

DELIVERABLE

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LIST OF ABBREVIATIONS

ABBREVIATION	EXPLANATION
CP	Content Provider
DoW	Description of Work
EDM	Europeana Data Model
WP	Work Package
DEA	Data Exchange Agreement
CHO	Cultural Heritage Object

EXECUTIVE SUMMARY

Deliverable 3.3.4 'Report on the contributions to Europeana' presents the status of the EAGLE content aggregation at the end of March 2016 (Month 36). The document summarises the work done by the Content Providers and by the Consortium to ingest the last set of data into Europeana. It presents also the issues encountered during this process and the corrective actions taken.

This Deliverable is created by the Cyprus Institute (Cyl) and it is the result of the collaboration between WP3, WP2 and WP4. It reports about the last contributions to Europeana and focuses on the final ingestion of EAGLE content towards Europeana, providing a final recap of the procedures developed and adopted by the Consortium and giving information about the ingestion figures.

The document is structured in 6 Chapters.

Chapter 1 is an introduction about the objectives of this Deliverable and its role in the project. It summarises objectives, tasks and milestones of WP3.

Chapter 2 is dedicated to the Content Providers and their collections, as well as to the new affiliated partners. It describes which are the new contributors of data to the EAGLE project and to Europeana. It also presents the status of the Data Exchange Agreement (DEA) signed by the content providers for the data publication into the European portal, as well as the status of the EAGLE agreements signed by the new affiliated partners for the provision of content (e.g. translations, pictures for Wikimedia) to the EAGLE project.

Chapter 3 is dedicated to the ingestion plan and to the procedures that have been put in place to implement the data ingestion and to assess the content to be sent to Europeana.

Chapter 4 presents the summary of the workflow developed to monitor the ingestion and the different sources of information used to perform it.

Finally, Chapter 5 represents the core part of the deliverable and it reports on the contributions to Europeana, with a description of the work done by the Content Providers, the data harvested by Europeana and the results of the publication in the European portal.

Chapter 6 draws the conclusions.

1. INTRODUCTION

This document represents an update of the previous release (D3.3.3) and it reports the activities carried out by Work Package 3 during the period 1st October 2015 – 31st March 2016. The work reported here is strictly connected with Deliverable 3.2, since they are part of the same workflow aimed at the implementation and monitoring of the content provision.

The report shows all the steps of the workflow. All the topics already treated in the previous issues will be cited but not repeated in this Deliverable unless there is any change or update or they are useful to understand the content of the document itself.

1.1 OBJECTIVES OF THE WP3 ‘METADATA MODEL, MAPPING AND INGESTION’

WP3 ‘Metadata model, mapping and ingestion’ is the core of the EAGLE project since it has to deal with the contribution of quality metadata and content from the individual partners to the EAGLE Aggregation and Image Management (AIM) infrastructure implemented within WP4 (‘EAGLE Aggregation and Image infrastructure’). The common EAGLE metadata model to ensure full interoperability with Europeana has been defined within the WP3 (see Deliverable D3.1 ‘EAGLE metadata model specifications’). This is the basis for the local mappings. The work within the Work Package addresses all the specific activities that are needed locally to harmonize the content coming from the different sources and archives of the project partners and prepare it for the ingestion process. The work consists of the implementation of the agreed standards and protocols, the preparation of the necessary mappings for the metadata conversions, the ingestion plan itself and finally the publication of the content into Europeana portal, including appropriate disambiguation. The role of the Content Providers is that one of checking, enrich and contextualize their metadata thanks to the data curation developed within WP4.

The Cyprus Institute is the leader of the Work Package and leader of the tasks ‘Planning and preparing the ingestion’ and ‘Implementing and monitoring the ingestion’. Other 3 Task leaders are associated: UAH (‘Definition of the EAGLE metadata model’ and ‘Metadata mapping’); K.U.LEUVEN (‘Duplicates identification’) and UNIROMA1 (‘Metadata enrichment and contextualization’). All the Content Providers are involved in the Work Package contributing to the mapping and the ingestion of their content to the EAGLE Aggregator and to Europeana.

The overall objectives of the Work Package 3 are:

- To achieve the large scale implementation of agreed standards and best practices at the local and institutional level across the Best Practices Network (BPN)
- To define the common EAGLE metadata structure to enable BPN metadata harmonization
- To define mapping from local BPN metadata structures to the common EAGLE metadata structure
- To define mapping from EAGLE metadata structure to Europeana Data Model (EDM), to ensure full interoperability with Europeana.
- To ingest content into EAGLE and Europeana
- To check, enrich and contextualize the aggregated metadata
- To improve the quality of content and metadata across the BPN

The WP3 is in charge to organize the ingestion plan and the aggregation workflow from Content Providers to Europeana passing through EAGLE Aggregator, to monitor the work progress and to assure that the Tasks and Milestones will be achieved.

The Milestones connected to this Work Package are:

- Month 18 (September 2014): 375.000 items available for Europeana (MS8)
- Month 24 (March 2015): 750.000 items available for Europeana (MS12)
- Month 30 (September 2015): 1.125.000 items available for Europeana (MS15)
- Month 36 (March 2016): 1.500.000 items available for Europeana (MS16)

All four Milestones of the WP3 are achieved.

1.2 ROLE OF THE DELIVERABLE 3.3.4 IN THE PROJECT

Deliverable 3.3.4 is aimed at reporting on the contribution and the progress of the content ingestion from the EAGLE Content Providers to Europeana. This Deliverable is the final report on the work done by the Content Providers and by the people working on the coordination to ingest the last set of data into Europeana. Summarising the implementation and monitoring of the ingestion workflow, this Deliverables reports on the final contribution of the content to the EAGLE infrastructure in order to be harvested and published by Europeana in their portal. This document, as the previous ones, are strictly connected with the achievement of the ingestion procedure and of the Milestones: MS8 (Month 18) with the ingestion of 375.000 items available for Europeana; MS12 (Month 24) with the ingestion of 750.000 items available for Europeana; MS15 (Month 30) with the ingestion of 1.125.000 items available for Europeana; MS16 (Month 36) with the ingestion of 1.500.000 items available for Europeana.

Table I reports the schedule of the WP3 Deliverables and Milestones (in light blue, the current report period):

MONTH	12	18	24	30	36
DELIVERABLE	D3.2	D3.3.1	D3.3.2	D3.3.3	D3.3.4
MILESTONE	-	MS8	MS12	MS15	MS16

Table I. WP3 Deliverables and Milestones.

2. CONTENT PROVIDERS AND COLLECTIONS

2.1 CONTENT PROVIDERS

Table II reports the list of the EAGLE partners and Content Providers to facilitate the reading of the current Deliverable. The project Consortium is composed of 19 partners from 12 different European countries. 14 are Content Providers and they supplied Europeana with Ancient Greek and Latin inscriptions with related metadata (including translations of selected texts in Wikimedia) for the benefit of the users.

N.	Organisation	Country	Content Provider
1	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	ITALY	✓
2	PARIS-LODRON-UNIVERSITÄT SALZBURG	AUSTRIA	✓
3	KATHOLIEKE UNIVERSITEIT LEUVEN	BELGIUM	
4	THE CYPRUS RESEARCH AND EDUCATIONAL FOUNDATION	CYPRUS	✓
5	EUREVA SAS	FRANCE	
6	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FRANCE	✓
7	RUPRECHT-KARLS-UNIVERSITAET HEIDELBERG	GERMANY	✓
8	DEUTSCHES ARCHAOLOGISCHES INSTITUT	GERMANY	✓
9	EÖTVÖS LORÁND TUDOMÁNYEGYETEM	HUNGARY	✓
10	UNIVERSITA DEGLI STUDI DI BARI "ALDO MORO"	ITALY	✓
11	THE BRITISH SCHOOL AT ROME	ITALY	✓
12	PROMOTER SRL	ITALY	
13	GOGATE SRL	ITALY	
14	CONSIGLIO NAZIONALE DELLE RICERCHE	ITALY	
15	SVEUCILISTE JURJA DOBRILE U PULI	REPUBLIC OF CROATIA	✓
16	ZNANSTVENORAZISKOVALNI CENTER SLOVENSKE AKADEMIJE ZNANOSTI IN UMETNOSTI	REPUBLIC OF SLOVENIA	✓

17	UNIVERSITATEA BABES BOLYAI	ROMANIA	✓
18	UNIVERSIDAD DE ALCALA	SPAIN	✓
19	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	UNITED KINGDOM	✓

Table II. List of the EAGLE Partners and Content Providers.

2.1.1 Collections

The EAGLE content is constituted of inscriptions (texts) connected to digital images (photographs, drawings, scanned notes, manuscripts and archive material, ancient books) and their related metadata.

All the collections declared in the DoW were confirmed and provided to the project.

2.1.2 Data Exchange Agreement (DEA) and EAGLE agreements

As already explained in Deliverable 3.2 “Ingestion plan” and in the successive D.3.3.1 - D.3.3.3 ‘Report on the contributions to Europeana’ (first, second and third release), an important requirement for the content provision and publication into Europeana is the signature of the DEA by all the EAGLE Content Providers. Every Content Provider supplying content to Europeana has to subscribe the Agreement.

WP3 (together with WP1) monitored the signatures in order to keep under control the publication process in Europeana from the ingestion point of view.

At Month 36 all the EAGLE Content Providers, including the external contributors, signed the DEA and accepted the Europeana regulatory framework. Thanks to this agreement their contents can be transmitted to Europeana for the publication in the Europeana portal.

2.1.3 New affiliated partners

One of the aim of the project, carried out by the WP2 ‘Networking and best practices’, is to attract new content providers to the EAGLE network, in order to increase the quantity and quality of the EAGLE digital resources. Content providers from outside the Consortium were encouraged to join the Best Practice Network and to contribute their content. All the content providing partners were asked to participate in the task of recruiting new content providers.

WP3 assisted WP2 to monitor these activities of Consortium enlargement and the involvement of the stakeholders to contribute with content to EAGLE and to Europeana¹.

At March 2016, 17 affiliated partners, corresponding to 14 collections, signed the agreement with the EAGLE project.

Table III summarises the contributions of the new Content Providers who joined the EAGLE network and it shows the status of the signatures of the DEA and of the EAGLE agreements for the content provision.

¹ The methodology and the activities about the enlargement of the network are described in the Deliverable D.2.1 ‘Networking infrastructure and terms of reference’.

No.	Organisation	Contribution	Agreement
1	Inscriptions of Aphrodisias (KLC)	Contribution to EAGLE and to Europeana	Signed
2	Roman Inscriptions of Britain	Contribution to EAGLE and to Europeana	Signed (under University of Oxford)
3	Centre for the Study of Ancient Documentation	Contribution to EAGLE and to Europeana	Signed (under University of Oxford)
4	The Israel Museum	Contribution to EAGLE and to Europeana	Signed
5	Pontificia Commissione di Archeologia Sacra	Contribution to EAGLE and to Europeana (via EDB)	Signed
6	Cittá di Anagni	Contribution to EAGLE and to Europeana	Signed
7	Iscrizioni Latine Archaiche (ILA)	Contribution to EAGLE and to Europeana	Signed
8	AshLi project	Contribution to EAGLE and to Europeana	Signed
9	EPNet: Production and Distribution of Food during the Roman Empire – Economic and Political Dynamics	Contribution to EAGLE and to Europeana	Signed
10	Attic Inscriptions Online	Translations in the EAGLE Media Wiki	Signed
11	University of Beograd	Photos to Wikimedia Commons	Signed
12	Historical Institute of Montenegro	Photos to Wikimedia Commons	Signed
13	Inscriptiones Graecae	Contribution to EAGLE and to Europeana (text and translations)	Signed
14	Iliia State University	Contribution to EAGLE and to Europeana	Signed
15	ISicily	Contribution to EAGLE and to Europeana	Signed

16	Ostia Graffiti project	Contribution to EAGLE and to Europeana	Signed
17	E-pigramme (Greek Inscriptions from the Louvre)	Contribution to EAGLE and to Europeana	Signed

Table III. Contributions of the new affiliated partners and signature of the DEA for the content provision to Europeana and of the EAGLE agreements for the content provision to the EAGLE project.

3. THE INGESTION PLAN

The tasks of the WP3 started at M1 (April 2013) and ended at M36 (March 2016).

The task T3.3. “Planning and preparing the ingestion”, concluded in March 2014, is connected with T3.4. “Implementing and monitoring the ingestion”, that started in April 2014 and lasted until the end of the project. During this period the Content Providers implemented locally the necessary procedures to ensure the continuous provision of metadata and digital content through the EAGLE Aggregator (WP4) to Europeana.

The task of the WP3 leader is to ensure that the Content Providers make their content available according to the project schedule and that they provide the content declared. WP3 leader, from month 12 (March 2014) started to operate the monitoring of the content ingestion into Europeana and its progress. Every 6 months WP3 reported about this monitoring activity and on the contribution to Europeana.

Within this task, the ingestion plan consists of all the activities on which is based the EAGLE aggregation procedure and the content delivery to Europeana: surveys, technical sessions, partners support, procedures, methodologies, feedback and milestones. WP3 aims consist of planning and preparing the ingestion and its implementation and monitoring.

In this Chapter it is shortly summarised the ingestion plan developed for the content aggregation.

3.1 THE INGESTION PLAN FORM

In order to perform the WP3 Tasks of keeping under control the content delivery to Europeana and to report about contributions as declared in the Description of Work (DoW), a working tool has been elaborated. The tool was used to confirm or update the content declared in the EAGLE Description of Work, to describe the status and the availability of the collections to be ingested and to trace the ingestion progress, along all the project period. The ingestion plan form was maintained updated according to the deadlines and Milestones.

The ingestion plan form data were cross-checked together with the information gathered with other working tools and coming from the feedback of all the project’s partners. The result is a synthesis of all the analytical reports of the Content Providers’ contributions to EAGLE and Europeana.

3.1.1 Content assessment

The activity of content assessment is strictly connected with the update of the ingestion plan form (paragraph 3.1) and the monitoring of the mid-term internal milestones, set up by WP3 to follow closely the progress of the ingestion and the data available.

During all the project period, WP3 launched surveys and directly contacted the Content Providers in order to monitor the data to be provided to Europeana (Task 3.4 ‘Implementing and monitoring the ingestion’). In fact, the ingestion could be influenced by different changes, technical or administrative, that in turn could have an impact on the final content provision. WP3 asked the CPs to give information about the collections’ amount to be provided, if there were any variations respect to the Description of Work, if they were encountering delays or problems for the content provision.

Regarding the content, all the Content Providers confirmed or increased the amount committed in the DoW. Detailed information about the provision of each provider is given in Chapter 5.

4. IMPLEMENTING AND MONITORING THE INGESTION

This section is a shorter summary of the same section included in the previous Deliverables. It is reported here in order to provide an overall picture of the process.

4.1 THE INGESTION WORKFLOW

The workflow implemented within the EAGLE project controls the relations between the Work Packages involved (WP3 and WP4), the Content Providers and Europeana ingestion team². The workflow starts from the work of the Content Providers, passes through the activities of WP3 and WP4 and arrives to the Europeana ingestion team action, in a cyclic way in case of adjustments and update of the content ingested (Fig. 1).

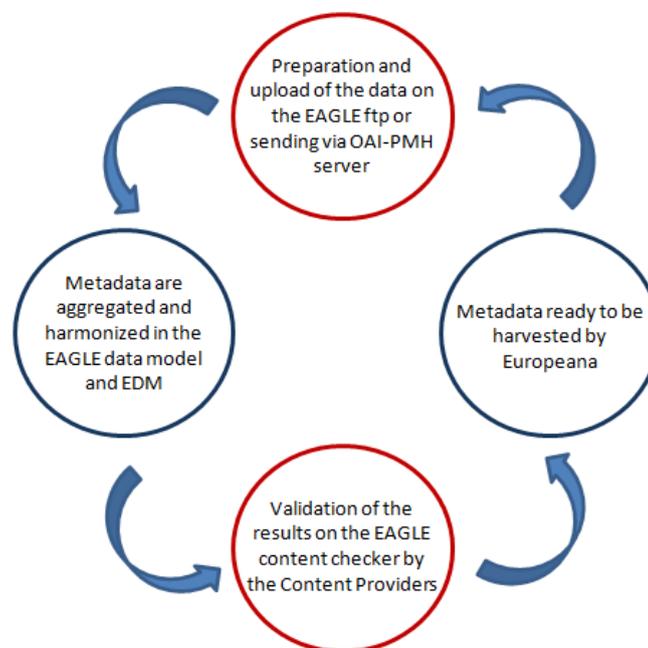


Fig. 1. The ingestion workflow

The workflow consists of four steps and is useful to follow how the aggregation and monitoring process is being carried out within EAGLE and which cooperation mechanisms among the project WPs, Content Providers and Europeana is being set up:

- Preparation, export and upload of the data.
- Data aggregation and harmonization
- Validation of the results
- EAGLE publication and Europeana harvesting

² For the full description, see the Deliverable 3.2 'Ingestion plan'.

4.2. FEEDBACK

The collection of feedback is an important step of the workflow in the contributions to Europeana and in the monitoring of the ingestion procedure. It is in fact part of the monitoring and supporting activities of the Providers' work involved in the contribution to Europeana.

The feedback is gathered making use of several tools and sources of information:

Direct contacts with the Content Providers

WP3 was periodically and constantly in contact with the Content Providers (personal e-mails, mailing list, Skype calls) in order to monitor the progress of their work and get feedback from them. All the results of these communications are reported in the working tool elaborated by WP3 to follow the Content Providers' ingestion and to monitor the available content and the progress of the project.

Technical meetings

During the project WP3 and WP4 organized five technical meetings. The aim of these meetings was to keep informed the Content Providers about the technical progress of the project and to give them direct assistance for the delivery of the content to Europeana. The last Plenary meeting in Rome (January 2016) was the last occasion to meet the CPs and to discuss the last minute issues face to face.

The EAGLE FTP

A dedicated EAGLE File Transfer Protocol (FTP) was established to upload data from the Content Providers that do not have at disposal an OAI, FTP or web APIs to enable WP4 to collect data in a programmatic way. The rest of the Content providers send content via their OAI-PMH servers or FTP protocols. Through the access to the EAGLE FTP server, WP3 was able to monitor the upload, and the amount of the content, carried out by each Content Provider³.

The Metadata Record Inspector of the EAGLE infrastructure

This source of information is very useful to get an analytical overview of the effective content ingestion. The D-Net data report functionalities provides features that allow to make detailed reports both for the single content providers and for WP3 and WP4 coordinators: the partners (after accessing with credentials) can have a quick view on the amount of metadata uploaded and transformed in the EAGLE infrastructure; the coordinators can supervise the work of all contributors. The data report offers to the users the breakdown of the items uploaded in the tool provider by provider and the consequent transformation operated after the mapping to the EAGLE metadata schema.

Europeana feedback

The feedback from Europeana is an important step to ensure that the content provided to the portal complies with Europeana's requirements and that is ready to be published. After the publication in the EAGLE infrastructure, WP3 informs the Europeana Operations Team of the datasets that are ready for the harvesting. In agreement with the Europeana team, WP3 organises the process and the deadlines from the Content Providers side and then communicate to Europeana the datasets ready to be harvested.

³ The control of the data amount of the Providers that send their content through OAI server is carried out monitoring them directly.



Once the datasets of the providers have been harvested, Europeana Operations Team is in charge to send to WP3 and WP4 a validation report. Europeana harvests the datasets published in the project OAI-PMH server and starts a process of quality control. After circa fifteen days Europeana sends to WP3 its validation report and WP3 informs the Content Providers and WP4 about the possible quality feedback and remedy actions to be performed on the datasets before the final publication in the portal. In this case, the procedure has to be repeated in order to adjust/fix the content. If no adjustments are needed, the dataset is finally published in the Europeana portal. This feedback is also important to calculate the effective amount of data published in the Europeana portal after the ingestion workflow.

Thanks to these source of information, the progress of the ingestion is documented and recorded in the working tools elaborated by WP3 (and shared with WP4), where is possible to trace the collected information.

5. REPORT ON THE CONTRIBUTIONS TO EUROPEANA

This Chapter reports on the overall content provision of the EAGLE providers at the end of the project (Month 36 = March 2016) and on the specific contribution provider by provider.

During the period under report, all the Content Providers worked hard to meet the deadlines and sent the content to the EAGLE Aggregator to upload and map/transform their data in the technical infrastructure. They prepared and adjusted their data in order to export the content and make it compliant with EAGLE and Europeana specifications.

Despite the fact that some providers encountered some problems with aggregation along the project's lifetime, the overall target of the Consortium was successfully reached.

5.1 Overall status and figures

The Content Providers sent the planned amount of items through FTP or via OAI-PMH servers to EAGLE. All of them uploaded even more items than what was planned, overcoming the target of Milestone 16 (100% of the content declared in the DoW).

The content provided by the Consortium, due to the transformation into the EAGLE metadata model, produced three different groups of metadata according to the digital objects they are connected to: artefacts, documental manifestation, visual representation.

According to what Europeana accepts to be published in its portal, the data that are sent to Europeana belong to the category of the artefacts (the inscriptions represented as texts, called by Europeana "CHO" or "Cultural Heritage Object") and of the visual representation (the images related to the inscriptions, called by Europeana "WebResource").

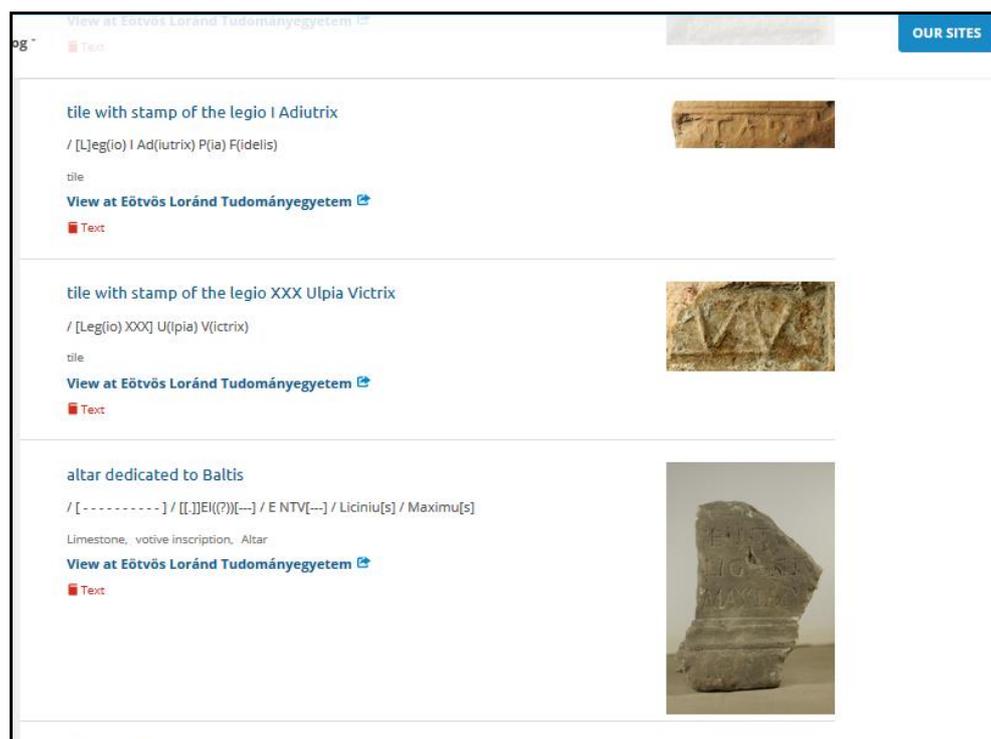


Figure 5.1. The publication of the EAGLE datasets in the new Europeana portal.

The distinction between CHO and WebResource has been introduced as a result of the introduction of the new EDM schema to provide the users with a better navigation and data retrieval and to aggregate under the same umbrella all the resources available for a Cultural Heritage Object, avoiding data duplication in the portal. For this reason, the WebResources are not anymore explicitly counted in Europeana in the numbering of the items, as they are linked to the CHO through the ore:Aggregation field, however they have their own meaning as they bring along their metadata and rights. Therefore, in order to calculate the total amount of items published in the portal, the Europeana ingestion team provides WP3 and WP4 leaders with the result of the statistics concerning the number of the CHOs and of the WebResources for each Content Provider.

In the Europeana portal, the only items explicitly visible on the front-end are the CHOs (Fig. 5.1).

Table VII below presents the status of the ingestion at March 2016, comparing what each Content Provider actually delivered with what it was planned for this Milestone (MS16), and declared in the DoW. A further column with the ongoing activities is provided with some additional notes.

Short Name	Planned amount (MS16)	Total amount	Artefacts	visual representations	Notes
UNIROMA1	60.000	113.938	69.247	44.691	At March 2016 they provided 53.938 items more respect to the declared amount. Additional 2.534 artefacts and 2.019 visual representations are under harvesting
UNIBA	45.000	47.428	40.283	7.145	At March 2016 they provided 2.428 items more respect to the declared amount
UHEI	65.000	85.125	69.057	16.068	At March 2016 they provided 20.125 items more respect to the declared amount, of which 1.000 images are provided by UBB
UOXF	1.500	7.134	2.841	4.293	At March 2016 they provided 5.634 items more respect to the declared amount
UAH	235.000	241.305	30.723	210.582	At March 2016 they provided 6.305 items more respect to the declared amount
PLUS	51.000	67.216	25.104	42.112	At March 2016 they provided 16.216 items more respect to the declared amount
UBB	4.000	3.086	2.019	1.067	UBB provided further 1.000 images through

					EDH, for a total of 4.086 items. At March 2016 they provided 86 items more respect to the declared amount
ELTE	1.500	1.553	651	902	At March 2016 they provided 53 items more respect to the declared amount
UNIPU	2.000	2.451	1.228	1.223	At March 2016 they provided 451 items more respect to the declared amount
ZRC SAZU	400	569	269	300	At March 2016 they provided 169 items more respect to the declared amount
AUSONIUS	5.000	5.030	2.507	2.523	At March 2016 they provided 30 items more respect to the declared amount
DAI	1.000.000	968.237	124.069	844.168	At March 2016 some items were missing (31.763 items less respect to the declared amount). However, at the beginning of April 2016 they provided additional 546 artefacts and 132.309 visual representations which are under harvesting
CYI	442	804	258	546	At March 2016 they provided 362 items more respect to the declared amount
BSR	1.356	2.428	1.025	1.403	At March 2016 they provided 1.072 items more respect to the declared amount
InsAph	0	4.522	1.505	3.017	New provider
RIB	0	2.401	2401	0	New provider
MAMA	0	1.205	386	819	New provider

IMJ	0	36	18	18	New provider
Vindolanda	0	737	737	0	New provider
TOTAL	1.472.198	1.555.205	374.328	1.180.877	MS16 achieved

Table VII. Report on the contribution to Europeana for the MS16 (March 2016)

Table VIII presents instead the total figures calculated by Europeana through their statistics' tool for each EAGLE Content Provider at March 2016.

As it can be noted, some amounts of the CHOs published in the Europeana portal are slightly different from what has been published in the EAGLE portal and reported in the table above. This inconsistencies are of different nature and they are due to two factors:

- the Europeana CHOs are more respect to the EAGLE artefacts: this is probably due to the incremental harvesting of Europeana that in this way sometimes include items instead deleted by the CPs.
- the Europeana CHOs are less respect to the EAGLE artefacts: this is due to the fact that some items have been discarded by Europeana because of some issues that have been identified by the Europeana Operation team ⁴.

These issues are described in more details in the following Section, provider by provider.

For both cases, WP3 is working with the Europeana Operation team and the Content Providers in order to clean and fix the datasets affected by these issues.

Data Provider (Europeana IDs)	Number Provided	Number WebResource	Total
Epigraphic Database Roma - EDR (europeana_collectionName:2058806*)	69.293	7.631	76.924
Epigraphic Dabatase Bari - EDB (europeana_collectionName:2058807*)	40.283	1.239	41.522
Epigraphische Datenbank Heidelberg - EDH (europeana_collectionName:2058801*)	69.053	7.597	76.650

⁴ The loss of some items is physiological during such an ingestion procedure: the various passages and data processing from the CP, to the EAGLE infrastructure to eventually arrive to the Europeana portal produces this phenomenon.

Last Statues of Antiquity - UOXF (europeana_collectionName:2058803*)	2.841	3.000	5.841
Hispania Epigraphica Online - HEpOI -UAH (europeana_collectionName:2058808*)	30.723	184.099	214.822
Ubi erat lupa - PLUS (europeana_collectionName:2058805*)	25.604	21.780	47.384
Universitatea Babes Bolyai - UBB (europeana_collectionName:2058810*)	1.700	127	1.827
Eötvös Loránd Tudományegyetem - ELTE (europeana_collectionName:2058809*)	651	653	1.304
Sveučilište Jurja Dobriće u Puli – UNIPU (europeana_collectionName:2058814*)	1.228	251	1.479
Znanstvenoraziskovalni Center Slovenske Akademije Znanosti in Umetnosti – ZRC- SAZU (europeana_collectionName:2058817*)	269	76	345
PETRAE - AUSONIUS (europeana_collectionName:2058804*)	2.571	495	3.066
Arachne - Deutsches Archäologisches Institut (DAI) (europeana_collectionName:2058811*)	124.616	820.370	944.986
Archeia Kipriaki Grammateia – CYI (europeana_collectionName:2058819*)	258	288	546
British School at Rome - BSR (europeana_collectionName:2058802*)	1.022	526	1.548
Inscriptions of Aphrodisias - InsAph (europeana_collectionName:2058813*)	1.500	1.753	3.253
Roman Inscriptions of Britain – RIB (europeana_collectionName:2058812*)	2.381	0	2.381
MAMA (europeana_collectionName:2058816*)	385	433	818

The Israel Museum of Jerusalem – IMJ (europeana_collectionName:2058818*)	18	0	18
Vindolanda Tablets Online – VTO (europeana_collectionName:2058815*)	737	0	737
Total	373.976	1.050.318	1.424.294

Tab VIII. Europeana statistics: amount of CHOs and WebResources published in the Europeana portal - March 2016.

At the end of March 2016, in the EAGLE OAI-PMH server, and already harvested by Europeana, there are 374.328 artefacts and 1.180.877 visual representations, for a total of 1.555.205 items. For the reasons explained above, the resulting number in Europeana is 1.424.294 items, which corresponds to 373.976 cultural heritage objects.

At the beginning of April, while drafting this document, a couple of partners uploaded additional data: overall 3,080 artefacts and 134,328 visual representations. This further items are going to be harvested by Europeana and with the next publication update it will be reached the total amount of 1.692.613 items in EAGLE and Europeana portals⁵.

The Milestone 16 is achieved with 100% of the total amount⁶.

5.2 Relation with Europeana: issues and delays

The feedback provided by the Europeana Operations Team is an important step in order to allow the providers to adjust issues and mistakes in the publication process.

As already explained in the previous releases of this Deliverable, Europeana experienced technical problems and consequent delays in harvesting and publishing the EAGLE content.

During the period June – August 2015 the harvesting was interrupted by Europeana. This interruption of the ingestion was due to the re-engineering of their portal and the related technical issues. Europeana was working at the release of the new portal and for this reason it was impossible to publish the data.

Anyway, the EAGLE Consortium continued to work and to publish its content regularly (during the stop WP3 kept in contact with the Europeana Operation Team, sending monthly the list of the ready datasets). This allowed not to interrupt the procedure from the EAGLE side.

However, this caused some issues. Since there was not feedback during these months regarding the data published by the EAGLE Providers, there was an overlap between the content published, the amount published, the feedback received and the eventual fixing the data before the successive harvesting/publication. Still during September and November the harvesting were unstable and they

⁵ Considering that the next Europeana harvesting will be on the 21st April and the Operation team needs at least 15 days for the process, we do hypothesize that the total amount will be online for the mid/end May.

⁶ The DoW foresees a total of 1.472.198 items.

overlapped, with partial publication of the data⁷. The publication started again with a regularity from December. However, from there onward the publications were affected by some technical issues (items deleted included in the counting⁸, items discarded for some issues that were not detectable on the Provider's side, etc.).

At the beginning of April 2016, all EAGLE datasets submitted between September 2015 and March 2016 were published on the Europeana portal.

It is worth to report that during the drafting of this Deliverable, the Europeana portal was out of order: after the reactivation of the portal, different (higher) figures for some EAGLE providers have been noticed (see Figure 5.2).

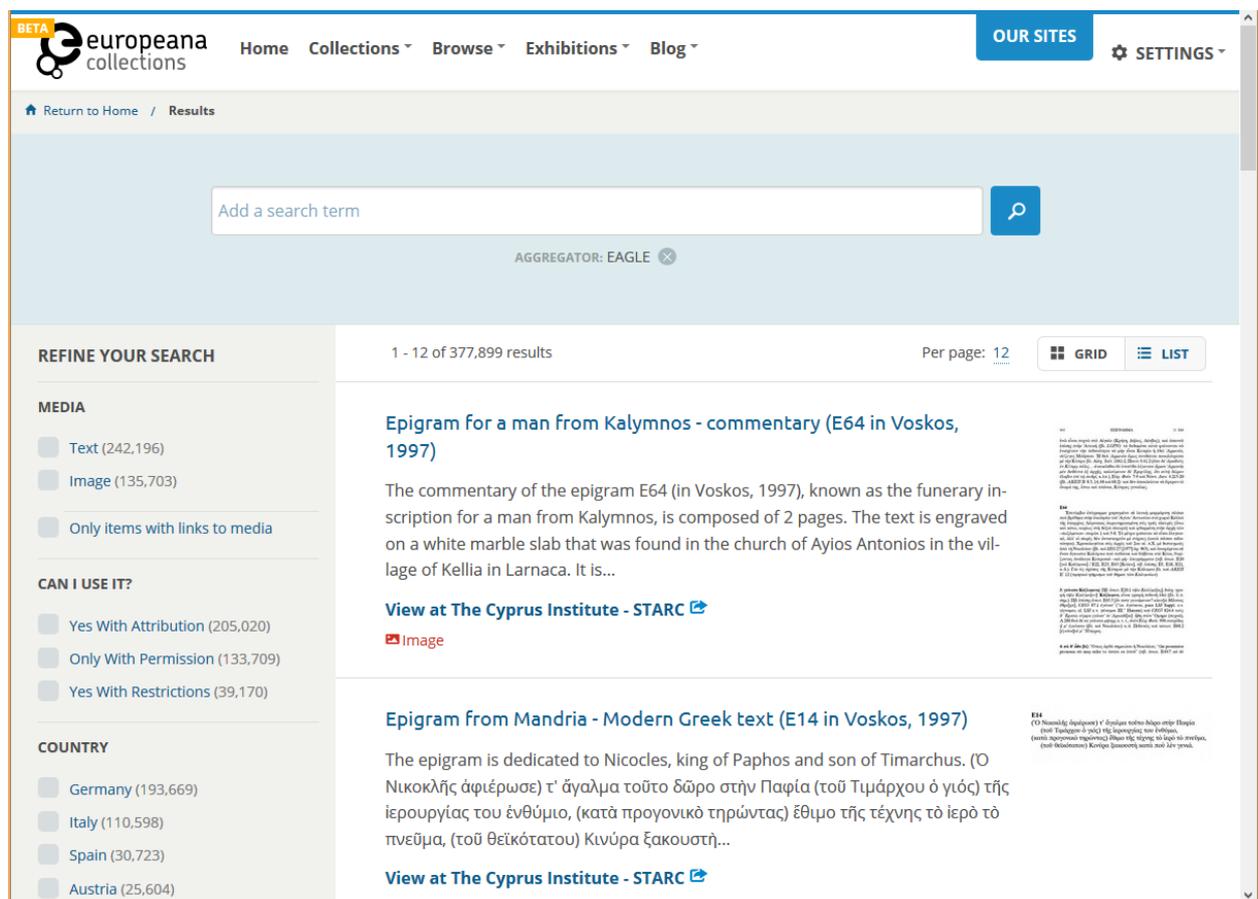


Figure 5.2. The EAGLE data published in the Europeana portal (18 April 2016).

⁷ Especially during October and November the Europeana harvesting were delayed and this caused a superimposition of the actions. The CPs continued to publish monthly as usual, but Europeana harvested some datasets in October and others in November, giving to EAGLE an imprecise situation about the amount published in the portal.

⁸ For example, even the March datasets present some discrepancies between what some CPs published in the EAGLE portal and what Europeana published in its portal. This difference could be due to the Europeana changes in the portal and to the fact that collecting the data incrementally, the data deleted by the provider go in the amount.

5.3 Report on the contribution ‘provider by provider’

The following tables present the status of each provider, the great work done to increase their data along the project and the great results reached by all of them.

The columns under D-Net (the EAGLE Aggregator) show the figures divided into artefacts and visual representations. In the central column there is the total amount of items provided to the EAGLE aggregator at March 2016. Under the last column “Europeana” there are the figures as counted by Europeana through its data statistic . What is visible online in the Europeana portal are the Cultural Heritage Objects (CHO).

Epigraphic Database Roma (EDR)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
March	69.247	44.691	113.938	69.2247	7.631	76.924
April	71.771	46.710	118.481	Under publication	Under publication	Under publication

History and comments:

- The EDR content due to the MS16 is of 60.000 items.
- At March 2016 EDR sent to EAGLE 69.247 artefacts and 44.691 visual representations for a total of 113.938 items.
- In Europeana (Europeana ID: 2058806) have been published 69.247 artefacts and 44.691 visual representations.
- Although the project came to an end, in April EDR published in the EAGLE portal further items: 71.771 artefacts and 46.710 visual representations, for a total of 118.481 items. Therefore 2.534 artefacts and 2.019 visual representations will be added to the total amount.
- In Europeana there are at the moment 69.247 items: 40 items more respect what the CP published in the EAGLE portal. This inconsistency is probably due to the incremental harvesting of Europeana that in this way sometimes include items instead deleted by the CPs. WP3 is working with the Europeana ingestion team to clean the dataset and to add the new content sent by the provider after the March Europeana harvesting.
- The CP reached and overcame the amount of data declared in the DoW.

Fig. 5.3 shows two of the important inscriptions provided by EDB to the EAGLE portal and to Europeana.



Epigraphic Database Bari (EDB)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
March	40.283	7.145	47.428	40.283	1.239	41.522

History and comments:

- The EDB content due to the MS16 is of 45.000 items.
- At March 2016 EDB sent to EAGLE 40.283 artefacts and 7.145 visual representations for a total of 47.428 items.
- In Europeana (Europeana ID: 2058807) have been published 40.283 artefacts and 7.145 visual representations.
- The CP reached and overcame the amount of data declared in the DoW.

Fig. 5.4 shows two of the important inscriptions provided by EDB to the EAGLE portal and to Europeana.



Fig. 5.4. Elogio Damasiano della Cripta dei Papi nella Catacomba di Callisto (left) and Iscrizione per il martire Gennaro (right)

Epigraphic Database Heidelberg (EDH)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	69.057	16.068	85,125	69.053	7.597	76.650

History and comments:

- The EDH content due to the MS16 is of 65.000 items.
- At March 2016 EDH sent to EAGLE 69.057 artefacts and 16.068 visual representation for a total of 85.125 items.
- In Europeana (Europeana ID: 2058801) have been published 69.053 artefacts and 16.068 visual representations.
- The difference between the number of artefacts in EAGLE and the CHOs in Europeana is due to the fact that 4 items have been discarded by Europeana for a problem in the dc:language that is being fixed by the provider. WP3 is working with the Europeana ingestion team to clean the datasets.
- The CP reached and overcame the amount of data declared in the DoW.

Fig. 5.5 shows two of the important inscriptions provided by EDB to the EAGLE portal and to Europeana.



Fig. 5.5. Relief with Mercurius and Rosmerta in Eisenberg / Germany (Photo: © C. Witschel), see EDH HD030195 (left) and A votive dedication to Jupiter Dolichenus from Frankfurt, see HD058746 (right)

Last statues of Antiquities (LSA)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	2.841	4.293	7.134	2.841	3.000	5.841

History and comments:

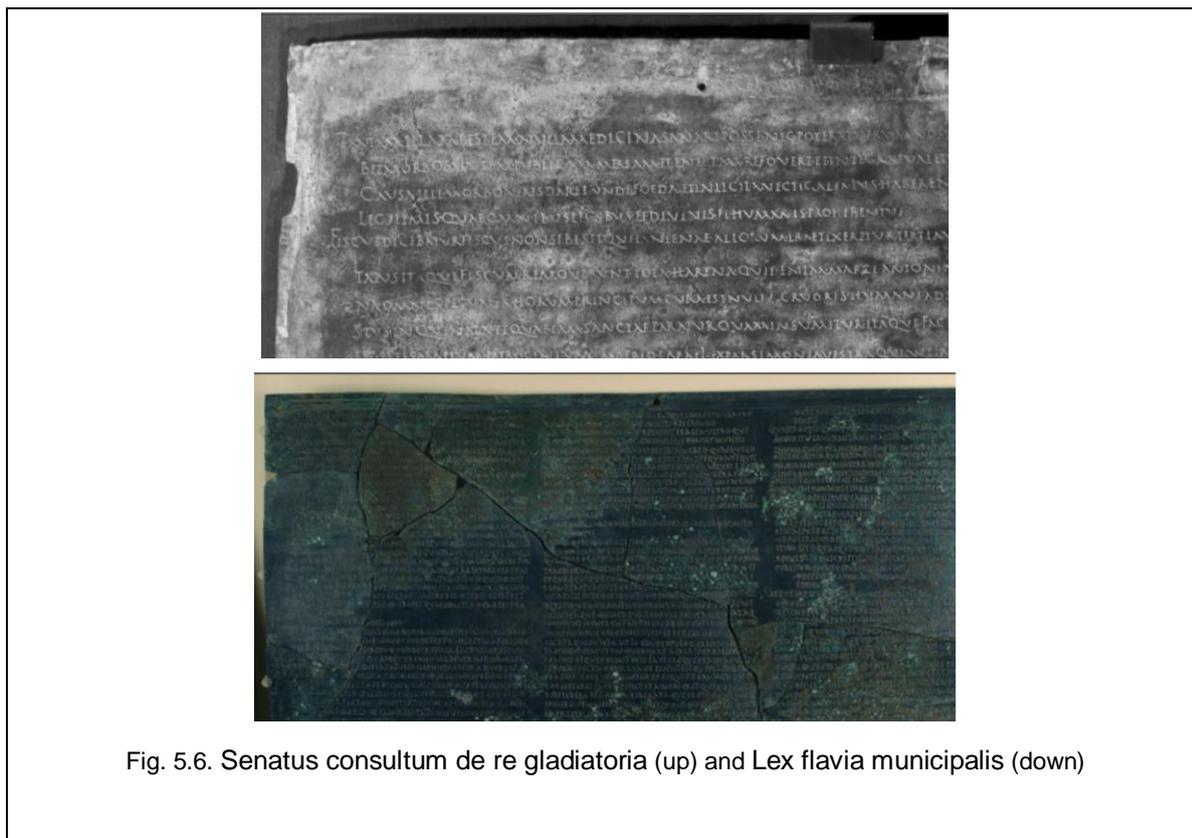
- The LSA content due to the MS16 is of 1.500 items.
- At March LSA sent to EAGLE 2.841 artefacts and 4.293 visual representations for a total of 7.134 items.
- In Europeana (Europeana ID: 2058803) have been published 2.841 artefacts and 4.293 visual representations.
- The CP reached and overcame the amount of data declared in the DoW.

Hispania Epigraphica (UAH)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	30.723	210.582	241.305	30.723	184.099	214.822

History and comments:

- The UAH content due to the MS16 is of 235.000 items.
- At March UAH sent to EAGLE 30.723 artefacts and 210.582 visual representations for a total of 241.305 items.
- In Europeana (Europeana ID: 2058808) have been published 30.723 artefacts and 210.582 visual representations.
- The Provider had some aggregation issues during the project period, but eventually it solved them, reaching and overcoming the amount of data declared in the DoW.

Fig. 5.6 shows two of the important inscriptions provided by UAH to the EAGLE portal and to Europeana.



Ubi erat Lupa (PLUS)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	25.104	42.112	67.216	25.104	21.780	46.884

History and comments:

- The PLUS content due to the MS16 is of 51.000 items.
- At March 2016 PLUS sent to EAGLE 25.104 artefacts and 42.112 visual representations for a total of 67.216 items.
- In Europeana (Europeana ID: 2058805) have been published 25.104 artefacts and 42.112 visual representations.
- In Europeana there are at the moment 25.604 items: 500 items more respect what the CP published in the EAGLE portal. This inconsistency is due to the incremental harvesting of Europeana that in this way sometimes include items instead deleted by the CPs. WP3 is working with the Europeana ingestion team to clean the dataset .
- The CP reached and overcame the amount of data declared in the DoW.

Babes-Bolyai University (UBB)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	2.019	1.067	3.086	1.700	127	1.827

History and comments:

- The UBB content due to the MS16 is of 4.000 items.
- At March 2016 UBB sent to EAGLE 2.019 artefacts and 1.067 visual representations for a total of 3.086 items. A set of 1.000 images has been uploaded through EDH, for a total of 4.086 items.
- In Europeana (Europeana ID: 2058810) have been published 1.700 artefacts and 898 visual representations.
- The difference between the number of artefacts in EAGLE and the CHOs in Europeana is due to the fact that 319 items have been discarded by Europeana for a problem in the EDM IsShownAt field that is being fixed by the provider. WP3 is working with the Europeana ingestion team to fix the datasets.

Fig. 5.7 shows one of the important inscriptions provided by UBB to the EAGLE portal and to Europeana.



Fig. 5.7. Building inscription from colonia Sarmizegetusa

Roman inscriptions from Brigetio (ELTE)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	651	902	1.553	651	653	1.304

History and comments:

- The ELTE content due to the MS16 is of 1.500 items.
- At March ELTE sent to EAGLE 651 artefacts and 902 visual representations for a total of 1.553 items.
- In Europeana (Europeana ID: 2058809) have been published 651 artefacts and 902 visual representations.
- The CP reached and overcame the amount of data declared in the DoW.

Fig. 5.8 shows one of the important inscriptions provided by ELTE to the EAGLE portal and to Europeana.



Fig. 5.8. Legal institution of Philippus Arabs to the soldiers

Latin inscriptions from Colonia Iulia Pola and Colonia Iulia Parentium (UNIPU)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	1.228	1.223	2.451	1.228	251	1.479
History and comments: <ul style="list-style-type: none"> - The UNIPU content due to the MS16 is of 2.000 items.. - At March UNIPU sent to EAGLE 1.228 artefacts and 1.223 visual representations for a total of 2.451 items. - In Europeana (Europeana ID: 2058809) have been 1.228 artefacts and 1.223 visual representations. - The CP reached and overcame the amount of data declared in the DoW. 						

Epigraphic Archives of Slovenia (ZRC-SAZU)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	269	300	569	269	76	345
History and comments: <ul style="list-style-type: none"> - The ZRC-SAZU content due to the MS16 is of 400 items. - At March ZRC-SAZU sent to EAGLE 269 artefacts and 300 visual representations for a total of 569 items. - In Europeana (Europeana ID: 2058817) have been published 269 artefacts and 300 visual representations. - The CP reached and overcame the amount of data declared in the DoW. <p>Fig. 5.9 shows one of the important inscriptions provided by ZRC-SAZU to the EAGLE portal and to Europeana.</p>						

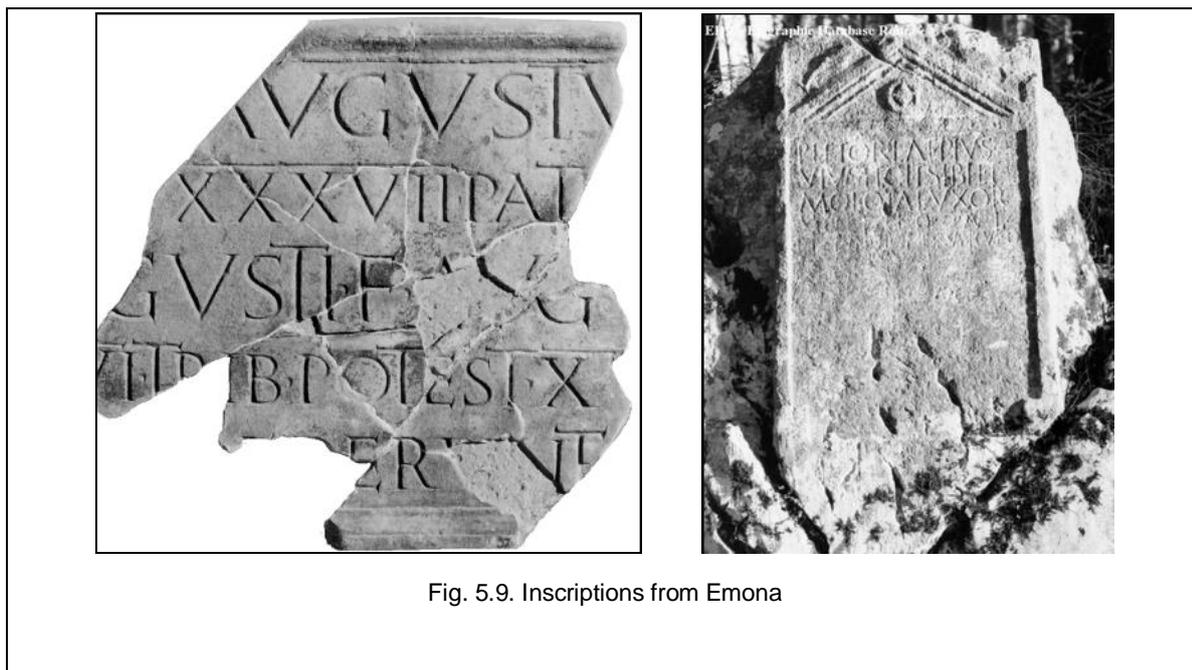


Fig. 5.9. Inscriptions from Emona

Petrae (AUSONIUS)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	2.507	2.524	5.031	2,507	495	3.002

History and comments:

- The AUSONIUS content due to the MS16 is of 5.000 items.
- At March 2016 AUSONIUS sent to EAGLE 2.507 artefacts and 2.524 visual representations for a total of 5.031 items.
- In Europeana (Europeana ID: 2058804) have been published 2.507 artefacts and 2.524 visual representations.
- In Europeana there are at the moment 2.571 items: 64 items more respect what the CP published in the EAGLE portal. This inconsistency is due to the incremental harvesting of Europeana that in this way sometimes include items instead deleted by the CPs. WP3 is working with the Europeana ingestion team to clean the dataset .
- The CP reached and overcame the amount of data declared in the DoW.

Fig. 5.10 shows two of the interesting inscriptions provided by AUSONIUS to the EAGLE portal and to Europeana.

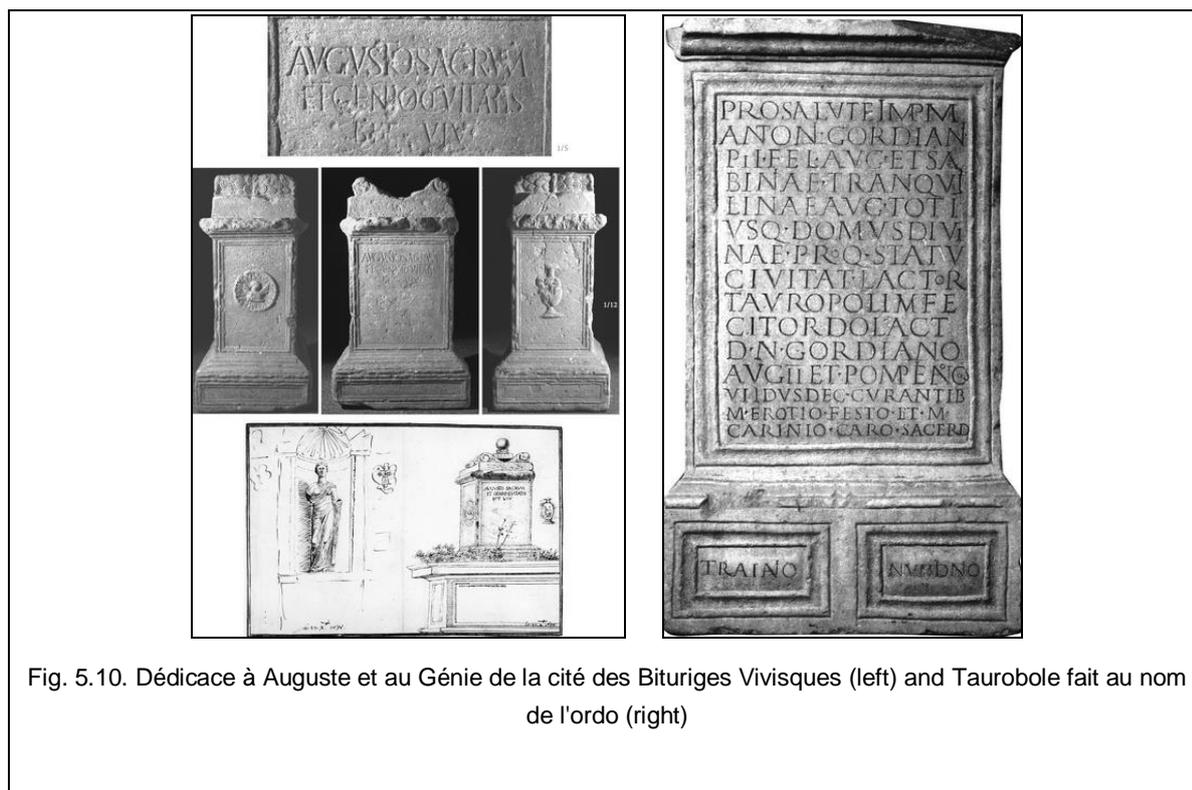


Fig. 5.10. Dédicace à Auguste et au Génie de la cité des Bituriges Vivisques (left) and Taurobole fait au nom de l'ordo (right)

Arachne (DAI)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	124.069	844.168	968.237	124.069	820.370	944.439
Apr	124.615	976.477	1.101.092	Under publication	Under publication	Under publication

History and comments:

- The DAI content due to the MS16 is of 1.000.000 items.
- At March 2016 DAI sent to EAGLE 124.069 artefacts and 844.168 visual representations for a total of 968.237 items.
- In Europeana (Europeana ID: 2058811) have been published 124.069 artefacts and 844.168 visual representations
- At March 2016, the provider was a bit under the amount declared in the DoW, since it was fixing some issues. At the date of drafting this Deliverable, DAI provided to EAGLE portal 124.615 artefacts and 976.477 visual representations for a total of 1.101.092 items. Therefore 546 artefacts and 132.309 visual representations will be added to the total amount.

- In Europeana there are at the moment 124.616 items: 547 items more respect what the CP published in the EAGLE portal. This inconsistency is probably due to the incremental harvesting of Europeana that in this way sometimes include items instead deleted by the CPs. WP3 is working with the Europeana ingestion team to clean the dataset and to add the new content send by the provider after the March Europeana harvesting.
- Thanks to the April update, the CP reached and overcame the amount declared in the DoW.

Archaia Kipriaki Grammateia Digital Corpus (CYI)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	258	546	804	258	288	546

History and comments:

- CYI content due to the MS16 is of 442 items.
- At March 2016 CYI sent to EAGLE 258 artefacts and 546 visual representations for a total of 804 items.
- In Europeana (Europeana ID: 2058819) have been published 258 artefacts and 546 visual representations.
- The Provider had some aggregation issues during the project period, but eventually it solved them, reaching and overcoming the amount of data declared in the DoW.

Fig. 5.11 shows one of the interesting inscriptions provided by CYI to the EAGLE portal and to Europeana.

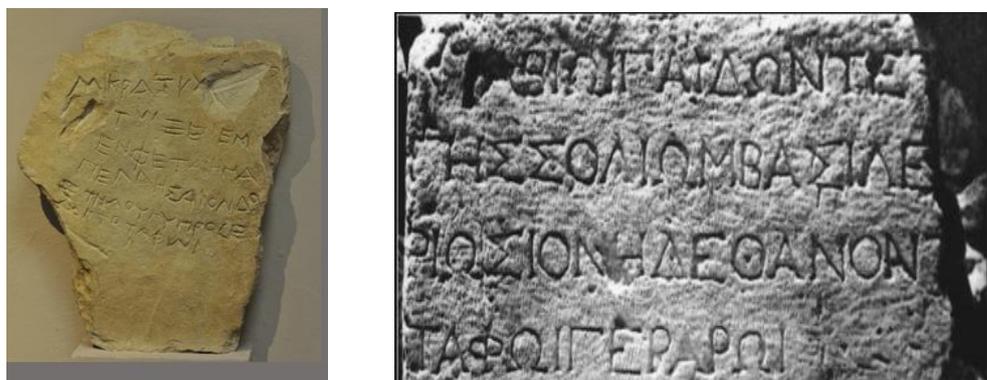


Fig. 5.11. Epigram for Myrto(left); epigram for Pasicrates, king of Soloi (right)

The following tables are referred to the new partners that joined the Consortium, providing content both to EAGLE and to Europeana⁹.

Inscriptions of Aphrodisias (KCL)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	1.505	3.017	4.522	1.500	1.753	3.253

History and comments:

- The Inscriptions of Aphrodisias dataset was included in the EAGLE portal in September 2015.
- At March 2016 KLC sent to EAGLE 1.505 artefacts and 3.017 visual representations for a total of 4.522 item .
- In Europeana (Europeana ID: 2058813) have been published 1.505 artefacts and 3.017 visual representations.
- The difference between the number of artefacts in EAGLE and the CHOs in Europeana is due to the fact that 5 items have been discarded by Europeana for an issue in the EDM dc:language field that is being fixed by the provider. WP3 is working with the Europeana ingestion team to fix the dataset.

Roman inscriptions of Britain (RIB)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	2.401	0	2.401	2.381	0	2.381

History and comments:

- The Roman Inscriptions of Britain dataset was included in the EAGLE portal in September 2015.
- At March 2016 RIB sent to EAGLE 2.401 artefacts and 0 visual representations for a total of 2.401 items.
- In Europeana (Europeana ID: 2058812) have been published 2.381 artefacts.
- The difference between the number of artefacts in EAGLE and the CHOs in Europeana is due to the fact that 20 items have been discarded by Europeana for an issue in the EDM dc:language field that is being fixed by the provider. WP3 is working with the Europeana ingestion team to fix the dataset.

⁹ They are not included in the list of the Content Providers in the Description of Work.

Monumenta Asia Minoris Antiqua (MAMA)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	386	819	1.205	385	433	818
History and comments: <ul style="list-style-type: none"> - The MAMA dataset was included in the EAGLE portal in September 2015. - At March 2016 MAMA sent to EAGLE 386 artefacts and 819 visual representations for a total of 1.205 items. - In Europeana (Europeana ID: 2058816) have been published 385 artefacts and 819 visual representations. - The difference between the number of artefacts in EAGLE and the CHOs in Europeana is due to the fact that 1 item have been discarded by Europeana for an issue in the EDM dc:language field that is being fixed by the provider. WP3 is working with the Europeana ingestion team to fix the dataset. 						

The Israel Museum, Jerusalem (IMJ)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	18	18	36	18	0	18
History and comments: <ul style="list-style-type: none"> - The dataset of IMJ was included in the EAGLE portal in September 2015. - At March 2016 IMJ sent to EAGLE 18 artefacts and 18 visual representations for a total of 36 items. - In Europeana (Europeana ID: 2058818) have been published 18 artefacts and 18 visual representations 						



Vindolanda Tablets Online (VTO)						
Date	D-Net		Total	Europeana		
	artefact	visual		CHO	WebResources	Total
Mar	737	0	737	737	0	737
History and comments: <ul style="list-style-type: none"> - The dataset of Vindolanda Tablets Online was included in the EAGLE portal in September 2015. - At March 2016 VTO sent to EAGLE 737 artefacts and 0 visual representations for a total of 737 items. - In Europeana (Europeana ID: 2058815) have been published 737 artefacts. 						

6. CONCLUSIONS

This Deliverable is the result of the collaborative work done by WP3, WP2, WP4 and the Content Providers for the implementation of the data ingestion process and it gives information about the status of the EAGLE contribution to Europeana in the period September 2015 – March 2016.

The document summarises the ingestion workflow and the activities and sources of information elaborated and used to keep under control the ingestion itself. Particularly, the tools and the methodology used to quantify the contributions of the single Content Providers and to perform the final assessment of the content to be delivered to Europeana.

During the present reporting period all the Content Providers worked to reach the final project's milestones (100% of the amount declared in the DoW) and contributed to the EAGLE and Europeana portals. The EAGLE CPs completed their tasks within the WP3. All of them gave more content respect to the expected one.

More than 1,5 million items are available in the EAGLE OAI-PMH server, already harvested and published in the Europeana portal. Further items, added in April 2016 after the conclusion of the project, are under harvesting. Europeana is going to harvest these new records as well as the items that have been corrected or updated.

The fact that the CPs continued to upload additional items also after the end of the project, demonstrates that they are willing to sustain the portal and the work done so far. WP3 together with WP4 will guarantee a prosecution of the work and will follow the publication of this further material in the next months, assisting the Content Providers and maintaining contacts with the Europeana Operation team to fix the pending issues.