



DELIVERABLE

Project Acronym: Europeana Cloud
Grant Agreement number: 325091
Project Title: Europeana Cloud: Unlocking Europe's Research via The Cloud

D7.4 Progress Report

Revision: 1

Authors:

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Project co-funded by the European Commission within the ICT Policy Support Programme		
Dissemination Level		
P	Public	P
C	Confidential, only for members of the consortium and the Commission Services	

Revision History

Revision	Date	Author	Organisation	Description
1	Oct 14	AD	TEL	

Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise.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

PROGRESS REPORT

Grant Agreement number: 325091

Project acronym: Europeana Cloud

Project title: Europeana Cloud: Unlocking Europe's Research via The Cloud

Project type: Pilot A Pilot B TN BPN

Periodic report: 1st 2nd 3rd 4th

Period covered: from Feb 2014 to 1 Sep 2014

Project coordinator name, title and organisation: Alastair Dunning, The European Library

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DECLARATION BY THE PROJECT COORDINATOR

I, as coordinator of this project and in line with my obligations as stated in Article II.2 of the Grant Agreement declare that:

- The attached periodic report represents an accurate description of the work carried out in this project for this reporting period;
- The project (tick as appropriate):
 - has fully achieved its objectives for the period;
 - X has achieved most of its objectives for the period with relatively minor deviations;
 - has failed to achieve critical objectives and/or is deviating significantly from the schedule.
- The public Website is up to date;
- [this point only applies to projects with actual cost reimbursement] To my best knowledge, the information contained in the financial statement(s) submitted as part of this report is in line with the actual work carried out and consistent with the reported resources and if applicable with the certificates on financial statements.

Name and position of Coordinator:Alastair Dunning.....

Date: 24/10/2014

Signature: 

PUBLISHABLE SUMMARY

The publishable summary is a self-standing document. It needs to be of suitable quality to enable direct publication by the Commission. Please ensure that it is set out and formatted so that it can be printed as a stand-alone paper document not exceeding four pages.

Please include a summary description of the project objectives, a description of the work performed since the beginning of the project, a description of the main results achieved so far, the expected final results and their potential impact and use (including the socio-economic impact and the wider societal implications of the project so far). You should update this publishable summary at the end of each reporting period.

Please include also, as appropriate, diagrams or photographs illustrating and promoting the work of the project, the project logo and relevant contact details. The address of the project public website should also be indicated.

Description of Work and Results so Far

Project Objectives

- 1. To provide access, at Europeana, to 2.4m new metadata records and 5m research focussed items from across European Universities, libraries, data centres and publishers**

Via the aggregator in the project, The European Library, 1.16m records have now been aggregated from partners in the project are forwarded to Europeana. This work is being managed by CERL as part of their work in leading Work Package 4

A content survey undertaken of partners in the project and also other data providers has been the source for an inventory for several million digitised objects that Europeana Cloud could store. A content ingestion plan will be written for M24 of the project (Jan 2015) and the content (as opposed to metadata) integrated into Europeana Cloud

- 2. To create a cloud based infrastructure capable of delivering cost-efficient content and metadata storage for stakeholders across Europe;**

The technical architecture described in Deliverable 2.2 has been the guide for the ongoing development of Europeana Cloud (as led by Work Package 2). Within this period, a second prototype of the Cloud service has been developed and shared amongst the relevant partners in the project.

Two more of the services underlying the file sharing system of eCloud have been added. This is the Authentication and Authorization Service (AAS) and the Logging Service (LS) The former allows users of eCloud identify themselves and then perform operations (upload, edit, download) according to permissions. The Logging Service monitors interactions have with eCloud so that aggregators have an accurate record of how, when and who is curating their data in the Europeana Cloud. Development on the Data Processing service has begun.

Two services are already in place – the Metadata and Content service that allows users to upload data, and the Unique Identifier Service that gives each piece of data a unique identifier. Work on the other three services listed in D2.2 will continue in the second half of the project

In addition, other services required as being a necessary part of the eCloud service (as defined in WP5) will be added to WP2

- 3. To understand and incorporate the legal, strategic and economic issues of a cloud-based system for content for cultural heritage institutions and domain aggregators**

With the advent of funding for Europeana and its partners as part of Connecting European Facility, there has been more focus within the project on whole eCloud can serve this larger ecosystem of Europeana and aggregators. This has given the project a broader scope than in the DoW.

As part of Work Package 5, extensive interviews have been undertaken with aggregators within the project *and also outside the project*. Assuming technical development proceeds as

required, the former will start using Europeana Cloud within the lifetime of the project, while it is planned the latter will begin to work with Europeana Cloud once the project ends and Europeana Cloud begins as a sustainable service.

The interviews have concentrated on identifying the technical, economic and strategic challenges faced by aggregators to Europeana; they provide the project with a much clearer understanding of how the Europeana Cloud services developed in WP2 should be tailored to precisely respond to aggregator needs. This research has demonstrated Europeana Cloud needs to deliver reliable tools for the ingestion and mapping of data as well as file sharing / storage.

This has led to the project modifying its idea of what will be delivered by the Europeana Cloud. As a result some of the more detailed deliverables from WP5 have been delayed in 2015, including the Handbook for users and licencing framework required for Europeana Cloud ; but two new deliverables have been added (Business Model, Product Requirements) that provide documentation of the development of the project.

4. To achieve a broad consensus among European content aggregators and research networks on the advantages of a cloud based solution

Objective four has been partially covered by the research mentioned above. Once a clear product outline for Europeana Cloud is articulated, the project will engage and advocate with the broader Europeana ecosystem to achieve consensus.

However, some of the work in this area has been delayed. D6.4 was due to be delivered in M18 and will now be delivered in M24.

5. To develop a digital platform, named Europeana Research, to discover and use European research

Research has taken place in WP1 to indicate how the scholarly communities, with a specific focus on researchers in the social sciences and humanities, would best work with Europeana. The investigations have shown the difficulty in developing a specific independent platform for researchers – in many disciplines, Europeana metadata is often not of the depth required by researchers. However, the user investigations have illustrated other ways that researchers in these areas could make use of the Europeana dataset, and more importantly interact with the Europeana eco-system for aggregating cultural heritage data from museums, libraries and archives. Relevant work will continue WP1 and WP3

6. Via this cloud to provide tools and services for researchers that permit innovative research that exploits digitised content in Europeana.

A first set of tools, exploiting data in Europeana and from other sources, has now been published for the use of researchers in early modern philosophy (<http://greenlearningnetwork.com/axiom>) Work Package 3 is now developing a second tool for those in the field of musicology – this will be available in M24 (Jan 2015)

Project Recommendations (from first year review)

1. The financial reports, as part of Work Package 7, are presented in full within 30 days from the date of the review

This has been done

- 2. A formal schedule for the rectification of delays in Work Package 4 should be submitted to the Commission within 30 days from the date of the review.**

This has been done

- 3. The project should re-tune its key objectives to prioritise the use of the new technology platform to introduce new potential revenue streams for Europeana.**

The project responded to the Commission, stating that while Europeana Cloud project in itself would not be a source of revenue for Europeana, it would enable Europeana to do so via other aspects of its business

- 4. The project must generate credible and meaningful Key Performance Indicators (KPIs) for all major measurable outcomes that are part of the Project's deliverables. These should be provided to the Commission at least 6 months prior to the next Project Review.**

This has been forwarded to the Commission

- 5. In the light of the first year's completed work, revisit the Project Risk Plan and make any changes and/or additions necessary. An updated Risk Assessment should be provided to the Commission at least 6 months prior to the next Project Review.**

A Risk Register is updated every two months at least for the Executive Board of the project. A Risk Register will be forwarded to the Commission and is also available here <https://docs.google.com/spreadsheet/pub?key=0ApagBRcERaZNdfB6TlgyWklfWlhScnFHYIRQdjU1cVE&output=html>

2. Work progress and achievements during the period

Please provide a concise overview of the progress of the work in line with the structure of Annex I of the Grant Agreement.

For each work package -- except project management, which will be reported in section 5 -- please provide the following information:

- A summary of progress towards objectives and details for each task;*
- Highlight clearly significant results;*
- If applicable, explain the reasons for deviations from Annex I and their impact on other tasks as well as on available resources and planning;*
- If applicable, explain the reasons for failing to achieve critical objectives and/or not being on schedule and explain the impact on other tasks as well as on available resources and planning (the explanations should be coherent with the declaration by the project coordinator) ;*
- a statement on the use of resources, in particular highlighting and explaining deviations between actual and planned person-months per work package and per beneficiary in Annex 1 (Description of Work)*
- If applicable, propose corrective actions.*

WP1 Progress Report

Task 1.1 - Humanities and Social Sciences Research Communities Advisory Board

DANS-KNAW have been making sure that the RCAB has peer- reviewed all Milestones and Deliverables WP1 has produced. Each member of the RCAB participated in each of the three Expert Forums which took place in October 2013, and November 2013.

The RCAB met virtually with members of the project in February 2014. The minutes of that meeting were submitted as Milestone 1.5 [M12].

A virtual meeting with the RCAB has been arranged for January 2015. A report of with the minutes of that meeting will be submitted soon afterwards, as Milestone 1.5 [M24]

Task 1.2 Developing a Content Strategy for Europeana Research

CERL has been leading this task. After a six-month deadline extension of Deliverable 1.4 (from M18 to M24), all involved partners have been working towards the identification of Content Priorities for Humanities and Social Sciences research communities. Furthermore, in collaboration with WP4 and the ERCG, all partners involved have started working on T 1.2.3, Content Strategy.

Task 1.3 Research user requirements for Europeana: digital research practices, tools and content

Desk research on digital research practices and digital tools state of the art were submitted on time. The web survey has been analysed and reviewed by the RCAB. Results and further discussion will be incorporated into Deliverable 1.3 (User Requirements analysis and Case Studies report).

Case Studies were developed under Task 1.3.5 'Exploring Innovative Tools in Research'. Research focused on the actual use of innovative digital tools and services in the humanities and social sciences research communities as these were identified in three main Case Studies in the disciplines of Education, Art History and Sociology built separately during the months 8 to 12 of the Project. The milestone report produced provides information on actual researchers and their use of digital tools further complemented by satellite cases concluding to recommendations for the new platform, Europeana Research.

In November 2014 [M21] WP1 will submit the second, updated version of D1.3, which will also include Outcomes of the user interviews for Europeana Research conducted by Dean Birkett over the summer 2014, after a meeting in The Hague in July.

Task 1.4 Research Community Engagement: Expert Forums

Three of four Expert Forums planned in this Task have been carried out and reported on. The Future Recommendations Workshop is due in M30.

Task 1.5 Research Community User Evaluation

The First Evaluation Workshop was held virtually in November 2013 and the minutes were submitted as Milestone 1.6 in the beginning of 2014.

The Second Evaluation workshop, planned to take place in The Hague in December 2014, aims at designing and delivering an event (possibly in cooperation with the NeDiMAH network or DARIAH) to demonstrate the potential for API usage in research to non-technical members of the Europeana Cloud key researcher cohorts and gather further detail on perceived barriers and possible solutions. We can recruit some researchers to talk about what they actually do, others to tell us whether they find the potential interesting and/or the skills required too difficult. Moreover, during this event, WP3 will take us through the Musicology tool they have been working on during the second iterative development cycle. The outcomes and minutes of this event will be submitted immediately afterwards and will constitute Milestone 1.6 [M21]

Work Package 2: Developing the Infrastructure for Europeana Cloud

Task 2.1 Requirements Gathering and Evaluation of Technologies [M1-30]

Task 2.1.1 Create and Iterate Architectural Design Document [M1-30]

In this task the [living document](#) describing the system architecture of Europeana Cloud is continuously updated to reflect changes required by the ongoing of the infrastructure. Over the reporting period there were no changes that required changing the architecture, so the document is up to date.

Task 2.2 Prototype Development for Metadata Cloud [M7-30]

The development of the prototype for Metadata Cloud was steadily going forward during the report period. During this period the team was mainly busy with stabilising the core services developed previously in months 1 to 12 and the development of three new services as defined in D2.2. These services are the Authentication and Authorisation Service, the Logging Service and the Data Processing Service. Works on the first two is largely completed, while development of the third started at the end of the reporting period.

Task 2.3 Prototype Development for Content Cloud [M7-30]

Because the services of the system allowing to store metadata are the same as the services allowing to store content, essentially the report on this task is equivalent to the previous one. Non-technical requirements stemming from handling content have mainly to do with performance (the next task) and IPR/licensing issues which are the domain of WP5.

After the first version of services was delivered, a performance benchmarking testing was executed on the test and production setups (as part of *Task 2.3.2 Adaptation of content cloud to meet performance and scalability requirements for large amounts of content*) Following these measurement the performance of the system was improved through a series of adjustments. Performance still remains the utmost concern and it is possible be more performance changes will be required in the future. A fuller report on performance will be made in the annual report to be delivered at the end of M24.

Task 2.4 Bidirectional Metadata and Content Access API [M7-30]

The Europeana Cloud API has been finalised and available for usage by partners. The current development of client tools (that is happening outside the project) informs the way this API will be used and provides a necessary feedback to the developers.

Task 2.5 Service Platform and Execution API [M12-36]

Data Processing Service is the foundation service for implementing computation-intensive flows performed by the cloud platform on behalf of Europeana Cloud users. The service will constitute the "processing heart" of the new system. As with other services, it will rely on an available open-source technology (the options being considered for the moment are *Apache Storm* and *AKKA*).

Work Package 3

Summary of progress

The tasks in this work package are proceeding as planned. In the reporting period (Feb-July 2014), partners have focused on the use of eCloud tools and services by musicologists who specialize in 'Early Music' (i.e. music from the Middle Ages, Renaissance and Baroque)

Deviations from tasks and timetable

none

Task 3.1 Personas, Scenarios and Use Cases

Identification and experimentation of tools, development of personas, scenarios, and use cases, and version 2 of Deliverable 3.1: document on personas, scenarios, and use cases related to Europeana Research tools produced as scheduled

Task 3.2 Iterative design, development and evaluation of tools

3.2.1 Initial brainstorming and scenario building

Identification of tools and development of personas, scenarios and use cases [see Deliverable 3.1, version 2].

3.2.2 Paper prototypes to gather initial feedback on early ideas

Identification of user groups interested in a tool related to the study of early music : DANS (<http://dans.knaw.nl/en/content/about-dans>), CMME project (<http://www.cmme.org>), Meertens institute (<http://www.meertens.knaw.nl/cms/nl/medewerkers/142502-peterk>), RISM office (<http://www.rism-ch.org/pages/contact>), City University London Music Informatics Group (<http://www.city.ac.uk/departments-computer-science/information-intensive-systems/music-informatics-group>), and Utrecht University (<http://www.staff.science.uu.nl/~wier1103/>).

Discussion of formats, tools, scenarios and use cases with user groups in several on-line meetings. The groups involved are developing a tool based on early music scored unearthed via Europeana. The tool will allow the images of such score to be processed by open source software that undertakes Optical Musical Recognition. The additional metadata created will then feed into a discovery tool for musicologists. It is hoped that a route can be found to place the enriched metadata back into the Europeana database via Europeana Cloud

3.2.3 Gradual development of more functional digital prototypes in rapid iteration cycles

This is currently under way based on the paper prototypes being developed in 3.2.2.

Pro memoria: a peer reviewed paper was published about our work in the first year of the project: H. Van den Berg, G. A. Parra Chico, A. Jentsch, A. Drakos, and E. Duval. *Studying the history of philosophical ideas: supporting research discovery, navigation, and awareness*. Proceedings of the 14th International Conference on Knowledge Management and Knowledge Technologies, 2014.

Other tasks are scheduled for later in the project

Work Package 4: Ingestion of Content and Metadata development

Task 4.1 Ingestion of Metadata into Europeana

Task 4.1.1 Create and Update Metadata Ingestion Plan

Staff at The European Library are ingesting the metadata mostly according to the Metadata Ingestion plan (with some rescheduling where necessary). A large buffer had been built in in the timetable, so whereas there are some delays to the data ingestion, ingestion is still set to be completed well before the end of the project. Where data ingestion is delayed this is mostly due to two factors

- In datasets that are a combination of data that has been aggregated from various sources it is difficult (and therefore time consuming) to determine a correct rights label (which is a mandatory field in the Europeana Data Model), or
- Some dataset contains metadata that is not in line with the Europeana content policy. This data will be made available in Europeana Research through the dataset of The European Library.

The dataset of the BSB München is delayed because this metadata is the first to be delivered in EDM format, created by the content provider. This process, while time-consuming, has created valuable enhancements to the data model, feeding into Task 4.4.

Task 4.1.2 Organise Metadata Ingestion Clinics

The slots for metadata ingestion will now be used for Content Ingestion Clinics, the first to take place early in 2015.

Task 4.2 Ingestion of Content for Research directly into the Cloud

The Project partners have been asked to contribute content, and OAPEN, National Library of Technology in Prague, UCL, NLWales, VU Amsterdam, Cinnecittà have offered content. After invitations to selected members of the Europeana network (task 4.2.3) one organisation outside the project (Swedish Open Cultural Heritage) has also offered content, so far.

A great variety of formats and a great variety of delivery methods have been put forward. The Ingestion teams of The Europeana Library and Europeana are examining suitable workflows and tools for the ingestion of this content (task 4.2.2).

Task 4.3 Connecting Research Material in the Cloud: Exploring Shared Metadata Enrichment

Work on this task begins in February 2015.

Task 4.4 Evolving the Europeana Data Model for research content [M5-36]

Work on content ingestion (see task 4.2 above), the development of Europeana Research, and the work on metadata enrichment (in task 4.3 above) will all in their own way lead to suggestions for further enhancement of the EDM.

Work Package 5: Sustaining the Europeana Cloud: Legal, Strategic and Economic Issues

WP5 has expanded its line of work, postponing some deliverables and adding in new ones. The rationale for this is outlined below, with added commentary under the tasks.

While the technical underpinnings of Europeana Cloud remain intact, the strategic context surrounding the work of Europeana has changed since the conception of the project. For instance, Europeana is now considered by the European Commission as a Digital Service Infrastructure under the Connecting Europe Facility (CEF), with attendant changes in the funding model for Europeana Foundation (and partners). The governance structure for Europeana is also being updated; there are significant changes elsewhere such as the forthcoming move by The European Library to become a legal entity separate from the Europeana Foundation.

Just as importantly, work occurring in other projects is also affecting the strategic context of Europeana Cloud. For example, the development of the content Reuse Framework in Europeana Creative is redefining the recommended standards for publication of content by cultural heritage organisations. Meanwhile, the review of the aggregation infrastructure and the associated development of aggregation tools in Europeana Version 3 suggests completely new ways in which the constituent parts of the Europeana ecosystem interact with one another.

Given these changes, the European Cloud has opted to take a broader view of the services it can offer to the Europeana ecosystem of aggregators and data providers, expanding beyond what was originally envisioned in the project.

Extra tasks have been undertaken in WP5 to research not just the potential of a cloud system for aggregators to Europeana but also to understand their current technical and strategic challenges in the context of CEF funding and the changing aggregation infrastructure

These extra tasks have demonstrated that Europeana Cloud needs to take a broader approach in creating a sustainable service for the ecosystem; providing aggregators and data providers not just with a file storage system but reliable scalable tools to interact with this cloud system.

Task 5.1 (EF) Strategic Requirements for the Europeana Cloud [M1-30]

With the high level principles as a guide, the strategic requirements of the Cloud are being checked in light of the development of the strategic requirements of two key partners: Europeana and TEL. This work is being undertaken in combination with T5.2.

Task 5.2 (EF) Determining the practical requirements for the Europeana Cloud [M3-20]

Following from the minimum requirements for Europeana Cloud through a series of workshops held on three core topics, with a task force consultation advising on key issues, a second round of validation has been undertaken.

This work is being undertaken in combination with T5.1 and is based on a series of structured interviews with core project partners as well as post-project target customers of the cloud services – these are largely the aggregators. This work is being undertaken to refine the value proposition and core product offered by the Cloud and will continue through to M23, where two new deliverables will be presented.

As agreed with the Commission, there has been a delay in D5.2. A draft version will be available in M24 (Jan 2015), version 2 in M28 (May 2015) and a final version in M34 (November 2015)

A New Deliverable (D5.7 - Product Requirements) will also be created. These product requirements will list the required aspects of the Europeana Cloud service being delivered to its customers - in the first instance this will be the aggregators in the Europeana ecosystem. This will be delivered in M23 (Dec 2014). It will be led by WP5, but will also involve much input from WP2

Task 5.3 (KL) Exploring Licensing Issues [M3-18]

For the reasons outlined above, the work in the licensing issues is postponed under Y3. With the agreement of the Commission, D5.3 has been delayed to M28 (May 2015), with a second version produced in M34 (November 2015)

KL continue to be involved in developing the strategic requirement, developing initial requirements for extending Europeana Licensing framework through workshops

Task 5.4 (EF) Sustainability, Governance and the Business Model [M1-24]

Developing initial requirements for models through workshops, interview and development of use cases. Drawing on the work done in 5.2 a new Deliverable (D5.6 - Business Model) will be produced. This business model will outline the key aspects of the final Europeana Cloud business model. It will articulate the key partners, value propositions, revenue streams, resources to be used, customer segments and other aspects. It will work according to the Business Model Canvas. This document will provide the basis for exploring more detailed issues to be fleshed out in WP5, eg the governance structure and cost model. It will be delivered by WP5. This will be delivered in M23 (Dec 2014)

Work Package 6: Dissemination and Networking

WP6 continues to disseminate the project's aims, objectives and progress. This has been achieved without significant deviation from the agreed Description of Work, with the exception of the final Deliverable, D6.4 (see below). KPIs for WP6 have been added to the DoW

Task 6.1. Stakeholder Engagement Plan.

The Stakeholder Engagement and Infrastructure Plan, D6.1, was delivered in M6.

Task 6.2: Sustainable Communications Infrastructure between European Research Networks.

Task 6.2.1. Create European Research Co-ordinators Group (ERCG).

The ERCG was formed, with agreed Terms of Reference, Membership and meetings schedule, in M2, meeting Milestone 30. The Group consists of representatives from CENDARI, CESSDA, DASISH, DARIAH, CLARIN, OpenAIRE, EUDAT and Europeana.

Task 6.2.2. Plan ERCG framework.

The ERCG has a governance framework for the lifetime of the project. Consideration of a framework for the post-project continuation of the ERCG as a strategic forum for its members is part of the Group's remit for year 3, as defined in D6.2 (see below).

Task 6.2.3. Communicating Europeana Cloud to Research Infrastructures.

D6.2, delivered in M8, shows how the ERCG members and the Europeana Cloud WPs, will interact. The ERCG has established a pattern of themed meetings to coincide with and contribute to developments in the project's technical Work Packages.

Task 6.3. Researcher Communication Plan

D6.3 was compiled under the leadership of the WP1 Leader and delivered in M18. The Deliverable outlines the communication strategy for Europeana Research to researchers, who are characterised by their experience in and appetite for technical engagement, on a spectrum from novice to expert.

Task 6.4. Promoting the Europeana Cloud

Task 6.4 will promote the Europeana Cloud to the Europeana Network, particularly aggregators. The Plan to communicate to the Network will be delivered as D6.4. Although due in M18, delayed delivery of D6.4 has been requested because of the dependency on WP5, and in particular on the content of two newly-proposed WP5 Deliverables. This will now be delivered in M24

Task 6.5. Project Results Dissemination

A project Website and blog were both initiated in M1. Both are kept up to date with new content, which is regularly sought from WP Leaders. The website and blog are at <http://pro.europeana.eu/web/europeana-cloud>. A Twitter account @europeana_cloud is also being maintained. The website is in the middle of an overhaul to make it clearer for different audiences (e.g. general public, project partners). A suite of communication tools for partners has been created, including templates, a standard introductory PowerPoint presentation, and factsheet. The

team has also worked up a set of 1-page guides to some of the more challenging technical conclusions emerging from WP2. All the above tools are directly available from the project website.

3. Deliverables and milestones tables

Deliverables (excluding the periodic and final reports)

Please list all the deliverables due in this reporting period, as indicated in Annex I of the Grant Agreement. Deliverables that are of a nature other than written "reports", such as "prototypes", "demonstrators" or "others", should also be accompanied by a short report, so that the European Commission has a record of their existence. If a deliverable has been cancelled or regrouped with another one, please indicate this in the column "Comments". If a new deliverable is proposed, please indicate this in the column "Comments".

This table is "cumulative", that is, it should always show all deliverables from the beginning of the project.

TABLE 1. DELIVERABLES									
Del. no.	Deliverable name	WP no.	Lead participant	Nature	Dissemination level	Due delivery date from Annex I	Delivered Yes/No	Actual / Forecast delivery date	Comments
1.1:	Research Communities Identification and Definition report	1	13 KNAW	R	PU	6	Yes		
1.2	State of the art report on digital research practices, tools and scholarly content use	1	6 CERL	R	PU	9	Yes		
1.4	Content priorities for Humanities and Social Sciences Research communities	1	6 CERL	R	PU	18	No	M24	Extension agreed to by Commission

Del. no.	Deliverable name	WP no.	Lead participant	Nature	Dissemination level	Due delivery date from Annex I	Delivered Yes/No	Actual / Forecast delivery date	Comments
1.5	Expert Forums with reports (Case Studies part)	1	25 TCD	R	PU	6, 10, 30	Yes		Iterative, final version due M30.
2.1	Create Development Environment	2	1 EF	O	PP	3	Yes		
2.2	Initial Version of Architectural Design Document	2	24 PSNC	R	PP	6	Yes		This will be a rolling document, subject to further revision and consultation.
2.3	Prototype of Metadata Cloud	2	1 EF	P	PU	12	Yes	M13, (17 Feb 2014)	
2.4	Prototype of Content Cloud	2	1 EF	P	PU	18	No	M21	
3.1	Document on personas, scenarios and use cases	3	14 KU LEUVEN	R	PU	6, 18, 30	Yes	M6, M18	
3.2	Tools and services	3	14 KU LEUVEN	P	PU	12, 24, 36	Yes	M12	
3.3	Evaluation report:	3	1 EF	R	PU	12, 24, 36	Yes	(M12)	1 st iteration.
4.1	Initial Metadata Ingestion Plan	4	6 CERL	R	PU	4	Yes		
5.1	Minimum requirements for the cloud	5	1 EF	R	PU	10	Yes		
5.2	Handbook for the Europeana Cloud participants	5	1 EF	R	PU	18	No		First draft - M24 – agreed with Commission
5.3	Revised Europeana Licensing Framework	5	12 KL	R	PU	18	No		Version 1 - M28 (May 2015) agreed with Commission
6.1	Stakeholder Engagement & Infrastructure Plan	6	27	R	PU	6	Yes		

Del. no.	Deliverable name	WP no.	Lead participant	Nature	Dissemination level	Due delivery date from Annex I	Delivered Yes/No	Actual / Forecast delivery date	Comments
6.2	European Research Coordinators Group Plan	6	13	R	PU	7	Yes	M8	
6.3	Researcher Communication Plan	6	ATHENA	R	PU	18	Yes		
6.4	Promoting Europeana Cloud	6	EF	R	PU	18	No	24	Delayed after agreement with commission,
7.1	Consortium Agreement	7	17	R	PP	6	Yes	M14	The Text of a CA was submitted in M6
7.2	1 st Periodic progress report	7	17	R	PU	6	Yes		
7.3	1st annual Report	7	17	R	PU	12	Yes		This report is the final version of a draft of D7.3, submitted for the 1st
7.4	2 nd Progress Report	7	1	R	PU	18	This report	M20	Waited for all progress report from partners before submitting

Milestones

Please complete this table if milestones are specified in Annex I of the Grant Agreement.
Milestones will be assessed against the specific criteria and performance indicators as defined in Annex I.

TABLE 2. MILESTONES					
Milestone no.	Milestone name	Due achievement date from Annex I	Achieved Yes/No	Actual / Forecast achievement date	Comments
1	Research Communities Advisory Board established	M1, Feb 2013	Yes		
2	Desk research on Scholarly Content use complete	M6, July 2013	Yes		
3:	Web Survey Complete	M7, Aug 2013	Yes		
4:	Desk Research on Digital Research Practices complete	M9, Oct 2013	Yes		
5	Research Communities Advisory Board First Meeting complete	M12, Jan 2014	Yes		
6	First Evaluation workshop and write-up complete	M10, Nov 2013	Yes		
7	Decision on the use of underlying cloud storage system	M6	Yes		Refer D2.2

8	First Prototype made available to other WPs - implementation with multiple nodes and sites.	M8	Yes		Refer D3.2
9	Content and metadata loaded and accessible through test API from prototype.	M9	Yes		Refer D3.2
10	Second Prototype completed – improvements on stability and performance	M18	Yes	M19	
11	Content and metadata loaded and accessible through Beta API from prototype	M18	Yes	Test metadata and content made available in M19	
12	Performance evaluation on improvements and limitations.	M18	Yes		Evaluation of Europeana Cloud service is ongoing
14	First version of tools and documentation	M12	Yes		
18	First Periodic report on meta data ingestion.	M12, Jan 2014	Yes (see comment)	M13, Feb 2014	Iterative, revised Metadata Ingestion Plan due M12, published M13. Final version due M36.
22	Metadata and content ingestion clinics	M5/M6 Jun/Jul 2013	Yes(see comment)		Iterative, clinics arranged around M6, M8 September 2013 for M12), M18, M24.
23	Sample Content ingested into Cloud	M18	Yes		Three test data sets comprising full text and metadata have been loaded into prototype versions of Europeana Cloud
26	High Level Strategic Requirements	M3	Yes		
27	High Level Strategic Requirements Check	M6, M12, (M18, M30)	Yes		Iterative

28	Europeana Cloud Strategic Organisation workplan	M4	Yes		
29	Cost Model	M18	No	M30	More work to be done on business model before precise pricing model can be worked out. Also dependent on Europeana's work as part of Connecting Europe Facility
30	Creation of Europeana Research Coordinators Group	M2	Yes		
31	Project website, blog constructed	M2	Yes		

4. Project management

Please use this section to summarise management of the consortium activities during the period.

This section should include the following:

- *Consortium management tasks and achievements;*
- *Problems which have occurred and how they were solved or envisaged solutions;*
- *Changes in the consortium, if any;*
- *List of project meetings, dates and venues;*
- *Project planning and status;*
- *Impact of possible deviations from the planned milestones and deliverables, if any;*
- *Impact of possible deviations from the planned resources;*
- *Any changes to the legal status of any of the beneficiaries, in particular non-profit public bodies, secondary and higher education establishments, research organisations and SMEs status;*
- *Development and use of the Project website;*
- *Use and dissemination activities during this period (if applicable).*

Please add any other relevant issue, which had or is likely to have an impact on project management

The section should also provide short comments and information on coordination activities during the period in question, such as communication between beneficiaries, possible cooperation with other projects/programmes etc.

Work Package 7

Summary

MDR Partners

MDR Partners resigned from the project in April 2014. Their work in WP7 was taken over by the Europeana Foundation and one new partner, Els Jacobs Consultants (who will join the project in late 2014)

The resignation of MDR partners, prompted by health problems, caused numerous short-term challenges within the project, as project management roles had to be taken up quickly by the Europeana Foundation. The new roles and responsibilities have now largely fallen into place, shared by The European Library (who operate as a separate unit under the legal aegis of the European Foundation) and Europeana themselves.

One other new partner, Semantika, is due to join in October 2014 as well

Changing Focus in WP5

As noted in WP5 and at the start of this document, extra work has been done to ascertain the needs of aggregators outside the project. These aggregators will form the first customers for Europeana Cloud services once the project finishes in 2016. Investigating their technical and strategic challenges has influenced the direction of the project, demonstrating the need for a refined product and business model. This has delayed some of the deliverables in WP5 (and also had a knock on effect on the advocacy work to be done in WP6), but it is anticipated that the final

results will now be more sustainable, and more focussed on the broader needs of the Europeana ecosystem.

Task 7.1 Activity planning and day to day management of the Network and its activities

Task 7.1.1 Ensure the Effectiveness of Communications

Project Basecamp (for sending and archiving project correspondence and files), project website, project blog established and used extensively. Communication tools created and circulated and continued to be used

Task 7.1.2 Executive Board Meetings

Monthly Executive Board established and meetings held monthly (mostly via Skype). All papers, agendas and minutes made available to all partners on Basecamp.

Task 7.1.3 Project Meetings

A successful mid-term meeting was held in Athens in early March 2014.

Task 7.2 Management of Commission Requirements

Task 7.2.1 Consortium Agreement

Text of consortium agreement drafted in consultation with key partners and submitted as D7.1. Partners to complete signing of the CA by October. As of M18 a few partners have requested minor changes to the document before signing. This is being dealt with by WP7

Task 7.2.3 Organising Payments

Payments made by EF, supported by MDR, as appropriate. MDR has circulated guidance to partners and is running trial reporting to monitor progress and finances and to ensure all partners understand the process

The second round of payments is due to take place at the end of October 2014. Negotiations between the European Foundation and the Commission about the number of productive man hours per month are ongoing. This has a knock on effect on the payments to the Europeana Foundation, but not the other partners.

Task 7.3 Quality Assurance of Deliverables

Quality Assurance Arrangements

Arrangements are put in place for the review of all project deliverables where possible and appropriate by external experts, otherwise by network partners.

Task 7.3.2 Ensure Regular Progress Monitoring

Progress monitoring and chasing is ongoing. In addition progress against the Dow (Tasks, deliverables, milestones, performance indicators, risks) is reviewed at each monthly Executive Board. Deliverables have been submitted on time.

Task 7.4 Monitoring, evaluation and risk management

Task 7.4.1 Monitoring Project Progress

EF is working with WP Leaders, taking into account overarching Europeana evaluation activities, to monitor the progress of the Best Practice Network and the amount, types and quality of metadata and content being contributed by Europeana Cloud partners to Europeana.

Task 7.4.2 Content Co-ordination Group

As with the first progress report, a content coordination group has not been deemed necessary so far as many of the discussions have been covered either in the Executive Board or as part of bilateral discussions between Work Packages (e.g. WP2 and WP5 are in regular discussion about strategic needs for eCloud and their technical implementation). This will be kept under review.

Task 7.4.2 Risk register and issues log

These have been established and are reviewed at the monthly Executive Board meetings and at Work package meetings.

Task 7.5 Legal framework

Task 7.5.1 Project representatives from one or more of EF, KL and MDR will attend relevant Europeana Network meetings.

This is ongoing

Task 7.5.2 Kennisland will develop strong relationships with the Arrow and other relevant projects

Engagement with the Arrow project is less relevant for the project; Kennisland will be contacting relevant stakeholders as part of D5.3

USE OF RESOURCES

(Not required for progress reports)

This part is only mandatory for projects using actual cost re-imburement. The tables below are given for reference and explanations. A spreadsheet version of the tables will be provided, which should be filled and uploaded.

Overview Person-Month Status (cumulative)

<i>Workpackage</i>	WP1		WP2		WP3		...		TOTAL per Beneficiary	
	Actual	Planned	Actual	Planned	Actual I	Planned	Actual I	Planned	Actual total	Planned total

Coordinator										
Beneficiary 1 short name										
Beneficiary 2 short name										
Beneficiary 3 short name										
....										
....										
TOTAL										

Actual = number of person months consumed from the beginning of the project to the end of this period

Planned = total effort planned for the project in the latest version of the description of work - annex I to the grant agreement.

Explanation of the use of the resources

Please provide an explanation of personnel costs, subcontracting and any other major costs incurred by each beneficiary, such as the purchase of important equipment, travel costs, large consumable items, etc. linking them to work packages.

There is no standard definition of "major cost items". Beneficiaries may specify these, according to the relative importance of the item compared to the total budget of the beneficiary, or as regards the individual value of the item.

These can be listed in the following tables:

TABLE 3.1 PERSONNEL, SUBCONTRACTING AND OTHER MAJOR COST ITEMS FOR BENEFICIARY 1 FOR THE PERIOD			
Work Package	Item description	Amount	Explanations
	Personnel costs		
	Subcontracting		
	Major cost item 'X'		
	Major cost item 'Y'		
	Remaining costs		
TOTAL DIRECT COSTS AS CLAIMED IN FIANCIAL STATEMENT			

TABLE 3.2 PERSONNEL, SUBCONTRACTING AND OTHER MAJOR COST ITEMS FOR BENEFICIARY 2 FOR THE PERIOD			
Work Package	Item description	Amount	Explanations
	Personnel costs		
	Subcontracting		
	Major cost item 'X'		
	Major cost item 'Y'		
	Remaining costs		
TOTAL DIRECT COSTS AS CLAIMED IN FIANCIAL STATEMENT			