



Adrinetbook Handbook for digitisation procedures

Deliverable number: T.2.1.1

Authors: Maria Teresa Natale, Marco Scarbaci, Elisa Sciotti, ICCU

Date: July 2021



TABLE OF CONTENT

SUMMARY	3
DATA PREPARATION, SCANNING, POSTPRODUCTION	4
Design and Preparation of Materials.....	4
Optical Scan	4
Image Capture Formats	5
Prototype of Scans and Quality Check	6
Identification of Images in Mass Memories	7
Metadata Production	7
AGGREGATION OF CONTENT.....	7
Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH).....	7
Europeana Data Model (EDM)	8
Semantic Enrichment	11
Focus on IDs.....	19
Focus on Language Tagging.....	19
General Rules on Creating EDM Metadata	20
LICENCES.....	22
Creative Commons Licences.....	22
Right statements	26
Europeana 14 Rights Statements	32
How to Choose the Europeana Correct Rights Statement: Tips	32
Europeana Publishing Framework.....	35
Tiers for metadata	35
Tiers for digital objects	36
Europeana Rights State Validation.....	37
Terms of use	37
Data exchange agreement.....	38
REFERENCES.....	38



SUMMARY

This deliverable has been produced within the activities of T2. It is targeted to all Adrinetbook partners involved in the digitization and aggregation of cultural collections.

It includes sections on data preparation, scanning, postproduction, aggregation of content, licences, references.



DATA PREPARATION, SCANNING, POSTPRODUCTION

This section contains the guidelines to create a digital collection according to the standards identified for the Adrinetbook project. It is based on the guidelines produced by ICCU for Italian libraries (<https://www.internetculturale.it/getFile.php?id=46924>).

Design and Preparation of Materials

The first activities to be done are:

- Selection of documents to be digitized aimed at producing a digital collection, with thematic, temporal and geographical characteristics.
- Count of digital files that will be the final product, aimed at calculating production costs, which are evaluated, including metadata, on the cost for each digital file. A digital file is the single reproduction of page for printing, recto or verso paper for manuscript, single image, remains double only in case of documented needs.

Recommendation: produce an excel file with the list of documents to be digitized by shelfmark / signature mark. The scan folder is named after the catalog, as well as the metadata xml file. The catalog reference is always essential for digital production.

Optical Scan

The scanning activities must be performed on site in a suitable environment with constant lighting and always the same at different times of the day, with suitable equipment, planetary scanner and mass memory server, in full compliance with current legislation on safety at work, and for the security and conservation of the documents to be processed.

All the equipment necessary to perform the service is installed and configured by the company, the scanner must always be calibrated upon assembly, before proceeding with the scans. Taking into account the value and delicacy of the originals, the shooting methods concerning the opening of the volumes, the lighting, the manipulation, must be such as not to cause them damage, the images will be acquired by placing the binding plates on the tilting surface of the scanner, the pages must be browsed carefully and without exerting pressure on the document, especially on the backs of the bindings. During all digitization operations, the personnel in charge must wear cotton gloves.

Reproduction must take place with the use of cold light lamps.

The double image will be taken with the single scan but an image file (digital object) will be produced for each of the two parts relating to:

- each verso and recto of each card for manuscripts; each page for printed texts, including the guard cards, even if without information, and both interpolated and consecutive blank cards; periodicals are treated on a page and as issues, not as bound volumes;
- all the parts making up the binding: plates, spine, cuts if significant (in the case of codes, so as to show capitals, clips, studs, cantonals);
- the chromatic scale and millimeter scale will be placed only once on a non-significant original paper of each document; the paper to be scanned will be agreed with the project manager



and placed as the last image file in the digital package; the millimeter scale must be positioned along the bottom edge with the "zero" aligned with the vertical edge of the paper;

- the cards will be reproduced in a "natural" way, including the margins of the cards and parts of the underlying volume, to show the materiality of the document in its entirety, without interfering with the quality of the colors on the depth of field. The shots will be carried out on a black background in order to include a minimum dark area surrounding the scanned paper that allows it to be viewed in context, in any case in such a way that no part of the document is ever excluded from the shot. The cards / pages in the binding area must be cut with a margin to show the binding and a small part of the front page.
- in case of tears, woodworm holes and oxidation of the inks, the papers must be masked with white paper in order to avoid picking up the underlying content.
- In the presence of papers to be scanned, smaller than the underlying sheets, place a Japanese paper (not a common white sheet) underneath the sheet to be scanned, of such thickness that it allows the visibility of the underlying pages so that they do not interfere with the reading of the scanned sheet, of a size equal to the size of the document.

The scan folder will be organized by placing in the order: front plate, back plate, rear plate, and in sequence the internal cards, at the bottom of the entire package the chromatic and millimeter scale.

Image Capture Formats

Master file

The acquisition must be performed respecting the following parameters:

- high resolution uncompressed TIFF 6.0, 600 dpi optical, 24-bit RGB color depth for format less than or equal to A4;
- high resolution uncompressed TIFF 6.0, 400 ppi, color depth of 24 bit RGB for a format much higher than A4.

The acquisitions must essentially guarantee the 1: 1 ratio between the dimensions of the analog object and those, "print size" (DPI), of the TIFF version of the image

This scan is intended for offline storage and as a safety copy, it is called (master).

Derived files

Once the quality and completeness have been verified, the following files will be produced from the master:

- JPEG in medium resolution compressed format, 300 optical dpi and 24 bit RGB color depth, intended for intranet consultation
- JPEG in low resolution compressed format, 150 dpi optical, color depth of 24 bit RGB, compression factor 85 percent, with resampling of the images, method by which the "print size" (DPI) of the JPG file will be identical to that of the TIFF file. Please, verify if the 150 dpi are sufficient to reach the Europeana requirements for the digital content tier classification (see below).



The value of the dpi resolution resizing can be increased to 200 dpi, or decreased to 100 dpi. This value must be defined in the prototype phase, in order to guarantee an easy consultation, depending on the quality of the material (inks, writing quality, print quality, body of the characters), also in relation to the size of the original, always taking into account not to underestimate the excessive weight of the final digital folder in view of the upload in the repository.

Particular attention must be paid to the choice of dpi for periodicals, determined by the body of the characters when very small and by the size of the sheet; in fact, a good readability on the screen with the zoom is essential.

For very small materials, of which one of the two dimensions is less than 10 cm (e.g. photographic material), in addition to the parameter of DPIs, it may be appropriate to apply the parameter relating to the dimensions in pixels of the digital resource, defining by default a value for the long side. ICCU suggests a value of 2000 pixels for the long side. In this case, the resampling method should not be applied, as the JPEG dimensions will necessarily be different from those of the TIFF version. However, an evaluation on the use of this modality must be the subject to analyzes, by all the interested parties, in the pre-prototype phase.

For easily readable quality printed materials and periodicals, you could also ask for:

- PDF with embedded OCR, as many files as there are image files, with the same nomenclature, sequence number and file name of the corresponding IMG file of the TIFF master copy.

Please, note that Europeana asks for textual digital resources:

- PDF files with embedded OCR (one PDF for the entire book), or in alternative
- The production of files according to IIIF standard.

In case of one page textual document, JPG is accepted.

References:

<https://pro.europeana.eu/post/publishing-framework>

Postproduction

It is always possible to use enhancement and photo-retouching programs for the JPEG format for the web (correction of micro-rotations, strengthening of the contrast with smoothing and noise reduction filters, etc., especially for digitization in the presence of particular supports, such as transparencies and pencil writing).

Prototype of Scans and Quality Check

The image quality control system is designed to ensure good legibility on the screen of all the information contained in the originals and to avoid subsequent disputes.

The system that makes production effective is the creation of a prototype of the scans to be produced on the basis of a significant sample of the materials provided by the company.

Significant not in quantity but in the proposal of examples by type of materials and / or with particular characteristics (damaged papers, weak writing, acid inks, small characters or weak prints, etc.).



The prototype that identifies the most appropriate parameters / formats, based on what is indicated in the previous paragraph, is approved with minutes by the project manager for the Institution and by the manager for the Company, and constitutes the quality reference for scanning activities

Identification of Images in Mass Memories

File names of digital images

During the realization of the above prototype, the project manager for the Institute provides the Company with the list of materials to be digitized with all information necessary to creation of the image folders (i.e. registry code of the library, progressive inventory number, etc.)

In the mass memories, the image files will be distributed in multiple folders, at least one for each cataloging unit, also named according to the procedure just described, in order to preserve the overall organization of the materials.

In the case of Periodicals, since the periodicity cases that can be used for preparing the folders are complex, we invite you to contact the ICCU helpdesk, to enter into the specifics of individual cases.

Metadata Production

The production of the metadata depends on the standards used by the single institution for their digital library or repository (i.e. Metz, Lido etc.)

Only for Italian libraries, the national standard MAG is required.

AGGREGATION OF CONTENT

If your institution intends to aggregate content in Europeana, the first step is to make available online its collection through a personal or shared digital library or a dark repository, and the share them via an interoperability protocol. In this chapter we will see the entire workflow, according to Europeana guidelines and framework.

Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)

The Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) is a low-barrier mechanism for repository interoperability:

- The OAI-PMH is a mean of making the metadata available to service providers.
- OAI-PMH defines a mechanism for harvesting XML-formatted metadata from repositories.
- It's only for metadata, not for digital content.
- Digitisation projects making their metadata available for harvesting have to set OAI repositories to expose structured metadata.
- OAI-PMH supports different metadata formats from different domains.
- Service Providers (e.g. Europeana) then make OAI-PMH service requests to harvest that metadata that will be transferred via HTTP.



Can your institutions afford and manage an OAI-PMH repository to publish the metadata? If you cannot, then the solution can be:

- go to a national aggregator
- go to a domain aggregator
- go to a thematic aggregator

Here you can find the list of accredited aggregators for Europeana:

<https://pro.europeana.eu/page/aggregators>

- An aggregator is an organisation that collects metadata from a group of content providers and distribute them on its own portal or to other platforms
- The aggregators support the data partners during the aggregation process with:
 - ✓ training;
 - ✓ helpdesk;
 - ✓ promoting and implementing standards farther along the content provision chain.
- Disseminate the vision of the digital culture.
- Providing domain-specific expertise and skills to data partners institutions.
- **National or regional**, often managed by culture/education ministries, governmental agencies or cultural institutions (e.g. Culturalitalia.it, Culture.fr, Deutsche Digitale Bibliothek, Erfgoedplus.be)
- **Domain**, libraries, archives, museums (e.g. Archive Portal Europe; Internet Culturale)
- **Thematic** (WWI, fashion, manuscripts, etc.)
- The national aggregators (or culture portals) collect metadata (and digital resources) from GLAMs of a specific nation/region.
- Unique access point to the local digital libraries.
- They may be:
 - ✓ cross-domain;
 - ✓ single domain;
 - ✓ thematic.
- They are often supported by culture/education ministries or public governmental agencies
- In Europe, many culture portals are also national aggregators for Europeana

If there is not a national aggregator in your country, for the Adrinetbook project you can contact MUSEU aggregator: <http://www.museuhub.eu/>

Europeana Data Model (EDM)

In order to be published online, your institution has structured its content according to local, national or international standards (i.e. LIDO, METS, MARC, etc.). If you want to make your collection interoperable with Europeana, the metadata of the data model you used but be mapped to the Europeana Data Model (EDM).



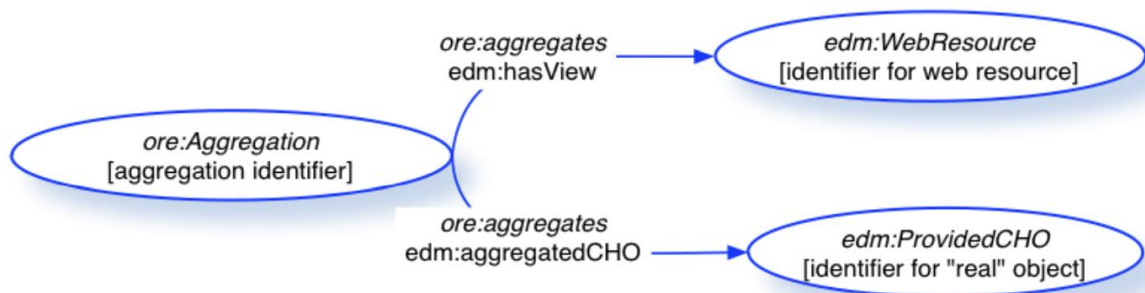
EDM is the proposal for structuring the data that Europeana will be ingesting, managing and publishing. It supports also complex objects. In terms of a digitised book, the individual chapters, illustrations and index can be understood both individually and collectively; in terms of an archival finding aid or fonds, the constituent letters, deeds, manuscripts or other items can be similarly understood. EDM not only supports the full richness of the content providers' metadata but also enables data enrichment from a range of third-party sources.

EDM adopts an open, cross-domain Semantic Web-based framework. It allows different participants to structure their data in a way that suits their original data and their desired functions. Data providers may create simple datasets or more complex ones depending on the structure of their source data. Similarly, Europeana will manipulate the data internally to perform its aggregation and enrichment functions.

Europeana has not used all the classes and properties defined in the EDM model (e.g., ore:proxy) The last version of the EDM Mapping Guidelines describes "only" the seven classes from the full model that are currently implemented: **the three core classes** representing the cultural heritage object and **the four contextual classes** that may be associated with it.

EDM has three core classes of resources that will result from the package of data provided to Europeana:

- the "provided cultural heritage object" itself (a painting, a movie, a music score, a book...) (edm:ProvidedCHO)
- one or more accessible digital representations of this object (edm:WebResource)
- an aggregation to represent the result of this provider's activity. (ore:Aggregation)



edm:ProvidedCHO class

Mandatory Properties:

- dc:title or dc:description dc:language for text objects
- dc:subject or dc:type or dcterms:spatial or dcterms:temporal
- edm:type

Recommended Properties:

all tagged elements with "+"



Core Classes

Properties for edm:ProvidedCHO	
+ dc:contributor	dcterms:isReplacedBy
dc:coverage	dcterms:isRequiredBy
+ dc:creator	+ dcterms:issued
+ dc:date	dcterms:isVersionOf
→ dc:description	dcterms:medium
dc:format	dcterms:provenance
+ dc:identifier	dcterms:references
✓ dc:language (if edm:type = TEXT)	dcterms:replaces
+ dc:publisher	dcterms:requires
dc:relation	○ dcterms:spatial
dc:rights	dcterms:tableOfContents
+ dc:source	○ dcterms:temporal
○ dc:subject	edm:currentLocation
→ dc:title	edm:hasMet
○ dc:type	edm:hasType
+ dcterms:alternative	edm:incorporates
dcterms:conformsTo	edm:isDerivativeOf
+ dcterms:created	+ edm:isNextInSequence
dcterms:extent	edm:isRelatedTo
dcterms:hasFormat	edm:isRepresentationOf
dcterms:hasPart	edm:isSimilarTo
dcterms:hasVersion	edm:isSuccessorOf
dcterms:isFormatOf	edm:realizes
+ dcterms:isPartOf	✓ edm:type
dcterms:isReferencedBy	owl:sameAs

edm:WebResource class

These are the properties that can be used for the class of edm:WebResource. They are attributes of the digital representation of the provided cultural heritage object, **not the cultural heritage object itself**.

Properties for edm:WebResource	
dc:creator	dcterms:hasPart
dc:description	dcterms:isFormatOf
dc:format	dcterms:isPartOf
dc:rights	dcterms:isReferencedBy
dc:source	dcterms:issued
dcterms:conformsTo	edm:isNextInSequence
dcterms:created	+ edm:rights
dcterms:extent	owl:sameAs

There may be more than one edm:WebResource for each edm:ProvidedCHO. Each web resource should have its own set of properties. Europeana providers who wish to submit their IIF resources to Europeana can do so by using a small extension to the WebResource element from the Europeana Data Model.



ore:Aggregation class

These are the properties that can be used for the class of ore:Aggregation. They are attributes that apply to the whole set of related resources about one particular provided CHO.

Properties for ore:Aggregation	
✓ edm:aggregatedCHO	✓ edm:provider
✓ edm:dataProvider	dc:rights
edm:hasView	✓ edm:rights
◆ edm:isShownAt	edm:ugc
◆ edm:isShownBy	+ edm:intermediateProvider
+ edm:object	

For each ore:Aggregation a set of these properties should be provided.

Mandatory Properties: edm:dataProvider ; edm:isShownAt or edm:isShownBy (but using both is recommended) ; edm:provider ; edm:rights ; edm:aggregatedCHO edm:ugc (if applicable)

Semantic Enrichment

The Europeana Data Model (EDM) gives support for contextual resources — the so-called ‘semantic layer’ — including concepts from ‘value vocabularies’ like thesauri, authority lists, classifications, either coming from the network of Europeana’s providers or from third-party data sources.

This means that data providers are strongly encouraged to include links from open and multilingual vocabularies in the metadata they send to Europeana following the EDM recommendations for metadata on contextual resources.

Europeana has developed a small internal tool that ‘dereferences’ the URIs, i.e., that fetches all the multilingual and semantic data that are published as Linked Open Data for vocabulary concepts and other contextual resources on third-party services.

Europeana currently dereferences [several vocabularies](#) from internationally established initiatives or more specific projects, which you can use as well.

The vocabulary mappings to EDM and configuration files used for dereferencing are available on [GitHub](#).

If an institution would like to have its own Linked Open Data vocabulary dereferenced, it must mention it to its Europeana contact.

In the following table you will find the list of Europeana dereferenceable vocabularies.



<p>CONCEPTS</p>	<p>Europeana Sounds Genres</p> <p>Fashion Thesaurus</p> <p>Gemeinsame Normdatei (GND)</p> <p>Getty - Art & Architecture Thesaurus (AAT)</p> <p>IconClass</p> <p>Israel Museum Jerusalem Concepts</p> <p>Library of Congress Subject Headings (LCSH)</p> <p>data.europeana.eu WWI Concepts from Library of Congress Subject Headings (LCSH)</p> <p>MIMO Concepts</p> <p>UDC</p> <p>UNESCO Thesaurus</p> <p>Wikidata</p> <p>YSO - General Finnish ontology</p>
<p>PLACES</p>	<p>Geonames</p> <p>Gemeinsame Normdatei (GND)</p> <p>Getty Thesaurus of Geographic Names (TGN)</p>
<p>AGENTS</p>	<p>Gemeinsame Normdatei (GND)</p> <p>Getty - Union List of Artist Names (ULAN)</p> <p>Virtual International Authority File (VIAF)</p> <p>Wikidata</p>



Europeana enriches its data providers' metadata by automatically linking text strings found in the metadata to controlled terms from Linked Open dataset or vocabularies. This process of "augmenting" the source metadata with additional terms is called semantic enrichment.

The enrichment process can be summarised to two main steps:

1. Matching the metadata of Europeana CH objects to external semantic data results in links between these objects and resources from external datasets.

For instance, Europeana enriches places with [Geonames](#), while person names and concepts are enriched with [DBpedia](#).

Let's look at an example where we will see that the object was automatically enriched with the concept of "Costume" from the DBpedia dataset.

https://classic.europeana.eu/portal/it/record/9200579/ej7aec4r.html?utm_source=new-website&utm_medium=button

2. The created links point to additional data such as translated labels or broader labels. In the example given, this means that the record is supplemented with all the translated labels of the DBpedia concept, as well as, with a link to the broader concept in DBpedia "Fashion" and all its translated labels.

This document describes the semantic enrichment process currently in place at Europeana, explaining the methods used to enrich the objects and the vocabularies that were selected for their enrichment, as well as an assessment of the current results of enrichment and evaluation of their quality.

<https://docs.google.com/document/d/1JvjrWMTpMIH7WnuieNqcT0zpJAXUPo6x4uMBj1pEx0Y/edit#>

For Europeana, the semantic enrichment of metadata is a core concern as it facilitates access to the material and contributes to the contextualization and knowledge generation beyond the original object description.

Its goal is to make documents easier to be retrieved by alleviating some of the vocabulary problems in metadata and to add semantically rich resources that contextualize the document within its interpretational scope.

In general, the process of semantic enrichment aims at adding new information at the semantic level to the data about certain resources. This is a rather vague notion, which has different interpretations depending on the disciplinary context.

In the Linked Data context, it chiefly refers to the creation of new links between the enriched resources and others, preferably coming from an existing, reference dataset.

In Information Retrieval, it means adding new terms to a query or document and therefore reaching a higher visibility of documents within the document space.

A better way to understand the semantic enrichment process is to conceptually distinguish between three main stages:



1. Analysis

The pre-enrichment phase focuses on the analysis of the metadata fields in the original resource descriptions, the selection of potential resources to be linked to and derived rules to match and link the original fields to the contextual resource.

If you choose vocabularies already dereferenced by Europeana, there is less work for you!!!

2. Linking

The process of automatically matching the values of the metadata fields to values of the contextual resources and adding contextual links (whose values are most often based on equivalent relationships) to the dataset.

3. Augmentation

The process of selecting the values from the contextual resource to be added to the original object description. This might not only include (multilingual) synonyms of terms to be enriched but also further information, for example broader or narrower concepts.

Even though these stages are present in Europeana, the name *semantic enrichment* is mainly used to designate only the second stage of this process as it refers to “*the creation of links to controlled vocabularies*” representing contextual resources such as places, concepts, agents and time periods.

In EDM, four contextual classes are modelled as separate entities from the CHO (Cultural Heritage Object) with their own properties.

The inclusion of these classes allows the exploitation of this rich data and allows data about the contextual resource to be kept separate from the data about the object of the description.

Remember:

PCHO (Provided Cultural Heritage Object) - Descriptive metadata

Web Resource – Technical and administrative info about the Digital Objects

Aggregation (which links the two previous core classes)

+

Contextual classes (semantic enrichment)

Choosing the most appropriate level of granularity for the CHO

To handle more complex provided objects, additional properties have been defined to express the relationships between parts of objects.

For example, an edm:ProvidedCHO could have an edm:isNextInSequence property to link to another object which logically precedes it.



With the ability to express such relationships, providers should always try to “distribute” their original descriptions onto objects that precisely match their holdings. In the archive domain, for example, a record can describe different object levels (“sub-series”, “file”, “item”, etc.). The description should be broken down into a number of sub-descriptions each of which is about an object at a different level that is considered to be a CHO.

Contextual classes

- **edm:Place**
it refers to a **place** as spatial locations identified by the provider and named according to some vocabulary or local convention;
- **skos:Concept**
it refers to a **concept** defined as a unit of thought or meaning that comes from an organised knowledge base (such as subject terms from a thesaurus or controlled vocabulary) where URIs or local identifiers have been created to represent each concept;
- **edm:Agent**
it refers to an **agent** comprising people, either individually or in groups, who have the potential to perform intentional actions for which they can be held responsible;
- **edm:TimeSpan**
for **time periods** defined as a period of time having a beginning, an end and a duration.
- **cc:License** – access and usage

The use of contextual classes takes advantage of rich data coming from providers that have rich data due to their use of authority files, controlled vocabularies and thesauri.

Contextual resources allow:

- the exploitation of rich data
- data about the contextual resource to be kept separate from the data concerning the object of the description

edm:Agent class

The class edm:Agent comprises people, either individually or in groups, who have the potential to perform intentional actions for which they can be held responsible.

Properties for edm:Agent	
+ skos:prefLabel	foaf:name
+ skos:altLabel	rdaGr2:biographicalInformation
skos:note	+ rdaGr2:dateOfBirth
dc:date	+ rdaGr2:dateOfDeath
dc:identifier	rdaGr2:dateOfEstablishment
dcterms:hasPart	rdaGr2:dateOfTermination
dcterms:isPartOf	rdaGr2:gender
edm:begin	rdaGr2:placeOfBirth
edm:end	rdaGr2:placeOfDeath
edm:hasMet	rdaGr2:professionOrOccupation
edm:isRelatedTo	owl:sameAs



edm:Place class

A spatial location identified by the provider and named according to some vocabulary or local convention.

Properties for edm:Place		
+	wgs84_pos:lat	skos:note
+	wgs84_pos:long	dcterms:hasPart
	wgs84_pos:alt	dcterms:isPartOf
+	skos:prefLabel	edm:isNextInSequence
	skos:altLabel	owl:sameAs

edm:Timespan class

A period of time having a beginning, an end and a duration. There is a difference between timespans as chronological values (where different skos:prefLabel can be used, e.g., "3200BC" is written "3200AC" in some languages, and all variants for "20th century") and historical timespans (e.g. "Bronze Age", "Middle Age") . edm:TimeSpan is not recommended for the latter.

Properties for edm:TimeSpan		
+	skos:prefLabel	+ edm:begin
	skos:altLabel	+ edm:end
	skos:note	edm:isNextInSequence
	dcterms:hasPart	owl:sameAs
	dcterms:isPartOf	

skos:Concept class

A Concept is defined as a unit of thought or meaning that comes from an organised knowledge base (such as subject terms from a thesaurus or controlled vocabulary) where URIs or local identifiers have been created to represent each concept.

Properties for skos:Concept		
+	skos:prefLabel	skos:relatedMatch
+	skos:altLabel	skos:exactMatch
	skos:broader	skos:closeMatch
	skos:narrower	skos:note
	skos:related	skos:notation
	skos:broadMatch	skos:inScheme
	skos:narrowMatch	

skos:Concept class

Mandatory Properties for the cc:License: odrI:inheritFrom

In the metadata for the edm:WebResource there will be an edm:rights statement with the identifier of the cc:License class. This will form the link to the cc:License resource.

Properties for cc:License	
✓ odrI:inheritFrom	cc:deprecatedOn

The Contextual classes topic is strictly connected to the semantic enrichment process.



Europeana enriches its data providers' metadata by automatically linking text strings found in the metadata to controlled terms from Linked Open dataset or vocabularies.

Contextual classes – How to create them?

First, in the metadata of one of the core class (mostly, the Provided CHO class), we have to fill a property with an ID resource that identifies an agent, a place, a timespan, a concept. Then, we have to fill the mandatory and recommended properties of the corresponding contextual class. In this context, IDs are:

- An HTTP URI that references a linked open data resource
- An HTTP URI that references an external resource
- A local URI (e.g., coming from an internal off-line vocabulary)

Creating contextual classes means promoting the act of retrieving a representation of a resource identified by a URI (URIs dereferencing). It is a crucial concept concerning the Semantic Web.

edm:Agent sample:

```
<edm:ProvidedCHO ...>
----
<dc:contributor rdf:resource="http://viaf.org/viaf/100183003"/>
----
</edm:ProvidedCHO ...>
<edm:Agent rdf:about="http://viaf.org/viaf/100183003">
<skos:prefLabel xml:lang="it-IT">Rodolfo Lanciani</skos:prefLabel>
---
<rdaGr2:dateOfBirth>1847-01-01</rdaGr2:dateOfBirth>
<rdaGr2:dateOfDeath>1929-05-21</rdaGr2:dateOfDeath>
----
</edm:Agent>
```

edm:Place sample:

```
<edm:ProvidedCHO ...>
...
<dcterms:spatial rdf:resource="https://pleiades.stoa.org/places/981503"/>
...
</edm:ProvidedCHO ...>
<edm:Place rdf:about="https://pleiades.stoa.org/places/981503">
<wgs84_pos:lat>19.211409</wgs84_pos:lat>
<wgs84_pos:long>30.56733</wgs84_pos:long>
<skos:prefLabel xml:lang="la">Aegyptus</skos:prefLabel>
<skos:prefLabel xml:lang="it">Antico Egitto</skos:prefLabel>
</edm:Place>
```

skos:Concept sample:

```
<edm:ProvidedCHO ...>
...
<dc:subject rdf:resource="http://culturaitalia.it/pico/thesaurus/4.2#stampe_incisioni_matrici"/>
```



```

...
</edm:ProvidedCHO ...>
<skos:Concept rdf:about="http://culturaitalia.it/pico/thesaurus/4.2#stampe_incisioni_matrici">
<skos:prefLabel xml:lang="en">Prints / Engravings / Matrices</skos:prefLabel>
<skos:prefLabel xml:lang="it">Stampe / Incisioni / Matrici</skos:prefLabel>
<skos:broader rdf:resource="http://culturaitalia.it/pico/thesaurus/4.1#opere_d_arte_visiva"/>
</skos:Concept>

```

edm:Timespan sample:

```

<edm:ProvidedCHO ...>
...
<dcterms:temporal rdf:resource="http://n2t.net/ark:/99152/p086kj9tqzk"/>
...
</edm:ProvidedCHO ...>
<edm:TimeSpan rdf:about="http://n2t.net/ark:/99152/p086kj9tqzk">
<skos:prefLabel xml:lang="en">19th Century</skos:prefLabel>
<skos:prefLabel xml:lang="it">Secolo XIX</skos:prefLabel>
<edm:begin>1801-01-01</edm:begin>
<edm:end>1899-12-31</edm:end>
</edm:TimeSpan>

```

EDM fields that can be dereferenced

- dc:contributor
- dc:coverage
- dc:creator
- cd.date
- dc:format
- dc:subject
- dc:type
- cdterms:created

=> Dont' use the same vocabulary to enrich all the EDM fields.

Minimum required metadata elements of contextual classes

edm:TimeSpan	skos:Concept	adm:Agent	edm:Place
edm:begin	skos:prefLabel	skos:prefLabel	skos:prefLabel
edm:end	skos:note	rdaGr2:professionOrOccupation	wgs84_pos:lat
	or	or	wgs84_pos:long
	skos:broader	edm:begin	
	skos:narrower	rdaGr2:dateOfBirth	
	skos:exactMatch	edm:end	
	skos:closeMatch	rdaGr2:dateOfDeath	
	skos:related	rdaGr2:placeOfDeath	
		rdaGr2:placeOfBirth	



Focus on IDs

As we said, the metadata description for one cultural heritage object is made up of several “sections”. Each section corresponds to an instance of one of the described classes and contains the properties and values associated with that class; Each of these sections of metadata can be regarded as a “resource” because it will have a unique identifier and one or more properties associated to that particular class.

The term “**resource**” is used for these sections of metadata in the remainder of this part of the document:

- Each resource must have its own unique identifier (URI) so that all the resources in one description can be linked together internally.
- The identifier for the resource is given in the “rdf:about” statement at the start of the section of metadata for the resource
- The link from a referring resource (a) to another resource (b) is made by putting the identifier of (b) in one of the properties of (a) as an “rdf:resource”
- Each resource (section of metadata) starts with the “rdf:about” statement containing the identifier of the resource:

A) for the resource representing the Provided CHO

B) for resource representing the WebResource

C) for resource representing the Aggregation

- The resources are then linked using those identifiers in the “rdf:resource “ statement
- The Aggregation resource is linked to the ProvidedCHO resource using its ID in the rdf:resource statement
- The Aggregation is linked to the WebResource resource using its ID in the rdf:resource statement
- Contextual resources are linked in a similar fashion. A property in the metadata of one of the core class resources will contain the ID of the contextual resource.
- For example, the edm:ProvidedCHO has a dc:type property which contains the HTTP URI which is the identifier for the skos:Concept resource.

Focus on Language Tagging

There are two language aspects to the data in Europeana that are relevant for Europeana:

- the language of the values in the properties
- the language of the object being described

In the ISO 639-2 standard, widely-known languages have both a two-letter code (e.g., “fr” for French and “it” for Italian) and a three-letter code (e.g., “eng”, “ita”). Less widely used languages may only have the three-letter code.

Providers are recommended to use the two-letter code wherever possible.



The language of the values given in the properties should be declared using the `xml:lang` attribute with the appropriate language code:

```
<dc:description xml:lang="en">Three silver buttons</dc:description>
```

Keep in mind this aspect because it has an impact on the Europeana metadata Tier classification

Where there is a language aspect to the object being described, providers are asked to indicate the language of the object using the `dc:language` property.

For objects with the `edm:type` of TEXT it is mandatory and for other types (for example, a voice recording or an image with some text on it) it is highly recommended.

We also recommend the use of the ISO 639-2 code ZXX for no linguistic content.

Samples:

```
<dc:language>en</dc:language>
```

```
<dc:language>ZXX</dc:language>
```

Relevant metadata fields (literal values) that need an `xml:lang` attribute:

DC	DCTERMS	EDM
dc:coverage	dcterms:alternative	edm:currentLocation
dc:description	dcterms:hasPart	edm:hasType
dc:format	dcterms:isPartOf	edm:isRelatedTo
dc:relation	dcterms:isReferencedBy	
dc:rights	dcterms:medium	
dc:source	dcterms:provenance	
dc:subject	dcterms:references	
dc:title	dcterms:spatial	
dc:type	dcterms:tableOfContents	
	dcterms:temporal	

General Rules on Creating EDM Metadata

- Datasets will be provided to Europeana in an RDF/XML structure and will contain metadata descriptions for many CHOs;
- Provide as many properties as you can;
- Provide the properties in the record in the same order given in mapping guidelines document;
- If the same contextual class applies to multiple ProvidedCHOs then it should be repeated for each ProvidedCHO;
- The values provided for properties will either be a reference or a literal. Most properties can have either type of value but for some, one or the other is specified;
- Provide only a reference or a literal value to avoid duplicating data;
- Properties used in combination with (i.e. which link to) contextual resources are recommended;
- Whenever a literal value is used an `xml:lang` tag should be employed to indicate the language of the value;



- Try to find the most precise property that is available. For example, use the sub-properties `dcterms:spatial` or `dcterms:temporal` instead of the more general `dc:coverage`;
- All classes and other resources represented in an EDM record should have an identifier;
- Do not use HTML mark-up in property values as it may distort the portal display and the API data output;
- Ensure the mandatory or alternative mandatory properties are included;
- The properties `dc:type` and `edm:type` should have different values;
- Try to use different values as title and description and try not to use the same title for different provided cultural heritage objects.

On order to help institutions we add here some Guidelines given for the Europeana Sport Project, which can be applied to the Adrinetbook project.

Collection Name	<u>PCHO/dcterms:isPartOf</u> Insert "SPORT COLLECTION"	HIGHLY RECOMMENDED TO INCREASE THE TIER RATING
CHO <u>type</u>	<u>PCHO/dc:type</u> Insert the link to the AAT (Art and Architecture Thesaurus) term In this format http://vocab.getty.edu/aat/300056036 Pay attention that http must be without the final s	HIGHLY RECOMMENDED IN ORDER TO INCREASE THE TIER RATING
CHO Subject	<u>PCHO/dc:subject</u> Here you could Insert a <u>Wikidata</u> term http://www.wikidata.org/entity/Q43450 Pay attention that http must be without the final s or from AAT (Art and Architecture Thesaurus) In this format http://vocab.getty.edu/aat/300056036 Pay attention that http must be without the final s	
CHO Location	<u>PCHO/dcterms:spatial</u> Insert the URI value from <u>Geonames</u> in this format https://sws.geonames.org/3171248/ Where only the numbers after the second / change	HIGHLY RECOMMENDED IN ORDER TO INCREASE THE TIER RATING
CHO Timespan	Still under evaluation	HIGHLY RECOMMENDED IN ORDER TO INCREASE THE TIER RATING



<p>CHO Creator and/or CHO Contributor</p>	<p><u>PCHO/dc:creator</u> or <u>PCHO/dc:contributor</u></p> <p>Insert the URI value from VIAF in this format</p> <p>http://viaf.org/viaf/11023335</p> <p>or from Wikidata in this format</p> <p>http://www.wikidata.org/entity/Q52596</p> <p>Pay attention that http must be without the final s</p>	<p>HIGHLY RECOMMENDED IN ORDER TO INCREASE THE TIER RATING</p>
---	--	--

LICENCES

The legislation on copyright subjects works to a very restrictive regulation on their use ("Copyright" or "All rights reserved").

Nevertheless It can often be useful for authors to share their work with users in order to be able to spread them as much as possible.

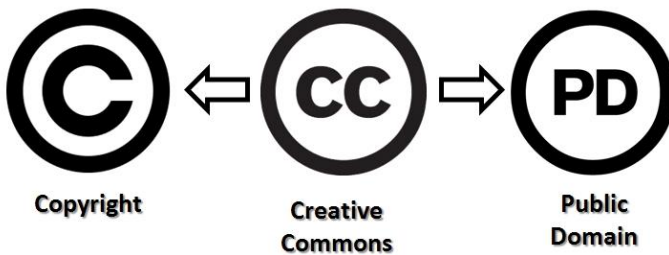
Therefore to facilitate the circulation of works, it is therefore necessary to decrease restrictions (hence the term "license" which means "permission", "consent").

Licenses do not protect rather they do the opposite.

The complete absence of any restrictive formula, including authorship of the work, defines a Public Domain work. This mode is rarely the one desired by the author.

Creative Commons Licences

Creative Commons licenses create various levels of intermediate licenses between a work under Copyright and one under the Public Domain. Creative Commons (<https://creativecommons.org/>) is a global nonprofit organization that enables sharing and reuse of creativity and knowledge through the provision of free legal tools.



Creative Commons licenses are a standard way to publicly give permission to share and use creative work under the conditions set by the creators.

Creative Commons licenses originally originated in the US based on their local legal system. They were subsequently adapted to the various legal systems of other nations.





CC licences are an innovative three layered system.

	<p>Legal code: It is the first layer and is presented in textual form. Its content is expressed in strictly legal language (the traditional legal license).</p> <p>Human readable: It is the middle layer. It is presented in a visual form and quickly readable by users. This layer when taken individually does not represent any license.</p> <p>Machine readable: this is the third level layer. It comes in the form of metadata, i.e. in a format that only software, search engines and other similar technologies can read and interpret (CC Rights Expression Language)</p>
--	---



The Creative Commons organization provides **standardized RDF/XML metadata** to be attached to the work published online. These metadata, as well as defining the type of license assigned to the work, also make automatic processing easier. In fact, the presence of such metadata facilitates the automatic dissemination of the work through internet tools that facilitate research as works under the CC license.

The Creative Commons are based on a set of 4 options that describe these exclusive rights of the author. They are called clauses.

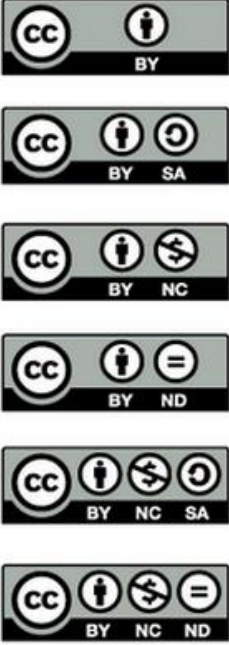



	<p>Attribution (BY)</p> <p>The author of the work must always be indicated so that it is possible to attribute authorship</p>
	<p>Non commercial use (NC)</p> <p>Commercial uses of the work are not permitted, but authorship can be attributed</p> <p>No derivative works (ND)</p>
	<p>No derivative works (ND)</p> <p>Processing of the creative work is not allowed</p>
	<p>Share alike (SA)</p> <p>The work can be modified but the modified work must be released under the same conditions chosen by the original author</p>



6 CC licenses arise from the combination of the various reconditioning clauses. It is up to the author on which exclusive rights (clauses) to keep its work

		<p>Attribution (BY)</p> <p>Others can copy, distribute, display, perform and remix your work of they credit your name as requested by you.</p>
		<p>No derivative works (ND)</p> <p>Others can only copy, distribute, display or perform verbatim copies of your work.</p>



		<p>Share alike (SA)</p> <p>Others can distribute your work only under a licence identical to the one you have chosen for your work.</p> <hr/> <p>Non commercial use (NC)</p> <p>Others can copy, distribute, display, perform or remix your work but for non commercial purposes only.</p>
---	---	--

Besides licences, CC offers other two tools to facilitate sharing and discovery of creative works.

	<p>CCO</p> <p>A public domain dedication for rights holders who wish to put their work into the public domain before the expiration of copyright. CC0 is used to waive (renounce to) all the rights in a Digital Object. By applying this waiver, all possible existing rights in the content are waived, and the objects can be used by anyone without any restrictions.</p>
	<p>PDM</p> <p>The Public Domain Mark (PDM) is applied to Digital Objects which are no longer protected by copyright. Objects that are labelled as being in the public domain can be used by anyone without any restrictions.</p>

The following table shows you an overview of each licence permission (source: <https://www.wur.nl/en/article/What-are-Creative-Commons-licenses>)



CREATIVE COMMONS LICENSES	COPY & PUBLISH	ATTRIBUTION REQUIRED	COMMERCIAL USE	MODIFY & ADAPT	CHANGE LICENSE
PUBLIC DOMAIN	✓	✗	✗	✗	✗
CC BY	✓	✓	✗	✓	✓
CC BY-SA	✓	✓	✗	✓	✗
CC BY-ND	✓	✓	✗	✗	✗
CC BY-NC	✓	✓	✗	✓	✓
CC BY-NC-SA	✓	✓	✗	✓	✗
CC BY-NC-ND	✓	✓	✗	✗	✗

You can redistribute (copy, publish, display, commercially, etc.)
 You have to attribute the original work
 You can use the work commercially
 You can modify and adapt the original work of the work
 You can choose license type for your adaptations of the work

Some considerations about CC licenses

They can only be applied by the person who holds the rights to an object or someone that has been authorised by them.

Cultural heritage institutions often do not own the copyright to works in their collections and cannot apply CC licenses without the rights owner's permission.

Once a CC license has been assigned, it cannot be revoked. Only an even less restrictive license can be applied to your work, getting you closer and closer to the Public Domain.

In fact, once you have applied a certain CC license to your work, it circulates on the network and is distributed according to the restrictions indicated by the license. Once this material is in the possession of third parties, they will use it according to the instructions given at the time of acquisition, even if you have subsequently decided to stop the distribution of this work.

Always make sure that the material to which you are assigning CC licenses is appropriate for undergoing such licenses.

There are in fact some situations in which this choice may be inappropriate or very useless. For example, CC licenses are not suitable for developed software as their structure does not take into account the source code or other components that are part of the work, and therefore do not specify their treatment.

Right statements

Rights statements are high-level summaries of the underlying rights status of the digital objects that they apply to. As such they do not replace but complement more detailed information about the rights status (including the license) of digital objects that the institutions that apply these statements may possess.

They can be used by cultural heritage institutions to indicate the rights status of digital objects that they make available online, either on their own website or via aggregation platforms.

The rights statements were provided by RightsStatements.org

RightsStatements.org is a joint initiative of Europeana and the Digital Public Library of America (DPLA). They build on a set of rights statements that Europeana developed as part of the Europeana Licensing Framework.

In order to ensure that the rights information on both Europeana and the DPLA is interoperable both institutions have taken the initiative to develop a set of rights statements that is independent of a particular platform.






RightsStatements.org currently provides 12 different rights statements that can be used by cultural heritage institutions to communicate the copyright and re-use status of digital objects to the public.

The rights statements have been designed with both human users and machine users (such as search engines) in mind and are made available as linked data. Each rights statement is located at a unique URI.

The rights statements have been specifically developed for the needs of cultural heritage institutions and online cultural heritage aggregation platforms and are not intended to be used by individuals to license their own creations. (If you are looking for a tool to license your own works you should consider using one of the [Creative Commons licenses](#)).





The rights statements are divide into three categories:

<p>IN COPYRIGHT</p> 	<p>Intended for use with digital objects that are in copyright.</p> <p>If your organization is the rightsholder for such objects and wants to encourage re-use it should consider making the objects available under an open Creative Commons licence.</p>
<p>NO COPYRIGHT</p> 	<p>The following four RS are intended for works that are not in copyright but where there are restrictions other than copyright that prevent free re-use or where the out of copyright status has only been ascertained for a specific jurisdiction.</p> <p>These rights statements should only be used when it is not possible to use the Public Domain Mark or the CC0 Public Domain Dedication.</p>
	<p>The following three RS are intended for use with digital objects where the copyright status has not been determined with certainty. These should only be used if it is not possible to use a clearer rights statement or license.</p>









- Statements provided by RightsStatements.org are not a contract or a license.
- They do not grant permissions, they provide information about copyright status of materials.
- They can be applied by an owning cultural heritage institution regardless of whether or not they hold the copyright.
- While CC licenses only work when applied to the material in which copyright exists, RS can also be used where copyright status is unclear, or to indicate that something is not in copyright, but has additional restrictions on its use.
- They are designed to capture common rights situations that cultural heritage institutions are dealing with; for instance, when digital objects are out of copyright but subject to limitations on commercial use, or if legal restrictions other than copyright apply.









The following table analysis the characteristic of each rights statement.

<p>IN COPYRIGHT</p> 		<p>This RS can be used for an Item that is in copyright.</p> <p>Using this statement implies that the organization making this Item available has determined that:</p> <ul style="list-style-type: none"> • the Item is in copyright and either is the rights-holder, • or has obtained permission from the rights-holder(s) to make their Work(s) available, • or makes the Item available under an exception or limitation to copyright (including Fair Use) that entitles it to make the Item available. <p>URI: http://rightsstatements.org/vocab/InC/1.0/</p>
<p>IN COPYRIGHT</p> 		<p>This RS is intended for use with Items for which the underlying Work has been identified as an Orphan Work in accordance with Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on certain permitted uses of Orphan Works.</p> <p>It can only be applied to Items derived from Works that are covered by the Directive: Works published in the form of books, journals, newspapers, magazines or other writings as well as cinematographic or audiovisual works and phonograms (note: this excludes photography and visual arts).</p> <p>It can only be applied by organizations that are beneficiaries of the Directive: publicly accessible libraries, educational establishments and museums, archives, film or audio heritage institutions and public-service broadcasting organizations, established in one of the EU member states. The beneficiary is also expected to have registered the work in the EU Orphan Works Database maintained by EUIPO.</p> <p>URI: http://rightsstatements.org/vocab/InC-OW-EU/1.0/</p>









<p>IN COPYRIGHT</p> 		<p>This RS can be used only for copyrighted Items for which the organization making the Item available is the rights-holder or has been explicitly authorized by the rights-holder(s) to allow third parties to use their Work(s) for educational purposes without first obtaining permission.</p> <p>URI: http://rightsstatements.org/vocab/InC-EDU/1.0/</p>
<p>IN COPYRIGHT</p> 		<p>This RS can be used only for copyrighted Items for which the organization making the Item available is the rights-holder or has been explicitly authorized by the rights-holder(s) to allow third parties to use their Work(s) for non-commercial purposes without obtaining permission first.</p> <p>URI: http://rightsstatements.org/vocab/InC-NC/1.0/</p>
<p>IN COPYRIGHT</p> 		<p>This RS is intended for use with an Item that has been identified as in copyright but for which no rights-holder(s) has been identified or located after some reasonable investigation.</p> <ul style="list-style-type: none"> • This RS should only be used if the organization that intends to make the Item available is reasonably sure that the underlying Work is in copyright. • This Rights Statement is not intended for use by EU-based organizations who have identified works as Orphan Works in accordance with the EU Orphan Works Directive (they must use InC-OW-EU instead). <p>URI: http://rightsstatements.org/vocab/InC-RUU/1.0/</p>
<p>NO COPYRIGHT</p> 		<p>This RS can only be used for Items that are in the Public Domain but for which the organization that intends to make the Item available has entered into contractual agreement that requires it to take steps to restrict third party uses of the Item.</p>



		<ul style="list-style-type: none"> In order for this RS to be conclusive, the organization that intends to make the Item available should provide a link to a page detailing the contractual restrictions that apply to the use of the Item. <p>URI: http://rightsstatements.org/vocab/NoC-CR/1.0/</p>
<p>NO COPYRIGHT</p> 		<p>This RS can only be used for Works that are in the Public Domain and have been digitized in a public-private partnership as part of which, the partners have agreed to limit commercial uses of this digital representation of the Work by third parties.</p> <p>It has been developed specifically to allow the inclusion of Works that have been digitized as part of the partnerships between European Libraries and Google, but can in theory be applied to Items that have been digitized in similar public-private partnerships.</p> <p>URI: http://rightsstatements.org/vocab/NoC-NC/1.0/</p>
<p>NO COPYRIGHT</p> 		<p>This RS should be used for Items that are in the Public Domain but that cannot be freely re-used as the consequence of known legal restrictions that prevent the organization that intends to make the Item available from allowing free re-use of the Item, such as cultural heritage or traditional cultural expression protections.</p> <ul style="list-style-type: none"> In order for this Rights Statement to be conclusive, the organization that intends to make the Item available should provide a link to a page detailing the legal restrictions that limit re-use of the Item. <p>URI: http://rightsstatements.org/vocab/NoC-OKLR/1.0/</p>
<p>NO COPYRIGHT</p> 		<p>This RS should be used for Items for which the organization that intends to make the Item available has determined are free of copyright under the laws of the United States.</p>



		<ul style="list-style-type: none"> This Rights Statement should not be used for Orphan Works (which are assumed to be in-copyright) or for Items where the organization that intends to make the Item available has not undertaken an effort to ascertain the copyright status of the underlying Work. <p>URI: http://rightsstatements.org/vocab/NoC-US/1.0/</p>
		<p>This RS should be used for Items for which the copyright status is unknown and for which the organization that intends to make the Item available has not undertaken an effort to determine the copyright status of the underlying Work.</p> <p>URI: http://rightsstatements.org/vocab/CNE/1.0/</p>
		<p>This RS should be used for Items for which the copyright status is unknown and for which the organization that has made the Item available has undertaken an (unsuccessful) effort to determine the copyright status of the underlying Work.</p> <p>Typically, this RS is used when the organization is missing key facts essential to making an accurate copyright status determination.</p> <p>URI: http://rightsstatements.org/vocab/UND/1.0/</p>
		<p>This RS should be used for Items for which the copyright status has not been determined conclusively, but for which the organization that intends to make the Item available has reasonable cause to believe that the underlying Work is not covered by copyright or related rights anymore.</p> <ul style="list-style-type: none"> This RS should not be used for Orphan Works (which are assumed to be in-copyright) or for Items where the organization that intends to make the Item available has not undertaken an



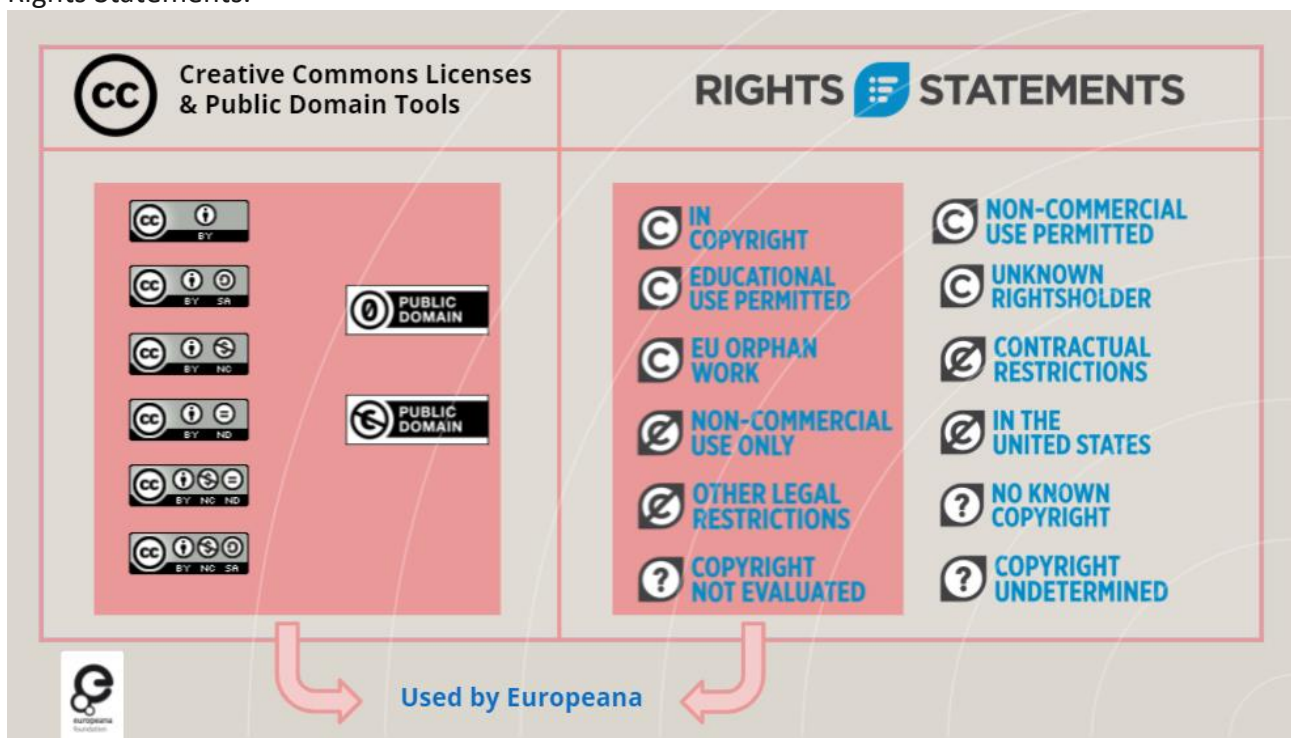
		<p>effort to ascertain the copyright status of the underlying Work. URI: http://rightsstatements.org/vocab/NKC/1.0/</p>
--	--	---

Guidelines for applying the rights statements

- https://rightsstatements.org/en/documentation/usage_guidelines.html

Europeana 14 Rights Statements

Europeana uses 14 standardised rights statements which communicate to users how they can access and use the content you share. As mandated in the Data Exchange Agreement, every digital object must be published with a rights statement identified by its partners. The Europeana rights statements were defined from a selection of Creative Commons Licenses, Public domain Tools and Rights Statements.



How to Choose the Europeana Correct Rights Statement: Tips

When you choose a rights statement, remember to:

Be honest and accurate. Do not misuse copyright to claim rights that do not exist, and do not indicate that something is freely usable if it is not the case.



Respect the public domain. Share works that are in the public domain openly, rather than applying a license or statement that limits their use.

In several cases, choosing a rights statement means granting a license to use the content. Make sure you have the right to do so.

- Evaluate the copyright status of the physical object.
- Consider your organisation's policy for sharing content, and whether there is a willingness to open up, which is encouraged by Europeana.
- If you already have permission to share an object, consider whether any specific terms and conditions apply. For instance, was it digitised through a partnership with a private actor and does the agreement allow for commercial uses? If not, there are dedicated statements that can reflect this condition.

In any case, these additional rights that may result from the digitisation of content can only be legally claimed:




- If the digitisation is an original work of art in itself, in which case the one who digitised the content is assigned 'full' copyright protection,
- If the digitisation is made in a country where neighbouring rights are recognised to non-original photography (and the requirements for this protection are met), in which case the one who digitised the content gets "some" copyright protection.

If you differentiate the two layers, remember that:












- If the content is protected by copyright, but the digital reproduction is not, the RS should communicate the in copyright status (through for instance a CC license, or an In Copyright RS)
- If the content is not protected by copyright, but the digital reproduction is (and you wish to claim the rights), the rights statement should communicate the in copyright status (through for instance a CC license, or an In Copyright RS)
- If neither the content or the digital reproduction is protected by copyright, the rights statement should communicate the out of copyright status (through for instance the Public Domain Mark, the Public Domain Dedication or an out of copyright RS)

How to apply rights statements in aggregation for Europeana?

In the following table, you may find the URIs to be used in your metadata

	<code><edm:rights rdf:resource="http://creativecommons.org/publicdomain/zero/1.0/"></code>
	<code><edm:rights rdf:resource="http://creativecommons.org/publicdomain/mark/1.0/"></code>
	<code><edm:rights rdf:resource="http://creativecommons.org/licenses/by/4.0/"></code>



	<p><edm:rights rdf:resource="http://creativecommons.org/licenses/by-sa/4.0/"></p>
	<p><edm:rights rdf:resource="http://creativecommons.org/licenses/by-nd/4.0/"></p>
	<p><edm:rights rdf:resource="http://creativecommons.org/licenses/by-nc/4.0/"></p>
	<p><edm:rights rdf:resource="http://creativecommons.org/licenses/by-nc-sa/4.0/"></p>
	<p><edm:rights rdf:resource="http://creativecommons.org/licenses/by-nc-nd/4.0/"></p>
	<p><edm:rights rdf:resource="http://rightsstatements.org/vocab/InC/1.0/"></p>
	<p><edm:rights rdf:resource="http://rightsstatements.org/vocab/InC-OW-EU/1.0/"></p>
	<p><edm:rights rdf:resource="http://rightsstatements.org/vocab/InC-EDU/1.0/"></p>
	<p><edm:rights rdf:resource="http://rightsstatements.org/vocab/CNE/1.0/"></p>
	<p><edm:rights rdf:resource=http://rightsstatements.org/vocab/NoC-NC/1.0/ "></p>
	<p><edm:rights rdf:resource="http://rightsstatements.org/vocab/NoC-OKLR/1.0/"></p>



Europeana Publishing Framework

There is a difference between the rights about the metadata and the rights about the digital objects. To manage data and deliver it in higher quality to our audiences, the Europeana Publishing Framework offers guidelines around the quality of content and metadata shared with Europeana. The content and metadata which data partners can provide will depend on their own agendas and capabilities. However, the higher the quality of information provided, the more benefit created for audiences and the greater the potential use in education, research and the creative industries. To help our partners understand what we mean by 'quality', the Publishing Framework outlines different layers for content and metadata, which we refer to as 'tiers.' The content tiers were developed in 2015 and the metadata tiers added in 2019.

Tiers for metadata

TIER	LANGUAGE	ENABLING ELEMENTS*	CONTEXTUAL CLASSES**	BENEFITS (CUMULATIVE)
A Europeana as a basic search platform . <i>'I want to find a specific item that I'm looking for.'</i>	At least 25% of the provided EDM metadata fields that are relevant have at least 1 language qualified value	At least one enabling element taken from one of the 'Discovery scenario' groups	None	Findability - material is available on Europeana Collections, indexed by search engines, and linked data technology Web traffic - click-throughs to your site
B Europeana as an exploration platform . <i>'I want to browse and explore Europeana even if I'm not sure what I'm looking for.'</i>	At least 50% of the provided EDM metadata fields that are relevant have at least 1 language qualified value	At least three distinct elements taken from two of the 'Discovery scenario' groups	At least one contextual class with all minimum required elements, OR link to LOD vocabulary	Greater potential for: Use in thematic collections - providing context and relation to other collections More marketing through Europeana
C Europeana as a knowledge platform . <i>'I want to search and browse in a more precise way, by named authors, specific subjects or topics.'</i>	At least 75% of the provided EDM metadata fields that are relevant have at least 1 language qualified value	At least four distinct elements taken from two of the 'Discovery scenario' groups	At least two distinct contextual classes with all minimum required elements, OR links to LOD vocabularies	Greater potential for: Use in Europeana's existing partnerships and projects , in e.g. education and research Use in apps and services Use by creative industry

***Discovery scenario**

Browse by date or time-span
 Browse by subjects and types
 Browse by agents
 Browse by places

****Contextual class**

edm:TimeSpan
 skos:Concept
 edm:Agent
 edm:Place

Enabling elements

dcterms:created, dcterms:issued, dcterms:temporal, edm:hasMet (with a time-span - edm:TimeSpan class)
 dc:subject (with a concept - skos:Concept class), dc:format, dc:type, dcterms:medium
 dc:creator, dc:contributor, dc:publisher, dc:subject (with an agent - edm:Agent class), edm:hasMet (with an agent - edm:Agent class)
 dc:subject (with a place - edm:Place class), dcterms:spatial, edm:currentLocation

Minimum required metadata elements

edm:begin, edm:end
 skos:prefLabel and skos:note (or skos:broader, skos:narrower, skos:exactMatch, skos:closeMatch, skos:related)
 skos:prefLabel and rdaGr2:professionOrOccupation (or edm:begin, rdaGr2:dateOfBirth, edm:end, rdaGr2:dateOfDeath, rdaGr2:placeOfDeath, rdaGr2:placeOfBirth)
 skos:prefLabel, wgs84_pos:lat, wgs84_pos:long

Notes on contextual classes

The contextual classes (listed above) can be included in the metadata at source, but the use of Linked Open Data vocabularies is preferred. References to contextual classes created as a result of Europeana's own Semantic Enrichment do not count for the tier classification.



Tiers for digital objects

TIER	DIRECT LINK TO OBJECT PROVIDED	RIGHTS STATEMENTS	EUROPEANA API DISPLAYS	BENEFITS (CUMULATIVE)
1 Europeana as a search engine . <i>'I want to search and browse collections online.'</i>	Yes. Minimum of 0.1 megapixel in size	Any from the Europeana licensing Framework	Metadata plus direct link to object	Findability - indexed by search engines, linked data technology Web traffic - click-throughs to your site
2 Europeana as a showcase . <i>'I want to be guided through collections online.'</i>	Yes. Minimum of 0.42 megapixel in size	Any from the Europeana licensing Framework	Metadata plus direct link to object	Use in thematic collections - providing context and relation to other collections on Europeana More marketing through Europeana
3 Europeana as a distribution platform for non-commercial reuse. <i>'I want to find, view and use collections in my own non-commercial projects.'</i>	Yes. Minimum of 0.95 megapixel in size	Any from the Europeana licensing framework that allow for some re-use	Metadata plus direct link to object and can filter to show only re-usable objects	Impressions - collections viewed on platforms outside of Europeana Use in Europeana's existing partnerships and projects in e.g. education and research Use in apps and services by third parties
4 Europeana as a free reuse platform . <i>'I want to find, view and use collections in whatever way I choose.'</i>	Yes. Minimum of 0.95 megapixel in size	Any from the Europeana licensing framework that allow free re-use	Metadata plus direct link to object and can filter to show only re-usable objects	Use on open platforms like Wikimedia Use by creative industry Use in commercial apps and services



Enabling elements












They are metadata elements grouped according to four discovery scenarios.

If some groups of these elements are used to describe the resource, the Tier rating will grow up.

Discovery scenario	Enabling elements
Browse by date or time-span	dcterms:created , dcterms:issued , dcterms:temporal , edm:hasMet (with a time-span – edm:TimeSpan class)
Browse by subject and types	dc:subject (with a concept – skos:concept class), dc:format , dc:type , dcterms:medium
Browse by agents	dc:creator , dc:contributor , dc:publisher , dc:subject (with an agent – edm:Agent class), edm:hasMet (with an agent – edm:Agent class)
Browse by places	dc:subject (with a place – edm:Place class), dcterms:spatial , edm:currentLocation



Europeana Rights State Validation

Content Tier 1	Content Tier 2	Content Tier 3	Content Tier 4
Any of the available rights statements	Any of the available rights statements	<p>Only RS that allow some reuse</p>       	<p>Only rights statements that allow free reuse</p>     <p>Before selecting one of the above RS, make sure that the work is in Public Domain, that you hold the rights, or that you have the rights holders' permission</p>

Terms of use

Be clear with your public and do not forget to publish your terms of use on your digital library.

Some examples

<https://www.deutsche-digitale-bibliothek.de/content/ueber-uns/lizenzen-und-rechtehinweise-der-lizenzkorb-der-deutschen-digitalen-bibliothek>

<https://www.internetculturale.it/it/15/termini-d-uso>



Data exchange agreement

The Europeana Data Exchange Agreement (DEA) is the central element of the Europeana Licencing Framework.

The DEA structures the relationship between Europeana and its data providers. It establishes two main rules relating to the intellectual property rights (IPR) in the metadata and content delivered to Europeana:

1. All metadata submitted to Europeana will be published as open data under the terms of the Creative Commons Zero Public Domain Dedication (CC0).
2. Each digital object (which includes the associated preview) that is available via Europeana needs to carry a rights statement that describes its copyright status and informs the users what they can or cannot do with the digital object. If an underlying material object is in the public domain, its digital surrogate should remain in the public domain.
3. If you are ready to provide data to Europeana and would like to sign the DEA, please consult a preview of the agreement through the PDF at the following link:
https://pro.europeana.eu/files/Europeana_Professional/DEA/Data%20Exchange%20Agreement%20Template.pdf
4. The signing process is quick and easy, and can be completed online using an electronic signature service.

REFERENCES

- *Europeana Data Model*
<https://pro.europeana.eu/page/edm-documentation>
- *Europeana Semantic Enrichment*
<https://pro.europeana.eu/page/europeana-semantic-enrichment>
- *Europeana Data Exchange Agreement Template*
https://pro.europeana.eu/files/Europeana_Professional/DEA/Data%20Exchange%20Agreement%20Template.pdf
- *Europeana Publishing Guide*
<https://pro.europeana.eu/post/publication-policy>
- *Europeana Publishing Framework*
<https://pro.europeana.eu/post/publishing-framework>
- *Public domain guidelines*
<https://www.europeana.eu/en/rights/public-domain-usage-guidelines>
- *Webinar about Europeana and Copyright*
<https://pro.europeana.eu/page/webinars#copyright>
- *Tools and resource online by Europeana Copyright Community*
<https://pro.europeana.eu/page/copyright-tools-and-resources>