

ECP-2007-DILI-517005

ATHENA

Set of instruments to support newcomers to join

Deliverable number	<i>D2.3</i>
Dissemination level	<i>Public</i>
Delivery date	<i>31 October 2009 31 October 2010 first revision 30 April 2011 final revision</i>
Status	<i>Final</i>
Author(s)	<i>Monika Hagedorn-Saupe SPK, Giuliana De Francesco (MiBAC 2008-2010 – SPK 2011), Maria Teresa Natale MiBAC, Gordon McKenna Collections Trust, Susan Hazan, Israel Museum, Georgia Angelaki, Robina Clayphan, Europeana</i>



eContentplus

This project is funded under the eContentplus programme¹,
a multiannual Community programme to make digital content in Europe more accessible, usable and exploitable.

¹ OJ L 79, 24.3.2005, p. 1.

Table of Contents

1. EUROPEANA AND ATHENA	4
1.1 EUROPEANA	4
1.2 EUROPEANA AND ITS CONTENT PROVIDERS	4
1.3 ATHENA AND EUROPEANA: COLLABORATION AND CROSS-COORDINATION	6
2. HOW TO DELIVER DIGITAL CONTENT TO EUROPEANA THROUGH ATHENA	8
2.1 REASONS FOR CONTRIBUTING TO EUROPEANA	8
2.2 PREPARING TO SUBMIT CONTENT TO EUROPEANA	8
2.3 EUROPEANA REQUIREMENTS FOR METADATA DESCRIPTIONS	9
2.4 EUROPEANA DELIVERY FORMATS: PREVIEWS	10
3. THE ROLE OF MINERVA TECHNICAL GUIDELINES	12
4. THE ATHENA TOOLS	13
4.1 LIDO: THE MUSEUM DOCUMENTATION HARVESTING STANDARD	13
4.2 THE ATHENA INGESTION TOOL	15
5. SUPPORT TO THE ATHENA INGESTION	19
5.1 THE ATHENA HELPDESK SERVICE	19
5.2 ATHENA TRAININGS	19
6. CULTURAL CONTENT IN EUROPEANA: REUSE, RE-PURPOSING AND INTELLECTUAL PROPERTY RIGHTS	20
7. THE DISSEMINATION OF THE ATHENA INSTRUMENTS TO SUPPORT NEWCOMERS TO JOIN	22
7.1 THE ATHENA IPR STEP-BY-STEP GUIDE	22
7.2 THE ATHENA WIKI ON TERMINOLOGIES	22
7.3 DISSEMINATION OF THE TECHNICAL TOOLS	24
7.4 THE ATHENA FACEBOOK GROUP	27
8. ATHENA PUBLICATIONS	29
8.1 DIGITISATION STANDARDS LANDSCAPE	29
8.2 LIDO	30
8.3 PERSISTENT IDENTIFIERS	30
8.4 GUIDELINES FOR GEOGRAPHIC INFORMATION	31
9. HOW TO JOIN THE ATHENA NETWORK	32
9.1 THE NATIONAL CONTACT POINTS	32
9.2 THE COOPERATION AGREEMENT	32
REFERENCES	33
ANNEXES	34
ANNEX 1: ATHENA LIDO MAPPING WORKSHEET	35
ANNEX 2: COOPERATION AGREEMENT	55
ANNEX 3: COOPERATION AGREEMENT LIST	57
ANNEX 4: NATIONAL CONTACT POINTS	59
ANNEX 5: MERCHANDISING FOR THE DISSEMINATION OF THE PROJECT	61

0. Executive Summary

ATHENA is a Best Practice Network established with the main purpose of supporting Europeana at various levels:

- Delivery of museum and other cultural heritage data to Europeana;
- Standards developments and implementation, where needed, in order to enable and improve the data delivery;
- Enlargement of the number of museums and other cultural heritage institutions contributing to Europeana through ATHENA

The ATHENA WP2 has therefore the objective of making European museums and other cultural institutions understand Europeana and be aware of the benefits derived from making available through it their digital contents; identify new tools and best practices, enabling and facilitating this process and disseminating to a larger audience the results achieved.

The activities in this WP2 focus on clearly presenting the benefits that the new participants can gain by adhering to Europeana, promoting the tools developed within ATHENA for joining Europeana and enlarging the network by providing easy to handle information on how to participate and which steps to be taken to join.

This deliverable *Set of Instruments to Support Newcomers to Join* presents the tools developed by ATHENA in order to enable the contribution of quality data to Europeana by the museums wishing to contribute.

It describes the cooperation between Europeana and ATHENA, the requirements content provider have to comply with in order to be able to contribute their content (metadata and previews) to Europeana, the ATHENA tools that enable and facilitate the content contribution, the support provided to the institutions throughout the content ingestion phase.

The issues involved with the transfer to Europeana of IPR on contributed content is then mentioned, and the effort that was done by both ATHENA and Europeana in order to solve them and agree on a data licensing model.

Products aimed at the wider dissemination of the ATHENA tools and activities, including publications, are then described.

Finally, the ATHENA networking instruments (National Contact Points and Cooperation Agreement), aimed at enlarging the network and mobilising new content providers for Europeana, are presented.

1. Europeana and ATHENA

1.1 Europeana

The genesis of Europeana was in a letter to the Presidency of Council and the Commission in April 2005. Here six Heads of State or Government proposed that there should be an online 'European Digital Library' (EDL) which would give access to Europe's rich cultural and scientific resources to everybody in the world. By september of the same year the Commission had announced its strategy for the creation of the European Digital Library as a goal of the *European Information Society i2010 Initiative*. This aims to encourage growth and jobs in the information society and media industries.

The result was the two-year project (originally EDLnet), from July 2007, to create a prototype with a selection of Europe's sample set of content. The portal, Europeana.eu,¹ was officially launched by Viviane Reding, European Commissioner for Information Society and Media, in November 2008.

The second, current, phase of Europeana is Europeana v1.0, which launches in 2011 a fully-operational portal with semantic web functionality and improved multilingual search and access. The project is a 'thematic network' in the Commission's eContentplus programme. It has over 100 partners from across Europe including libraries, museums, archives and audio-visual collections.

Europeana is led by a team based in the Koninklijke Bibliotheek in The Hague, Netherlands. The project is overseen by the EDL Foundation, now Europeana Foundation, with representatives from the four cultural domains and beyond. Its statutes commit members to:

- Provide access to Europe's cultural and scientific heritage by way of a cross-domain portal;
- Co-operate in the delivery and sustainability of the joint portal;
- Stimulate and facilitate initiatives to bring together existing digital content;
- Support digitisation of Europe's cultural and scientific heritage.

By the fall of 2010 the Europeana portal was giving access to at least 10 million items. At the time of last updating this file the items are already 18 million, although the amount of 20 million was only foreseen by 2012. Of these, over 4 million are directly provided by ATHENA.

1.2 Europeana and its content providers

The Europeana portal does not hold the digital content itself but stores:

- Metadata for the creation of indexes, search and resource discovery;
- Previews, e.g. thumbnail images, which help the user to select the content they want to explore in more depth;
- Links (within the metadata) which provide access to the actual content generally of a provider's website or another thematic portal.

¹ See: <http://www.europeana.eu>

Therefore Europeana is dependent on the contribution of content, accessible online, from the cultural heritage institutions themselves. One mechanism to enable this to happen is for the Commission to fund projects which make contribution easy.

A range of projects are contributing or planning to do so. Some of them are listed here:

Project	Content type	Website
<i>APEnet</i>	National archives	http://www.apenet.eu
<i>ATHENA</i>	Museum	http://www.athenaeurope.org
<i>BHL-Europe</i>	Biodiversity heritage	http://www.bhl-europe.eu
<i>CARARE</i>	Archaeology and architectural heritage	http://www.carare.eu
<i>Eclap</i>	Performing Arts	http://www.eclap.eu
<i>Europeana Connect</i>	Sound	http://www.europeanaconnect.eu
<i>European Film Gateway</i>	Cinema	http://www.europeanfilmgateway.eu
<i>Europeana Libraries</i>	Research Libraries	http://www.europeana-libraries.eu/
<i>Europeana Local</i>	Regional and local content (via sensible aggregation)	http://www.europeanalocal.eu
<i>Europeana Regia</i>	Illuminated manuscripts	http://www.europeanaregia.eu/
<i>EURO-photo</i>	Historical photos	http://www.europphoto.org
<i>EUscreen</i>	Television	http://www.euscreen.eu
<i>Europeana Travel</i>	Travel, trade, tourism and migration	http://www.europeanatravel.eu
<i>HOPE</i>	Social history collections	http://www.peoplesheritage.eu/
<i>JUDAICA Europeana</i>	Jewish contribution to Europe's cultural heritage	http://judaica-europeana.eu
<i>MIMO</i>	Musical instruments	http://www.mimo-project.eu
<i>Natural Europe</i>	Natural History collections	http://www.natural-europe.eu/
<i>The European Library</i>	National libraries	http://www.theeuropeanlibrary.org

Europeana in general works with **aggregators**, and not with individual organisations. They may be national, regional, thematic, and domain specific. Aggregators collect information from many organisations relevant to their remit, standardise content file formats and metadata. The content then can be more easily delivered to Europeana. For Europeana dealing with aggregators also offers advantages in limiting the number of organisations it has to deal

with. Several of the projects mentioned above act also as domain aggregators of content for Europeana: ATHENA is among them.

1.3 ATHENA and Europeana: Collaboration and cross-coordination

Throughout the course of the project, particular attention is paid to assuring the tight alignment of all the project's activities to the Europeana development and their effective contribution to Europeana's growth and success.

ATHENA and Europeana agreed that all questions related to museums would be forwarded by Europeana and other projects of the network to ATHENA; Similarly, ATHENA forwards questions related, eg., to cinema heritage to EFG, to archival heritage to APEnet and so on.

Mutual exchange and participation to meetings ensured that the data delivery is smooth and as easy as possible. A list of the main formal interactions includes:

- Participation of ATHENA WP2 leaders to Europeana Communications Group
- Participation of ATHENA WP3 and WP7 leaders to Europeana Version 1 WP3
- Participation of ATHENA WP5 leaders to the Europeana Version 1 WP1.
- Participation of ATHENA W7 leaders to Europeana Connect, the project delivering core components which are essential for the realisation of Europeana as a truly interoperable, multilingual and user-oriented service for all European citizens¹.

Among the examples of this cooperation could be mentioned the joint execution of the Aggregator Survey (2009).

The Aggregators survey

In July 2009 the Europeana and ATHENA projects launched the Survey for Aggregators with the purpose to verify the shared issues and enable the establishment of aggregators in contributing content to Europeana.eu. The purpose of the survey was to verify which strategies, activities, services, and problems are shared by the aggregators, with a focus on the contribution of content towards Europeana. The results of the survey are published online.²

Another relevant example is given by the joint meeting on the new version of the Europeana Data Provider Agreement, which will take place in Bruxelles on the 8th of April 2011.

1.3.1 ATHENA and EuropeanaLocal

Since the early stages of the two projects, a potential for overlapping between ATHENA and EuropeanaLocal was noticed, and therefore the need of an effective collections coordination. EuropeanaLocal is another one of the first suite of projects, funded by the European Commission to help further develop Europeana.³

As ATHENA, also EuropeanaLocal is a Best Practice Network project, funded under the eContentplus programme of the European Commission. It started in June 2008 and is

¹ Europeana Connect website: <http://www.europeanaconnect.eu>

² The report can be downloaded starting from the following web page:
<http://www.athena-europe.org/index.php?en/149/athena-deliverables-and-documents>

³ EuropeanaLocal website: <http://www.europeanalocal.eu/>

designed to involve and help local and regional libraries, museums, archives and audio-visual archives to make their content available through Europeana and deliver new services.

A first meeting between representatives of ATHENA and EuropeanaLocal took place in Paris already on 26-27 November 2008. On that occasion, scenarios were set out and a strategy developed in order to maximise the efforts of both projects. The key for the most effective collaboration was identified in the circulation of information, the sharing of documentation and results, the coordination of the data gathering activities at national level.

The content that each partner country was going to contribute to either project was listed in detail as early as January 2009. The list is available online in the Intranet of ATHENA website.¹

A technical follow-up to the Paris meeting took place in The Hague on 14 January 2009.

The ongoing coordination throughout the course of both projects led to the joint organisation of the workshop *The European Contribution to Online Digital Cultural Heritage - Il contributo europeo al patrimonio culturale in digitale sul web*, which took place in Rome (Italy) on February 21st, 2011.

A short description and the programme of the event, as well as all presentation, can be found online.²

¹ <http://www.athenaeurope.org/index.php?en/115/relations-with-europeanalocal>

² <http://www.athenaeurope.org/index.php?en/111/events/116/roma-il-contributo-europeo-al-patrimonio-culturale-in-digitale-sul-web-the-european-contribution-to-online-digital-cultural-heritage-athenaeuropeanalocal-workshop-presentations-available>

2. How to deliver digital content to Europeana through ATHENA

2.1 Reasons for contributing to Europeana

In order to involve museums into Europeana, ATHENA has disseminated across the museums community the following reasons why an organisation should submit its digital data to it:

- Visits to an organisation's website will increase because Europeana links back to the content provider's website.
- By exposing museum metadata to search engines Europeana is making deep web content accessible.
- User experience will be enriched: Users will be able to find not only your collections but also related content in other countries or in other forms.
- Users want an integrated experience. They expect to be able to see what they are looking for in the same place. They do not like to have to visit multiple sites in order to see all the content they want, often they even don't know where to find it.
- Content gains from association with other linked material: International and interdisciplinary studies are made possible.
- Europeana will be providing Application Programming Interfaces (APIs) which will allow the data made available through Europeana to be re-used or taken back in its enriched form by organisations providing content. This in turn can be used by a provider in their own sites.

These are potentially a set of valuable features that an organisation will gain when it submits content to Europeana.

2.2 Preparing to submit content to Europeana

In order to be able to submit content to Europeana, an organisation needs to comply with some basic requirements that need to be met for an organisation:

- Content must be accessible online. It can be on an organisation's own website or hosted by an aggregator's website.
- Descriptive metadata about the content must be supplied, which conforms to the Europeana Semantic Elements format (ESE). This is a Dublin Core-based set of elements with 12 additional elements needed by Europeana for the correct operation of the portal. For more details see the section on metadata below.
- A link (URL) to the content on the organisation's website must be provided, which the content provider guarantees will not change over time (a persistent identifier).

If Europeana is to harvest metadata from the contributing organisation's site, or its hosting aggregator, their preferred method is OAI-PMH (Open Archives Initiative – Protocol for Metadata Harvesting).¹ Therefore OAI-PMH should be implemented by the organisation's system. However, there are alternatives in place, such as putting data on an FTP server from which they can retrieve it.

¹ See: <http://www.openarchives.org/OAI/openarchivesprotocol.html>

In order to support the content ingestion, harmonization and delivery to Europeana, ATHENA has developed and manages an Ingestion Tool for metadata and content (see below).

2.3 Europeana requirements for metadata descriptions

The proper functioning of the Europeana portal depends on individual content suppliers and aggregators serving up their data in the Europeana Semantic Elements (ESE) format¹, which is based on Dublin Core (DC).²

ESE has some elements that refine and extend simple DC which it is important to populate with data. Therefore individual content suppliers must supply this data in order to successfully submit their content for ingestion by Europeana.

The ESE elements with data defining links to content on the organisation's site are:

<i>Element</i>	<i>Definition and notes</i>	<i>Data requirements</i>
<i>isShownBy</i>	An unambiguous URL reference to the digital object on the content provider's web site in the best available resolution/quality . (i.e. a link to the content as a text, image, sound, or video file, not to the webpage containing it) Data here will allow the full functionality of Europeana and the automatic generation of a thumbnail by them. If this cannot be given then you must provide data for isShownAt.	Must be a valid URI (e.g. URL)
<i>isShownAt</i>	An unambiguous URL reference to the digital object on the content provider's website in its full information context . If this cannot be given then you must provide data for isShownBy .	Must be a valid URI (e.g. URL)
<i>object</i>	For image thumbnails, if you can give a URL to a thumbnail on your website then give that URL here. If you do not have a thumbnail then you may give the same data as in isShownby element.	Must be a valid URL

The elements with data that are currently used by Europeana to provide faceted search are:

<i>Element</i>	<i>Definition and notes</i>	<i>Data requirements</i>
<i>type</i>	The Europeana material type of the resource.	Must be: TEXT or IMAGE or SOUND or VIDEO
<i>provider</i>	Name of the organisation that is delivering content to Europeana.	

¹ For latest version see: <http://group.europeana.eu/web/europeana-project/technicaldocuments>

² Dublin Core Metadata Element (DCMES) Set Version 1.1 is available here:
<http://dublincore.org/documents/dces/>

	<p>If the provider is not an aggregator then use this element.</p> <p>If the provider is an aggregator then use this element for the name of the aggregator. For the name of the provider to the aggregator use the element source.</p>	
--	---	--

2.4 Europeana delivery formats: Previews

Together with the metadata, Europeana gives access to thumbnails of digital content. The main aim is to facilitate the discovery of content relevant to the user's needs through previews of the content as part of the result set of a search including discovery metadata. Through the previews, the user can more easily review the results and move on to more detailed information. This is made available through the link (provided in the field `isShownBy`) giving access to content in the original context on the content provider's website. Any traffic for the content is therefore recorded at the content provider end.

In order to make the portal attractive and to offer the user a good reference, the thumbnail will have a minimal size, ensuring high speed of delivery, and be recognisable, to add significance to the descriptive metadata they complement.

For **image** content, the preview will be a small thumbnail image. For **text** and **video** content the preview may also be an image thumbnail, whilst for **audio** content it can be a short audio sample.

The requirements for the previews and their treatment by Europeana are described in detail in the document "Europeana Portal Image Policy".¹ Below are summarized the technical requirements for image previews.

2.4.1 Europeana requirements for image previews

Europeana does not store in its system any high quality or large format source object. From the source images whose links are provided by the content provider together with the metadata, Europeana generates and caches images in two sizes. Europeana requirements for content relate to the size of the thumbnail images it creates stores and uses on the portal.

There are two types of thumbnail in use: they are called `briefDoc` and `fullDoc`.

briefDoc

Size parameter – Height=110 pixels

If a content provider supplies a link to an image which does not fit this:

- If the image provided is smaller, it is scaled up to 110 pixels;
- If it is larger, it is scaled down to 110 pixels.

¹ Europeana Portal Image Policy (January 2011)
http://version1.europeana.eu/c/document_library/get_file?uuid=6b52d4be-6a4d-443a-842a-ab991bca2b1f&groupId=10602

fullDoc

Size parameter – Width=200 pixels

If a content provider supplies a link to an image which does not fit this:

- If the image provided is smaller, it remains unchanged;
- If it is larger, it is scaled down to 200 pixels.

The major problems will occur when *briefDoc* thumbnail is displayed and it is smaller than the Europeana requirement. Distortion of the image will inevitably occur on the portal. This will be particularly the case where thumbnail on the provider's site is not close to a standard landscape shape. Therefore organisations providing content to Europeana should ideally provide links to a preview which have the same or larger size parameters that are required for use on the portal.

It should be noted that previews are optional but organisations are recommended to provide Europeana with one. This will improve the impact of the content on the portal, thus increasing the traffic. On the other hand, **if a provider cannot provide an image meeting Europeana's specification**, then Europeana uses a default image corresponding to the type of object. As a results page with a large number of these default images gives a poor user experience, Europeana policy in the future might be to rank objects with proper images higher in the search results than objects with only a default image.

3. The role of MINERVA Technical Guidelines

When producing digital content, a first step towards the creation of quality digital resources, which will prove durable and portable and will enable interoperability across different portals and systems, is the adoption of a shared set of technical standards and guidelines. The document *Technical Guidelines for Digital Cultural Content Creation Programmes*, released for the first time in 2004 by the MINERVA and updated in 2008 by MINERVAeC, seeks to provide a guidance for the use of technical standards to all those involved in digitisation projects, from the policy-makers, to those implementing funding programmes, to those managing projects for the creation of digital cultural content.

These Guidelines were first developed in 2004 in the framework of the former MINERVA Project,¹ funded by FP5, and in cooperation with other networks and projects engaged in the field of cultural digital content creation, and building upon previous experiences and guidelines in the field. The Technical Guidelines were revised and updated in 2008, in the framework of the MINERVAeC project, funded by eContentplus; this new edition aimed at offering a useful reference to all projects funded in the framework of the EC i2010 Digital Libraries initiative.²

The document might prove particularly useful for those organisations planning or executing digitisation projects, as it seeks to identify areas where there is already a commonality of approach and to provide a generally applicable core, around which context-specific requirements might be built. The Technical Guidelines are therefore not prescriptive, but condense and offer the experience developed by wide institutional networks throughout almost a decade. Their structure reflects the life cycle of the digitisation process and of the digital resource, but dependencies and relations within different stages are recognised and pointed out. This approach makes their consultation and use particularly effective at any stage of the project.

Any project or (mostly smaller) institutions, not yet experienced in digitisation, aiming to create digital content to be contributed to Europeana might benefit from the reference to this Guidelines, in order to create quality content ready to be made available through their own digital online service, and at the same time fit for contribution to the Europeana portal. The different chapters, in fact, give an orientation for most of the issues involved in the digital data creation and contribution to an international aggregator, such as Europeana. The main sections of the Guide are Projects and Planning, Preparing for the digitisation process, Storage and management of digital master material, Metadata, standards and resource discovery, Publishing on the web, Delivery formats, Re-use and repurposing, Intellectual property rights, copyright, licencing and sustainability. As a matter of fact, some projects in the Europeana group suggested the adoption of these Guidelines since the early stages, and the same advice was given by ATHENA to its content providers.

¹ <http://www.minervaeurope.org>

² K. Fernie, G. De Francesco, D. Dawson (edd.), *Technical Guidelines for Digital Cultural Content Creation Programmes*, Version 2.0, September 2008, Rome © 2008
<http://www.minervaeurope.org/publications/MINERVA%20TG%202.0.pdf>

4. The ATHENA tools

In order to support the aggregation and ingestion of content contributed by its project partners, and its semantic interoperability in the Europeana context now and in the near future, ATHENA together with other partners active in the museum scene developed a museum-specific metadata harvesting standard for the purpose of implementing it as the ATHENA harvesting standard and developed and customised a metadata ingestion tool.

4.1 LIDO: The museum documentation harvesting standard

4.1.1 Reasons for a museum harvesting standard

The ESE schema, used in the Europeana prototype, is based on the Dublin Core metadata format. Although initially created strictly for the description of Web resources, Dublin Core has become the most common format in cultural heritage service environments.

However, as mapping into ESE “flattens out” museum metadata, with most of the data going into a limited subset of elements, the ESE model is not considered totally appropriate within the museum community.

For example, a number of different persons and institutions are usually associated with a museum object: the creator or finder of an object, important persons who have used it, the museum currently holding it, previous owners, and so on. The specificities of all this qualified information is lost in the ESE format.

Moreover, the lack of a structure allowing different elements to be grouped according to their semantic content leads to substantial information loss. A particular problem is the fact that Dublin Core, and thus ESE, does not allow information about the object itself and its digital surrogate to be clearly differentiated – the creator of the object appears in the same field as the photographer of its image.

Museums represent the main ATHENA target audience and are the most of its content providers. Survey work on metadata formats used by the ATHENA partners and content providers performed in 2009 within the ATHENA WP3 confirmed the need for a richer metadata format than the one provided for by ESE. The metadata harvesting format would have needed to be able to represent all possible descriptive metadata relevant for any kind of object. It should have also been able to describe the events that happened to that object and the persons, organisations and places associated with it. Finally the format should have been able to record dates, date ranges, and periods in a culturally significant way.

4.1.2 LIDO

ATHENA therefore co-operated with other partners active in the museum field to develop a XML harvesting schema, which meets the highlighted needs for the aggregation of museum documentation metadata. This schema is called LIDO, which stands for *Lightweight Information Describing Objects*.

LIDO is a format for contributing museum information for resource discovery. LIDO is a schema intended for delivering metadata, for use in a variety of online services, from an organization’s online collections database to portals of aggregated resources, as well as

exposing, sharing and connecting data on the web. Its strength lies with its ability to represent the full range of descriptive information about museum objects. It can be used for all kinds of objects, e.g. art, cultural, technology and natural science. It supports multilingual portal environments.

LIDO is not really a new schema. It builds on existing standards and best practice from a number of different countries in Europe and the rest of the world. The full background to this development can be found in the ATHENA WP3 Deliverables, together with the documentation of LIDO as well as on the LIDO website.¹

The LIDO development underway was primarily an effort to harmonize the two existing harvesting formats CDWA Lite and Museumdat into one single schema. When ATHENA joined the LIDO initiative, ATHENA supported further development that would subsequently integrate SPECTRUM requirements into the schema.

Thus LIDO was chosen and further developed as the metadata format for the delivery of museum content through ATHENA to Europeana.

LIDO v1.0 was officially released at CIDOCs 2010 annual meeting, (Shanghai, China, November 8th-10th); the CIDOC Data Harvesting and Interchange Working Group² serves as a place to bring together documentation and material for LIDO, along with information on CDWA Lite and museumdat, the two XML schemas upon which LIDO is based. The CIDOC Working Group will serve as the source for the most up-to-date information about advancements with LIDO after the end of ATHENA, and serves as a place to evaluate its progress, implementations and understanding within the greater community.

4.1.3 LIDO and the semantic interoperability with Europeana

The mapping between LIDO and ESE is documented in the ATHENA WP3 Deliverables.

The ESE elements with data defining links to content on the organisation's site (=link elements) can be represented in the LIDO schema:

<i>Element</i>	<i>LIDO representation</i>
<i>isShownBy</i>	[Resource wrapper elements] ⇔ resourceSet ⇔ linkResource (type attribute = image_master) AND [Resource wrapper elements] ⇔ resourceSet ⇔ resourceType [with data = 'Digital Image']
<i>isShownAt</i>	[Record wrapper elements] ⇔ recordInfoSet ⇔ recordInfoLink
<i>object</i>	[Resource wrapper elements] ⇔ resourceSet ⇔ linkResource (type attribute = image_thumb) AND [Resource wrapper elements] ⇔ resourceSet ⇔ resourceType [with data = 'Digital Image']

¹ See: <http://www.athenaeurope.org> and <http://www.athenaeurope.org/index.php?en/149/athena-deliverables-and-documents>; www.lido-schema.org

² CIDOC Data Harvesting and Interchange Working Group
[http://cidoc.icom.museum/WG_Data_Harvesting\(en\)\(E1\).xml](http://cidoc.icom.museum/WG_Data_Harvesting(en)(E1).xml)

Through the original harvesting into LIDO format, however, ATHENA can assure that richer metadata descriptions provided by the cultural institution are not just flattened out, but made uniform and kept into the system. They will be therefore immediately available once Europeana will implement the newly released and much more articulated Europeana Data Model.¹

4.2 The ATHENA Ingestion Tool

In order to facilitate and better manage the mapping and ingestion process for content providers, a software tool was developed by the technical partner of the ATHENA project, the National Technical University of Athens (NTUA).

The ATHENA Ingestion Tool enables and facilitates cultural heritage metadata aggregation, organization-, user- and records-management, alignment of proprietary schemata, export (XML, XSLT formats) and publication (via OAI-PMH).

The ATHENA ingestion tool implemented LIDO v.0.9² and combines a comprehensive metadata format with a customized technical solution for practical mapping, with the main objective of including as much information as possible and avoiding any loss of granularity. The task of mapping data to LIDO can therefore be challenging. It requires the analysis not only of the full data structure, but also of how these data elements have been filled. Even with a documentation system based on a standard, everyday indexing practice tends to establish collection-specific, implicit rules and preconditions, which have to be reflected in the mapping.

Data provided by the institutions in an XML format can be loaded into the system. The tool subsequently visualizes, on the left, the incoming source data structure and, on the right, the LIDO target schema.

The content provider can then map their source data elements through ‘drag and drop’ to the target fields, including the mapping of structural elements holding no data, and conditions for the mapping and concatenation of data values and constants.

In order to get to a full and meaningful mapping that best reflects the source information in the target schema, several ‘feedback loops’ may be necessary between the local expert, who knows the source schema and content very well, and a LIDO expert who knows LIDO’s structure in depth.

This loop is considerably shortened by the ATHENA mapping tool, which reflects the target schema very clearly. The process is also considerably easier if the source schema is based on a documentation standard, such as SPECTRUM or a national standard.

Moreover, features supporting data analysis and data value statistics, such as provided in the mapping tool, help immensely in this process.

¹ C. Meghini et al., Definition of the Europeana Data Model Elements: Version 5.2.1., Europeana V. 1.0 7/3/2011; url: http://group.europeana.eu/c/document_library/get_file?uuid=aff89c92-b6ff-4373-a279-fc47b9af3af2&groupId=10605

² In order to be able to start in due time the ingestion process, and at the same time not miss the opportunity of reaching a fully satisfactory international standard, the project decided to implement the version 0.9 as such. The release of LIDO 1.0 in fact took place not earlier than November 2010.

An ATHENA Spectrum-LIDO mapping worksheet was prepared as supporting material for the training sessions (see below) and is attached as ANNEX 1.

The mapping results within the ATHENA project showed that many users appear to have grasped very well both the LIDO schema and how to map into it. (others needed the help through experts.

The overall result of this process is the semantic interoperability of content from many different collections and from different management systems with different data structures.



Fig. 1 The ATHENA Ingestion Tool: Overview

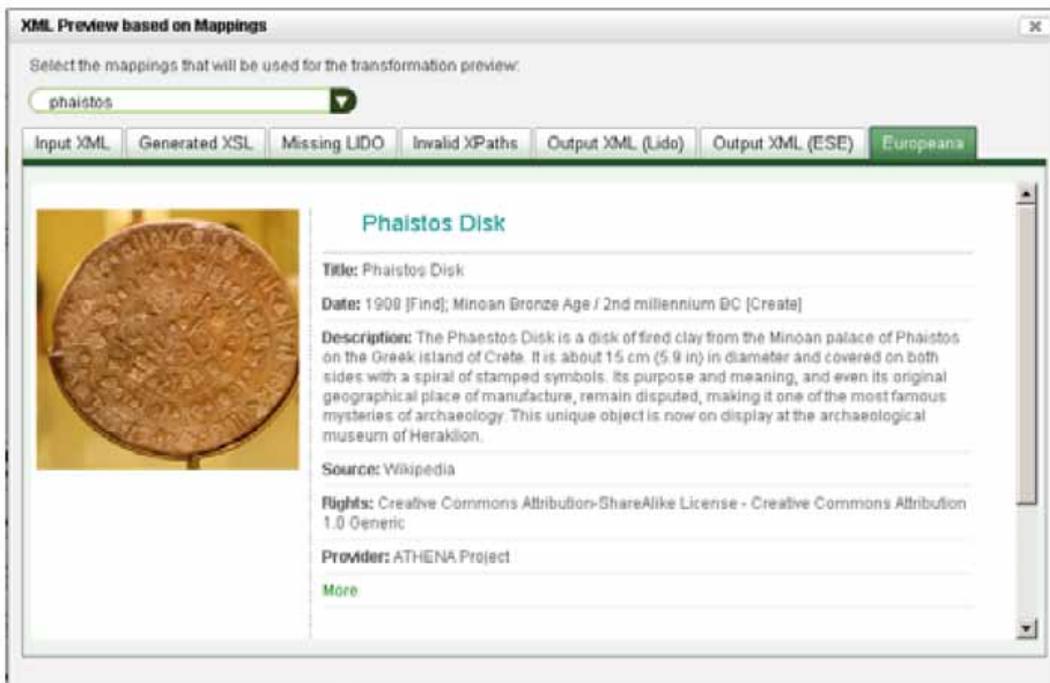


Fig. 2 The ATHENA Ingestion Tool: XML analysis, statistics and preview



Fig. 3 ATHENA Ingestion Tool: Visual mapping editor (XSL). XPath and constant value mappings, value concatenation String value transformation functions based on XSL



Fig. 4 ATHENA Ingestion Tool: Complex condition editor



The usefulness and overall success of the tool made other projects take it into account for their own ingestion process. Among others, EUScreen, JudaicaEuropeana and CARARE took it into account.

More information about the metadata ingestion tool and its future evolution can be found on the website of the Technical University of ATHENS.¹

¹ [Ttp://mint.image.ece.ntua.gr](http://mint.image.ece.ntua.gr)

5. Support to the ATHENA ingestion

5.1 The ATHENA Helpdesk service

Throughout the ingestion process, a helpdesk mailing list allowed users to ask to the project experts questions about the LIDO format and the ingestion tool, but also to help each other and to share problems and experiences.

The Helpdesk service was widely used and effectively provided individual support throughout the ingestion process.

5.2 ATHENA Trainings

In preparation of the ingestion phase, and later on, while the ingestion process was ongoing, several training workshops were organised in different places, in order to enable ATHENA partners and collaborators to effectively and autonomously transfer their own content through the ATHENA Ingestion Tool to Europeana, while exploiting the opportunities offered by the new LIDO harvesting standard for keeping their information as rich and relevant as possible.

The first training workshops took place in Rome and Berlin in January 2010 (Rome, 18-19 January 2010; Berlin, 20-21 January 2010); the last one was conducted in Athens the 4th February 2011.

All the materials produced for the trainings are available online, including videos of some sessions.¹

In the same webpage some further ingestion supporting materials are published:

- The ATHENA LIDO Mapping Worksheet
- An ATHENA Ingester Tutorial
- A set of Basic Rules for Mapping
- A set of Guidelines on the Use of the ATHENA Ingester
- A set of Guidelines for Publication on Europeana (25 October 2010)
- Some Clarifications concerning the ATHENA server

¹ <http://www.athenaeurope.org/index.php?en/159/training>

6. Cultural Content in Europeana: Reuse, Re-purposing and Intellectual Property Rights

Europeana will be storing and publishing within the portal content provider's material (metadata and previews), plus the link to the digital content in its original context, that's to say the main access service.

This content may have rights, specifically copyright, associated with it. Each content provider is legally responsible for clearing any rights in the data they contribute.

This means that each content provider has to:

- Have licence agreements in place with other rights owners, to allow their content to be used in Europeana. Without these licences providers must not submit that content to Europeana;
- Enter into a licence agreement directly with Europeana if they are providing material directly;
- Have a licence agreement with their aggregator which allows the aggregator to have an agreement with Europeana for the content in Europeana.

At the time when the ATHENA ingestion started, Europeana was completing a first set of two standard agreements, defining what uses it wished to be allowed with respect to the contributed data.

A first draft of the two agreements was circulated among the ATHENA community between December 2009 and January 2010. The two documents were:

- Europeana Data Aggregator Agreement
- Europeana Data Provider Agreement.

These drafts envisaged possible reuse of data for **commercial purposes** and **content enrichment**

The ATHENA community commented very lively and quickly and raised some concerns that can be summarized as follows:

- **Background issue:** Europeana states that the agreements only deal with metadata, and not with the content itself: *“most metadata is without intellectual property rights”*.
Museums concern: museum object descriptions, as the result of expertise and research, are original and extremely rich in intellectual content, and therefore subject to intellectual property rights. The general and strong position of the Museum community is that the distinction between metadata and content is not applicable, as *the museum object descriptions ARE the digital content*.
- **Commercial use:** ATHENA partners claimed that any commercial use of metadata by Europeana Foundation, or any third parties, had to be explicitly excluded.
- **Moral and ownership rights:** a concern was expressed that these rights might not be duly safeguarded throughout the chain of aggregation and reuse and the development of services on top of the content. The ATHENA community required that, for each content, the organisation responsible for it, the contributing aggregator and, when available, the personal author should always be credited.
- **Update and accuracy of data:** Metadata, especially in the museum domain, are subject to corrections and revisions, and can't be regarded as definitive. A mechanism was

required, allowing the museums to quickly, and possibly automatically, update the data already contributed.

Another concern was expressed in relation to adaptations and derivatives: if not faithful to the original, they might undermine the accuracy and completeness of data. It was strongly advised to keep the content of the metadata as faithful as possible to the original.

A summary of all comments posted to the ATHENA mailing list (135 subscribers) on the occasion of this first consultation is available in the project website's intranet, under "Documents sent to Europeana".¹

At the end of this first phase, Europeana decided to accept the non-commercial clause and to make other adaptations to the agreements, that were required by the community, thus closing the major source of concern across the museum community. Therefore MiBAC, as the ATHENA coordinator, decided to undersign the Europeana Data Aggregator Agreement on behalf of the whole partnership.

To each content provider wishing to make available their data to Europeana through ATHENA it was requested to undersign a letter authorizing the Project Coordinator to transfer to Europeana the content contributed by the partner via the ATHENA Ingestion Tool under the terms and conditions defined by the Europeana Licence Agreement (2010 version). The ATHENA technical partner, NTUA, also committed with the Project Coordinator to process the data contributed by the content providers only in the framework of the tasks and activities foreseen by the ATHENA project, and to only transfer them to the Europeana server after having been authorised to do so by the Project Coordinator.

At the time of writing Europeana is completing a second round of comments by all projects and content providers on a new proposal for a standard agreement requiring that all resources are made available to Europeana with a CC0 Public Domain Dedication licence.² The main purpose for this major change is the possibility to publish Europeana data as Linked Open Data.

Several issues are raised by this across the museum community. They will be discussed in depth on the occasion of the ATHENA-Europeana IPR workshop which will take place in Brussels the 8th April 2011.

¹ Europeana Data Aggregator Agreement: ATHENA Comments, Rome 18.01.2010
<http://www.athena-europe.org/index.php?en/158/documents-sent-to-europeana>

² CC0 1.0 Universal (CC0 1.0) Public Domain Dedication <http://creativecommons.org/publicdomain/zero/1.0/>

7. The dissemination of the ATHENA instruments to support newcomers to join

7.1 The ATHENA IPR Step-byStep guide

Conceived as a tool to help cultural institutions to identify the situation of intellectual property rights on the collections they wish to make available online and through Europeana, and to support them to clear rights with rights holders, this Guide is made available online.¹ The main purpose is to support institutions in the process of making available and exploit resources on the Web with a legal basis.

The Guide is linked from the ATHENA website.²

The Guide will be officially presented for the first time on the occasion of the ATHENA final conference, which will take place in Rome on the 28th April 2011.



Fig. 5 The homepage of the ATHENA IPR Step-by-step Guide

7.2 The ATHENA wiki on terminologies

ATHENA supports the development and implementation of standards and common terminologies. Work on terminologies is particularly important for the further development of a fully operational semantic web search. The ATHENA WP4 was particularly committed on this field, and explored ways how the SKOS standard (Simple Knowledge Organisation System), the W3C standard for terminology management and interoperability, could be

¹ http://devel.silktech.gr/athenaeurope_ipr/lang_en/page/home-page

² <http://www.athenaeurope.org/index.php?en/192/step-by-step-ipr-guide>

adopted by museums in order to enable the semantic interoperability of their databases within Europeana.

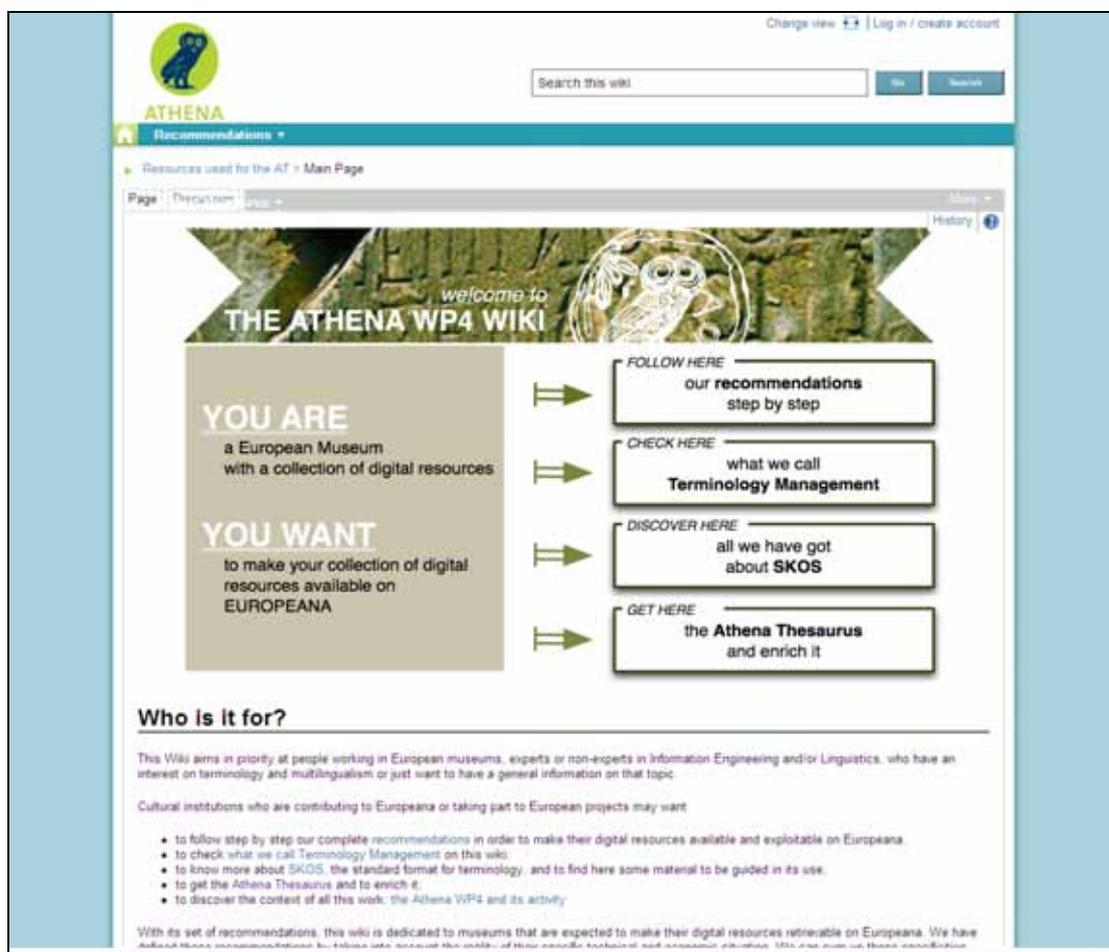
In order to support collaborative work contributing to the ATHENA WP4 a wiki was set up under the ATHENA website <http://www.athenaeurope.org>.

This wiki presents general information on the objectives of the workpackage, as well as technical information and relevant documentation about terminology issues.

The ATHENA wiki can be accessed at the following url:
<http://www.athenaeurope.org/athenawiki/>

The main sections of the wiki are:

- Recommendations: Dedicated to museums that are expected to make their digital resources retrievable on Europeana;
- About terminology: Includes sub-sections about Terminology management, Definitions, EU projects dealing with terminologies, Inventory of terminology resources;
- About SKOS: Includes a Tutorial, a section of Guidelines for SKOS-ification, and some References
- The ATHENA Thesaurus, including the presentation of the resources used for this experimentation
- A full description of the ATHENA WP4. Among other sub-sections, it includes a sub-section about benchmarking of the tools available for SKOS terminology management.



Set of instruments to support newcomers to join



Fig. 6 Homepage of the ATHENA WP4 wiki

7.3 Dissemination of the technical tools

Promotional material was developed also in order to disseminate information about the ATHENA technical tools, in particular LIDO and the Metadata Ingester.

LIDO (Lightweight Information Describing Objects): Making it easier to deliver information to portals

Why LIDO?

Organizations need to provide information on their objects to many portals including thematic, cross domain, regional, national and international. The difficulty, for the portal owner, is that the object information is in the providers' own collections management systems and cataloguing databases. Each of these has potentially a different metadata format. This means that it is both time-consuming and costly to integrate information from all those organizations wanting to participate. To overcome this situation LIDO has been developed.

What is LIDO?

LIDO is an XML harvesting schema. LIDO is a schema intended for delivering metadata, for use in a variety of online services, from an organization's online collections database to portals of aggregated resources, as well as exposing, sharing and connecting data on the web. Its strength lies with its ability to represent the full range of descriptive information about museum objects. It can be used for all kinds of object, e.g. art, cultural, technology and natural science. It supports multilingual portal environments.

How was LIDO created?

LIDO is the result of an international collaboration based upon existing work and practical experience. It combines the CDWA Lite and museumdat schemas, and has been aligned with the SPECTRUM collections management standard. It has an event-oriented approach which is compliant with the CIDOC CRM (ISO 21127).

LIDO was made possible through the collective efforts and support from: the CDWA Lite Advisory Committee, the Documentation Committee of the German Museums Association, the CDWA Lite – museumdat Working Group, the CIDOC-CRM Special Interest Group, and the ATHENA project.

What's in LIDO?

LIDO defines 14 groups of information of which only three are mandatory. This allows for as large a variety of completeness of information as possible. Organizations can decide which data they want provide to a portal and publish online.

LIDO also allows an organization to provide (in different parts of the schema):

- **Indexing information** – optimized for searching and retrieval,
- **Display information** – optimized for presenting information online to the user of the portal.

CIDOC

CIDOC

An important part of LIDO's design, taken from the CIDOC Conceptual Reference Model (ISO 21127), is the concept of **events**. These include the creation, collection, and use of an object. Events have associated with them dates, places and actors. These can all be represented in a consistent way within the schema and allow for better searching, retrieval, and display in the portal.

Overview of LIDO

Descriptive and administrative elements of a LIDO record

- Object identifier(s)
- Object / Work Type** (mandatory)
- Classification**
- Object number(s)
- Title / Name** (mandatory)
- Inscriptions**
- Repository / Location**
- State / Edition**
- Object Description**
- Measurements**

Event(s)

- Event Set
- Subject Set**
- Related Works**

Administrative elements

- Rights**
- Record** (mandatory)
- Resource**

Events in LIDO

- Event
- Event Identifier
- Event Type
- Role in Event
- Event Name
- Event Actor
- Culture
- Event Date
- Event Place
- Event Method
- Materials / Techniques
- Thing Present
- Event Related
- Event Description

Content / Subject in LIDO

- Subject
- Extent Subject
- Subject Concept
- Subject Actor
- Subject Date
- Subject Place
- Subject Event
- Subject Object

CIDOC

Where can I find out more about LIDO?

The management of LIDO is centralized within the *Data Harvesting and Interchange Working Group* of CIDOC, the international documentation committee of ICOM. This brings together all the communities involved: CDWA Lite, museumdat, SPECTRUM and CIDOC CRM. The group also welcomes participation from the wider heritage community.

The Working Group serves as the source of the most up-to-date information about LIDO, and acts as the forum for its implementation and understanding.

For more information visit: <http://www.lido-schema.org>

Fig. 7 LIDO Leaflet, page 1 and 2



The screenshot shows the 'Metadata Ingestion Platform' interface. At the top, there are logos for ATHENA (www.athena-europe.org) and the IIRG logo (www.iirg.eu). The main title is 'Metadata Ingestion Platform'. Below the title is a navigation bar with tabs: HOME, MY PROFILE, ADMINISTRATION, METADATA, DATA SOURCES, and LOGOUT. The 'DATA SOURCES' tab is selected. The main content area is titled 'Overview' and contains a table of data sources. The table has columns for 'Name', 'Status', and 'Action'. The data sources listed are: 'Eurobarometer 2010', 'Eurobarometer 2011', 'Eurobarometer 2012', 'Eurobarometer 2013', 'Eurobarometer 2014', 'Eurobarometer 2015', 'Eurobarometer 2016', 'Eurobarometer 2017', 'Eurobarometer 2018', 'Eurobarometer 2019', and 'Eurobarometer 2020'. Below the table, there is a section for 'Cultural Heritage metadata aggregation' with the following text: 'Organization, user and records management', 'Alignment of proprietary schemata', and 'Export (XML, XSLT) & publish (OAI-PMH)'. At the bottom right, there is a small text: 'metadata interoperability services' and 'For more information, visit: <http://iirg.eu>'.

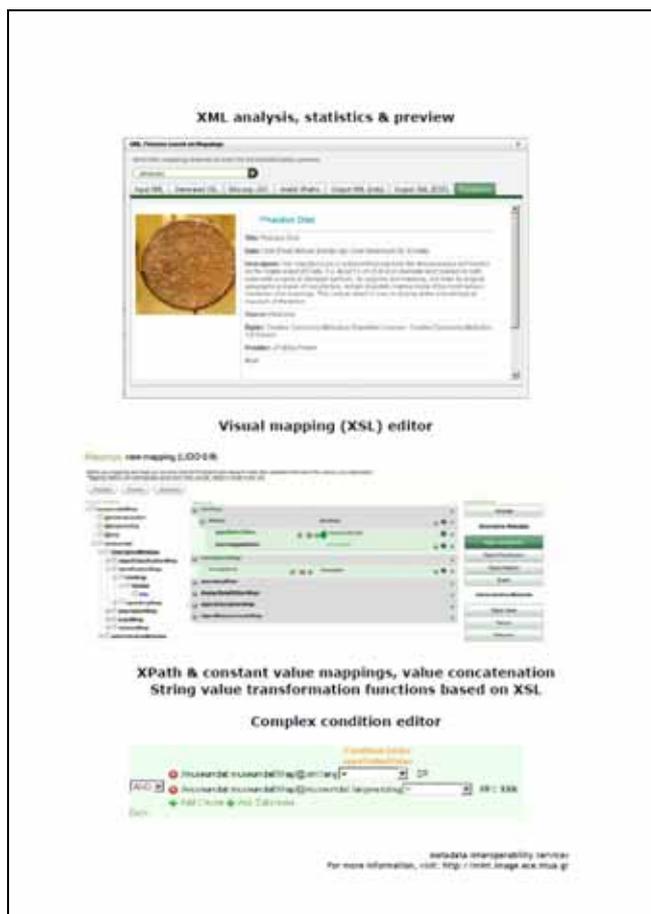


Fig. 8 ATHENA Metadata Ingestion Platform Leaflet, page 1 and 2

Both leaflets were distributed at conferences and other events, and are available online on the project's website.¹

7.4 The ATHENA Facebook Group

Although neither identified nor used as a main dissemination tool, but just as a complementary asset, it is worth mentioning that ATHENA created an own Facebook group in order to be able to attract potential content providers and other interested people. The access to the group is moderated. The Group gathered about 50 members and deals as a tool for spreading information about initiatives not only by ATHENA but also other Europeana-related projects.

¹ <http://www.athena-europe.org/index.php?en/110/promotional-material>



ATHENA - access to cultural heritage across Europe

Wall Info Discussions Photos +

Share: Status Question Photo Link Video

Write something...

Settings

Kate Ferrie The CARARE project is organising a workshop on metadata for 3D objects at the VAST conference in Paris on 21st September, there's still time to register. For more info see: <http://www.vast2010.org/workshop/metadata>

18 September 2010 at 10:11 · Like · Comment

Sesan Hazan attended the event Museums and the Web 2010 - ATHENA Paper.

Museums and the Web 2010 - ATHENA Paper
Tuesday, 13 April 2010 at 09:00
Denver, USA

03 January 2010 at 19:29 · Like · Comment · Share

Sesan Hazan attended the event 5th ATHENA Plenary Meeting.

5th ATHENA Plenary Meeting
Monday, 25 January 2010 at 11:00
Berlin

03 January 2010 at 19:30 · Like · Comment · Share

Sesan Hazan attended the event ATHENA Training Workshop.

ATHENA Training Workshop
Monday, 18 January 2010 at 01:30
Venue: 300J (5th National Central Library) Volk Centre...

03 January 2010 at 19:16 · Like · Comment · Share

Sesan Hazan attended the event SADS Workshop.

SADS Workshop
Monday, 11 January 2010 at 09:00
Tel Aviv

03 January 2010 at 19:12 · Like · Comment · Share

Sesan Hazan attended the event Berlin: ATHENA Training Workshop.

Berlin: ATHENA Training Workshop
Thursday, 21 January 2010 at 09:00
Konrad Zuse Institut, Berlin

03 January 2010 at 19:09 · Like · Comment · Share

Sesan Hazan The Art Newspaper

Facebook is more than a fad—and museums need to learn from it.
By Jim Richardson

Information

Category: Organizations - Professional Organizations

Description: The aim of ATHENA is to bring together relevant stakeholders and content owners from all over Europe, evaluate and integrate standards and tools for facilitating the inclusion of new digital content into Europeana, so conveying to the user the original and multifaceted experience of all the European cultural heritage.

Privacy type: Closed: Limited public content. Members can see all content.

Admins

- Marka Hagestern-Gauze
- Maria Teresa Nobile (Daily)
- Guiliana De Francesco (Daily)
- Susan Hazan (Daily) (creator)

Members

5 of 50 members See All

Karin Bernhardt Sara Di Giorgio Feriug Petroski

Fig. 9 Homepage of the ATHENA Facebook group

8. ATHENA Publications

Based on the work done in the framework of ATHENA (among others, the data aggregation and transfer experience, the development of the ATHENA tools, the preparation of deliverables) four booklets were published, which communicate to the public in an easy and concise way the main technical aspects of the project and provide additional ways to ease their path to becoming a Europeana content provider.

All booklets are both printed and circulated on paper, and are available online through the ATHENA website. At the moment of writing, all of them were linked from the website homepage,¹ two of them also from the section Dissemination – Promotional material²

8.1 Digitisation Standards Landscape

Already in 2009 a booklet was published, based upon the survey of descriptive and technical standards adopted by the European museums performed by ATHENA WP3. It is called: *Digitisation: Standards Landscape for European Museums, Archives, Libraries*.

The text provides a quick introduction to some basic concepts, relevant to the main topic (such as standards, digitisation, interoperability, metadata); after which, it offers the standards landscape deriving from the ATHENA survey.

The standards are organised into three main categories, Information schemes (metadata), Multimedia formats, Other technical standards.

The description format is structured according to a main international standard, as it is Dublin Core (DC) derived.



Fig. 10 Cover of the booklet: *Digitisation: Standards Landscape for European Museums, Archives, Libraries*, by ATHENA WP3, texts by G. McKenna and C. DeLoof

This booklet was translated into Russian, and adapted to the Russian context.³

¹ <http://www.athenaeurope.org/>

² <http://www.athenaeurope.org/index.php?en/110/promotional-material>

³ The Russian version is available online, too, at the following url:
http://www.minervaplus.ru/publish/standards_landscape.pdf

8.2 LIDO

Three more booklets addressed to the wider cultural community engaged with digitisation were printed near the end of the project.

The first one motivates the LIDO common harvesting standard, its purpose and background, the basic design principles, when to use it, and provides practical information deriving from the experience made in the framework of the ATHENA ingestion. The ATHENA community strongly believes, in fact, that by applying the LIDO standard it will be easier for museums to provide quality data to Europeana and other cultural heritage repositories.

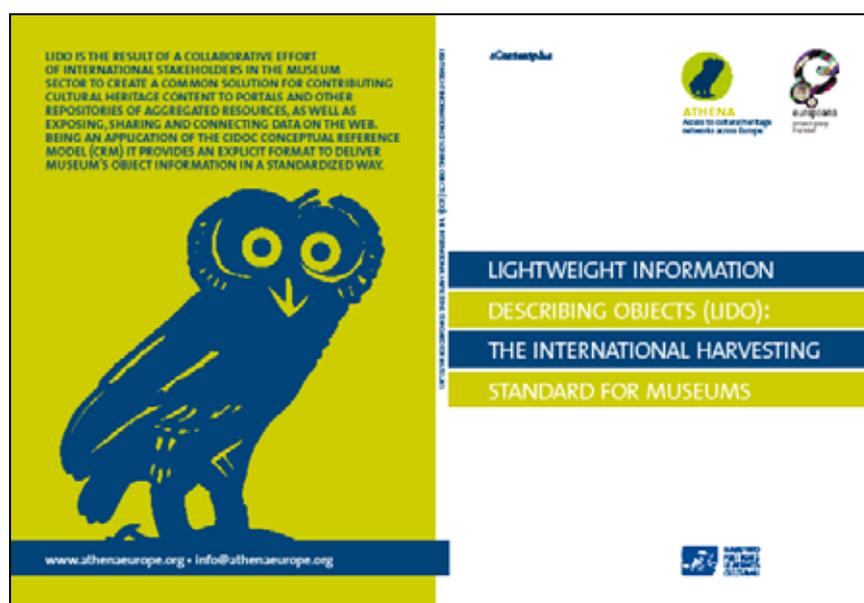


Fig. 11 Cover of the ATHENA booklet *Lightweight Information Describing Objects (LIDO): The International Harvesting Standard for Museums*, edited by ATHENA WP3, texts by G. McKenna, S. Rohde-Enslin, R. Stein.

8.3 Persistent identifiers

Another booklet was published, based upon WP3 work about persistent identifiers. Persistent urls play, in fact, an important role in the Europeana environment, as already explained in the first two chapters of this deliverable.

In order to ensure that information about an object, the object itself and its digital copies can be related to each other and retrieved easily at different points in time and from different places, it is necessary to use “persistent identifiers”, abbreviated as PIDs. The booklet is intended as a short introduction why persistent identifiers are needed and what systems are currently available.

After a brief introduction to the persistent identification of cultural resources and its direct and indirect benefits, the text provides information about the policy that a cultural institution needs to put in place in order to support the persistent identification of resources, and eventually lists and describes in a Dublin Core derived format the standards and services currently available for physical objects, digital objects, institutions.



Fig. 12 Cover of the ATHENA booklet *Persistent Identifiers (PIDs): Recommendations for Institutions*, edited by ATHENA WP3, texts by G. McKenna, R. Wyns.

8.4 Guidelines for Geographic Information

In addition, one booklet communicates to the public the work done by ATHENA WP7 in the field of geographic information about cultural resources in the digital environment.

These guidelines aim at providing basic information for the description of geographic locations. The geographic location information needs to be implemented in such a way that the information is machine-readable and thus can be used also in Europeana and other relevant portals to identify the place of objects.

The booklet provides an introduction about geographic location information, a brief glossary of basic terms, a description of a GIS (Geographic Information System), a landscape of the relevant standards, some use cases and a list of literature and web resources.

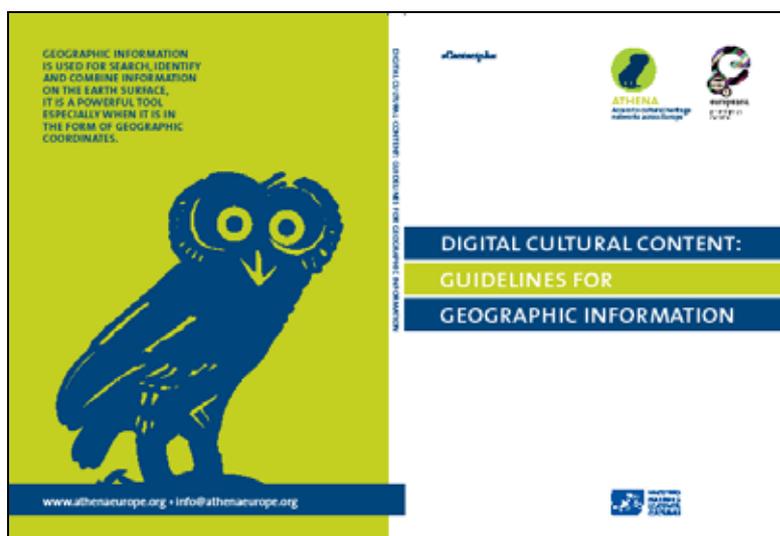


Fig. 13 Cover of the ATHENA booklet *Digital Cultural Content: Guidelines for Geographic Information*, edited by ATHENA WP7, texts by F. J. Zakrajsek and V. Vodeb.

9. How to join the ATHENA network

9.1 The National Contact Points

In order to establish a network and a workflow able to effectively support the data gathering and ingestion process and to raise awareness about Europeana across the museum community, each ATHENA national partner appointed the institutions, and within them the persons, responsible for the dissemination of information about ATHENA and Europeana, the performance of surveys and other project activities and the collection of the data to be integrated through the ATHENA ingestion tool, and finally contributed to Europeana.

These responsible persons were called national Contact Points (NCPs).

The list of ATHENA National Contact Points is made available online and can be found attached as ANNEX 4.

9.2 The Cooperation agreement

The organisations (institutions, projects, etc.) interested (in different ways depending on their roles) in ATHENA activities and results and wishing to closely cooperate with the project, can get in contact with the ATHENA partner in their own country or directly with the central management of the project.

An organisation might cooperate with ATHENA in order to:

- Participate in the ATHENA working groups;
- Share ATHENA results and contribute to their dissemination;
- Provide digital content through ATHENA to Europeana;

Cooperation between organisations, experts, projects and ATHENA can be formalised by means of a Co-operation Agreement.

The text of the Cooperation Agreement is available in English and Russian. The English text is available online¹ and can be found as ANNEX 2 to this Deliverable.

At the moment of writing, 35 organisations from 8 different countries had formalised their cooperation with ATHENA. From the 8 countries, 2 are associated members to the EU: the Russian Federation and Ukraine.

The list of the institutions who signed the Cooperation Agreement with ATHENA is published online, too,² and can be found as ANNEX 3.

In order to be valid, the Cooperation Agreement should contain the name of the cooperating organisation, the signature of the responsible person and the name of the ATHENA formal partner who supported the cooperation.

Each cooperating body has to send three copies of the undersigned Agreement to the ATHENA project coordinator, who will undersign and send back one copy to the operating institution and another copy to the relevant ATHENA partner.

¹ <http://www.athenaeurope.org/index.php?en/131/cooperation-agreement>

² <http://www.athenaeurope.org/index.php?en/150/cooperation-agreement-list>

REFERENCES

M. Piccininno in cooperation with Jill Cousins, Mel Collier, Annette Friberg, Valentina Vassallo, *Analysis of the Europeana and ATHENA Survey for the Aggregators – Working Document*, October 2009

Europeana Semantic Elements Specification, Version 3.3.1 (24/01/2011)

Europeana Portal Image Policy (January 2011)

K. Fernie, G. De Francesco, D. Dawson (edd.), *Technical Guidelines for Digital Cultural Content Creation Programmes*, Version 2.0, September 2008, Rome © 2008

C. Meghini et al., *Definition of the Europeana Data Model Elements: Version 5.2.1.*, Europeana v1.0 7/3/2011

G. McKenna, C. DeLoof, *Digitisation: Standards Landscape for European Museums, Archives, Libraries*, edited by ATHENA WP3, s.d.

G. McKenna, S. Rohde-Enslin, R. Stein, *Lightweight Information Describing Objects (LIDO): The International Harvesting Standard for Museums*, edited by ATHENA WP3, s.d.

G. McKenna, R. Wyns, *Persistent Identifiers (PIDs): Recommendations for Institutions*, edited by ATHENA WP3, s.d.

F. J. Zakrajsek, V.a Vodeb *Digital Cultural Content: Guidelines for Geographic Information*, edited by ATHENA WP7, s.d.

Set of instruments to support newcomers to join



ANNEXES

Set of instruments to support newcomers to join



ANNEX 1: ATHENA LIDO Mapping Worksheet

ATHENA

LIDO Mapping Worksheet

Descriptive and administrative elements of a LIDO record

- *Object Classifications* -

Object / Work Type (*mandatory*)

Classification

- *Object Identifications* -

Title / Name (*mandatory*)

Inscriptions

Repository / Location

State / Edition

Object Description

Measurements

- *Events* -

Event Set

- *Relations* -

Subject Set

Related Works

- *Administrative Metadata* -

Rights

Record (*mandatory*)

Resource

Object identification information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Object number</i>	[Object Identification] ⇒ repositoryWrap ⇒ repositorySet ⇒ workID (no type attribute)
	<i>Other number</i>	[Object Identification] ⇒ repositoryWrap ⇒ repositorySet ⇒ workID (type attribute = data from <i>Other number type</i> Unit)
	<i>Other number type</i>	[See above]
	<i>Brief description</i>	[Object Identification] ⇒ objectDescriptionWrap ⇒ objectDescriptionSet (no type attribute) ⇒ descriptiveNoteValue
	<i>Comments</i>	[Object Identification] ⇒ objectDescriptionWrap ⇒ objectDescriptionSet (type attribute = ‘Comments’) ⇒ descriptiveNoteValue
	<i>Distinguishing features</i>	[Object Identification] ⇒ objectDescriptionWrap ⇒ objectDescriptionSet (type attribute = ‘Distinguishing-features’) ⇒ descriptiveNoteValue
	<i>Number of objects</i>	[Object Identification] ⇒ objectDescriptionWrap ⇒ objectDescriptionSet (type attribute = ‘Number-of-objects’) ⇒ descriptiveNoteValue
	<i>Object name</i> [if no title only]	[Object Identification] ⇒ titleWrap ⇒ titleSet ⇒ appellationValue
	<i>Object name</i>	[Object Classification] ⇒ objectWorkTypeWrap ⇒ objectWorkType ⇒ term
	<i>Title</i>	[Object Identification] ⇒ titleWrap ⇒ titleSet ⇒ appellationValue

Object production information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	[SPECTRUM event type term]	[Event] ⇒ eventSet ⇒ event ⇒ eventType ⇒ term (with data = ‘creation’)
	<i>Object production date</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ displayDate
	<i>Object production date</i> [earliest date]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ earliestDate
	<i>Object production date</i> [latest date]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ latestDate
	<i>Object production date</i> [period]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ periodName ⇒ term
	<i>Object production organisation</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ displayActorInRole
	<i>Object production organisation</i> [analysed]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ actorInRole ⇒ actor ⇒ [See Organisation information group below]
	<i>Object production people</i>	[Event] ⇒ eventSet ⇒ event ⇒ culture ⇒ term
	<i>Object production person</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ displayActorInRole
	<i>Object production person</i> [analysed]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ actorInRole ⇒ actor ⇒ [See Person information group below]
	<i>Object production place</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ displayPlace
	<i>Object production place</i> [controlled – for each term]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ place ⇒ namePlaceSet ⇒ appellationValue
	<i>Technique</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventMaterialsTech ⇒ materialsTech ⇒ termMaterialsTech (attribute type = ‘Technique’) ⇒ term

Object collection information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	[SPECTRUM event type term]	[Event] ⇒ eventSet ⇒ event ⇒ eventType ⇒ term (with data = ‘field collection’)
	<i>Field collection date</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ displayDate
	<i>Field collection date</i> [earliest date]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ earliestDate
	<i>Field collection date</i> [latest date]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ latestDate
	<i>Field collection date</i> [Date - period]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ periodName ⇒ term
	<i>Field collection event name</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventName ⇒ appellationValue
	<i>Field collection event reference number</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventID
	<i>Field collection method</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventMethod ⇒ term
	<i>Field collection number</i>	[Object Identification] ⇒ repositoryWrap ⇒ repositorySet ⇒ workID (type attribute = ‘Field-collection-number’)
	<i>Field collection place</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ displayPlace
	<i>Field collection place</i> [analysed]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ place ⇒ [See <i>Place information</i> group below]
	<i>Field collector</i> (Org or Per) [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ displayActorInRole
	<i>Field collector</i> (Org or Per) [analysed]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ actorInRole ⇒ actor ⇒ [See <i>Organisation information</i> or <i>Person information</i> groups below]



Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Geological complex name</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ place ⇒ placeClassification (type attribute = ‘Geological-complex’) ⇒ term
	<i>Habitat</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ place ⇒ placeClassification (type attribute = ‘Habitat’) ⇒ term
	<i>Stratigraphic unit name</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ place ⇒ placeClassification (type attribute = ‘Stratigraphic-unit’) ⇒ term

Object description information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Age</i>	[Object Classification] ⇒ classificationWrap ⇒ classification ⇒ term (attribute type = ‘Age’)
	<i>Colour</i>	[Object Classification] ⇒ classificationWrap ⇒ classification ⇒ term (attribute type = ‘Colour’)
	<i>Content - activity</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectConcept ⇒ term (attribute type = ‘Content-activity’)
	<i>Content - concept</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectConcept ⇒ term (attribute type = ‘Content-concept’)
	<i>Content - date</i> [simple string]	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectDate ⇒ displayDate
	<i>Content - date</i> [earliest]	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectDate ⇒ date ⇒ earliestDate
	<i>Content - date</i> [latest]	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectDate ⇒ date ⇒ latestDate
	<i>Content - date</i> [period]	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectDate ⇒ date ⇒ periodName ⇒ term
	<i>Content – description</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ displaySubject
	<i>Content - event name</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectEvent ⇒ event ⇒ eventName ⇒ appellationValue
	<i>Content - note</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ displaySubject (attribute label = ‘Content-note’)
	<i>Content - object</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectObject ⇒

Set of instruments to support newcomers to join



		object ⇔ objectNote
--	--	----------------------------

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Content - organisation</i> [simple string]	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectActor ⇒ displayActor
	<i>Content - organisation</i> [analysed]	[Object Relations] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectActor ⇒ actor ⇒ [see Organisation Information group below]
	<i>Content - other</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ displaySubject
	<i>Content - people</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectConcept (attribute type = ‘Culture’) ⇒ term
	<i>Content - person</i> [simple string]	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectActor ⇒ displayActor
	<i>Content - person</i> [analysed]	[Object Relations] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectActor ⇒ actor ⇒ [see Organisation Information group below]
	<i>Content - place</i> [simple string]	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectPlace ⇒ displayPlace
	<i>Content - place</i> [controlled terms]	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectPlace ⇒ place ⇒ namePlaceSet ⇒ appellationValue [see also Place Information group below]
	<i>Content – position</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ extentSubject
	<i>Content note</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ displaySubject (attribute label = ‘Content-note’)
	<i>Copy number</i>	[Object Identification] ⇒ displayStateEditionWrap ⇒ displayEdition (attribute label = ‘Copy-number’)

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	[single string for dimensions]	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ displayObjectMeasurements
	<i>Dimension</i> [for each dimension of each part]	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ objectMeasurements ⇒ measurementsSet (attribute type = [data for this Unit])
	<i>Dimension measured part</i>	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ objectMeasurements ⇒ measurementsSet ⇒ extentMeasurements
	<i>Dimension value</i>	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ objectMeasurements ⇒ measurementsSet (attribute value = [data for this Unit])
	<i>Dimension measurement unit</i>	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ objectMeasurements ⇒ measurementsSet (attribute unit = [data for this Unit])
	<i>Dimension value qualifier</i>	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ objectMeasurements ⇒ measurementsSet ⇒ qualifierMeasurements
	<i>Edition number</i>	[Object Identification] ⇒ displayStateEditionWrap ⇒ displayEdition (attribute label = 'Edition-number')
	<i>Form</i>	[Object Classification] ⇒ classificationWrap ⇒ classification ⇒ term (attribute type = 'Form')
	<i>Inscription content</i>	[Object Identification] ⇒ inscriptionsWrap ⇒ inscriptions
	<i>Inscription description</i>	[Object Identification] ⇒ inscriptionsWrap ⇒ inscriptions

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Material</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventMaterialsTech ⇒ materialsTech ⇒ termMaterialsTech (attribute type = ‘material’) ⇒ term
	<i>Object status</i>	[Object Classification] ⇒ classificationWrap ⇒ classification ⇒ term (attribute type = ‘Object-status’)
	<i>Phase</i>	[Object Classification] ⇒ classificationWrap ⇒ classification ⇒ term (attribute type = ‘Phase’)
	<i>Physical description</i>	[Object Identification] ⇒ objectDescriptionWrap ⇒ objectDescriptionSet (type attribute = ‘Physical-description’) ⇒ descriptiveNoteValue
	<i>Sex</i>	[Object Classification] ⇒ classificationWrap ⇒ classification ⇒ term (attribute type = ‘Sex’)
	<i>Style</i>	[Object Classification] ⇒ classificationWrap ⇒ classification ⇒ term (attribute type = ‘Style’)
	[single string for technical attributes]	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ displayObjectMeasurements
	<i>Technical attribute</i>	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ objectMeasurements ⇒ measurementsSet (attribute type = [data for this Unit])
	<i>Technical attribute measurement</i>	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ objectMeasurements ⇒ measurementsSet (attribute value = [data for this Unit])
	<i>Technical attribute measurement unit</i>	[Object Identification] ⇒ objectMeasurementsWrap ⇒ objectMeasurementsSet ⇒ objectMeasurements ⇒ measurementsSet (attribute unit = [data for this Unit])

Object history and association information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Association type</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventType ⇒ term
	<i>Association note</i>	[Event] ⇒ eventSet ⇒ event ⇒ culture ⇒ eventDescriptionSet ⇒ descriptiveNoteValue
	<i>Associated activity</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectConcept (attribute type = ‘Associated-activity’) ⇒ term
	<i>Associated concept</i>	[Object Relation] ⇒ subjectWrap ⇒ subjectSet ⇒ subject ⇒ subjectConcept (attribute type = ‘Associated-concept’) ⇒ term
	<i>Associated cultural affinity</i>	[Event] ⇒ eventSet ⇒ event ⇒ culture ⇒ term
	<i>Associated date</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ displayDate
	<i>Associated date</i> [earliest]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ earliestDate
	<i>Associated date</i> [latest]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ latestDate
	<i>Associated date</i> [period]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ periodName ⇒ term
	<i>Associated event date</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ displayDate
	<i>Associated event date</i> [earliest]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ earliestDate
	<i>Associated event date</i> [latest]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ latestDate
	<i>Associated event date</i> [period]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ periodName ⇒ term
	<i>Associated event name</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventName ⇒ appellationValue
	<i>Associated event organisation</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ actorInRole ⇒ displayActorInRole
	<i>Associated event people</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ culture ⇒ term



Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Associated event person</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ displayActorInRole
	<i>Associated event person</i> [analysed]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ actorInRole ⇒ actor ⇒ [See <i>Person information</i> group below]
	<i>Associated event place</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ displayPlace
	<i>Associated event place</i> [controlled terms]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ place ⇒ namePlaceSet ⇒ appellationValue [see also <i>Place Information</i> group below]
	<i>Associated object</i>	[Event] ⇒ eventSet ⇒ event ⇒ thingPresent ⇒ displayObject
	<i>Associated organisation</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ displayActorInRole
	<i>Associated organisation</i> [analysed]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ actorInRole ⇒ actor ⇒ [See <i>Organisation information</i> group below]
	<i>Associated people</i>	[Event] ⇒ eventSet ⇒ event ⇒ culture ⇒ term
	<i>Associated place</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ displayPlace
	<i>Associated place</i> [controlled terms]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ place ⇒ namePlaceSet ⇒ appellationValue [see also <i>Place Information</i> group below]



Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Object history note</i>	[Object Identification] ⇒ objectDescriptionWrap ⇒ objectDescriptionSet (type attribute = ‘Object-history-note’) ⇒ descriptiveNoteValue
	[SPECTRUM event type term]	[Event] ⇒ eventSet ⇒ event ⇒ eventType ⇒ term (with data = ‘ownership’)
	<i>Owner</i> (Org or Per) [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ displayActorInRole
	<i>Owner</i> (Org or Per) [analysed]	[Event] ⇒ eventSet ⇒ event ⇒ eventActor ⇒ actorInRole ⇒ actor ⇒ [See Organisation information or Person information groups below]
	<i>Ownership dates</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ displayDate
	<i>Ownership dates</i> [earliest date]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ earliestDate
	<i>Ownership dates</i> [latest date]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ latestDate
	<i>Ownership dates</i> [period]	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ periodName ⇒ term
	<i>Ownership place</i> [single string]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ displayPlace
	<i>Ownership place</i> [controlled – for each term]	[Event] ⇒ eventSet ⇒ event ⇒ eventPlace ⇒ place ⇒ namePlaceSet ⇒ appellationValue [see also Place Information group below]
	<i>Related object number</i>	[Event] ⇒ eventSet ⇒ event ⇒ thingPresent ⇒ object ⇒ objectID



Object rights information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Right begin date</i>	[Rights Work] ⇒ rightsWorkSet ⇒ rightsDate ⇒ earliestDate
	<i>Right holder</i> (Org, Peo, Per)	[Rights Work] ⇒ rightsWorkSet ⇒ rightsHolder ⇒ legalBodyName ⇒ appellationValue
	<i>Right type</i> [usually copyright here]	[Rights Work] ⇒ rightsWorkSet ⇒ rightsType
	[Credit line referring to copyright in general]	[Rights Work] ⇒ rightsWorkSet ⇒ creditLine

Acquisition information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	[SPECTRUM event type term]	[Event] ⇒ eventSet ⇒ event ⇒ eventType ⇒ term (with data = 'acquisition')
	<i>Acquisition date</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ displayDate
	<i>Acquisition method</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventMethod ⇒ term



Use of collections information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	[SPECTRUM event type term]	[Event] ⇒ eventSet ⇒ event ⇒ eventType ⇒ term (with data = ‘exhibition’)
	<i>Exhibition reference number</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventID
	<i>Exhibition begin date</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ earliestDate
	<i>Exhibition end date</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventDate ⇒ date ⇒ latestDate
	<i>Exhibition title</i>	[Event] ⇒ eventSet ⇒ event ⇒ eventName ⇒ appellationValue
	<i>Venue (Org)</i>	[Event] ⇒ eventSet ⇒ event ⇒ actorInRole ⇒ displayActorInRole



Reference information

Europeana Links

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Reference</i> [for online digital image of the object]	[Resource] ⇒ resourceSet ⇒ linkResource (type attribute = image_master) AND [Resource] ⇒ resourceSet ⇒ resourceType [with data = ‘Digital Image’]
	<i>Reference</i> [for online web page containing digital image of the object in context]	[Record] ⇒ recordInfoSet ⇒ recordInfoLink
	<i>Reference</i> [for online suitable thumbnail digital image of the object]	[Resource] ⇒ resourceSet ⇒ linkResource (type attribute = image_thumb) AND [Resource] ⇒ resourceSet ⇒ resourceType [with data = ‘Digital Image’]

Other References

	<i>Catalogue number</i>	[Object Identification] ⇒ displayStateEditionWrap ⇒ displayEdition (attribute label = ‘Catalogue-number’)
--	-------------------------	--



Date information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Date - earliest/single</i>	[Wrapper elements] ⇒ date ⇒ earliestDate
	<i>Date - latest</i>	[Wrapper elements] ⇒ date ⇒ latestDate
	<i>Date – period</i>	[Wrapper elements] ⇒ date ⇒ periodName ⇒ term

Organisation information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	Organisation's additions to name	[Wrapper elements] ⇒ actor ⇒ nameActorSet ⇒ appellationValue (attribute type = 'Additions-to-name')
	Organisation's dissolution date	[Wrapper elements] ⇒ actor ⇒ vitalDatesActor (attribute deathDate = [data from Unit])
	Organisation's foundation date	[Wrapper elements] ⇒ actor ⇒ vitalDatesActor (attribute birthDate = [data from Unit])
	Organisation's foundation place	[Wrapper elements] ⇒ actor ⇒ nationalityActor ⇒ term
	Organisation's reference number	[Wrapper elements] ⇒ actor ⇒ actorID

Person information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Person's additions to name</i>	[Wrapper elements] ⇒ actor ⇒ nameActorSet ⇒ appellationValue (attribute type = 'Additions-to-name')
	<i>Person's association</i>	[Wrapper elements] ⇒ actor ⇒ roleActor ⇒ term
	<i>Person's birth date</i>	[Wrapper elements] ⇒ actor ⇒ vitalDatesActor (attribute birthDate = [data from Unit])
	<i>Person's death date</i>	[Wrapper elements] ⇒ actor ⇒ vitalDatesActor (attribute deathDate = [data from Unit])
	<i>Person's forenames</i>	[Wrapper elements] ⇒ actor ⇒ nameActorSet ⇒ appellationValue (attribute type = 'Forenames')
	<i>Person's gender</i>	[Wrapper elements] ⇒ actor ⇒ genderActor
	<i>Person's group</i>	[Wrapper elements] ⇒ actor ⇒ nationalityActor ⇒ term (attribute label = 'Cultural-group')
	<i>Person's nationality</i>	[Wrapper elements] ⇒ actor ⇒ nationalityActor ⇒ term
	<i>Person's reference number</i>	[Wrapper elements] ⇒ actor ⇒ actorID
	<i>Person's surname</i>	[Wrapper elements] ⇒ actor ⇒ nameActorSet ⇒ appellationValue (attribute type = 'Surname')
	<i>Person's title</i>	[Wrapper elements] ⇒ actor ⇒ nameActorSet ⇒ appellationValue (attribute type = 'Title')



Place information

Internal element	SPECTRUM Unit of information	LIDO elements path in the ATHENA system – element containing data in bold
	<i>Place name</i>	[Wrapper elements] ⇒ place ⇒ namePlaceSet ⇒ appellationValue (attribute type = [data from <i>Place name type</i> Unit])
	<i>Place name type</i>	[see above]
	<i>Place reference number</i>	[Wrapper elements] ⇒ place ⇒ placeID (attribute type = [data from <i>Place reference number type</i> Unit])
	<i>Place reference number type</i>	[see above]

ESE provider and source elements

Content from an organisation (not an aggregator):

Internal element	Data	LIDO elements path in the ATHENA system – element containing data in bold
	Name of the organisation	[Record] ⇒ recordSource ⇒ legalBodyName ⇒ sourceAppellation

Content from an aggregator with many source organisations:

Internal element	Data	LIDO elements path in the ATHENA system – element containing data in bold
	Name of the aggregator	[Record] ⇒ recordSource ⇒ legalBodyName ⇒ sourceAppellation
	Name of the source organisation	[Object Identification] ⇒ repositoryWrap ⇒ repositorySet ⇒ repositoryName ⇒ legalBodyName ⇒ appellationValue

ANNEX 2: Cooperation Agreement

The text of the following Agreement can be found online, both in pdf and in word formats, from the following url: <http://www.athenaeurope.org/index.php?en/131/cooperation-agreement>



ATHENA Co-operation Agreement

A co-operation agreement is hereby concluded between:

Ministero per i Beni e le Attività culturali, *Istituto centrale per il catalogo unico delle biblioteche italiane e per le informazioni bibliografiche, Viale Castro Pretorio 105, 00185 Roma* (“the co-ordinator”)

of the one part,

and

..... *Name (acronym), address, country,.....*(“the new member”)

of the other part,

collectively “the parties”, represented by their authorised representatives.

In the framework of the eContentplus Programme, the **Ministero per i Beni e le Attività culturali** concluded the contract ECP-2007-DILI-517005 to realise the Best Practice Network entitled **ATHENA**.

In the light of the activities foreseen within the ATHENA Network, the parties have agreed to co-operate as it follows:

Article 1 - Subject matter of the co-operation agreement

The purpose of this agreement is to enable the new member to participate in the ATHENA Network and to contribute to its implementation in accordance with the conditions provided for in this agreement.

Article 2 - Scope

The new member shall perform his share of the work pursuant to this agreement in compliance with the project goals. The new member shall co-operate with the co-ordinator and with the other members of the ATHENA network on one or more of the following topics, in particular:

- to participate in the ATHENA working groups
- to provide digital content to ATHENA
- to participate to the ATHENA dissemination activities and to the initiatives aimed at the enlargement of the ATHENA network.

The new member may be invited to participate in meeting organised by ATHENA, following the schedule of activities indicated in the Technical Annex and others possibly agreed with the European Commission.

In the framework of co-operation, the new member will also be invited to contribute to the ATHENA reports, by the provision of specific content, after having discussed and agreed with the co-ordinator their nature and scope.

Article 3 - Entry into force of the co-operation agreement

The agreement shall enter into force from the date of its signature.

Article 4 - Completion, expiry or termination of the co-operation agreement

1. The present co-operation agreement shall automatically terminate on the date of completion or termination of the basic ATHENA contract.
2. Each party may terminate this agreement subject to two months' written notice.

For the parties	Signature and title	Date
<i>Ministero per i Beni e le Attività Culturali</i> <i>c/o Istituto centrale per il catalogo unico delle</i> <i>biblioteche</i> <i>Viale Castro Pretorio 105</i> <i>00185 Roma, Italy</i> <i>(please return a signed copy to this address)</i>
<i>Supported by (*)</i>
<i>Name of the new member</i> <i>(written out in full)</i>

(*) Please include this section if you sign the agreement on behalf on the Italian Ministry

ANNEX 3: Cooperation agreement list

The following is the list of institutions who signed the cooperation agreement with ATHENA. The constantly updated list of cooperating organisations is made available online, at the url: <http://www.athenaeurope.org/index.php?en/150/cooperation-agreement-list>.

BELGIUM

- Museum van Hedendaagse Kunst (MuHKA), Antwerpen
- Stedelijk Museum voor Actuele Kunst (S.M.A.K.), Gent
- Agentschap Kunsten en Erfgoed, Collectie van de Vlaamse gemeenschap

CZECH REPUBLIC

- Česká pošta, Praha
- Muzeum Romske Kulturi, Brno
- Muzeum Kávy Alchymista, Praha
- Slezské zemské Muzeum, Opava
- Postovní Muzeum, Praha
- Regionalni Muzeum a galerie v Jicine, Jicin

FINLAND

- Helinä Rautavaara Museum, Espoo City
- Mobilia säätiö, Kangasala

GERMANY

- Badisches Landesmuseum Karlsruhe
- Landesmuseum Württemberg
- Reiss-Engelhorn-Museen Mannheim
- Staatl. Kunsthalle Karlsruhe
- Stiftung Friedenstein Gotha
- Technoseum Mannheim
- UB Heidelberg Bibliotheca Palatina
- Sudetendeutsche Stiftung
- Stadtarchiv Mainz
- Sachsen, Landesstelle für Museumswesen
- Dt. Volksliedarchiv Freiburg

HUNGARY

- Magyar Nemzeti Museum, Budapest
- Museum of Fine Arts Budapest, Budapest

LATVIA

- Jelgava History and Art Museum named after G. Eliass, Jelgava
- National History Museum of Latvia, Riga
- The Specially Protected Cultural Monument-Turaida Museum Reserve, Sigulda
- The Museum of the Local Studies of Valmiera, Valmiera
- Latgale Culture and History Museum, Rezekne
- The Museum of the History of Riga and navigation, Palastaiela
- The Natural History Museum of Latvia, Riga
- The Latvian national Museum of Art, Riga

- Madona Local History and Art Museum, Madona
- The Latvian War Museum Smilšu, Riga

LITHUANIA

- Lithuanian Art Museum, Vilnius
- M.K Ciurlionis National Museum of Art, Kaunas
- Siauliai Ausra Museum (SAM), Siauliai
- Lithuanian Sea Museum, Klaipeda

RUSSIAN FEDERATION

- Alt-Soft Information & Communication Technologies JSC, Saint Petersburg
- Kazan State University, Kazan
- Chuvashia State Art Museum, Ceboksary
- Radischev's museum, Saratov
- The State Tretyakov Gallery, Moscow
- Centre on Informatisation in the sphere of Culture (centre PIC), Moscow
- Rybinsk State Architectural Historical and Art Museum Preserve, Rybinsk

UKRAINE

- National Parliamentary Library of Ukraine, Kiev

ANNEX 4: National Contact Points

Each ATHENA partner has appointed some national contact points: person/institutions responsible for the data collection and the dissemination of the information.

Azerbaijan

Efsun Ahmedov (Ministry of culture), efsun_mct[at]yahoo[dot]com

Belgium

Barbara Dierickx (Packed), barbara[dot]dierickx[at]packed[dot]be

Rony Vissers (Packed), rony[at]packed[dot]be

Bulgaria

Sabina Aneva (CL-BAS), sabina[at]cl[dot]bas[dot]bg

Cyprus

Franco Nicolucci (STARC) f.nicolucci[at]cyi[dot]ac[dot]cy

Sorin Hermon sorin.hermon[at]gmail[dot]com

Czech Republic

Pavel Dousa (National Museum Prague), pavel_dousa[at]nm[dot]cz

Estonia

Indrek Eensaar (Ministry of Culture), Indrek[dot]Eensaar[at]kul[dot]ee

Finland

Pirjo Hamari (National Board of Antiquities), Pirjo[dot]Hamari[at]nba[dot]fi

Sirkka Valanto (National Board of Antiquities), sirkka[dot]valanto[at]nba[dot]fi

France

France Marie-Véronique Leroi (Ministère de la culture et de la communication), marie-veronique[dot]leroi[at]culture[dot]gouv[dot]fr

Germany

Monika Hagedorn-Saupe (SMB-SPK), m[dot]hagedorn[at]smb[dot]spk-berlin[dot]de

Greece

Vassilis Tzouvaras (NTUA), tzouvaras[at]image[dot]ntua[dot]gr

Dimitrios K. Tsolis (UP), dkt[at]hpclab[dot]ceid[dot]upatras[dot]gr

Katerina Moutogianni (Ministry of Culture), kmoutogianni[at]culture.gr

Hungary

Gabor Palko (PIM), palkog[at]pim[dot]hu

Ivan Ronai (Hungarian National Library), ivan[dot]ronai[at]okm[dot]gov[dot]hu

Kati Bánkeszi (National Széchényi Library), bankeszi[at]oszk[dot]hu

Hainalka Sutheo (Magyar National Radio) sutheo.hajnalka[at]radio[dot]hu

Israel

Dov Winer (Makash), dov[dot]winer[at]savion[dot]huji[dot]ac[dot]il

Italy

Marzia Piccininno (Ministero per i beni e le attività culturali), marzia[dot]piccininno[at]beniculturali[dot]it

Giuliana De Francesco (Ministero per i beni e le attività culturali), defrancesco[at]beniculturali[dot]it

Latvia

Una Balode (Kultūras informācijas sistēmas), una.balode[at]kis[dot]gov[dot]lv

Luxembourg

Guy Frank (Ministry of Culture), Guy[dot]Frank[at]mc[dot]etat[dot]lu

Malta

Noel Zammit (Heritage Malta), noel[dot]zammit[at]gov[dot]mt

The Netherlands

Cathy Jager (Rijksmuseum), C[dot]Jager[at]rijksmuseum[dot]nl

Poland

Maria Sliwinska (ICIMSS), Maria[dot]Sliwinska[at]uni[dot]torun[dot]pl

Romania

Dan Matei (CIMEC), dan[at]cimec[dot]ro

Russia

Nadezhda Brakker (CPIC), nbrakker[at]gmail[dot]com

Slovak Republic

Pavel Antalík (Ministry of Culture), pavel.antalik[at]culture[dot]gov[dot]sk

Slovenia

Franc Zakrajsek (Ministry of Culture), franc[dot]zakrajsek[at]guest[dot]arnes[dot]si

Sweden

Ann Hagerfors (Luleå University of Technology), Ann[dot]Hagerfors[at]ltu[dot]se

United Kingdom

Gordon McKenna, (Collections Trust), gordon[at]collectionstrust[dot]org[dot]uk

Europeana

Lizzy Komen (EDL Foundation), Lizzy[dot]Komen[at]KB[dot]nl

ANNEX 5: Merchandising for the dissemination of the project

Folders, pens, shoppers

During the second and third year of the project, the following promotional materials were developed and distributed, online and in physical copies:

USB cards

USB cards with the ATHENA and Europeana logo and slogan were distributed to speakers and attendees on the occasion of the conferences and workshops organised by ATHENA, independently or in cooperation with other projects and networks.



Fig. 14 ATHENA USB card

Shoppers (fabric)

Fabric shoppers were produced in order to be distributed as a gadget and also to deal as conference folders.



Fig. 15 The ATHENA fabric shopper

Pen

The ATHENA pen is included as a gadget in conference folders and used as a dissemination tool.



Fig. 16 The ATHENA metal pen

Conference folders, plastic pens, bookmarks and paper shoppers were also produced in a Lithuanian version



Fig. 17 The Lithuanian ATHENA paper shopper



Fig. 18 The Lithuanian ATHENA conference folder and gadgets

Set of instruments to support newcomers to join



Coins

The supermarket coins, foreseen since the beginning of the project, were produced and distributed on any dissemination event.



Fig. 19 The ATHENA supermarket coin