Austria	04/03 2017	http://conference.ait.co.at/digbib/index.php/digbib2017/digbib2017/schedConf/presentations
FUB	Europeana Aggregator-in-residence	Joint meeting of FUB + AIT partner with Europeana officers Pierre Barrault and Henning Scholz	Graz, Austria	06/03 2017	
EF	ENSSIB Lecture as part of professional training: Numérisation et constitution de bibliothèques numériques, Actualités et prospective	Presentation: Actualité d'Europeana : la stratégie pour les années à venir	Lyon, France	13/03 2017	

Humboldt	International Symposium on Information Science (ISI 2017)	Presentation: Multilinguality of Metadata - Measuring the Multilingual Degree of Europeana's Metadata	Berlin, Germany	14/03/2017	http://isi2017.ib.hu-berlin.de/
eFashion	Meeting with Luca Missoni (Missoni Archive)	Meeting with creative director Luca Missoni and Missoni Archive's staff to discuss new content provision and open licensing for Europeana Fashion aggregator	Varese, Italy	14/03 2017	
Lovegrove	Library awareness raising event	Over 100 million library users in the EU: how can copyright reform help them?	European Parliament Strasbourg, France	15/03 2017	http://pro.europeana.eu/blogpost/a-framework-for-public-libraries
CLARIN	Meeting	General technical/project meeting related to task 2.6.3	The Hague, Netherlands	17/03 2017	
NISV	1968 in the Media + EUscreen Network Meeting	Organise, Presentation: Eve-Marie Oesterlen. *Status Aggregation / Network*	Paris, France	20-21/03 2017	http://blog.euscreen.eu/archives/9129
F&F	Transcribathon Romania – Bucharest,	Press conference, organisation, presentation and	Bucharest, Romania	21/03 2017	https://transcribathon.com/en/news/thats-a-wrap/

	Europeana 1914-1918	realisation of the event			
F&F	Transcribathon Romania – Brasov, Europeana 1914-1918	Press conference, organisation, presentation and realisation of the event	Brasov, Romania	22/03 2017	https://transcribathon.com/en/news/thats-a-wrap/
F&F	Transcribathon Romania – Cluj, Europeana 1914-1918	Press conference, organisation, presentation and realisation of the event	Cluj, Romania	23/03 2017	https://transcribathon.com/en/news/thats-a-wrap/
F&F	Transcribathon Romania – Sibiu, Europeana 1914-1918	Press conference, organisation, presentation and realisation of the event	Sibiu, Romania	23/03 2017	https://transcribathon.com/en/news/thats-a-wrap/
Platoniq	Makerspaces in Public Libraries	Europeana labs, a space for makers. Presentation to the Spanish network of public libraries. Event organized by Subdirección General de Coordinación Bibliotecaria, Medialab-Prado and US embassy in Madrid	Madrid, Spain	23/03 2017	https://www.youtube.com/watch?v=yh3gbSmuwBo&feature=youtu.be
eFashion	Meeting for "The Future of Aggregation" Task Force	Participation to the Task Force activities and discussions	The Hague, Netherlands	24/03 2017	

F&F	Award ceremony of Transcribathon Romania Frank Drauschke/ Ad Pollé (EF)	Transcribing Europeana 1914-1918, District Library "Octavian Goga"	Cluj, Romania	25/03 2017	
MCA	Restricted meeting on the European Year of Cultural Heritage	Organiser: French Ministry of Culture – CH Direction Speakers: European Commission, French and German coordinators of the EYCH2018. Dissemination on Europeana DSI-2 & Museu-Hub activities	Paris, France	29/03 2017	
Lovegrove	Library coordination meeting	Discussion on development on copyright reform with regards to cultural heritage institutions	London, UK	29/03 2017	
ACE	ACE Workshop "Metadata Management in Film Archives" : Putting the Cinematographic Works Standard in use and introducing	ACE co-organised the workshop with DIF. ACE was responsible for communication and dissemination of the event. Workshop topics: Cinematographic Works Standard,	Potsdam, Germany	29-30/03 2017	http://www.ace-film.eu/?page_id=4287

	the new FIAF Cataloguing Manual	FIAF cataloguing manual, Linked Open Data, Europeana's achievements in terms of data enrichment and data quality. 89 film archivists, students and CHI representatives attended the workshop			
F&F	15th East-Western-European Memorial Seminar	Presentation Transcribathon/Europeana 1914-1918	Krzyzowa, Poland	29/03 - 01/04 2017	https://www.bundesstiftung-aufarbeitung.de/internationales-gedenkstaettentreffen-kreisau-3169.html
INESC-ID	"Semantics and cultural heritage data"	EUDAT Semantic Working Group Workshop	Barcelona, Spain	03/04 2017	
eFashion	Meeting for the Impact assessment Task Force	Participation to the Task Force activities and discussions. Presentation of the Europeana Fashion outreach activities.	Copenhagen, Denmark	03-04/04 2017	https://docs.google.com/document/d/1P8uQJYxi9typpsrWVt1GbG28z0g6zXuyuSmYTrzvefQ/edit?usp=drive_web
NISV	Impact Assessment Task Force Workshop & Meeting	Co-organizer	Copenhagen, Denmark	03-04/04 2017	http://pro.europeana.eu/blogpost/kick-starting-the-development-of-the-impact-toolkit
eFashion	Presentation at The New	Presentation of the Europeana	Paris, France	07/04 2017	

	School Parsons Paris	Fashion portal and Tumblr to the students of the fashion curation course at TNS Parson Paris. Marta Franceschini presented: "Europeana Fashion. How to curate fashion digital content online"			
eFashion	Europeana Collection Forum	Presentation of the Europeana Fashion curation and communication activities and participation to the discussions	The Hague, Netherlands	07/04 2017	https://docs.google.com/document/d/1rsD-JoLqDqhsxsVs4IndjSxM3c82I_c93DRG52I4-bo/edit#
DEN	Workshop: Indicatoren cultureel erfgoed	Workshop with presentation about ENUMERATE	The Hague, Netherlands	12/04 2017	http://weekvanhetdigitaalerfgoed.nl/12-april/
eFashion	Europeana Aggregator Forum	Attending workshops & discussions and chairing a table on the possible scenarios for aggregation	The Hague, Netherlands	18-19/04 2017	https://www.eventbrite.co.uk/e/aggregator-forum-spring-2017-tickets-32320379124
NTUA	Europeana Aggregator Forum	Attending workshops & discussions	The Hague, Netherlands	18-19/04 2017	http://pro.europeana.eu/event/aggregator-forum-

					spring-2017
FUB	Europeana Aggregators Forum April 2017	Participation in activities and discussions	The Hague, Netherlands	18-19/04 2017	http://pro.europeana.eu/event/aggregator-forum-spring-2017
PHOTOCONSORTIUM	Europeana Aggregators Forum April 2017	Attending workshops & discussions Antonella Fresa, Fred Truyen, David Iglesias	The Hague, Netherlands	18-19/04 2017	http://pro.europeana.eu/event/aggregator-forum-spring-2017
2Culture	Europeana Aggregator Forum	Participation in working groups	The Hague, Netherlands	18-19/04 2017	http://pro.europeana.eu/event/aggregator-forum-spring-2017
NISV	Museum and the Web Conference	Presentation: Brigitte Jansen, *MuPop – The Museum Pop-Up Exhibition Tool. Museums and the Web*	Cleveland, USA	19-22/04 2017	https://mw17.mwconf.org/proposal/mupop-the-museum-pop-up-exhibition-tool/
NISV	DPLAfest	Presentation: EuropeanaTech: Synergizing Europe's cultural heritage digital infrastructure	Chicago, USA	21/04/2017	https://dp.la/info/get-involved/dplafest/april-2017/
EF	LD4P/LD4L-Labs Community Meeting	Presentation: W3C Data on the Web Best Practices - Data Vocabularies	Stanford, USA	24-25/04 2017	https://wiki.duraspace.org/pages/viewpage.action?pageId=83232681
EF, INESC-ID	Seminar Linked Data in Research and Cultural	Presentation: New approaches for data acquisition at	The Hague, Netherlands	01/05 2017	https://dans.knaw.nl/nl/actueel/agenda/seminar-linked-data-in-research-and-

	Heritage	Europeana: IIIF, Sitemaps and Schema.org			cultural-heritage
Humboldt	Subject Indexing & Information Technology Workshop	Presentation: Multilinguality of Metadata - Measuring the Multilingual Degree of Europeana's Metadata	Göttingen, Germany	11/05/2017	
FUB	Webinar	Participation in IIIF Webinar for The Royal Botanical Garden Edinburgh	Edinburgh, UK	16/05 2017	https://meetings.webex.com/collabs/#/meetings/detail?uuid=IE09XZST7IFUYGBJWK219C2CK1-GN0L
NISV	Europeana Photography Launch Event	User engagement with MuPop	Pisa, Italy	20/05 2017	http://www.digitalmeetsculture.net/article/europeana-photography-thematic-collection-launch-event-in-pisa/
NISV	Europeana Fashion International Association Symposium + General Assembly	User engagement with MuPop	Venice, Italy	22-23/05 2017	http://pro.europeana.eu/event/european-fashion-symposium-fashion-digital-memories
Humboldt	Workshop with Library and Information Science Students from the University of Chapel Hill	Cultural heritage information system, cultural objects and their descriptions.	Berlin, Germany	25/05/2017	
EF	DHBenelux	Panel: Be FAIR or be square:	Utrecht, Netherlands	03-05/06 2017	https://dhbenelux2017.eu/

		Stakeholders' perspectives on data quality in the Digital Humanities			
FUB	9th European GBIF Nodes Meeting	Updates and community networking	Stockholm, Sweden	03-05/06 2017	https://www.gbif.org/event/83228/9th-european-gbif-nodes-meeting
INESC-ID EF	N. Freire, N. van Schaverbeke, "How EUDAT supports the cultural heritage datasets discovery, access, citability and re-use"	Interview in EUDAT News		06/06 2017	https://eudat.eu/news/how-eudat-supports-the-cultural-heritage-datasets-discovery-access-citability-and-re-use
INESC-ID, EF	21st International Conference on Electronic Publishing (ELPUB2017)	Presentation: Web technologies: a survey of their applicability to metadata aggregation in cultural heritage	Larnaca, Cyprus	07-08/06 2017	http://www.cyprusconferences.org/elpub2017/
INESC-ID	IIIF 2017 Conference	Presentation "Metadata Aggregation of IIIF Resources at Europeana: status, plans and cooperation opportunities "	Vatican City	06-09/06 2017	http://iiif.io/event/2017/vatican/
EF	IIIF 2017 Conference	Representing the Europeana Task Force on IIIF	Vatican City	06-09/06 2017	http://iiif.io/event/2017/vatican/

		Co-chairing session of the IIIF Discovery Technical Working Group Panel on Institutional benefits to adopt IIIF			
EF, Humboldt	Conference European Library Automation Group (ELAG 2017)	Presentation: Nothing is created, nothing is lost, everything changes: measuring and visualizing data quality in Europeana	Athens, Greece	06-09/06 2017	http://elag2017.org/
DEN	Cultuurindex meeting	Short presentation about ENUMERATE	The Hague, Netherlands	09/06 2017	
DEN	KVAN conference	Presentation with section about ENUMERATE	Dordrecht, Netherlands	12/06 2017	https://kvandagen2017.sched.com/event/AQBX/archiefdiensten-en-hun-digitale-onderzoeksomgeving-vijf-voor-twaalf-of-vijf-over-twaalf-janna-leguijt-harriet-de-man-ken-je-publiek-vind-het-digitale-olifantenpad-en-vergroot-je-zichtbaarheid-wietske-van-den-heuvel
2Culture	Archaeology	Organiser and	Leiden,	13-14/06	http://www.carare.e

	and Architecture in Europeana	presentation „Welcome: Introduction to CARARE“	Netherlands	2017	u/events/archaeology-and-architecture-europeana/
2Culture	CARARE AGM	Organisation and company secretary report	Leiden, Netherlands	14/06 2017	
FUB	SPNHC 2017: The Next Generation in Best Practices	Presentation on natural history in Europeana & community networking activities: W.G. Berendsohn:” Public access to collections. Natural History in Europeana”	Denver, USA	18-24/06 2017	http://www.spnhc.org/media/assets/1499710396_SPNHCProgram2017.pdf
NISV	Transcribathon Campus	User engagement with Transcribathon competition	Berlin, Germany	22-23/06 2017	http://pro.europeana.eu/event/europeana-transcribathon-campus-2017
FUB	Europeana Transcriba-thon Campus 2017	Take part in action	Berlin, Germany	23/06 2017	http://pro.europeana.eu/event/europeana-transcribathon-campus-2017
FUB	Open Night of Science Berlin & Potsdam	Demonstration on Europeana activities to a mixed, broad audience: Petra Böttinger & Jörg Holetschek: “Virtuelle Museen und Bibliotheken - lassen wir uns	Berlin & Potsdam, Germany	24/06 2017	https://www.langenachtderwissenschaften.de/startseite.html

		begeistern!?"			
ACE	ACE Workshop „Collection Management Tools in the 21st Century"	Follow-up of the workshop „Metadata Management in Film Archives" with a focus on LOD Networking	Bologna, Italy	27/06 2017	http://www.ace-film.eu/?p=4491
ACE	ACE Executive Committee Meeting 2017	Memo on EFG sustainability models under DSI 3	Bologna, Italy	28/06 2017	
ACE	ACE General Assembly 2017	Presentation of ACE Annual Report, including EFG under Europeana DSI-2	Bologna, Italy	28/06 2017	
FUB	BioSyst.EU 2017	Oral presentation in session "New approaches to outreach and teaching in biodiversity science": Petra Böttinger, Jörg Holetschek, Gerda Koch, Heimo Rainer & Walter G. Berendsohn: "Natural history in Europeana – making new friends on the web"	Gothenburg, Sweden	15-18/08 2017	http://www.conferencemanager.se/BiosystEU2017/conference-programme.html
2Culture	European	Session organiser:	Maastricht,	30/08–	

	Association of Archaeologists conference 2017	„Towards digital infrastructures for open, participatory public archaeology“, paper presentation Networking	Netherlands	03/09 2017	

7.2. Publications

Authors	Title	Description	Date	Website
Humboldt, EF, AIT Manguinhas, H., Freire, N., Isaac, A., Stiller, J., Charles, V., Soroa, A., Simon, R.; Alexiev, V.	Exploring Comparative Evaluation of Semantic Enrichment Tools for Cultural Heritage Metadata	In International Conference on Theory and Practice of Digital Libraries, Lecture Notes in Computer Science, Volume 9819 (pp. 266-278). Springer International Publishing.	September 2016	https://link.springer.com/chapter/10.1007/978-3-319-43997-6_21
EF, Hugo Manguinhas et al.	Linking subject labels in Cultural Heritage Metadata to MIMO vocabulary using CultuurLink	In Proceedings NKOS2016	September 2016	http://ceur-ws.org/Vol-1676/paper4.pdf
Humboldt, EF, Timothy Hill, Valentine Charles, Juliane Stiller, and Antoine	"Searching for inspiration": user needs and search architecture in Europeana collections	In Proceedings of the 79th ASIS&T Annual Meeting: Creating Knowledge, Enhancing Lives through Information & Technology (ASIST '16). American Society for Information Science, Silver Springs, MD,	October 2016	http://dl.acm.org/citation.cfm?id=3017490

Isaac.		USA		
EUN	Call for Europeana DSI-2 teachers	European Schoolnet online Teachers' newsletter	October 2016	http://us6.campaign-archive2.com/?u=fcaa73d53911340a72d92d73f&id=0f5f0287d7
EF, Antoine Isaac	Europeana and International Image Interoperability Framework - An Update	EuropeanaTech blog post.	October 2016	http://pro.europeana.eu/blogpost/europeana-and-iiif-update-oct-2016
LNB	Nacionālā bibliotēka aicina apkopot liecības un stāstus par Pirmo pasaules karu	in: National Library of Latvia homepage	October 2016	http://www.lnb.lv/lv/nacionala-biblioteka-aicina-apkopot-liecibas-un-stastus-par-pirmo-pasaules-karu
LNB	Aicinām apkopot liecības un stāstus par Pirmā pasaules kara laiku	in: Regional issue "Dzirkstele"	October 2016	http://dzirkstele.diena.lv/lietotaju-raksti/aicinam-apkopot-liecibas-un-stastus-par-pirma-pasaules-kara-laiku-151433
LNB	Europeana 1914-1918 Kolekcijas dienas	in: "Whereevent"	October 2016	http://www.whereevent.com/detail/Latvijas-Nacionala-biblioteka-Europeana-1914-1918-Kolekcijas-dienas
LNB	Europeana 1914–1918	in: Alūksnes library homepage	October 2016	http://www.albibl.lv/index.php?subaction=showfull&id=1478097581&archive=&start_from=&ucat=49&go=
LNB	Nacionālā bibliotēka aicina apkopot liecības un stāstus	in: Portāla "Ir" blogs	October 2016	http://irir.lv/en/blogs/kultura/nacionala-biblioteka-aicina-

	par Pirmo pasaules karu			apkopot-liecibas-un-stastus-par-pirmo-pasaules-karu
LNB	Nacionālā bibliotēka aicina apkopot liecības un stāstus par Pirmo pasaules karu	in: Portāls "Historia.lv"	October 2016	http://www.historia.lv/jaunumi/nacionala-biblioteka-aicina-apkopot-liecibas-un-stastus-par-pirmo-pasaules-karu
LNB	Nacionālā bibliotēka aicina apkopot liecības un stāstus par Pirmo pasaules karu	in: Latvijas Bibliotēku portāls	October 2016	http://www.biblioteka.lv/Libraries/latvijas-nacionala-biblioteka/News/ArticleItem.aspx?article=38828&type=0
LNB	Aicina apkopot liecības un stāstus par Pirmā pasaules kara laiku	in: Gulbene District library homepage	October 2016	http://www.gulbenesbiblioteka.lv/lv/jaunumi-1/aicina-apkopot-liecibas-un-stastus-par-pirma-pasaules-kara-laiku
LNB	Aicinām apkopot liecības un stāstus par Pirmā pasaules kara laiku	in: Jelgava Town library	October 2016	http://www.jelgavasbiblioteka.lv/piedavajam/jaunumi/aicinam-apkopot-liecibas-un-stastus-par-pirma-pasaules-kara-laiku-674/
LNB	Nacionālā bibliotēka aicina apkopot liecības un stāstus par Pirmo pasaules karu	in: Valka District Central Library homepage	November 2016	http://biblioteka.valka.lv/lv/nacionala-biblioteka-aicina-apkopot-liecibas-un-stastus-par-pirmo-pasaules-karu
LNB	Apkopos stāstus par 1. pasaules karu	in: News.lv	November 2016	http://news.lv/Kurzemnieks/2016/11/07/apkopos-stastus-par-1-pasaules-karu
LNB	News item, in: Radio "Tev"	broadcasted and electronically	November 2016	http://www.radiotev.lv/aktuali/1110/aicina-

				saglabat-liecibas-par-pirmo-pasaules-karu
LNB	Europeana 1914-1918 Kolekcijas dienas	in: “All events in Riga”		https://allevents.in/riga/europeana-1914-1918-kolekcijas-dienas/10112249703 2259
EUN	Europeana DSI-2 workshop 1 coming up in November	European Schoolnet online Teachers’ newsletter	November 2016	http://us6.campaign-archive1.com/?u=fcaa 73d53911340a72d92 d73f&id=8db617aa45
FUB - Jörg Holetschek, Gisela Baumann, Gerda Koch and Walter G. Berendsohn	Natural History in Europeana. Accessing Scientific Collection Objects via LOD	Proceedings of the 10th International Conference on Metadata and Semantics Research, pp.223-234; in E. Garoufallou et al. (Eds.), MTSR 2016, Springer International Publishing AG. (ISBN 978-3-319-49156-1, DOI: 10.1007/978-3-319-49157-8_20)	November 2016	
PHOTOCONSORTIUM	The channel	PHOTOCONSORTIUM website and social media channels	13/12/2016	http://www.photoconsortium.net/europeana-photography-collection-at-the-starting-line/
EF, Valentine Charles, Antoine Isaac	And the quest for better metadata quality goes on: an update from the DQC	EuropeanaTech blog post	January 2017	http://pro.europeana.eu/blogpost/and-the-quest-for-better-metadata-quality-goes-on
EF, NISV, Antoine Isaac, Gregory Markus	IIIF Adoption by Europeana: future perspectives for the Network	EuropeanaTech blog post	February 2017	http://pro.europeana.eu/blogpost/iiif-adoption-by-europeana-future-perspectives-for-the-network-1

EUN	Europeana DSI-2 workshop 2 coming up in February	European Schoolnet online Teachers' newsletter	February 2017	http://us6.campaign-archive1.com/?u=fcaa73d53911340a72d92d73f&id=818852ac28
Humboldt, EF, Vivien Petras, Juliane Stiller, Tim Hill, Maria Gade	Europeana – a Search Engine for Digitised Cultural Heritage Material	In Datenbank-Spektrum, 17 (1)	March 2017	https://link.springer.com/article/10.1007/s13222-016-0238-1
EF, Valentine Charles, Pierre-Edouard Barrault	Mappings makeover: how to improve data quality	EuropeanaTech blog post	March 2017	http://pro.europeana.eu/blogpost/mappings-makeover-how-to-improve-data-quality
EF, Richard Wallis, Antoine Isaac, Valentine Charles, and Hugo Manguinhas	Recommendations for the application of Schema.org to aggregated Cultural Heritage metadata to increase relevance and visibility to search engines: the case of Europeana	Code4Lib Journal	April 2017	http://journal.code4lib.org/articles/12330
EF, INESC-ID, Valentine Charles, Nuno Freire	Linked Data, Looking Ahead	EuropeanaTech blog post	May 2017	http://research.europeana.eu/blogpost/linked-data-looking-ahead
INESC-ID, EF, Nuno Freire, , Hugo Manguinhas, Antoine	"Web technologies: a survey of their applicability to metadata aggregation in cultural heritage"	21st International Conference on Electronic Publishing, ELPUB2017, Cyprus	June 2017	http://ebooks.iospress.nl/publication/46657

Isaac, Glen Robson, John Brooks Howard				
EF Valentine Charles	Why data partners should link their vocabulary to Wikidata: a new case study	EuropeanaTech blog post	August 2017	http://pro.europeana.eu/blogpost/why-data-partners-should-link-their-vocabulary-to-wikidata-a-new-case-study
EUN	EUROPEANA DSI-2 PILOT Results and recommendations for embedding Europe's digital cultural heritage in education	Europeana DSI-2 Pilot Brochure	August 2017	
DEN	Erfgoedbalans 2017, Ministry of Culture, Education and Science	Includes ENUMERATE data	2017	https://cultureelerfgoed.nl/publicaties/erfgoedbalans-2017
Gerhard Jan Nauta, Wietske van den Heuvel & Maarten Brinkerink	Digitale erfgoedcollecties en de jacht op de gebruikscijfers : wat we weten van meten	Essay in Boekman Extra #7	2017	https://www.boekman.nl/producten/artikelen/boekman-extra-7-erfgoedpraktijken-meerstemmig-en-digitaal
AIT Sergiu Gordea et al	Semantische Bereicherung für das Europäische Kulturerbe	OCG Journal	2017	http://www.ocg.at/sites/ocg.at/files/medien/pdfs/OCG-Journal1701.pdf
EUN	Europeana DSI-2	Future Classroom Website website	2017	http://fcl.eun.org/europeana-dsi2
Humboldt, Juliane Stiller,	Multilinguality of Metadata - Measuring the	15th International Symposium of Information Science.	2017	

Péter Kiraly	Multilingual Degree of Europeana's Metadata. Juliane Stiller, Péter Király.	Verlag Werner Hülsbusch. p. 164-176		