



# IMPLEMENTING

## LIDO



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# Introduction

According to the goals of AthenaPlus, one of its aims is to promote standards that ease information processing and information dissemination of the rich museum contents. LIDO, developed since 2008, has from the beginning proven to be a very useful tool to bring the metadata of museum objects to internet portals and especially to Europeana, so that these objects can be accessed and used by as large as possible an audience.

Within the framework of AthenaPlus LIDO has been implemented by a wide group of data providers from many different countries. The experience gained has been brought back to the International Working Group in CIDOC responsible for LIDO maintenance and development and has been an important component for LIDO implementation on a wider scale.

So as to share this experience with a wide museum community, the present booklet concentrates on outlining the way of practical implementation of LIDO in a succession of logical steps, thereby at the same time giving an outline description of LIDO.

We hope that this booklet will help the even wider dissemination of the tool LIDO and we do invite the community to actively participate in its usage and further development.

**Monika Hagedorn-Saupe**

Digital Exhibition Working Group Coordinator



# 1. Background – A LIDO Implementation Methodology

The purpose of this publication is to provide a methodology for implementing LIDO, and in doing so give help and advice to potential and new users seeking to employ LIDO.

- 1 The 'L' of LIDO is pronounced as the English word 'lee' and not as 'lie'.

LIDO<sup>1</sup> (Lightweight Information Describing Objects) grew out of a need, articulated by the museum community, for a standard metadata schema which best represents the potentially complex and rich nature of the information which describes the items they hold. It was also a response to the deficiencies of Dublin Core when used to describe culture heritage and their digital surrogates.

LIDO, defined as an XML schema, was developed, starting in 2008, from a number of existing metadata standards, and is compliant with the relevant sector ontology. It is the result of the joint collaborative efforts of the international stakeholder communities which created those standards. The purpose of the work was to create a common standard for contributing cultural heritage information and content to portals and other aggregation repositories.

- 2 See: [http://getty.art.museum/research/publications/electronic\\_publications/cdwa/cdwalite.htm](http://getty.art.museum/research/publications/electronic_publications/cdwa/cdwalite.htm)

The story of LIDO began with the J Paul Getty Trust and ARTstor who developed the *CDWA Lite* schema (Categories for the Description of Art)<sup>2</sup> in the USA. The scope of this was extended by the Working Group Data Exchange of the German Museum Association's development of *museumdat*<sup>3</sup>. This generalised the schema to include being able to describe non-art objects, e.g. social history, natural science, and technology, and to include the need to support multilingual records.

- 3 See: <http://www.museumdat.org/index.php?ln=en>

It was agreed to create a single schema rather than keep *CDWA Lite* and *museumdat* separate. In addition input from the greater community of cultural heritage information and technology professionals was sought. Part of this effort was to secure compliance of the new schema with CIDOC CRM (ISO 21127)<sup>4</sup> as sector standard ontology. A working group was established for the development of what became LIDO.

- 4 See: <http://www.cidoc-crm.org>

Resulting from a report on existing standards applied in European museums, it was concluded by partners



5 See: <http://www.athenaeurope.org/>

6 See: <http://www.collectiontrust.org.uk/spectrum>

in the ATHENA<sup>5</sup> project that any metadata format for ATHENA would also have to meet the needs of SPECTRUM<sup>6</sup>. As a result ATHENA decided to join the LIDO working group to further development that would integrate SPECTRUM requirements into what became the published LIDO schema.

The result of all this work: *LIDO – Lightweight Information Describing Objects Version 1.0*, was delivered to the sector during the CIDOC meeting at the ICOM triennial conference in November 2010 which took place in Shanghai, China.

7 ICOM  
International  
Committee for  
Documentation -  
see: <http://cidoc.icom.museum/>

The CIDOC<sup>7</sup> Working Group LIDO - formerly Data Harvesting and Interchange Working Group - centralizes information and activities taking place with LIDO. All basic standard information is hosted at

<http://www.lido-schema.org>

Document (URL)	Description
<i>LIDO - Lightweight Information Describing Objects: XML Schema for Contributing Content to Cultural Heritage Repositories, Version 1.0</i> <a href="http://www.lido-schema.org/schema/v1.0/lido-v1.0.xsd">http://www.lido-schema.org/schema/v1.0/lido-v1.0.xsd</a>	The formal definition of the XML schema.
<i>LIDO - Lightweight Information Describing Objects, Version 1.0</i> <a href="http://www.lido-schema.org/schema/v1.0/lido-v1.0-specification.pdf">http://www.lido-schema.org/schema/v1.0/lido-v1.0-specification.pdf</a>	A human-friendly description of the XML schema as a standalone document.
<i>LIDO - Lightweight Information Describing Objects: XML Schema for Contributing Content to Cultural Heritage Repositories, Version 1.0</i> <a href="http://www.lido-schema.org/schema/v1.0/lido-v1.0-schema-listing.html">http://www.lido-schema.org/schema/v1.0/lido-v1.0-schema-listing.html</a>	A human-friendly description of the XML schema as a webpage.
<i>LIDO (Lightweight Information Describing Objects): Making it easier to deliver information to portals</i> <a href="http://www.lido-schema.org/documents/LIDO-Handout.pdf">http://www.lido-schema.org/documents/LIDO-Handout.pdf</a>	One page summary of the basic facts about LIDO.
<i>Lightweight Information Describing Objects: Contributing Content to Cultural Heritage Repositories</i> <a href="http://www.lido-schema.org/documents/LIDO-Introduction.pdf">http://www.lido-schema.org/documents/LIDO-Introduction.pdf</a>	PowerPoint introduction to LIDO.

8 h See: <http://www.athenaplus.eu/>

**Gordon McKenna**  
(2014) *Survey and description of existing mapping models to LIDO*.  
ATHENA PLUS  
Project.  
<http://athenaplus.eu/getFile.php?id=538>

The here presented *LIDO implementation methodology* was developed in the ATHENA PLUS project as part of Workpackage 2 ‘*Coordination of content and standards*’.<sup>8</sup> It is focused on helping the implementation of LIDO and covers:

1. XML basics in the context of LIDO;
2. Overview of LIDO (What it is and is not; its design principles; and what is in it);
3. Before starting to use LIDO (Setting your own house in order; and LIDO and the target portal);
4. General LIDO issues (language(s) of the record and elements; display elements; repeating elements and their ordering; dates and periods);
5. The various parts of a LIDO record (what is mandatory, recommended and optional and how to implement it).

Following the methodology, together with any linked resources mentioned, will allow the potential or new implementer of LIDO to successfully export data to their chosen target portals.



## 2. Implementing LIDO

9 Please read for general information on XML, for example: [http://www.w3schools.com/xml/xml\\_what\\_is.asp](http://www.w3schools.com/xml/xml_what_is.asp); <http://en.wikipedia.org/wiki/XML>; and <http://www.xml.com/pub/a/98/10/guideo.html>

10 For full information see the technical documentation at: <http://www.lido-schema.org>

### XML basics and LIDO

There are many simple guides to XML<sup>9</sup>, therefore here we will focus on some aspects of LIDO XML<sup>10</sup>.

#### Tag-names:

**All** tag-names for elements in LIDO XML are in lower case **except** for the first letter of the second or later parts of concatenated tag-name. So:

- `lido:descriptiveMetadata` is correct;
- `lido:DescriptiveMetadata` is incorrect;
- `lido:descriptivemetadata` is incorrect.

#### Attribute-names:

**All** attribute-names for elements in LIDO XML are **lower case**. So:

- `xml:lang` is correct;
- `xml:Lang` is incorrect.

#### Namespaces:

There are three namespaces used in LIDO schema:

- **lido**: for nearly all of elements and attributes;
- **xml**: for the `xml:lang` attribute;
- **gml**: for the parts of LIDO with geographical coordinates, etc

All tag-names and attribute names should be pre-fixed by a namespace in order to provide correct LIDO. So:

- `<lido:descriptiveMetadata xml:lang="[code]">` is correct;
- `<descriptiveMetadata lang="[code]">` is incorrect;
- `<lido:descriptiveMetadata lang="[code]">` is incorrect.

### Advice to implementers:

The organisation implementing LIDO, and particularly those persons carrying out the implementation should familiarise themselves about the basics of XML, and how LIDO handles:

- Tag-names;
- Attribute-names;
- Namespaces.

## Overview of LIDO

### What LIDO is

LIDO is:

- An XML schema for contributing information about cultural heritage objects and other material, held by an organisation, to portals, aggregations and other similar repositories;
- A metadata delivery mechanism for use in a range of online scenarios including an organisation's own online collections database, and external portals aggregating information from many organisations (e.g. Europeana and Deutsche Digitale Bibliothek);
- Intended to represent the full range of descriptive information about cultural heritage material (e.g. art, history, technology and natural science).
- It supports multilingual environments.

### What LIDO is not

LIDO is:

- Not a fully developed data exchange format, i.e. it should not be used for a point-to-point exchange of information between organisations and especially not for migrating from one collection management system to another;
- Not a format designed for full cataloguing (some aspects are not covered);
- Not intended to be used as a basis for a collections management system (e.g. supporting acquisition, movement control, conservation, rights management, and all the other procedures needed).

### LIDO's design principles

The LIDO XML schema (and specification) was designed so that it can:

- Enable the appropriate description of cultural heritage material;
- Allow an organisation to decide how rich, or how light, the metadata records are that they provide to a particular portal (i.e. can be different in different scenarios);

- Allow the delivery of metadata about an organisation's item and links to their related digital surrogates;
- Include links back to the records in their 'home' context (i.e. on an organisation's website);
- Allow for delivery a metadata record containing all the information for the correct display and retrieval of an individual item;
- Enable the identification of an entity provided (i.e. who, what, when, and where), by providing the ability to reference to controlled vocabularies and authority files;
- Provide metadata for retrieval and for display, i.e. have display and indexing elements.
- Give full support for multilingual records, either at structural-element level, or at individual text-element level (or both);
- Distinguish between the identifiers of the physical item, the webpage with a description of it, and its online digital surrogates.

### What's in LIDO?

A LIDO record is made up of a nested set of 'wrapper' and 'set' elements which structure metadata about an item in ways that are relevant to the expression of its cultural heritage significance. The aim being to allow a user to access information about the item based on these parameters.

At the highest level it is organised into seven information areas. Four of these hold 'descriptive' metadata while the other three hold 'administrative' metadata.

#### *Descriptive Metadata:*

Information area	Description
<i>Object classification</i>	Terms classifying an item as representative of a specific group of objects, especially its type (object name).
<i>Object identification</i>	Identifying information about an item, especially its physical appearance.
<i>Event</i>	Events that the item has taken part in.
<i>Object relation</i>	Subjects of visual or textual items, and other related items

### *Administrative Metadata:*

Information area	Description
<i>Rights work</i>	Information about rights associated with the physical (or born digital) item required for its use. Right types may include copyright, other intellectual property rights (e.g. those applying to trademarks, designs, and performers' rights), moral rights, data protection, human rights, and personality rights.  Do not confuse these rights with the rights associated with the surrogate (the Resource).
<i>Record</i>	Information about the catalogue record. This is usually held in a collections management system (CMS). Some of this information may be implicit (e.g. the organisation itself) and may not be stored as data in the CMS.
<i>Resource</i>	Information about digital resource(s) being supplied to the service environment, i.e. accessible via the target portal.

Looking at the second level of information organisation:

### *Object classification:*

Information area	Note
<i>Object work type</i> [mandatory]	The type (or object name) of the item.
<i>Classification</i>	Other terms describing the item, e.g. style and form for cultural items; age, sex, and phase for natural science items. Do not confuse classification with the subject of a visual or textual item (see below).

### *Object identification:*

Information area	Note
<i>Title</i> (or object type/ name if no title) [mandatory]	In case an item has no title use object type (name) but try to further individualize it, for example by adding the inventory number.
<i>Inscriptions</i>	A textual transcription and/or a description for non-textual marks on the item. Do not confuse with the subject of visual or textual items.
<i>Repository</i>	Information about the organisation holding the physical item (e.g. its name), and the identifier of the physical item.
<i>Display and edition</i>	Used especially for prints.
<i>Description</i>	Of the physical item.
<i>Measurements</i>	Any kind of measurement, including technical attributes, e.g. 78 rpm playing speed for a vinyl record.



### *Event:*

Information area	Note
<i>Event ID</i>	For an event in an authority file of events.
<i>Event type</i>	Use a controlled vocabulary <sup>11</sup> of types.
<i>Role in event</i>	Of the item being described.
<i>Event name</i>	Given to the event, e.g. 'World War I'.
<i>Event actor</i>	Persons and organisations involved in the event.
<i>Culture</i>	Cultural group(s) involved in the event.
<i>Event date</i>	The single date or date range when the event took place. Follow the ISO 8601 standard for expressing dates.
<i>Event period</i>	The period when the event took place. Use a controlled vocabulary. Do not confuse periods with dates. i.e. 'Neolithic' is a period, '1880/1900' is a date range, with 'late nineteenth century' as display date.
<i>Event place</i>	Where the event took place.
<i>Event method</i>	E.g. acquisition by 'purchase'.
<i>Event material/ technique</i>	E.g. material 'gold' and technique 'cast'.
<i>Thing present</i>	References to other items present at the event.
<i>Related event</i>	References to other event(s).
<i>Event description</i>	Further information not already covered by other elements.

<sup>11</sup> There is a published suggested set of term for event types See Section 5.4.8 below.

### *Object relation:*

Information area	Note
<i>Subject</i>	Of items depicting something (e.g. paintings, photographs, prints, and posters) or textual items (e.g. books, manuscripts, newspapers, and letters). Subjects are distinguished into: concepts, actors, dates, places, events, and objects.
<i>Related items</i>	References to other items directly related to the item being described in the record.

### *Rights work:*

Information area	Note
<i>Rights type</i>	The type of right being recorded. Items can have more than copyright affecting their use (e.g. moral rights and privacy rights).
<i>Rights date</i>	The date (usually a range) when the right applies. Using just a latest date would indicate when the right is due to end.
<i>Rights holder</i>	The person or organisation that owns, or holds control over, the right.
<i>Credit line</i>	For physical items the right being credited (acknowledged) is often associated with the transfer of ownership, and is probably part of a contract.

### *Record:*

Information area	Note
<i>Record ID [mandatory]</i>	A unique identifier in the local system.
<i>Record type [mandatory]</i>	Term saying that the record represents: an individual item; or a collection, series, or group of items.
<i>Record source [mandatory]</i>	Where the information in the record comes from. Usually it is the repository holding the physical item.
<i>Record rights</i>	Of the metadata being supplied.
<i>Record metadata</i>	The wrapper for information about:
<i>Record info link</i>	The link to the record about the item (not the item itself).

*Resource:*

Information area	Note
<i>Resource ID</i>	Identifier for the resource.
<i>Resource representation</i>	
<i>Resource link</i>	URL of the resource.
<i>Resource type</i>	The medium (e.g. x-ray, 3D model).
<i>Resource relationship type</i>	For example: conservation image, historical image, reconstruction.
<i>Resource perspective</i>	Vantage point or perspective of the resource.
<i>Resource description</i>	A short description for of what is shown or depicted in the resource.
<i>Resource date taken</i>	When the resource was created
<i>Resource source</i>	If it is not the holding organisation.
<i>Resource rights</i>	The rights associated with the resource.

## Before starting to implement LIDO

### Setting your own house in order

Good LIDO begins with good collections management, and that is ensured by:

#### 1. *Using a standards-based collections management system*

Advice to implementers:

It is vital that the organisation manages their collection to a standard sufficient for them to be confident that the metadata they export as LIDO is of the quality needed to meet their needs to provide access. One way to guarantee this, if properly implemented, is to base the system used on accepted standards, e.g. for museums *SPECTRUM* or *CDWA*.

In-house developed systems should be able to map their metadata elements to the metadata elements of these standards. It should be possible to export from the rich metadata in the collections management system into LIDO. If the organisation's system is not as comprehensive as one of the recommended standards it might not be possible to submit fully rich metadata into LIDO.

#### 2. *Correctly using a standards-based collections management system*

Advice to implementers:

As well as using a standards-based collections management system the organisation must also monitor its correct use of the system. There is a tendency for misuse to creep in, sometimes this is by accident, but sometimes it is deliberate.

Over thirty years experience by the author in creating and working with data in collections management systems leads to the identification of the following issues with data in CMSs which may impact in creating LIDO records:

Issue	Minimised by
Data entry errors (e.g. spelling mistakes)	Review, correction, and use of terminologies
Putting the wrong type of data in a field (e.g. confusing dates with periods)	Monitoring and correction
Inconsistency in the use of terminology	Monitoring, correction, and using automatic terminology control

The organisation must have in place policies and procedures to minimise these issues.

## LIDO and the target portal

Not all portals are the same. Knowing how the target portal will handle the LIDO records it imports is important.

Advice to implementers:

Before providing metadata to a portal the organisation must get from the target portal's owner as much information as possible about how the portal will handle and display the LIDO being supplied.

This should include how the following is handled, and displayed:

- Extent of LIDO elements that are used in the portal
- Multilingual metadata;
- Display elements and their corresponding indexing elements, and what happens if either is not present;
- Ordering of repeatable elements;
- References to controlled vocabularies and authority files;
- Links on resources (e.g. thumbnails and other previews);
- Multiple resources;
- Link to the online webpage.

The portal should also clearly inform about any requirements and restrictions for metadata and resources it has. These might include size restrictions for previews or a requirement for rights information. An important criterion for the organisation on how rich or how light their provided LIDO records will be is the portal's requirement on waiving rights to the metadata.

Having considered this information the organisation should decide if they wish to modify their LIDO export in order to take into account the target portal.

# General LIDO issues

## Elements containing data

Only a subset of the elements in a LIDO document can contain data. All others are wrapper elements which can only contain other elements. The *wrapper elements* structure the data in culturally significant ways. The content-containing elements are:

### Terms:

Where the information given is potentially part of a controlled vocabulary, it is held in a LIDO record as a concept, with a `<lido:term>` element like this:

`<lido:term>[Term]</lido:term>`

It is best practice to reference the online-published identifier (URI) for this term in a LIDO record in a `<lido:conceptID>` element like this:

`<lido:conceptID lido:type="URI">[Published URI for term]</lido:conceptID>`

It is optional to give just the element `<lido:term>` or just the `<lido:conceptID>`, but both are preferred if available.

The *super-elements* define the type of relation between the concept and the related entity. The super-elements containing terms are:

<ul style="list-style-type: none"><li>• <code>&lt;lido:category&gt;</code></li><li>• <code>&lt;lido:classification&gt;</code></li><li>• <code>&lt;lido:culture&gt;</code></li><li>• <code>&lt;lido:eventMethod&gt;</code></li><li>• <code>&lt;lido:eventType&gt;</code></li><li>• <code>&lt;lido:nationalityActor&gt;</code></li><li>• <code>&lt;lido:objectWorkType&gt;</code></li></ul>	<ul style="list-style-type: none"><li>• <code>&lt;lido:periodName&gt;</code></li><li>• <code>&lt;lido:placeClassification&gt;</code></li><li>• <code>&lt;lido:recordType&gt;</code></li><li>• <code>&lt;lido:relatedEventRelType&gt;</code></li><li>• <code>&lt;lido:relatedWorkRelType&gt;</code></li><li>• <code>&lt;lido:resourcePerspective&gt;</code></li><li>• <code>&lt;lido:resourceRelType&gt;</code></li></ul>	<ul style="list-style-type: none"><li>• <code>&lt;lido:resourceType&gt;</code></li><li>• <code>&lt;lido:rightsType&gt;</code></li><li>• <code>&lt;lido:roleActor&gt;</code></li><li>• <code>&lt;lido:roleInEvent&gt;</code></li><li>• <code>&lt;lido:subjectConcept&gt;</code></li><li>• <code>&lt;lido:termMaterialsTech&gt;</code><sup>12</sup></li></ul>
---	--	---

In addition there are elements that contain metadata that could be supported by terminology but do not use `<lido:term>`. These are:

<ul style="list-style-type: none"><li>• <code>&lt;lido:attributionQualifierActor&gt;</code></li><li>• <code>&lt;lido:extentActor&gt;</code></li><li>• <code>&lt;lido:extentMeasurements&gt;</code></li><li>• <code>&lt;lido:extentSubject&gt;</code></li></ul>	<ul style="list-style-type: none"><li>• <code>&lt;lido:formatMeasurements&gt;</code></li><li>• <code>&lt;lido:genderActor&gt;</code></li><li>• <code>&lt;lido:measurementType&gt;</code></li><li>• <code>&lt;lido:measurementUnit&gt;</code></li></ul>	<ul style="list-style-type: none"><li>• <code>&lt;lido:measurementValue&gt;</code><sup>13</sup></li><li>• <code>&lt;lido:qualifierMeasurements&gt;</code></li><li>• <code>&lt;lido:scaleMeasurements&gt;</code></li><li>• <code>&lt;lido:shapeMeasurements&gt;</code></li></ul>
--	--	---

12 In addition the `<lido:term MaterialsTech>` element must have a `lido:type` attribute to distinguish between materials (`lido:type=«material»`) and techniques (`lido:type=«technique»`).

13 The metadata must be a number.

### Free-text values:

- 14 Alternatively the description can be referenced through the identifier element `lido:descriptiveNoteID`.

For free-text values there are two approaches in use: Where the metadata for an item is a free-text description possibly taken from an external source it is held in a `<lido:descriptiveNoteValue>` element in a LIDO record like this:

`<lido:descriptiveNoteValue>[Description]</lido:descriptiveNoteValue>`<sup>14</sup>

To identify the descriptions they have super-elements which define which part of the item's metadata is being described. The super-elements containing descriptive note values are:

• <code>&lt;lido:eventDescriptionSet&gt;</code>	• <code>&lt;lido:inscriptionDescription&gt;</code>	• <code>&lt;lido:objectDescriptionSet&gt;</code>
---	--	--

The following elements are free text with no reference to an external source:

• <code>&lt;lido:creditLine&gt;</code> • <code>&lt;lido:extentMaterialsTech&gt;</code> • <code>&lt;lido:inscriptionTranscription&gt;</code>	• <code>&lt;lido:objectNote&gt;</code> • <code>&lt;lido:resourceDescription&gt;</code> • <code>&lt;lido:sourceAppellation&gt;</code>	• <code>&lt;lido:sourceDescriptiveNote&gt;</code> • <code>&lt;lido:sourceMaterialsTech&gt;</code> • <code>&lt;lido:sourceStateEdition&gt;</code>
---	--	--

### Appellations:

Where the metadata for an item is an appellation (name) it is held in a `<lido:appellationValue>` element in a LIDO record like this:

`<lido:appellationValue>[Appellation]</lido:appellationValue>`

To identify the appellations they have *super-elements* which define which part of the item's metadata is being described. The super-elements containing appellations are:

• <code>&lt;lido:eventName&gt;</code> • <code>&lt;lido:legalBodyName&gt;</code>	• <code>&lt;lido:nameActorSet&gt;</code> • <code>&lt;lido:namePlaceSet&gt;</code>	• <code>&lt;lido:titleSet&gt;</code>
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## Web links:

These are usually URLs:

LIDO Element	Linking to
<lido:legalBodyWeblink>	The website for a legal body (organisation or person).
<lido:linkResource>	Surrogate for the item on the Web.
<lido:recordInfoLink>	Webpage of the item on the organisation's website
<lido:objectWebResource>	Webpage of a related item on the Web, i.e. not the item being described in the record.

15 International Standard Identifier for Libraries and Related Organizations.

## Identifiers for entities:

These are elements identifying entities within the LIDO record, e.g. either the item being described, the metadata about it, or other entities related to the item:

LIDO Element	Identifies
<lido:actorID>	An actor (person or organisation) either taking part in an event associated with the item being described or being the subject of the item.
<lido:descriptiveNoteID>	An external resource describing the entity. May be any kind of document accessible through a URI.
<lido:eventID>	An event associated with the item being described.
<lido:legalBodyID>	An organisation or person being referred to as a legal body.
<lido:lidoRecID>	A LIDO record. Best practice is to have it made up of an identifier for: <ul style="list-style-type: none"><li>• The organisation providing the record (e.g. an ISIL<sup>15</sup>);</li><li>• The record in the organisation's local collections management system.</li></ul> Do not confuse this with the <lido:objectID>.
<lido:objectID>	An item associated with the item being described.
<lido:objectPublishedID>	The item being described. It may be: <ul style="list-style-type: none"><li>• A link to an authority file maintained outside of the collections management system of the organisation holding the work;</li><li>• An identifier for the object published by its repository, e.g. composed of an identifier for the repository and an inventory number of the object.</li></ul> Best practice is for it to be a URL.



LIDO Element	Identifies
<lido:placeID>	A place either being the location of the item or where an event associated with the item being described took place or being the subject of the item.
<lido:recordID>	The record describing the item in the organisations collections management system.
<lido:recordInfID>	A record describing the item outside the organisation's collections management system, for example an externally-maintained OAI record.
<lido:resourceID>	The original, digital or analogue, surrogate for the item being described.
<lido:workID>	The physical item held by the organisation.

16 The tables in the sections below show:

- **SPECTRUM Unit(s) of information**, where they exist: SPECTRUM is used to represent the collections management system fields of the providing cultural heritage institution. This will support LIDO mappings especially for systems formally SPECTRUM compliant.
- **Notes:** Giving more information about the information being mapped;
- **LIDO elements path:** Shows the elements path that a CMS should map data automatically to in LIDO, or

**Display elements:** See Section '*Display and Indexing elements*' below.

**Dates:** See Section '*Events*' below.

**Advice to implementers:**

The organisation implementing LIDO should have knowledge of which elements in a LIDO record hold data, and what kind of data each of these elements should hold. It should also know its own collections management system well enough to be able to map to these elements.

### ***Language(s) of the record and elements***

**Advice to implementers:**

It is **mandatory** that the language of the metadata is set, in two places in a LIDO record, by using a standard ISO code for the language. The organisation implementing LIDO must have knowledge of the correct code for the language(s) they are intending to use in their LIDO records. They must also know where the codes are held in their collections management system, if at all, in order to facilitate the creation of LIDO records. If they do not have the code in their CMS then they must have a method placing it when they are creating the LIDO record.

In LIDO:

SPECTRUM unit <sup>16</sup>	Notes	LIDO elements path
[Record language] [Not a <i>SPECTRUM</i> Unit of information]	This is <b>not</b> the language of the content of a textual item.  The [code] is the standard ISO code for the language and <b>not</b> the name, e.g. “en” not “English”	<lido:descriptiveMetadata xml:lang=”[code]”>
		<lido:administrativeMetadata xml:lang=”[code]”>
		<lido:administrativeMetadata xml:lang=”[code]”>

that a user maps manually in a CMS. Where relevant XML attributes are included Note the path is not complete and

There are two ways of having information in more than one language in LIDO record:

1. *Setting ‘global’ xml:lang attributes and multiple language records*

Here <lido:descriptiveMetadata> and <lido:administrativeMetadata> have a mandatory xml:lang attribute containing ISO standard codes for languages.

SPECTRUM unit	Notes	LIDO elements path
[Metadata language] [Not a <i>SPECTRUM</i> Unit of information]	This is not the language of the content of a textual item.  The [code] is the standard ISO code for the language and not the name, e.g. “en” not “English”	<lido:descriptiveMetadata xml:lang=”[code]”>
		<lido:administrativeMetadata xml:lang=”[code]”>

in a real record **all** elements should have end tags.

All sub-elements ‘inherit’ this language without having to define the xml:lang attribute

SPECTRUM unit	Notes	LIDO elements path
Title		<lido:descriptiveMetadata xml:lang=”[code]”> <lido:objectIdentificationWrap> <lido:titleWrap> <lido:titleSet> <lido:appellationValue>[Title]</lido:appellationValue>

In a purely monolingual record nothing further needs to be done.

For fully multilingual records, repeat the elements:

- `<lido:descriptiveMetadata>`
- `<lido:administrativeMetadata>`

Do this once for each language represented with the appropriate code in the `xml:lang` attribute.

## 2. Setting `xml:lang` attributes for individual sub-elements

If the record is mostly monolingual set the `<lido:descriptiveMetadata>` and `<lido:administrativeMetadata>` elements with `xml:lang` attribute of the main language. For the few sub-elements not in the main language (e.g. title, credit line) repeat the sub-elements specifying the `xml:lang` attribute at the sub-element level. For example a Title in two languages (German is the main language and English the additional language):

SPECTRUM unit	Notes	LIDO elements path
Title		<pre>&lt;lido:descriptiveMetadata xml:lang="de"&gt; &lt;lido:objectIdentificationWrap&gt;   &lt;lido:titleWrap&gt;     &lt;lido:titleSet&gt;       &lt;lido:appellationValue&gt;[Title in German]     &lt;/lido:appellationValue&gt;       &lt;lido:appellationValue xml:lang="en"&gt;[Title in English]     &lt;/lido:appellationValue&gt;   &lt;/lido:titleSet&gt; &lt;/lido:titleWrap&gt; &lt;/lido:objectIdentificationWrap&gt; &lt;/lido:descriptiveMetadata&gt;</pre>

The choice of which method to use should take into account a combination of the following:

- Availability of multilingual metadata in the organisation's collections management system;
- Organisation's policy regarding multilingual records in general, which may be governed by legal requirements;
- Target portal's handling of multilingual LIDO.

The LIDO elements which are repeatable for language variants only, and not for any other reason, are:

LIDO Element	Records information about
<lido:appellationValue>	Appellations, e.g. titles, identifying phrases, or names given to an item, but also name of a person or corporation, also place name, etc.
<lido:creditLine>	Acknowledgement of the rights associated with the physical item and/or digital object as requested.
<lido:descriptiveNoteValue>	Usually a relatively brief essay-like text that describes the entity.
<lido:displayActor>	Display element for one actor, corresponding to the following <lido:actor> element.
<lido:displayActorInRole>	Display element for an actor coupled with its specific role, corresponding to the following <lido:actorInRole> element.
<lido:displayDate>	Display element for a date specification, corresponding to the following <lido:date> element.
<lido:displayEdition>	A description of the edition of the item. Used primarily for prints and other multiples.
<lido:displayEvent>	Display element for an event, corresponding to the following <lido:event> element.
<lido:displayMaterialsTech>	Display element for materials/technique, corresponding to the following <lido:materialsTech> element.
<lido:displayObject>	A free-text description of the item, corresponding to the following <lido:object> element.
<lido:displayObjectMeasurements>	Display element for one item measurement, corresponding to the following <lido:objectMeasurement> element.
<lido:displayPlace>	Display element for a place specification, corresponding to the following <lido:place> element.
<lido:displayState>	A description of the state of the item. Used primarily for prints and other multiples.
<lido:displaySubject>	A free-text description of the subject matter represented by/ in the item, corresponding to the following <lido:subject> element
<lido:extentSubject>	When there are multiple subjects, a term indicating the part of the item to which these subject terms apply.
<lido:genderActor>	The sex of the individual.
<lido:inscriptionTranscription>	Transcription of the inscription.
<lido:measurementType>	Indicates what kind of measurement is taken.
<lido:measurementUnit>	The unit of the measurement.

## Advice to implementers:

If the organisation wishes to have more than one language for their metadata in LIDO records they:

- Should be aware of how multilingual records will be supported by the target portal;
- Must be able to record multilingual metadata in their collections management system (in some way, e.g. by different field names or by parameter for a field), in order to facilitate the creation of the LIDO record.

## Display and indexing elements

Some information in a LIDO record can be represented as both 'display elements' and/or 'indexing elements'. The purpose of giving a display element is to have control over how a record appears in a portal. This assumes the portal accepts the indication for display. The indexing elements allow the portal to create machine-understandable indexes for search and retrieval.

Another reason for using a display element may be that the system exporting LIDO is not granular enough to export the full range of indexing elements. Therefore the choice of which to use may be outside the control of the implementer.

The allowable display elements in LIDO records are:

Element tag-name	Notes
<lido:displayActor>	<p>Display element for one actor, corresponding to the following &lt;lido:actor&gt; element.</p> <p>May include name, brief biographical information of the named actor, presented in syntax suitable for display to the end-user. If there is no known actor, make a reference to the presumed culture or nationality of the unknown actor.</p> <p>May be concatenated from the respective Actor element. The name should be in natural order, if possible, although inverted order is acceptable. Include nationality and life dates. For unknown actors, use e.g.: "unknown," "unknown Chinese," "Chinese," or "unknown 15th century Chinese."</p>
<lido:displayActorInRole>	<p>Display element for an actor coupled with its specific role, attribution, and extent of the actor's participation in the event being described corresponding to the following &lt;lido:actorInRole&gt; element.</p> <p>May include name, brief biographical information of the named actor, presented in syntax suitable for display to the end-user. If there is no known actor, make a reference to the presumed culture or nationality of the unknown actor.</p> <p>May be concatenated from the respective Actor element. The name should be in natural order, if possible, although inverted order is acceptable. Include nationality and life dates. For unknown actors, use e.g.: "unknown," "unknown Chinese," "Chinese," or "unknown 15th century Chinese."</p>

Element tag-name	Notes
<lido:displayDate>	<p>Display element for a date specification, corresponding to the following &lt;lido:date&gt; element.</p> <p>It is a concise description of the date, presented in syntax suitable for display to the end-user and including any necessary indications of uncertainty, ambiguity, and nuance.</p>
<lido:displayEdition>	<p>A description of the edition of the item. Used primarily for prints and other multiples.</p> <p>Formulated according to rules. For edition, include impression number, edition size, and edition number, or edition name, as appropriate.</p>
<lido:displayEvent>	<p>Display element for an event, corresponding to the following &lt;lido:event&gt; element.</p>
<lido:displayMaterialsTech>	<p>Display element for materials/technique, corresponding to the following &lt;lido:materialsTech&gt; element.</p> <p>It is presented in syntax suitable for display to the end-user and including any necessary indications of uncertainty, ambiguity, and nuance.</p>
<lido:displayObject>	<p>A free-text description of the object, corresponding to the following &lt;lido:object&gt; element</p>
<lido:displayObjectMeasurements>	<p>Display element for one object measurement, corresponding to the following &lt;lido:objectMeasurement&gt; element.</p>
<lido:displayPlace>	<p>Display element for a place specification, corresponding to the following &lt;lido:place&gt; element.</p>
<lido:displayState>	<p>A description of the state of the item. Used primarily for prints and other multiples.</p> <p>Formulated according to rules. For State, include state identification and known states, as appropriate.</p>
<lido:displaySubject>	<p>A free-text description of the subject matter represented by or in the item (object/work), corresponding to the following &lt;lido:subject&gt; element</p>

### Advice to implementers:

If the organisation wishes to give display elements in their LIDO records they:

- Should be aware how display elements will be supported by the target portal, particularly together with the indexing elements;
- Must be able to record display information in their collections management system (in some way, e.g. by different field names or by flag for a field), in order to facilitate the creation of the LIDO record.
- May be compelled to give only display elements if their collections management is not of sufficient granularity to support indexing elements.

### *Repeatable elements (not for language)*

The following LIDO elements are repeatable for reasons other than for language variants only:

Element	Reason for repeating
<lido:actorID>	More than one ID for an actor.
<lido:attributionQualifierActor>	More than one qualifier for uncertain attribution (e.g. attributed to, studio of, workshop of, and manner of).
<lido:classification>	Item is assigned to more than one classification.
<lido:conceptID>	More than one ID for a term.
<lido:culture>	More than one culture associated with an event.
<lido:descriptiveNoteID>	More than one ID for a descriptive note.
<lido:eventActor>	More than one actor taking part in an event.
<lido:eventDescriptionSet>	More than one description for an event.
<lido:eventID>	More than one ID for an event.
<lido:eventMaterialsTech>	More than one set of materials and/or techniques associated with an event, related to different parts of the item.
<lido:eventMethod>	More than one method for an event.
<lido:eventName>	More than one name for an event.
<lido:eventPlace>	An event took place in more than one place.
<lido:eventSet>	More than one event for an item.
<lido:extentActor>	An actor has more than one extent in their participation in an event (e.g. design, execution, and with additions by).
<lido:extentMaterialsTech>	A set of materials and/or techniques is used in more than one part of an item.
<lido:extentMeasurements>	The measurement or the technical attributes apply to more than one part of an item.
<lido:formatMeasurements>	More than one configuration of an item.
<lido:inscriptionDescription>	More than one inscription description.
<lido:inscriptions>	More than one inscription.

Element	Reason for repeating
<lido:legalBodyID>	More than one ID for a legal body (person or organisation).
<lido:legalBodyName>	More than one name for a legal body (person or organisation).
<lido:legalBodyWeblink>	More than one link to a website with information about a legal body (person or organisation).
<lido:lido>	Many records in one LIDO XML file.
<lido:lidoRecID>	More than one ID for a LIDO record.
<lido:measurementsSet>	More than one measurement set.
<lido:nameActorSet>	More than one name for an actor.
<lido:namePlaceSet>	More than one name for the same place, e.g. today's and historical names.
<lido:nationalityActor>	Actor has more than one nationality.
<lido:objectDescriptionSet>	More than one description for the item.
<lido:objectID>	More than one ID for an item related to the item being described in a LIDO record.
<lido:objectMeasurementsSet>	Multiple parts of the item are measured.
<lido:objectNote>	More than one note.
<lido:objectPublishedID>	More than one published ID for an item.
<lido:objectWebResource>	More than one web resource.
<lido:objectWorkType>	More than one object/work type for an item.
<lido:partOfPlace>	More than one larger place entity to be referenced.
<lido:periodName>	Only for indicating an earliest and latest period delimiting the event.
<lido:placeClassification>	A place is classified as more than one type of place
<lido:placeID>	More than one ID for a place.
<lido:qualifierMeasurements>	More than one qualifier for a measurement.
<lido:recordID>	More than one ID for the record describing the item in the contributor's local system.
<lido:recordInfoID>	More than one ID for a metadata record about the item.
<lido:recordInfoLink>	More than one link to a metadata record about the item.



Element	Reason for repeating
<lido:recordInfoSet>	More than one set of metadata for a metadata record about the item.
<lido:recordMetadataDate>	More than one date for the metadata record.
<lido:recordRights>	More than one right governing the use of the information in a LIDO record.
<lido:recordSource>	More than one source for information in a LIDO record.
<lido:relatedEventSet>	More than one event related to an event being described in a LIDO record.
<lido:relatedWorkSet>	More than one item related to the item being described in a LIDO record.
<lido:repositorySet>	More than one repository, e.g. current and/or multiple former repositories are given for the item.
<lido:resourceDescription>	More than one description for a resource.
<lido:resourceMeasurementsSet>	More than one measurement or technical attribute for a resource.
<lido:resourcePerspective>	More than one view shown in a resource.
<lido:resourceRelType>	More than one relationship between a resource and the item being described in a LIDO record.
<lido:resourceRepresentation>	For variants representing the same resource, e.g. different sizes of the same image, or a thumbnail representing an audio or video file and the digital audio or video file itself.
<lido:resourceSet>	More than one resource for the item being described in a LIDO record.
<lido:resourceSource>	More than one source for a resource for the item being described in a LIDO record.
<lido:rightsHolder>	More than one holder for a right controlling the use of the item, a surrogate, or the metadata record of the item.
<lido:rightsResource>	More than one right controlling the use of a resource for the item being described in a LIDO record.
<lido:rightsType>	More than one type for a right controlling the use of the item, a surrogate, or the metadata record of the item.
<lido:rightsWorkSet>	More than one right controlling the use of the item.
<lido:roleActor>	More than one role for an actor in an event.
<lido:roleInEvent>	More than one role played by the item in an event.

Element	Reason for repeating
<lido:scaleMeasurements>	More than one ratio between the size of the representation of a thing and that thing (e.g., the size of the drawing on a building and building itself).
<lido:shapeMeasurements>	More than one shape for an item being described in a LIDO record.
<lido:sourceAppellation>	More than one source for an appellation.
<lido:sourceDescriptiveNote>	More than one source for a description.
<lido:sourceMaterialsTech>	More than one source for the information about a material or technique used in a event.
<lido:sourceStateEdition>	More than one source for a state or edition information.
<lido:subjectActor>	More than one actor (person or organisation) depicted in a visual item or as subject of an item.
<lido:subjectConcept>	More than one concept depicted in a visual item or as subject of an item.
<lido:subjectDate>	More than one date depicted in a visual item or as subject of an item.
<lido:subjectEvent>	More than one event depicted in a visual item or as subject of an item.
<lido:subjectObject>	More than one item depicted in a visual item or as subject of an item.
<lido:subjectPlace>	More than one place depicted in a visual item or as subject of an item.
<lido:subjectSet>	If an object / work has multiple parts or otherwise has separate, multiple subjects, repeat this element and use Extent Subject in the Subject element. This element may also be repeated to distinguish between subjects that reflect what an object / work is *of* (description and identification) from what it is *about* (interpretation).
<lido:term>	For providing preferred and alternative terms for a concept.
<lido:termMaterialsTech>	More than one material or technique used for a part of the object in a event.
<lido:thingPresent>	More than one physical item present in an event, other than the item being described in a LIDO record.
<lido:titleSet>	More than one title for the item being described in a LIDO record.
<lido:workID>	More than one ID for the item being described.

## Advice to implementers:

If the organisation wishes to repeat elements in their LIDO records they:

- Should be aware how repeated elements will be supported by the target portal, particularly their ordering;
- Must be able to record repeating fields in their collections management system, in order to facilitate the creation of the LIDO record.

### *Ordering of repeatable elements*

It is optional to give an order, in a LIDO record, to some of the elements that are repeated, e.g. the order of more than one actor in a production event or more than one material.

This is enabled by adding a `lido:sortorder` attribute with appropriate data values:

- For the 1st element: `lido:sortorder="1"`
- For the 2nd element: `lido:sortorder="2"`
- For the 3rd element: `lido:sortorder="3"`
- [and so on] ...

The elements where the `lido:sortorder` attribute is allowed are:

<ul style="list-style-type: none"><li>• <code>&lt;classification&gt;</code></li><li>• <code>&lt;culture&gt;</code></li><li>• <code>&lt;eventActor&gt;</code></li><li>• <code>&lt;eventDescriptionSet&gt;</code></li><li>• <code>&lt;eventMaterialsTech&gt;</code></li><li>• <code>&lt;eventMethod&gt;</code></li><li>• <code>&lt;eventPlace&gt;</code></li><li>• <code>&lt;eventSet&gt;</code></li><li>• <code>&lt;extentMeasurements&gt;</code></li><li>• <code>&lt;formatMeasurements&gt;</code></li><li>• <code>&lt;inscriptionDescription&gt;</code></li><li>• <code>&lt;inscriptions&gt;</code></li><li>• <code>&lt;lido&gt;</code></li><li>• <code>&lt;measurementsSet&gt;</code></li><li>• <code>&lt;nationalityActor&gt;</code></li></ul>	<ul style="list-style-type: none"><li>• <code>&lt;objectDescriptionSet&gt;</code></li><li>• <code>&lt;objectMeasurementsSet&gt;</code></li><li>• <code>&lt;objectWorkType&gt;</code></li><li>• <code>&lt;periodName&gt;</code></li><li>• <code>&lt;qualifierMeasurements&gt;</code></li><li>• <code>&lt;recordSource&gt;</code></li><li>• <code>&lt;recordRights&gt;</code></li><li>• <code>&lt;relatedEventSet&gt;</code></li><li>• <code>&lt;relatedWorkSet&gt;</code></li><li>• <code>&lt;repositorySet&gt;</code></li><li>• <code>&lt;resourceDescription&gt;</code></li><li>• <code>&lt;resourceSource&gt;</code></li><li>• <code>&lt;resourceSet&gt;</code></li><li>• <code>&lt;rightsHolder&gt;</code></li><li>• <code>&lt;rightsResource&gt;</code></li></ul>	<ul style="list-style-type: none"><li>• <code>&lt;rightsWorkSet&gt;</code></li><li>• <code>&lt;roleActor&gt;</code></li><li>• <code>&lt;scaleMeasurements&gt;</code></li><li>• <code>&lt;shapeMeasurements&gt;</code></li><li>• <code>&lt;subjectActor&gt;</code></li><li>• <code>&lt;subjectConcept&gt;</code></li><li>• <code>&lt;subjectDate&gt;</code></li><li>• <code>&lt;subjectEvent&gt;</code></li><li>• <code>&lt;subjectObject&gt;</code></li><li>• <code>&lt;subjectPlace&gt;</code></li><li>• <code>&lt;subjectSet&gt;</code></li><li>• <code>&lt;termMaterialsTech&gt;</code></li><li>• <code>&lt;thingPresent&gt;</code></li><li>• <code>&lt;titleSet&gt;</code></li><li>• <code>&lt;workID&gt;</code></li></ul>
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## Advice to implementers:

If the organisation wishes to give an order to some of their metadata in LIDO records they:

- Should be aware if their order will be supported by the target portal;
- Must be able to record that order in their collections management system (in some way, e.g. by different field names or by parameter for a field), in order to facilitate the creation of the LIDO record.

### Preference of repeatable elements

It is optional to give preference, in a LIDO record, to some of the elements that are repeated. This is enabled by adding a **lido:pref** attribute with appropriate data values:

- For preferred elements: **lido:pref="preferred"**
- For non-preferred elements: **lido:pref="alternative"**

The elements where the **lido:pref** attribute is allowed are appellations, identifiers, web links, and term:

<ul style="list-style-type: none"><li>• &lt;actorID&gt;</li><li>• &lt;appellationValue&gt;</li><li>• &lt;conceptID&gt;</li><li>• &lt;descriptiveNoteID&gt;</li><li>• &lt;eventID&gt;</li><li>• &lt;legalBodyID&gt;</li></ul>	<ul style="list-style-type: none"><li>• &lt;legalBodyWeblink&gt;</li><li>• &lt;lidoRecID&gt;</li><li>• &lt;objectID&gt;</li><li>• &lt;objectPublishedID&gt;</li><li>• &lt;objectWebResource&gt;</li><li>• &lt;placeID&gt;</li></ul>	<ul style="list-style-type: none"><li>• &lt;recordID&gt;</li><li>• &lt;recordInfoID&gt;</li><li>• &lt;recordInfoLink&gt;</li><li>• &lt;resourceID&gt;</li><li>• &lt;term&gt;</li></ul>
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### Advice to implementers:

<p>If the organisation wishes give preference to some of their metadata in LIDO records they:</p> <ul style="list-style-type: none"><li>• Should be aware if their preference will be supported by the target portal;</li><li>• Must be able to record that preference in their collections management system (in some way, e.g. by different field names or by flag for a field), in order to facilitate the creation of the LIDO record.</li></ul>
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### Events

The use of events is one of the most important aspects of LIDO. The event-oriented approach, e.g. representing the history of an item as a series of events, enables the use of the same elements for describing a large part of the information associated with an item. This fundamental design principle of LIDO is based on the conceptual reference model for cultural heritage documentation, the CIDOC CRM (ISO 21127).

As part of the development of LIDO a terminology of standard events was created.

**17** The term given is in English, however the terminology is multilingual.

Event term <sup>17</sup> [alternative term(s)]	Definition	URI (<lido:conceptID>)
<i>Acquisition</i>	The establishment of legal ownership of items, by an organisation of items, e.g. by selection, ordering, purchase, gift, or exchange.	<a href="http://terminology.lido-schema.org/lido00001">http://terminology.lido-schema.org/lido00001</a>

Event term [alternative term(s)]	Definition	URI (<lido:conceptID>)
<i>Collecting</i> [Collection Event; Field Collection; Collection]	Gathering objects in order to retain them.	<a href="http://terminology.lido-schema.org/lido00010">http://terminology.lido-schema.org/lido00010</a>
<i>Commissioning</i> [Order]	The authorisation to perform a task or duty, including the creation of new items.	<a href="http://terminology.lido-schema.org/lido00226">http://terminology.lido-schema.org/lido00226</a>
<i>Creation</i> [Conception; Create]	The creation of conceptual or non-material items, such as legends, poems, texts, music, images, movies, laws, and types. <b>Do not use for physical items</b> (use <i>Production</i> for these).	<a href="http://terminology.lido-schema.org/lido00012">http://terminology.lido-schema.org/lido00012</a>
<i>Designing</i> [Design]	The creation of conceptual schemes for the organisation or the appearance of items.	<a href="http://terminology.lido-schema.org/lido00224">http://terminology.lido-schema.org/lido00224</a>
<i>Destruction</i>	The end of existence of an item.	<a href="http://terminology.lido-schema.org/lido00026">http://terminology.lido-schema.org/lido00026</a>
<i>Event</i>	A general event, being the top concept in the hierarchy of event types.	<a href="http://terminology.lido-schema.org/lido00003">http://terminology.lido-schema.org/lido00003</a>
<i>Excavation</i>	The digging or other uncovering of evidence of past life, including artefacts, fossils, frozen remains, or other preserved evidence. Specifically, refers to the systematic digging and documentation of an archaeological site.	<a href="http://terminology.lido-schema.org/lido00033">http://terminology.lido-schema.org/lido00033</a>
<i>Exhibition</i>	The display of items, for a limited time, in a specific location.	<a href="http://terminology.lido-schema.org/lido00225">http://terminology.lido-schema.org/lido00225</a>
<i>Finding</i> [Find]	The discovery of an item that has been lost or forgotten for a period of time. Used for discovery such as: metal detector, a farmer on his land, and other forms of accidental discovery. Should also be used when the conditions of discovery are either unknown or uncertain.	<a href="http://terminology.lido-schema.org/lido00002">http://terminology.lido-schema.org/lido00002</a>
<i>Loss</i>	The removal of an item from a collection. Examples include: theft, destruction, or poor documentation. These methods of loss were not intended by the organisation holding the item,	<a href="http://terminology.lido-schema.org/lido00009">http://terminology.lido-schema.org/lido00009</a>

Event term [alternative term(s)]	Definition	URI (<lido:conceptID>)
<i>Modification</i>	The change or transition of an item's physical state by an intentional intervention.	<a href="http://terminology.lido-schema.org/lido00006">http://terminology.lido-schema.org/lido00006</a>
<i>Move</i>	The change of physical location of an item.	<a href="http://terminology.lido-schema.org/lido00223">http://terminology.lido-schema.org/lido00223</a>
<i>Part addition</i>	The modification of a physical item by it being increased, enlarged, or augmented by the addition of a part.	<a href="http://terminology.lido-schema.org/lido00008">http://terminology.lido-schema.org/lido00008</a>
<i>Part Removal</i>	The modification of a physical item by it being decreased by the removal of a part.	<a href="http://terminology.lido-schema.org/lido00021">http://terminology.lido-schema.org/lido00021</a>
<i>Performance</i>	Activities that follow the directions of a performance plan.	<a href="http://terminology.lido-schema.org/lido00030">http://terminology.lido-schema.org/lido00030</a>
<i>Planning</i>	Determining objectives and outlining, or arranging, the procedures and resources for attaining them.	<a href="http://terminology.lido-schema.org/lido00032">http://terminology.lido-schema.org/lido00032</a>
<i>Production</i>	The creation of one or more physical items. <b>Do not use for conceptual and non-material items</b> (use <i>Creation</i> for these).	<a href="http://terminology.lido-schema.org/lido00007">http://terminology.lido-schema.org/lido00007</a>
<i>Provenance</i>	The history of the ownership and transmission of an item, including its previous locations.	<a href="http://terminology.lido-schema.org/lido00227">http://terminology.lido-schema.org/lido00227</a>
<i>Publication</i>	Documents distributed to the public by sale or other transfer of ownership, or by rental, lease, or lending.	<a href="http://terminology.lido-schema.org/lido00228">http://terminology.lido-schema.org/lido00228</a>
<i>Restoration</i>	The process of making changes to an item or its structure so that it will closely approximate its original state or a state at a specific time in its history.	<a href="http://terminology.lido-schema.org/lido00034">http://terminology.lido-schema.org/lido00034</a>
<i>Transformation</i>	The event that result in the simultaneous destruction of one or more items and the creation of one or more other items that preserves recognizable substance from original(s) but has fundamentally different nature and identity. Examples include: the repurposing of buildings, the taxidermy of natural science specimens, and the creation of a mummy from a human body.	<a href="http://terminology.lido-schema.org/lido00029">http://terminology.lido-schema.org/lido00029</a>

Event term [alternative term(s)]	Definition	URI (<lido:conceptID>)
<i>Type assignment</i>	The act of classifying items, such as: objects, specimens, people, actions and concepts.	<a href="http://terminology.lido-schema.org/lido00023">http://terminology.lido-schema.org/lido00023</a>
<i>Type creation</i>	The act of adding a value to a classification of, for example, objects, specimens, people, actions and concepts.	<a href="http://terminology.lido-schema.org/lido00013">http://terminology.lido-schema.org/lido00013</a>
<i>Use</i>	Employing, occupying, applying or exploiting the value of item.	<a href="http://terminology.lido-schema.org/lido00011">http://terminology.lido-schema.org/lido00011</a>

### Object classification area

This area of a LIDO record includes all classifying information about an item. It is divided into two areas:

#### Object work type

Advice to implementers:

It is **mandatory** to provide an object/work type in a LIDO record. Every LIDO record must have a term in this element. It is recommended that the term comes from a controlled vocabulary. Include a URI if the term has been published online.

The organisation **must** ensure that it has this information in its collections management system, and should be aware where it is held in that system in order to facilitate the creation of the LIDO record.

In the LIDO record:

SPECTRUM Unit	Notes	LIDO elements path
		<pre>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt;   &lt;lido:objectClassificationWrap&gt;     &lt;lido:objectWorkTypeWrap&gt;</pre>
Object name	Object type. Optionally there can be <lido:conceptID> element containing a published URI for term.	<pre>&lt;lido:objectWorkType&gt;   &lt;lido:conceptID lido:type="URI"&gt;[Published URI for term] &lt;/lido:conceptID&gt;   &lt;lido:term&gt;[Item type]&lt;/lido:term&gt; &lt;/lido:objectWorkType&gt;</pre>
	Without published URI for term.	<pre>&lt;lido:objectWorkType&gt;   &lt;lido:term&gt;[Item type]&lt;/lido:term&gt; &lt;/lido:objectWorkType&gt;</pre>

## Classification

### Advice to implementers:

An item can be classified in many ways (e.g. style, form, age, and phase), all of which can be represented in a LIDO record. It is also possible for multiple classifications in the same type (e.g. many colours).

It is **recommended** that the term in a LIDO Classification comes from a controlled vocabulary. Include a URI if the term has been published online.

The organisation should be aware where Classification information is held in its collections management system in order to facilitate the creation of the LIDO record.

The general form of the classification area of a LIDO record is:

SPECTRUM Unit	Notes	LIDO elements path
		<code>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt; &lt;lido:objectClassificationWrap&gt; [...] &lt;lido:classificationWrap&gt;</code>
[see below]	Optionally there can be a <code>&lt;lido:conceptID&gt;</code> element containing a published URI for the term.	<code>&lt;lido:classification lido:type="[Classification]"&gt; &lt;lido:conceptID lido:type="URI"&gt;[Published URI for the term] &lt;/lido:conceptID&gt; &lt;lido:term&gt;[Term in classification]&lt;/lido:term&gt; &lt;/lido:classification&gt;</code>

Below are suggested classifications based on the standard *MDA cards*:

Item type	Suggested classifications	SPECTRUM unit	Notes
Archaeology	Style	<i>Style</i>	
	Form	<i>Form</i>	
Costume	Style	<i>Style</i>	
	Form	<i>Form</i>	
	Sex	<i>Sex</i>	Gender of the wearer.
	Age	<i>Age</i>	In the human sense.
	Status	<i>Status</i>	A statement of the standing of an item in relation to others in existence, e.g.: copy and forgery.



Item type	Suggested classifications	SPECTRUM unit	Notes
Decorative art	Style	<i>Style</i>	
	Form	<i>Form</i>	
	Status	<i>Status</i>	A statement of the standing of an item in relation to others in existence, e.g.: copy and forgery.
Ethnography/ Folk Life	Style	<i>Style</i>	
	Form	<i>Form</i>	
	[other]	[not applicable]	See other types for possible classifications based on the type of item (e.g. classifications of costume).
Fine Art	Style	<i>Style</i>	
	Form	<i>Form</i>	
	Status	<i>Status</i>	A statement of the standing of an item in relation to others in existence, e.g.: copy and forgery.
Geology Specimen	Form	<i>Form</i>	In the geological sense.
	Age	<i>Age</i>	In the geological sense.
	Complex	<i>Geological complex name</i>	
History Artefact	Style	<i>Style</i>	
	Form	<i>Form</i>	
	[other]	[not applicable]	See other types for possible classifications based on the type of item (e.g. costume).
Military Artefact	Style	<i>Style</i>	
	Form	<i>Form</i>	
	[other]	[not applicable]	See other types for possible classifications based on the type of item (e.g. costume).
Mineral Specimen	Form	<i>Form</i>	In the geological sense.
	Age	<i>Age</i>	In the geological sense.
	Complex	<i>Geological complex name</i>	

Item type	Suggested classifications	SPECTRUM unit	Notes
Museum Object	Style	<i>Style</i>	
	Form	<i>Form</i>	
	[other]	[not applicable]	See other types for possible classifications based on the type of item (e.g. costume).
Musical Instrument	Form	<i>Form</i>	
Natural History	Form	<i>Form</i>	In a natural science sense
	Sex	<i>Sex</i>	
	Age	<i>Age</i>	
	Phase	<i>Phase</i>	Of development (e.g. larva)
	Status		A statement of the standing of a natural science specimen in relation to others in existence, e.g.: type, paratype, and holotype.
Numismatics	Form	<i>Form</i>	
Photograph	Form	<i>Form</i>	
Pictorial Representation	Form	<i>Form</i>	
Scientific Instrument	Form	<i>Form</i>	
Technology	Form	<i>Form</i>	
Texts	Language		Use standard language codes. <b>Do not just use for language of the record.</b> The [code] is the standard ISO code for the language and not the name, e.g. “en” not “English”.  Optionally there can be <lido:conceptID> element containing a published URI for term.
	Status	<i>Status</i>	A statement of the standing of an item in relation to others in existence, e.g.: copy and forgery.

Another possible classification is that based on how the holding organisation structures its collection, e.g.:

- Fine art;
- Decorative art;
- Prints and drawings;
- Natural science;
- Numismatics;
- Local history.

*Object identification area*

**Title**

Advice to implementers:

It is **mandatory** to provide a title in a LIDO record. A reason for this is that this metadata in a LIDO record is most often used to label the item in the target portal.

The organisation **must** ensure that it has Title information in its collections management system, where this exists, and should be aware where it is held that system in order to facilitate the creation of the LIDO record.

However not all types of item have a title, therefore in those cases it will be necessary to insert the data from the `<lido:term>` element within the, mandatory, `<lido:objectWorkType>` element.

It should also be aware of which items do not have Titles in order to use the Object/work type information instead

In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
		<code>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt;</code> <code>[...]</code> <code>&lt;lido:objectIdentificationWrap&gt;</code> <code>&lt;lido:titleWrap&gt;</code>
<i>Title</i> <b>[or]</b> <i>Object name</i>	<i>Object name</i> should be mapped if there is no <i>Title</i>	<code>&lt;lido:titleSet&gt;</code> <code>&lt;lido:appellationValue&gt;</code> [Title or Object name] <code>&lt;/lido:appellationValue&gt;</code> <code>&lt;/lido:titleSet&gt;</code>

The issue with using just Object name is that there is a danger that lots of records will have the same ‘title’ (e.g. coin, vase, or scraper). Implementers may consider creating a short description in their collections management system which could be used in LIDO, or try to create one by concatenating a title from other fields in their database, fields chosen should help in identification.

There is no special advice for different types of item.

### Inscriptions

Inscriptions are textual or non-textual marks inscribed on an item, e.g. signatures and maker’s marks. Do not confuse inscriptions with textual and visual content which is dealt with under the Object relation area (see below).

Advice to implementers:

An item can have many different inscriptions and marks.

The organisation should be aware where *Inscriptions* information is held in its collections management system in order to facilitate the creation of the LIDO record.

It is **recommended** that inscriptions are included in a LIDO record where they occur associated with the item.

In a LIDO record is:

SPECTRUM unit	Notes	LIDO elements path
		<lido:descriptiveMetadata xml:lang="[code]"> [...] <lido:objectIdentificationWrap> [...] <lido:inscriptionsWrap>
<i>Inscription content</i>	The text inscribed as part of the decoration or construction of an item recorded in the original language.	<lido:inscriptions> <lido:inscriptionTranscription>[Inscription content] </lido:inscriptionTranscription> </lido:inscriptions>
<i>Inscription description</i>	A description of non-textual marks inscribed on an item.	<lido:inscriptions> <lido:inscriptionDescription> <lido:descriptiveNoteValue>[Inscription description] </lido:descriptiveNoteValue> </lido:inscriptionDescription> </lido:inscriptions>

## Repository

### Advice to implementers:

Information about the Repository holding the item is unlikely to be held in an organisation's collections management system. However it is possible that it is.

Therefore the organisation should be aware if, or where, *Repository* information is held in its collections management system.

If it is in the system then this will facilitate the creation of the LIDO record. If it is not the organisation should be able to add the information using their LIDO creation mechanism.

It is **recommended** that at least the current *Repository name* appears in the LIDO. If *Repository name* is not applicable *Repository location* should appear instead (e.g. for architecture). In an export to a portal the information may be required.

### The name of the repository in a LIDO record is:

SPECTRUM unit	Notes	LIDO elements path
		<code>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt;</code> [...] <code>&lt;lido:objectIdentificationWrap&gt;</code> [...] <code>&lt;lido:repositoryWrap&gt;</code>
[Where the item is held]  [Not a SPECTRUM Unit of information]		<code>&lt;lido:repositorySet lido:type="current"&gt;</code> <code>&lt;lido:repositoryName&gt;</code> <code>&lt;lido:legalBodyName&gt;</code> <code>&lt;lido:appellationValue&gt;</code> [Repository name] <code>&lt;/lido:appellationValue&gt;</code> <code>&lt;/lido:legalBodyName&gt;</code> <code>&lt;/lido:repositoryName&gt;</code> <code>&lt;/lido:repositorySet&gt;</code>

## Display and edition

### Advice to implementers:

Prints and other types of multiple can have optional *Display state and edition* information.

The organisation should be aware where Display state and edition information is held in its collections management system in order to facilitate the creation of the LIDO record.

It is recommended that it is exported in the types of item where it does occur.

In a LIDO record:

SPECTRUM unit	Notes	LIDO elements path
		<code>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt;</code> [...] <code>&lt;lido:objectIdentificationWrap&gt;</code> [...] <code>&lt;lido:displayStateEditionWrap&gt;</code>
<i>Edition number</i>	A number assigned to a group of items produced at the same time by the maker.	<code>&lt;lido:displayEdition xml:label="Edition number"&gt;</code> [Edition number] <code>&lt;/lido:displayEdition&gt;</code>
<i>Copy number</i>	A number assigned to an item by the maker within a limited edition or special run.	<code>&lt;lido:displayEdition xml:label="Copy number"&gt;</code> [Copy number] <code>&lt;/lido:displayEdition&gt;</code>

### Description

Advice to implementers:

An item can have many different types of description. These might concern different aspects of the item or be aimed at different audiences. The organisation should be aware where all the different types of *Description* information are held in its collections management system in order to facilitate the creation of the LIDO record. It is **recommended** that at least a brief description should be in the LIDO record. However the description in the record should take into account, if possible, the requirements of the target portal, and its audience.

In a LIDO record:

SPECTRUM unit	Notes	LIDO elements path
		<code>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt;</code> [...] <code>&lt;lido:objectIdentificationWrap&gt;</code> [...] <code>&lt;lido:objectDescriptionWrap&gt;</code>
<i>Brief description</i>	Should be detailed enough to properly describe the item.	<code>&lt;lido:objectDescriptionSet&gt;</code> <code>&lt;lido:descriptiveNoteValue&gt;</code> [Brief description] <code>&lt;/lido:descriptiveNoteValue&gt;</code> <code>&lt;/lido:objectDescriptionSet&gt;</code>

There may be other descriptive texts associated with the item:

SPECTRUM unit	Notes	LIDO elements path
<i>Comments</i>	Any comments about the item, e.g. 'The identification was thought to be wrong by Dr H Jones who visited in 1992.'	<pre> &lt;lido:objectDescriptionSet   lido:type="Comments"&gt;   &lt;lido:descriptiveNoteValue&gt;[Comments] &lt;/lido:descriptiveNoteValue&gt; &lt;/lido:objectDescriptionSet&gt; </pre>
<i>Distinguishing features</i>	Any distinguishing features of the item, e.g. 'Monogram on base, one handle replaced'.	<pre> &lt;lido:objectDescriptionSet   lido:type="Distinguishing features"&gt;   &lt;lido:descriptiveNoteValue&gt;[Distinguishing     features] &lt;/lido:descriptiveNoteValue&gt; &lt;/lido:objectDescriptionSet&gt; </pre>
<i>Physical description</i>	A physical description of the item	<pre> &lt;lido:objectDescriptionSet lido:type="Physical   description"&gt;   &lt;lido:descriptiveNoteValue&gt;[Physical     description] &lt;/lido:descriptiveNoteValue&gt; &lt;/lido:objectDescriptionSet&gt; </pre>

There is no special advice for different types of item.

## Measurements

Advice to implementers:

An item and its parts, where relevant, can have many measurements and non-measured technical attributes. The exact types of them are dependent on the perceived collections management and research needs of the item. They also vary with different types of item.

The organisation should be aware where *Measurement and technical attribute* information are held in its collections management system in order to facilitate the creation of the LIDO record.

It is **recommended** that measurements and/or technical attributes (where present), should be in the LIDO record. However if and how they appear in the record should take into account, if possible, the requirements of the target portal, and its audience. With some items it may be necessary to give measurements for parts of the item.

In a LIDO record the simplest way to map the dimension and technical attribute of an item is to have them as a single string:

SPECTRUM unit	Notes	LIDO elements path
		<pre>&lt;lido:descriptiveMetadata xml:lang="code"&gt; [...]</pre> <pre>&lt;lido:objectIdentificationWrap&gt; [...]</pre> <pre>&lt;lido:objectMeasurementsWrap&gt;</pre>
<i>Dimensions</i> [single string]	A simple string of all the dimensions, e.g. '3 cm x 2 cm x 10 cm'	<pre>&lt;lido:objectMeasurementsSet&gt; &lt;lido:displayObjectMeasurements&gt;[Dimensions (as a single string)]&lt;/lido:displayObjectMeasurements&gt; &lt;/lido:objectMeasurementsSet&gt;</pre>
<i>Technical attributes</i> [single string]		<pre>&lt;lido:objectMeasurementsSet&gt; &lt;lido:displayObjectMeasurements&gt;[Technical attributes (as a single string)]&lt;/lido:displayObjectMeasurements&gt; &lt;/lido:objectMeasurementsSet&gt;</pre>

In addition to mapping dimensions and technical attributes as a single string, in the **<lido:ObjectMeasurements>** element, it is possible to map them separately as triples of:

- **<lido:measurementType>** for Dimension or Technical attribute;
- **<lido:measurementValue>** for Dimension value or Technical attribute measurement;
- **<lido:measurementUnit>** for Dimension measurement unit or Technical attribute measurement unit.

If this second method is used **all the three sub-elements must be present**.

For Dimensions:

SPECTRUM unit	Notes	LIDO elements path
<i>Dimension</i>	The aspect of a part being measured, e.g. height, width, depth, diameter, weight	<pre>&lt;lido:objectMeasurementsSet&gt; &lt;lido:displayObjectMeasurements&gt;[Dimensions (as a single string)]&lt;/lido:displayObjectMeasurements&gt; &lt;lido:objectMeasurements&gt; &lt;lido:measurementsSet&gt; &lt;lido:measurementType&gt;[Dimension] &lt;/lido:measurementType&gt; &lt;lido:measurementValue&gt;[Dimension value] &lt;/lido:measurementValue&gt; &lt;lido:measurementUnit&gt;[Dimension measurement unit] &lt;/lido:measurementUnit&gt; &lt;/lido:measurementsSet&gt;</pre>
<i>Dimension value</i>	The numeric value of the measurement. Must be a number, e.g. 987, 0.234 or 0,234	
<i>Dimension measurement unit</i>	The unit of measurement being used, e.g. m, mm, inches, troy, grains	



### For Technical attributes:

SPECTRUM unit	Notes	LIDO elements path
<i>Technical attribute</i>	The name of a technical attribute possessed by an item which can be described and quantified, e.g. magnetic tape type, record speed.	<pre> &lt;lido:objectMeasurementsSet&gt;   &lt;lido:displayObjectMeasurements&gt;[Technical attributes (as a single string)]&lt;/lido:displayObjectMeasurements&gt;   &lt;lido:objectMeasurements&gt;     &lt;lido:measurementsSet&gt;       &lt;lido:measurementType&gt;[Technical attribute]       &lt;/lido:measurementType&gt;       &lt;lido:measurementValue&gt;[Technical attribute value]       &lt;/lido:measurementValue&gt;       &lt;lido:measurementUnit&gt;[Technical attribute measurement unit]&lt;/lido:measurementUnit&gt;     &lt;/lido:measurementsSet&gt;   &lt;/lido:objectMeasurementsSet&gt; </pre>
<i>Technical attribute measurement</i>	The measurement of a named Technical attribute, e.g. 78.	
<i>Technical attribute measurement unit</i>	The unit of measurement used when measuring a Technical attribute, e.g. rpm	

Repeat the `<lido:measurementsSet>` element and its triple sub-elements for multiple dimensions and technical attributes for the item (as a whole)

The only suggested measurements, and technical attributes, based on the standard MDA cards are:

Item type	Suggested measurements and technical attributes	Notes
Numismatics	Weight	
	Die axis	The rotation of the reverse die, in relation to the obverse die. May be expressed in degrees or hours as on a clock face.

For part of the item (e.g. base, frame, mount)

SPECTRUM unit	Notes	LIDO elements path
<i>Dimension measured part</i>	The part of an item measured, e.g. base, frame, mount	<code>&lt;lido:extentMeasurements&gt;</code> [Dimension measured part] <code>&lt;/lido:extentMeasurements&gt;</code>
<i>Dimension value qualifier</i>	E.g. approximate; to the nearest cm	<code>&lt;lido:qualifierMeasurements&gt;</code> [Dimension value qualifier] <code>&lt;/lido:qualifierMeasurements&gt;</code> <code>&lt;/lido:objectMeasurements&gt;</code> <code>&lt;/lido:objectMeasurementsSet&gt;</code>

Below are suggested parts of an item which should be measured, based on the standard MDA cards and, where appropriate, from projects (e.g. MIMO and DCA):

Item type	Suggested measures parts	Notes
<i>Fine Art</i>	Frame	
	Mount	
<i>Pictorial Representation</i>	Frame	
	Mount	

In addition the number of items, where there is more than one, is a relevant technical attribute in a collection of items being described together:

SPECTRUM unit	Notes	LIDO elements path
Number of objects	The number of items being described in the record. Suggest that only used when the number of items is more than one.	<code>&lt;lido:objectMeasurementsSet&gt;</code> <code>&lt;lido:objectMeasurements&gt;</code> <code>&lt;lido:measurementsSet&gt;</code> <code>&lt;lido:measurementType&gt;</code> Number of items <code>&lt;/lido:measurementType&gt;</code> <code>&lt;lido:measurementUnit&gt;</code> items <code>&lt;/lido:measurementUnit&gt;</code> <code>&lt;lido:measurementValue&gt;</code> [Number] <code>&lt;/lido:measurementValue&gt;</code> <code>&lt;/lido:measurementsSet&gt;</code> <code>&lt;/lido:objectMeasurements&gt;</code> <code>&lt;/lido:objectMeasurementsSet&gt;</code>

## **Event area**

### **Advice to implementers:**

An item and its parts, where relevant, can be associated with many events, during:

- Its bringing into being;
- After that but before it became part of an organisation;
- After it became part of an organisation.

The exact types of event associated with an item are dependent on the item itself and its historical context. Some information may be partial or entirely missing.

The organisation should be aware where *Event* information is held in its collections management system in order to facilitate the creation of the LIDO record.

It is **recommended** that at least, where information is present and relevant, to give that information in the LIDO record in the following events:

- Production (man-made items);
- Designing (designed items);
- Publication (published items);
- Collecting (those collected in some way);
- Excavation (those from archaeological excavations);
- Exhibition (those that have taken part in an exhibition).

Other events can be included if the organisation thinks they are relevant.

In the following sections we look at the major events that are likely to be found associated with an item.

## Production

This may include information on other ‘production-like’ events, like creation, designing, and publication.

SPECTRUM unit	Notes	LIDO elements path
		<code>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt;</code> <code>[...]</code> <code>&lt;lido:eventWrap&gt;</code>
Indication of the production event  [Not a SPECTRUM Unit of information]		<code>&lt;lido:eventSet&gt;</code> <code>&lt;lido:event&gt;</code> <code>&lt;lido:eventType&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;http://terminology.lido-schema.org/lido00007&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;Production&lt;/lido:term&gt;</code> <code>&lt;/lido:eventType&gt;</code>
<i>Object production person</i>	Who made the object	<code>&lt;lido:eventActor&gt;</code> <code>&lt;lido:actorInRole&gt;</code> <code>&lt;lido:actor&gt;</code> <code>&lt;lido:actorID lido:type="URI"&gt;[Published URI for person]</code> <code>&lt;/lido:actorID&gt;</code> <code>&lt;lido:nameActorSet&gt;</code> <code>&lt;lido:appellationValue&gt;[Object production person]</code> <code>&lt;/lido:appellationValue&gt;</code> <code>&lt;/lido:nameActorSet&gt;</code> <code>&lt;/lido:actor&gt;</code>
<i>Person's association</i>	Their role in the production event, e.g., manufacturer, artist, engraver, painter	<code>&lt;lido:roleActor&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;[Person's association]&lt;/lido:term&gt;</code> <code>&lt;/lido:roleActor&gt;</code> <code>&lt;/lido:actorInRole&gt;</code> <code>&lt;/lido:eventActor&gt;</code>
<i>Object production organisation</i>	Who made the object	<code>&lt;lido:eventActor&gt;</code> <code>&lt;lido:actorInRole&gt;</code> <code>&lt;lido:actor&gt;</code> <code>&lt;lido:actorID lido:type="URI"&gt;[Published URI for organisation]&lt;/lido:actorID&gt;</code> <code>&lt;lido:nameActorSet&gt;</code> <code>&lt;lido:appellationValue&gt;[Object production organisation]</code> <code>&lt;/lido:appellationValue&gt;</code> <code>&lt;/lido:nameActorSet&gt;</code> <code>&lt;/lido:actor&gt;</code>
<i>Organisation's association</i>	Their role in the production event, e.g., manufacturer, artist, engraver, painter	<code>&lt;lido:roleActor&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;[Organisation's association]&lt;/lido:term&gt;</code> <code>&lt;/lido:roleActor&gt;</code> <code>&lt;/lido:actorInRole&gt;</code> <code>&lt;/lido:eventActor&gt;</code>

SPECTRUM unit	Notes	LIDO elements path
<i>Object production date</i> [single string]	Free-text format, allows for expressing uncertainty of date information. It is recommended to provide a date range in Date – earliest/ single and Date - latest as they will be used for timelines for example.	<pre> &lt;lido:eventDate&gt; &lt;lido:displayDate&gt;[Object production date (as a single string)] &lt;/lido:displayDate&gt; </pre>
<i>Date - earliest/ single</i>	Recommended format is 'YYYY[-MM[-DD]]'.	<pre> &lt;lido:date&gt; &lt;lido:earliestDate&gt;[Date - earliest/single] &lt;/lido:earliestDate&gt; </pre>
<i>Date – latest</i> [best practice is to also have a earliest date]	Recommended format is 'YYYY[-MM[-DD]]'.	<pre> &lt;lido:latestDate&gt;[Date - latest]&lt;/lido:latestDate&gt; &lt;/lido:date&gt; &lt;/lido:eventDate&gt; </pre>
<i>Object production place</i>	Where the item was created	<pre> &lt;lido:eventPlace&gt; &lt;lido:place&gt; &lt;lido:placeID lido:type="URI"&gt;[Published URI for place] &lt;/lido:placeID&gt; &lt;lido:namePlaceSet&gt; &lt;lido:appellationValue&gt;[Object production place] &lt;/lido:appellationValue&gt; &lt;/lido:namePlaceSet&gt; &lt;lido:place&gt; &lt;/lido:eventPlace&gt; </pre>
<i>Material</i>	What the item is made of	<pre> &lt;lido:eventMaterialsTech&gt; &lt;lido:materialsTech&gt; &lt;lido:termMaterialsTech lido:type="material"&gt; &lt;lido:conceptID lido:type="URI"&gt;[Published URI for term] &lt;/lido:conceptID&gt; &lt;lido:term&gt;[Material]&lt;/lido:term&gt; &lt;/lido:termMaterialsTech&gt; </pre>

SPECTRUM unit	Notes	LIDO elements path
<i>Technique</i>	How the item was created	<pre> &lt;lido:termMaterialsTech lido:type="technique"&gt; &lt;lido:conceptID lido:type="URI"&gt;[Published URI for term] &lt;/lido:conceptID&gt; &lt;lido:term&gt;[Technique]&lt;/lido:term&gt; &lt;/lido:termMaterialsTech&gt; &lt;/lido:materialsTech&gt; &lt;/lido:eventMaterialsTech&gt; &lt;/lido:event&gt; &lt;/lido:eventSet&gt; </pre>

### Designing

This event might be recorded as part of the production event and not separately. In this case use production event only.

SPECTRUM	Notes	LIDO elements path
Indication of the designing event  [Not a SPECTRUM Unit of information]		<pre> &lt;lido:eventSet&gt; &lt;lido:event&gt; &lt;lido:eventType&gt; &lt;lido:conceptID lido:type="URI"&gt;http://terminology.lido- schema.org/lidoo0224&lt;/lido:conceptID&gt; &lt;lido:term&gt;Designing&lt;/lido:term&gt; &lt;/lido:eventType&gt; </pre>
[Item designing person]  [Not a SPECTRUM Unit of information]	Who designed the object	<pre> &lt;lido:eventActor&gt; &lt;lido:actorInRole&gt; &lt;lido:actor&gt; &lt;lido:actorID lido:type="URI"&gt;[Published URI for person] &lt;/lido:actorID&gt; &lt;lido:nameActorSet&gt; &lt;lido:appellationValue&gt;[Item designing person] &lt;/lido:appellationValue&gt; &lt;/lido:nameActorSet&gt; &lt;/lido:actor&gt; </pre>
<i>Person's association</i>	Their role in the designing event. Usually 'designer'	<pre> &lt;lido:roleActor&gt; &lt;lido:conceptID lido:type="URI"&gt;[Published URI for term] &lt;/lido:conceptID&gt; &lt;lido:term&gt;[Person's association]&lt;/lido:term&gt; &lt;/lido:roleActor&gt; &lt;/lido:actorInRole&gt; &lt;/lido:eventActor&gt; </pre>

SPECTRUM	Notes	LIDO elements path
[Item designing organisation - single string]  [Not a SPECTRUM Unit of information]	Who designed the object	<pre> &lt;lido:eventActor&gt;   &lt;lido:actorInRole&gt;     &lt;lido:actor&gt;       &lt;lido:actorID lido:type="URI"&gt;[Published URI for organisation]&lt;/lido:actorID&gt;       &lt;lido:nameActorSet&gt;         &lt;lido:appellationValue&gt;[Item designing organisation]         &lt;/lido:appellationValue&gt;       &lt;/lido:nameActorSet&gt;     &lt;/lido:actor&gt;   &lt;/lido:actorInRole&gt; &lt;/lido:eventActor&gt; </pre>
<i>Organisation's association</i>	Their role in the designing event. Usually 'designer'	<pre> &lt;lido:roleActor&gt;   &lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]   &lt;/lido:conceptID&gt;   &lt;lido:term&gt;[Organisation's association]&lt;/lido:term&gt; &lt;/lido:roleActor&gt; &lt;/lido:actorInRole&gt; &lt;/lido:eventActor&gt; </pre>
[Item designing date - single string]  [Not a SPECTRUM Unit of information]	Free-text format, allows for expressing uncertainty of date information. It is recommended to provide a date range in Date – earliest/ single and Date - latest as they will be used for timelines for example.	<pre> &lt;lido:eventDate&gt;   &lt;lido:displayDate&gt;[Item designing date (as a single string)] &lt;/lido:displayDate&gt; </pre>
<i>Date - earliest/ single</i>	Recommended format is 'YYYY[-MM[-DD]]'.	<pre> &lt;lido:date&gt;   &lt;lido:earliestDate&gt;[Date - earliest/single] &lt;/lido:earliestDate&gt; </pre>
<i>Date - latest</i>	Recommended format is 'YYYY[-MM[-DD]]'.	<pre>   &lt;lido:latestDate&gt;[Date - latest]&lt;/lido:latestDate&gt; &lt;/lido:date&gt; &lt;/lido:eventDate&gt; &lt;/lido:event&gt; &lt;/lido:eventSet&gt; </pre>

## Publication

This event might be recorded as part of the production event and not separately. In this case use production event only.

SPECTRUM	Notes	LIDO elements path
Indication of the publication event  [Not a SPECTRUM Unit of information]		<pre> &lt;lido:eventSet&gt;   &lt;lido:event&gt;     &lt;lido:eventType&gt;       &lt;lido:conceptID lido:type="URI"&gt;http://terminology.lido- schema.org/lido00228&lt;/lido:conceptID&gt;       &lt;lido:term&gt;Publication&lt;/lido:term&gt;     &lt;/lido:eventType&gt;           </pre>
[Item publication organisation]  [Not a SPECTRUM Unit of information]	Who published the item	<pre> &lt;lido:eventActor&gt;   &lt;lido:actorInRole&gt;     &lt;lido:actor&gt;       &lt;lido:actorID lido:type="URI"&gt;[Published URI for organisation]&lt;/lido:actorID&gt;       &lt;lido:nameActorSet&gt;         &lt;lido:appellationValue&gt;[Item publication organisation]         &lt;/lido:appellationValue&gt;       &lt;/lido:nameActorSet&gt;     &lt;/lido:actor&gt;           </pre>
<i>Organisation's association</i>	Their role in the publication event. Usually 'publisher'	<pre> &lt;lido:roleActor&gt;   &lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]   &lt;/lido:conceptID&gt;   &lt;lido:term&gt;[Organisation's association]&lt;/lido:term&gt;   &lt;/lido:roleActor&gt; &lt;/lido:actorInRole&gt; &lt;/lido:eventActor&gt;           </pre>
[Item publication date - single string]  [Not a SPECTRUM Unit of information]	Free-text format, allows for expressing uncertainty of date information. It is recommended to provide a date range in Date – earliest/ single and Date - latest as they will be used for timelines for example.	<pre> &lt;lido:eventDate&gt;   &lt;lido:displayDate&gt;[Item publication date (as a single string)]   &lt;/lido:displayDate&gt;           </pre>



SPECTRUM	Notes	LIDO elements path
<i>Date – earliest/ single</i>	Recommended format is 'YYYY[-MM[-DD]]'.	<lido:date> <lido:earliestDate>[Date - earliest/single] </lido:earliestDate>
<i>Date - latest</i>	Recommended format is 'YYYY[-MM[-DD]]'.	<lido:latestDate>[Date - latest]</lido:latestDate> </lido:date> </lido:eventDate>
[Item publication place]  [Not a SPECTRUM Unit of information]	Where the item was published	<lido:eventPlace> <lido:place> <lido:placeID lido:type="URI">[Published URI for place] </lido:placeID> <lido:namePlaceSet> <lido:appellationValue>[Item publication place] </lido:appellationValue> </lido:namePlaceSet> <lido:place> </lido:eventPlace> </lido:event> </lido:eventSet>

### Collecting

SPECTRUM	Notes	LIDO elements path
<i>Indication of the collection event</i>  [Not a SPECTRUM Unit of information]		<lido:eventSet> <lido:event> <lido:eventType> <lido:conceptID lido:type="URI">http://terminology.lido-schema.org/lido00010</lido:conceptID> <lido:term>Collecting</lido:term> </lido:eventType>
<i>Field collection person</i>	Who collected the item	<lido:eventActor> <lido:actorInRole> <lido:actor> <lido:actorID lido:type="URI">[Published URI for person] </lido:actorID> <lido:nameActorSet> <lido:appellationValue>[Object field collection person] </lido:appellationValue> </lido:nameActorSet> </lido:actor>
<i>Person's association</i>	Their role in the collection event. Usually 'Collector'	<lido:roleActor> <lido:conceptID lido:type="URI">[Published URI for term] </lido:conceptID> <lido:term>[Person's association]</lido:term> </lido:roleActor> </lido:actorInRole> </lido:eventActor>

SPECTRUM	Notes	LIDO elements path
<i>Field collection organisation</i>	Who collected the item	<pre> &lt;lido:eventActor&gt;   &lt;lido:actorInRole&gt;     &lt;lido:actor&gt;       &lt;lido:actorID lido:type="URI"&gt;[Published URI for organisation]&lt;/lido:actorID&gt;       &lt;lido:nameActorSet&gt;         &lt;lido:appellationValue&gt;[Object field collection organisation]&lt;/lido:appellationValue&gt;       &lt;/lido:nameActorSet&gt;     &lt;/lido:actor&gt; </pre>
<i>Organisation's association</i>	Their role in the collection event	<pre> &lt;lido:roleActor&gt;   &lt;lido:conceptID lido:type="URI"&gt;[Published URI for term] &lt;/lido:conceptID&gt;   &lt;lido:term&gt;[Organisation's association]&lt;/lido:term&gt; &lt;/lido:roleActor&gt; &lt;/lido:actorInRole&gt; &lt;/lido:eventActor&gt; </pre>
<i>Field collection date</i> [single string]	Free-text format, allows for expressing uncertainty of date information. It is recommended to provide a date range in Date – earliest/ single and Date - latest as they will be used for timelines for example.	<pre> &lt;lido:eventDate&gt;   &lt;lido:displayDate&gt;[Object field collection date (as a single string)] &lt;/lido:displayDate&gt; </pre>
<i>Date – earliest/ single</i>	Recommended format is: 'YYYY-MM-DD'	<pre> &lt;lido:date&gt;   &lt;lido:earliestDate&gt;[Collecting begin date]&lt;/lido:earliestDate&gt;   &lt;lido:latestDate&gt;[Collecting end date]&lt;/lido:latestDate&gt; &lt;/lido:date&gt; &lt;/lido:eventDate&gt; </pre>
<b>[Together with]</b>		
<i>Date - latest</i>	Recommended format is: 'YYYY-MM-DD'	
<i>Field collection place</i>	Where the item was collected	<pre> &lt;lido:eventPlace&gt;   &lt;lido:place&gt;     &lt;lido:placeID lido:type="URI"&gt;[Published URI for place]     &lt;/lido:placeID&gt;     &lt;lido:namePlaceSet&gt;       &lt;lido:appellationValue&gt;[Object field collection place]     &lt;/lido:appellationValue&gt;     &lt;/lido:namePlaceSet&gt;   &lt;/lido:place&gt; &lt;/lido:eventPlace&gt; &lt;/lido:event&gt; &lt;/lido:eventSet&gt; </pre>

## Exhibition

SPECTRUM	Notes	LIDO elements path
Indication of the exhibition event  [Not a SPECTRUM Unit of information]		<code>&lt;lido:eventSet&gt;</code> <code>&lt;lido:event&gt;</code> <code>&lt;lido:eventType&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;http://terminology.lido-schema.org/lido00225&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;Exhibition&lt;/lido:term&gt;</code> <code>&lt;/lido:eventType&gt;</code>
Exhibition title	The name of an exhibition, display or other type of event.	<code>&lt;lido:eventName&gt;</code> <code>&lt;lido:appellationValue&gt;[Exhibition title]&lt;/lido:appellationValue&gt;</code> <code>&lt;/lido:eventName&gt;</code>
Exhibition begin date	Recommended format is:  'YYYY-MM-DD'	<code>&lt;lido:eventDate&gt;</code> <code>&lt;lido:date&gt;</code> <code>&lt;lido:earliestDate&gt;[Exhibition begin date]&lt;/lido:earliestDate&gt;</code> <code>&lt;lido:latestDate&gt;[Exhibition end date]&lt;/lido:latestDate&gt;</code> <code>&lt;/lido:date&gt;</code> <code>&lt;/lido:eventDate&gt;</code> <code>&lt;/lido:event&gt;</code> <code>&lt;/lido:eventSet&gt;</code>
[Together with]		
Exhibition end date	Recommended format is:  'YYYY-MM-DD'	

## Object relation area

### Subject

Advice to implementers:

For visual and textual works and objects it is possible to describe the Subjects of their content in this area of a LIDO record. The exact types of Subjects content are dependent on the item itself.

The organisation should be aware where this information is held in its collections management system in order to facilitate the creation of the LIDO record.

It is recommended that where the information is present and relevant, to give that information in the LIDO record. It can include information about or depicting:

- Activities;
- Concepts;
- Dates;
- Periods;
- Events;
- Objects;
- Organisation;

- People;
- Persons;
- Places.

In addition, if the organisation thinks they are relevant, a general description of content and where on the item the content is located can be included.

In LIDO:

SPECTRUM unit	Notes	LIDO elements path
		<code>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt;</code> <code>[...]</code> <code>&lt;lido:objectRelationWrap&gt;</code> <code>&lt;lido:subjectWrap&gt;</code>
<i>Content - position</i>	The position of what shown or discussed on the item	<code>&lt;lido:subjectSet&gt;</code> <code>&lt;lido:subject&gt;</code> <code>&lt;lido:extentSubject&gt;[Content - position]&lt;/lido:extentSubject&gt;</code>
<i>Content - concept</i>	The concept shown or discussed, e.g. love, peace	<code>&lt;lido:subjectConcept&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term xml:label="Concept"&gt;[Content - concept]&lt;/lido:term&gt;</code> <code>&lt;/lido:subjectConcept&gt;</code>
<i>Content - people</i>	The cultural group shown or discussed	<code>&lt;lido:subjectConcept&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;[Content - people]&lt;/lido:term&gt;</code> <code>&lt;/lido:subjectConcept&gt;</code>
<i>Content - [period]</i>	A period shown or discussed	<code>&lt;lido:subjectConcept&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;[Content - period]&lt;/lido:term&gt;</code> <code>&lt;/lido:subjectConcept&gt;</code>
<i>Content - activity</i>	The activity shown or discussed in a general sense, e.g. tea drinking, swimming, praying	<code>&lt;lido:subjectConcept&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term xml:label="Activity"&gt;[Content - activity]&lt;/lido:term&gt;</code> <code>&lt;/lido:subjectConcept&gt;</code> <code>&lt;/lido:subject&gt;</code> <code>&lt;/lido:subjectSet&gt;</code>

SPECTRUM unit	Notes	LIDO elements path
	The following subject elements reference an individualized entity with evidence in history.	
<i>Content - person</i>	The person shown or discussed	<pre> &lt;lido:subjectSet&gt;   &lt;lido:subject&gt;     &lt;lido:subjectActor&gt;       &lt;lido:actor&gt;         &lt;lido:actorID lido:type="URI"&gt;[Published URI for person]       &lt;/lido:actorID&gt;       &lt;lido:nameActorSet&gt;         &lt;lido:appellationValue&gt;[Content - person]       &lt;/lido:appellationValue&gt;       &lt;/lido:nameActorSet&gt;     &lt;/lido:actor&gt;   &lt;/lido:subjectActor&gt; </pre>
<i>Content - organisation</i>	The organisation shown or discussed	<pre> &lt;lido:subjectActor&gt;   &lt;lido:actor&gt;     &lt;lido:actorID lido:type="URI"&gt;[Published URI for organisation]&lt;/lido:actorID&gt;     &lt;lido:nameActorSet&gt;       &lt;lido:appellationValue&gt;[Content - organisation]     &lt;/lido:appellationValue&gt;     &lt;/lido:nameActorSet&gt;   &lt;/lido:actor&gt; &lt;/lido:subjectActor&gt; </pre>
<i>Content - date</i> [single string]	Free-text format, allows for expressing uncertainty of date information. It is recommended to provide a date range in Date – earliest/ single and Date - latest as they will be used for timelines for example.	<pre> &lt;lido:subjectDate&gt;   &lt;lido:displayDate&gt;[Content date (as a single string)] &lt;/lido:displayDate&gt; </pre>

SPECTRUM unit	Notes	LIDO elements path
<i>Content - date</i> [earliest/ single] <b>And</b> <i>Content - date</i> [latest]	Recommended format is 'YYYY[-MM[-DD]]'.	<lido:date> <lido:earliestDate>[Content date (earliest/single)] </lido:earliestDate> <lido:latestDate>[Content date (latest)] </lido:latestDate> </lido:date> </lido:subjectDate>
<i>Content - event name</i>	An event shown or discussed	<lido:subjectEvent> <lido:event> <lido:eventName> <lido:appellationValue>[Content - event name] </lido:appellationValue> </lido:eventName> </lido:event> </lido:subjectEvent>
<i>Content - place</i>	The place shown or discussed	<lido:subjectPlace> <lido:place> <lido:placeID lido:type="URI">[Published URI for place] </lido:placeID> <lido:namePlaceSet> <lido:appellationValue>[Content - place] </lido:appellationValue> </lido:namePlaceSet> <lido:place> </lido:subjectPlace>
<i>Content - object</i>	An item shown or discussed	<lido:subjectObject> <lido:object> <lido:objectNote>[Content - object]</lido:objectNote> </lido:object> </lido:subjectObject> </lido:subject> </lido:subjectSet>
	Free-text is a subject display:	
<i>Content – description</i>	A description of what is shown or discussed	<lido:subjectSet> <lido:displaySubject>[Content - description] </lido:displaySubject> </lido:subjectSet>
<i>Content - note</i>	A note about of what is shown or discussed	<lido:subjectSet> <lido:displaySubject>[Content - note] </lido:displaySubject> </lido:subjectSet>
<i>Content - other</i>	A aspect about what is shown or discussed	<lido:subjectSet> <lido:displaySubject>[Content - other]</lido:displaySubject> </lido:subjectSet>

### Related items

#### Advice to implementers:

It is optional to relate items to the item being described in the LIDO record. However it is recommended that where the information is present and relevant, to give that information about in the LIDO record. It should include information the:

- Nature of the relationship;
- ID of the related work;
- Note describing the related work.

The organisation should be aware where this information is held in its collections management system in order to facilitate the creation of the LIDO record.

#### In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
		<code>&lt;lido:descriptiveMetadata xml:lang="[code]"&gt;</code> [...] <code>&lt;lido:objectRelationWrap&gt;</code> [...] <code>&lt;lido:relatedWorksWrap&gt;</code>
<i>Related object number</i>		<code>&lt;lido:relatedWorkSet&gt;</code> <code>&lt;lido:relatedWorkRelType&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;</code> [Published URI for term] <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;</code> [Relationship type] <code>&lt;/lido:term&gt;</code> <code>&lt;lido:relatedWork&gt;</code> <code>&lt;lido:object&gt;</code> <code>&lt;lido:objectID&gt;</code> [Related item's ID] <code>&lt;/lido:objectID&gt;</code> <code>&lt;lido:objectNote&gt;</code> [Note about related item] <code>&lt;/lido:objectNote&gt;</code> <code>&lt;/lido:object&gt;</code> <code>&lt;/lido:relatedWork&gt;</code> <code>&lt;/lido:relatedWorkSet&gt;</code>
<i>Related object association</i>		
<i>Related object note</i>		

### Rights for work area

The rights information in this part of a LIDO record is that for the physical item (the 'work'). The rights for the surrogate(s) can be recorded as part of Resource information. The rights for the metadata record can be recorded as part of Record information.

It is very important that an organisation gives all the relevant information about the rights affecting the use of the physical item in order to benefit the organisation, and to respect the rights of others.

Therefore the organisation should identify the fields in their collections management system which holds that information, and place the relevant information about the rights affecting the use of the physical item in the LIDO record being exported.

Do not confuse the rights affecting the use of the physical item with those of its surrogates and the metadata record describing the item.

## Rights type

The type of right associated with the physical item. In LIDO:

SPECTRUM unit	Notes	LIDO elements path
		[...] <code>&lt;lido:administrativeMetadata xml:lang="code"&gt;</code> <code>&lt;lido:rightsWorkWrap&gt;</code>
<i>Right type</i>	Best practice for the use of the <code>&lt;lido:conceptID&gt;</code> element is only applicable when the term is in an online published terminology	<code>&lt;lido:rightsWorkSet&gt;</code> <code>&lt;lido:rightsType&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;[Right type]&lt;/lido:term&gt;</code> <code>&lt;/lido:rightsType&gt;</code>

## Rights date

The dates of when rights associated with the physical item are applicable:

<i>Rights begin date</i> <b>And</b> <i>Rights end date</i>	Recommended format is 'YYYY[-MM[-DD]]'.  For copyright the Rights end date may be used on its own.  There is not an option for a <code>&lt;lido:displayDate&gt;</code> element.	<code>&lt;lido:rightsDate&gt;</code> <code>&lt;lido:date&gt;</code> <code>&lt;lido:earliestDate&gt;[Rights begin date]&lt;/lido:earliestDate&gt;</code> <code>&lt;lido:latestDate&gt;[Rights end date]&lt;/lido:latestDate&gt;</code> <code>&lt;/lido:date&gt;</code> <code>&lt;/lido:rightsDate&gt;</code>
--	---	--



## Rights holder

The person or organisation that controls (e.g. moral rights) or owns (e.g. copyright) associated with the physical item:

SPECTRUM unit	Notes	LIDO elements path
<i>Right holder</i>		<pre>&lt;lido:rightsHolder&gt; &lt;lido:legalBodyID lido:type="URI"&gt;[Published URI for right holder] &lt;/lido:legalBodyID&gt; &lt;lido:legalBodyName&gt; &lt;lido:appellationValue&gt;[Right holder]&lt;/lido:appellationValue&gt; &lt;/lido:legalBodyName&gt; &lt;/lido:rightsHolder&gt;</pre>

## Credit line

The right being credited (acknowledged) is often associated with the acquisition of the item, and is probably part of a contract, e.g.:

- Purchased with funds from the National Art Collection Fund;
- Donated by Ms B. Smith, Sydney, Australia in memory of her father John Smith.

In the former case the part of the contract which provided funds to purchase an item said that the organisation must acknowledge the funding every time the item is displayed. In the latter case the organisation agreed to make the statement every time the item is displayed.

A credit line about the copyright status of the physical item can also be given, e.g.:

- © The Artist.

In LIDO:

SPECTRUM unit	Notes	LIDO elements path
<i>Credit line</i>		<pre>&lt;lido:creditLine&gt;[Credit line]&lt;/lido:creditLine&gt; &lt;/lido:rightsWorkSet&gt;</pre>

## Record area

### Record ID

Advice to implementers:

It is **mandatory** to provide an identifier for the metadata record unique in the organisation's collections management system in the LIDO record.

The organisation should be aware where this identifier is held in its collections management system in order to facilitate the creation of the LIDO record. It will typically be the internal identifier for the database record describing the item.

In the LIDO record

SPECTRUM unit	Notes	LIDO elements path
		[...] <lido:administrativeMetadata xml:lang="[code]"> [...] <lido:recordWrap>
[Record ID in the organisation's system] [Not a SPECTRUM Unit of information]	Should be unique in the system	<lido:recordID lido:type="local">[Internal system ID]</lido:recordID>

### Record type

Advice to implementers:

It is **mandatory** to provide a type for the metadata record being described in the LIDO record.

The organisation should be aware where this record type is held in its collections management system in order to facilitate the creation of the LIDO record.

In the LIDO record

SPECTRUM unit	Notes	LIDO elements path
[Not a SPECTRUM Unit of information]	Usually 'item', but possibly 'collection', 'series', 'group'. This is not the Object name or Object type	<lido:recordType> <lido:conceptID lido:type="URI">[Published URI for term] </lido:conceptID> <lido:term>[Record type]</lido:term> </lido:recordType>

## Record source

### Advice to implementers:

It is **mandatory** to provide information about the source for the metadata record being described in the LIDO record. This is usually the organisation itself. This information must include one, or more, of the following:

- The name of the source;
- An identifier for the source;
- Link to the website of the source.

The organisation should be aware where this record source information is held in its collections management system in order to facilitate the creation of the LIDO record.

It is possible that it is not held in the CMS. In this case the organisation must have a method for getting the information into the LIDO record.

### In the LIDO record

SPECTRUM unit	Notes	LIDO elements path
Source name [Not a SPECTRUM unit]	One or more of these.  The source is usually the organisation holding the item, but may also be an organisation only documenting the item.	<code>&lt;lido:recordSource&gt;</code> <code>&lt;lido:legalBodyID&gt;[Record source's ID]&lt;/lido:legalBodyID&gt;</code> <code>&lt;lido:legalBodyName&gt;</code> <code>&lt;lido:appellationValue&gt;[Record source's name]</code> <code>&lt;/lido:appellationValue&gt;</code> <code>&lt;/lido:legalBodyName&gt;</code> <code>&lt;lido:legalBodyWeblink&gt;[Record source's website URL]</code> <code>&lt;/lido:legalBodyWeblink&gt;</code> <code>&lt;/lido:recordSource&gt;</code>
Source's ID [Not a SPECTRUM unit]		
Source's website URL [Not a SPECTRUM unit]		

## Record rights

The rights information in this part of a LIDO record is that for the metadata record describing the item.

### Advice to implementers:

It is very important that an organisation gives **all the relevant information about the rights** affecting the use of the metadata record describing the item in order to benefit the organisation, and to respect the rights of others.

Therefore the organisation should identify the fields in their collections management system which holds that information, and place the relevant information about the rights affecting the use of the metadata record describing the item in the LIDO record being exported.

**Do not confuse the rights affecting the use of the metadata record describing the item with those of the physical item and its surrogates.**

### ***Rights type:***

The type of right associated with the metadata record describing the item:

SPECTRUM unit	Notes	LIDO elements path
<i>Right type</i>	Best practice for the use of the <code>&lt;lido:conceptID&gt;</code> element is only applicable when the term is in a online published terminology	<code>&lt;lido:recordRights&gt;</code> <code>&lt;lido:rightsType&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;[Right type]&lt;/lido:term&gt;</code> <code>&lt;/lido:rightsType&gt;</code>

### ***Rights date:***

The dates of when rights associated with the metadata record describing the item are applicable:

SPECTRUM unit	Notes	LIDO elements path
<i>Rights begin date</i> <b>And</b> <i>Rights end date</i>	Recommended format is 'YYYY[-MM[-DD]]'.  For copyright the Rights end date may be used on its own.  There is not an option for a <code>&lt;lido:displayDate&gt;</code> element.	<code>&lt;lido:rightsDate&gt;</code> <code>&lt;lido:date&gt;</code> <code>&lt;lido:earliestDate&gt;[Rights begin date]&lt;/lido:earliestDate&gt;</code> <code>&lt;lido:latestDate&gt;[Rights end date]&lt;/lido:latestDate&gt;</code> <code>&lt;/lido:date&gt;</code> <code>&lt;/lido:rightsDate&gt;</code>

### ***Rights holder:***

The person or organisation that controls (e.g. moral rights) or owns (e.g. copyright) the rights associated with the metadata record describing the item:

SPECTRUM unit	Notes	LIDO elements path
<i>Right holder</i>		<code>&lt;lido:rightsHolder&gt;</code> <code>&lt;lido:legalBodyID lido:type="URI"&gt;[Published URI for right holder]</code> <code>&lt;/lido:legalBodyID&gt;</code> <code>&lt;lido:legalBodyName&gt;</code> <code>&lt;lido:appellationValue&gt;[Right holder]&lt;/lido:appellationValue&gt;</code> <code>&lt;/lido:legalBodyName&gt;</code> <code>&lt;/lido:rightsHolder&gt;</code>

### ***Credit line:***

A credit line about the copyright status of the metadata record describing the item.

In LIDO:

SPECTRUM unit	Notes	LIDO elements path
<i>Credit line</i>		<code>&lt;lido:creditLine&gt;[Credit line]&lt;/lido:creditLine&gt; &lt;/lido:recordRights&gt;</code>

### **Record metadata information**

Advice to implementers:

It is **recommended** to provide URL link to a metadata record for a physical item in a LIDO record.

The organisation should be aware where this identifier is held in its collections management system in order to facilitate the creation of the LIDO record.

In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
[URL of metadata record] [Not a SPECTRUM unit]	This link will typically be generated from the recordID according to a formal syntax.	<code>&lt;lido:recordInfoSet&gt; &lt;lido:recordInfoLink&gt;[URL of metadata record] &lt;/lido:recordInfoLink&gt; &lt;/lido:recordInfoSet&gt;</code>

### ***Resource area***

#### **Resource ID**

Advice to implementers:

It is **optional** to provide an identifier for a surrogate for a physical item in a LIDO record.

If the organisation wishes to provide this information it should be aware where this identifier is held in its collections management system in order to facilitate the creation of the LIDO record.

In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
		[...] <code>&lt;lido:administrativeMetadata xml:lang="[code]"&gt;</code> [...] <code>&lt;lido:resourceWrap&gt;</code>
[Resource ID in the organisation's system]  [Not a <i>SPECTRUM</i> Unit of information]	Should be unique in the system	<code>&lt;lido:resourceSet&gt;</code> <code>&lt;lido:resourceID&gt;[Resource ID]&lt;/lido:resourceID&gt;</code>

## Resource representation

Advice to implementers:

It is **recommended** to provide URL links to at least one digital surrogate for a physical item in a LIDO record.

The organisation should be aware where these links are held in its collections management system in order to facilitate the creation of the LIDO record.

In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
[URL of surrogate in the organisation's system]  [Not a <i>SPECTRUM</i> Unit of information]	A valid URL to a surrogate.	<code>&lt;lido:resourceRepresentation lido:type="[type]"&gt;</code> <code>&lt;lido:linkResource&gt;[URL of surrogate]&lt;/lido:linkResource&gt;</code> <code>&lt;/lido:resourceRepresentation&gt;</code>

## Resource type

Advice to implementers:

It is **optional** to provide type information for a surrogate for a physical item in a LIDO record.

If the organisation wishes to provide this information it should be aware where this type information is held in its collections management system in order to facilitate the creation of the LIDO record.

In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
[Resource type in the organisation's system] [Not a <i>SPECTRUM</i> Unit of information]	Best practice for the use of the <code>&lt;lido:conceptID&gt;</code> element is only applicable when the term is in a online published terminology	<code>&lt;lido:resourceType&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;</code> [Published URI for term] <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;</code> [Resource type] <code>&lt;/lido:term&gt;</code> <code>&lt;/lido:resourceType&gt;</code>

## Resource relationship type

Advice to implementers:

It is **optional** to provide the relationship between a surrogate and the physical item it relates to in a LIDO record.

If the organisation wishes to provide this information it should be aware where this type information is held in its collections management system in order to facilitate the creation of the LIDO record.

In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
[Resource relationship type in the organisation's system]  [Not a <i>SPECTRUM</i> Unit of information]	Best practice for the use of the <code>&lt;lido:conceptID&gt;</code> element is only applicable when the term is in a online published terminology	<code>&lt;lido:resourceRelType&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;</code> [Published URI for term] <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;</code> [Resource relationship type] <code>&lt;/lido:term&gt;</code> <code>&lt;/lido:resourceRelType&gt;</code>

## Resource perspective

Advice to implementers:

It is **optional** to provide the perspective shown in a surrogate for the physical item in a LIDO record.

If the organisation wishes to provide this information it should be aware where this type information is held in its collections management system in order to facilitate the creation of the LIDO record.

In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
[Resource perspective in the organisation's system]  [Not a <i>SPECTRUM</i> Unit of information]	Best practice for the use of the <code>&lt;lido:conceptID&gt;</code> element is only applicable when the term is in a online published terminology	<code>&lt;lido:resourcePerspective&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;[Resource perspective]&lt;/lido:term&gt;</code> <code>&lt;/lido:resourcePerspective&gt;</code>

## Resource description

Advice to implementers:

It is **optional** to provide the description of a surrogate for the physical item in a LIDO record.

If the organisation wishes to provide this information it should be aware where this type information is held in its collections management system in order to facilitate the creation of the LIDO record.

In the LIDO record:

SPECTRUM unit	Notes	LIDO elements path
[Resource description in the organisation's system]  [Not a <i>SPECTRUM</i> Unit of information]		<code>&lt;lido:resourceDescription lido:type="[type]"&gt;[Resource description] &lt;lido:resourceDescription&gt;</code>

## Resource date taken

Advice to implementers:

It is **optional** to provide information about the date of creation of surrogate for the physical item in the LIDO record.

If the organisation wishes to provide this information it should be aware where resource creation dates are held in its collections management system in order to facilitate the creation of the LIDO record.



## In LIDO:

SPECTRUM unit	Notes	LIDO elements path
Resource creation date [single string]  [Not a SPECTRUM unit]		<code>&lt;lido:resourceDateTaken&gt;</code> <code>&lt;lido:displayDate&gt;</code> [Resource creation date (as a single string)] <code>&lt;/lido:displayDate&gt;</code>
<b>Or/and</b>		
Resource creation date - earliest  [Not a SPECTRUM unit]	Recommended format is 'YYYY-MM-DD'.	<code>&lt;lido:date&gt;</code> <code>&lt;lido:earliestDate&gt;</code> [Resource creation date - earliest] <code>&lt;/lido:earliestDate&gt;</code> <code>&lt;lido:latestDate&gt;</code> [Resource creation date – latest] <code>&lt;/lido:latestDate&gt;</code> <code>&lt;/lido:date&gt;</code> <code>&lt;lido:resourceDateTaken&gt;</code>
Resource creation date – latest  [Not a SPECTRUM unit]	Recommended format is 'YYYY-MM-DD'.	

## Resource source

### Advice to implementers:

It is **optional** to provide information about the source of a surrogate for the physical item in the LIDO record. It is possibly the organisation itself, but might be an outside person or organisation. This information must include one, or more, of the following:

- The name of the source;
- An identifier for the source;
- Link to the website of the source.

If the organisation wishes to provide this information it should be aware where resource source information is held in its collections management system in order to facilitate the creation of the LIDO record.

## In the LIDO record

SPECTRUM unit	Notes	LIDO elements path
Source name [Not a SPECTRUM unit]	One or more (optional) of these.  The source is usually the organisation holding the item.	<code>&lt;lido:resourceSource&gt;</code> <code>&lt;lido:legalBodyID&gt;[Resource source's ID]&lt;/lido:legalBodyID&gt;</code> <code>&lt;lido:legalBodyName&gt;</code> <code>&lt;lido:appellationValue&gt;[Resource source's name]</code> <code>&lt;/lido:appellationValue&gt;</code> <code>&lt;/lido:legalBodyName&gt;</code> <code>&lt;lido:legalBodyWeblink&gt;[Resource source's website URL]</code> <code>&lt;/lido:legalBodyWeblink&gt;</code> <code>&lt;/lido:resourceSource&gt;</code>
Source's ID [Not a SPECTRUM unit]		
Source's website URL [Not a SPECTRUM unit]		

## Resource rights

The rights information in this part of a LIDO record is that for the surrogate(s) ('resource(s)') for the physical item.

It is very important that an organisation gives **all the relevant information about the rights** affecting the use of the surrogate for the physical item in order to benefit the organisation, and to respect the rights of others.

Therefore the organisation should identify the fields in their collections management system which holds that information, and place the relevant information about the rights affecting the use of the surrogate for the item in the LIDO record being exported.

**Do not confuse the rights affecting the use of the surrogate for the item with those of the physical item and metadata record describing it.**

## Rights type:

The type of right associated with the surrogate for the physical item:

SPECTRUM unit	Notes	LIDO elements path
<i>Right type</i>	Best practice for the use of the <code>&lt;lido:conceptID&gt;</code> element is only applicable when the term is in a online published terminology	<code>&lt;lido:resourceRights&gt;</code> <code>&lt;lido:rightsType&gt;</code> <code>&lt;lido:conceptID lido:type="URI"&gt;[Published URI for term]</code> <code>&lt;/lido:conceptID&gt;</code> <code>&lt;lido:term&gt;[Right type]&lt;/lido:term&gt;</code> <code>&lt;/lido:rightsType&gt;</code>

### ***Rights date:***

The dates of when rights associated with the surrogate for the physical item are applicable:

Rights begin date And Rights end date	Recommended format is 'YYYY[- MM[-DD]]'.  For copyright the Rights end date may be used on its own.  There is not an option for a <lido:displayDate> element.	<lido:rightsDate> <lido:date> <lido:earliestDate>[Rights begin date]</lido:earliestDate> <lido:latestDate>[Rights end date]</lido:latestDate> </lido:date> </lido:rightsDate>
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### ***Rights holder:***

The person or organisation that controls (e.g. moral rights) or owns (e.g. copyright) the rights associated with surrogate for the physical item:

SPECTRUM unit	Notes	LIDO elements path
Right holder		<lido:rightsHolder> <lido:legalBodyID lido:type="URI">[Published URI for right holder] </lido:legalBodyID> <lido:legalBodyName> <lido:appellationValue>[Right holder]</lido:appellationValue> </lido:legalBodyName> </lido:rightsHolder>

### ***Credit line:***

A credit line for surrogate for the physical item. Here, for example, it is possible to acknowledge the creator of the photograph:

- Photographer: John Smith

In LIDO:

SPECTRUM unit	Notes	LIDO elements path
Credit line		<lido:creditLine>[Credit line]</lido:creditLine> </lido:rightsResource>

# 3. Summary of LIDO implementation advice

The potential or new implementer of LIDO needs to ensure these procedures are put in place and advice taken on board:

## Before you start

### *A LIDO-enabled collections management system*

The organisation should ideally manage their collections in a system based on the recognised standards for their part of the cultural and scientific heritage domain, e.g. for museums SPECTRUM or CDWA.

Many commercially available systems conform to these standards, and do have a generic functionality to export data in LIDO. In-house developed systems should be able to map their metadata elements to the metadata elements of these standards, and ideally be able to export metadata in LIDO.

Not having a LIDO-enabled collections management system (CMS) will make it much more difficult to submit fully rich metadata to target portals.

### *Using the collections management system*

The organisation must monitor its correct use of their collections management system. There is a tendency for misuse to creep in, sometimes accidentally, but sometimes deliberately.

Experience has shown issues can arise with data in CMSs which may impact in creating LIDO records:

Issue	Minimised by
Data entry errors (e.g. spelling mistakes)	Review and correction
Putting the wrong type of data in a field (e.g. confusing dates with periods)	Monitoring and correction
Inconsistency in the use of terminology	Monitoring, correction, and the using automatic terminology control

The organisation must have in place policies and procedures to minimise these issues, and any others of a similar nature.

## ***Beginning to implement LIDO***

When beginning to implement LIDO an organisation and particularly those carrying it out must have, or obtain, knowledge in three areas:

### ***Knowledge of LIDO***

The organisation should be familiar with:

- The basics of XML;
- LIDO itself and in particular how it handles tag-names, attribute-names and namespaces.

The former can be obtained from written material widely available online and in paper-based forms, and perhaps from attend training courses.

The latter can be obtained online from the LIDO website:

<http://www.lido-schema.org>

### ***Knowledge of the target portal***

Before providing metadata to a portal the organisation must get from its owner as much information as possible about how the portal will handle and display the LIDO being supplied.

This should include how the following is handled, and displayed:

- Extent of LIDO elements that are used in the portal
- Multilingual metadata;
- Display elements (and their corresponding indexing elements if present);
- Ordering of repeatable elements;
- Links on resources (e.g. thumbnails and other previews);
- Multiple resources;
- Link to the online webpage.

The portal should also give any requirements and restrictions for metadata and resources it has. These might include size restrictions for previews or a requirement for rights information.

An important criterion for the organisation on how rich or how light their provided LIDO records will be is the portal's requirement on waiving rights to the metadata.

Having considered this information the organisation should decide if they wish to modify their LIDO export in order to take into account the target portal.

### ***Knowledge of the relationship between the CMS and LIDO***

In order to facilitate the creation of LIDO records, for all the data, that it might export as LIDO the organisation should be aware of:

- Where that data is held in its collections management system;
- Where that data will appear in a LIDO record.

For the LIDO-enabled CMSs mentioned above this will automatically be available to the user of the system. However, in order to export fully rich metadata this will often need amendments according to the organisation's local customization of the system. For in-house developed and ad hoc solutions the implementer will have to carry out a mapping exercise. This can be partly automated by using a suitable tool like MINT, but can be begun by using a mapping grid taking in-house data to LIDO in a tabular document.

### **Decisions on the general LIDO issues**

When creating LIDO records the implementer will have to make some decision of a general nature:

#### ***Language(s) of the record and elements***

It is **mandatory** that the language is set, in two places in a LIDO record (`xml:lang` attribute of the `<descriptiveMetadata>` and `<administrativeMetadata>`), by using a standard ISO code for the language.

The organisation must have knowledge of the correct code for the language(s) they are intending to use in their LIDO records. They must also know where the codes are held in their collections management system, if at all, in order to facilitate the creation of LIDO records. If they do not have the code in their CMS then they must have a method placing it when they creating the LIDO record.

If the organisation wishes to have more than one language for their metadata in LIDO records they:

- Should be aware of how multilingual records will be supported by the target portal;
- Must be able to record multilingual metadata in their collections management system (in some way, e.g. by different field names or by parameter for a field), in order to facilitate the creation of the LIDO record.

They should also decide on which of the two ways of representing multilingual metadata they will implement:

- Setting 'global' `xml:lang` attributes only but having multiple `<descriptiveMetadata>` and `<administrativeMetadata>` elements for different fully multilingual records;
- Setting `xml:lang` attributes for individual sub-elements.

### ***Display and indexing elements***

If the organisation wishes to give display elements in their LIDO records they:

- Should be aware how display elements will be supported by the target portal, particularly together with the indexing elements;
- Must be able to record display information in their collections management system (in some way, e.g. by different field names or by flag for a field), in order to facilitate the creation of the LIDO record;
- May be compelled to give only display elements if their collections management is not of sufficient granularity to support indexing elements.

### ***Repeatable elements (not for language)***

If the organisation wishes to repeat elements in their LIDO records they:

- Should be aware how repeated elements will be supported by the target portal, particularly their ordering;
- Must be able to record repeating fields in their collections management system (in some way, e.g. by different field names or by a parameter for a field), in order to facilitate the creation of the LIDO record.

### ***Ordering of repeatable elements***

If the organisation wishes to give an order to some of their metadata in LIDO records they:

- Should be aware if their order will be supported by the target portal;
- Must be able to record that order in their collections management system, in order to facilitate the creation of the LIDO record.

### ***Preference of repeatable elements***

If the organisation wishes to give preference to some of their metadata in LIDO records they:

- Should be aware if their preference will be supported by the target portal;
- Must be able to record that preference in their collections management system (in some way, e.g. by different field names or by flag for a field), in order to facilitate the creation of the LIDO record.

### ***Events***

An item and its parts, where relevant, can be associated with many events, during:

- Its bringing into being;
- After that but before it became part of an organisation;
- After it became part of an organisation.

The exact types of event associated with an item are dependent on the item itself and its historical context. Some information may be partial or entirely missing.

The organisation should be aware where Event information is held in its collections management system in order to facilitate the creation of the LIDO record.

### **Decisions on the richness of LIDO records**

The richness of LIDO records can be at two levels:

#### ***Mandatory and recommended***

Having mandatory elements only in a LIDO record will not be 'rich'. Therefore it is suggested that implementers also use, where possible, the recommended elements and information areas suggested by the AthenaPlus project. These elements and areas (with relevant sub-elements) are:

- Object work type [**mandatory**];
- Classification;
- Title [**mandatory**];
- Inscriptions;
- Repository;



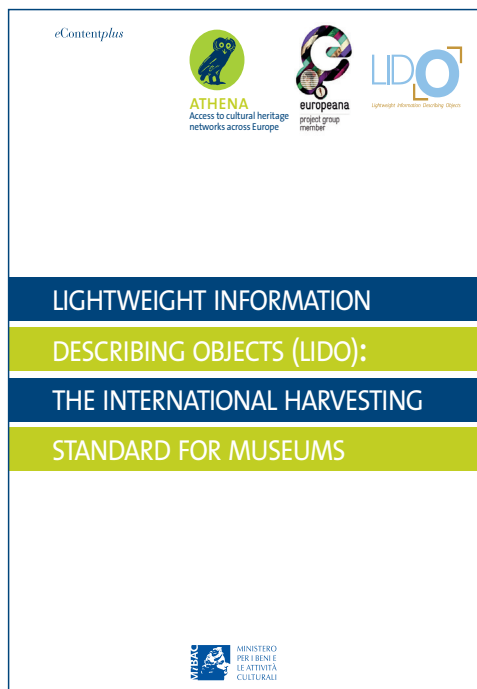
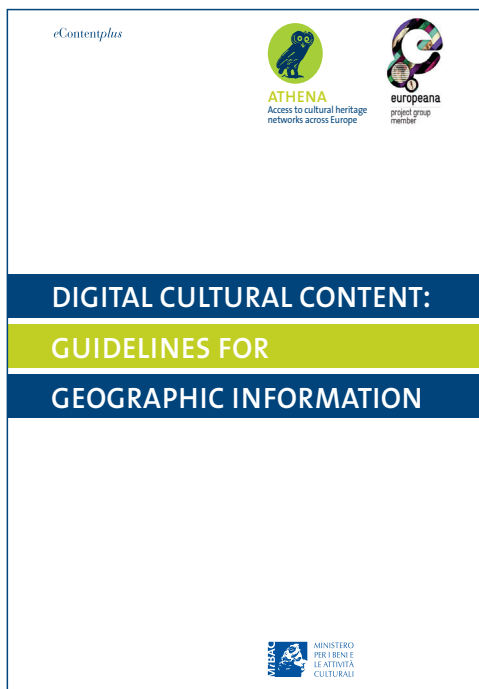
- Description;
- Measurements;
- Event – Production if applicable, and other relevant events;
- Subject;
- Related items;
- Record ID [**mandatory**];
- Record type [**mandatory**];
- Record source [**mandatory**];
- Record metadata – Links;
- Resource representation – Links;

### ***Optional***

In addition to the mandatory and recommended element above an implementer can choose to have other elements in their LIDO records. The reasons for choice can be:

- The nature of the items being described;
- The availability of data in the organisation's collections management system;
- The requirements of the target portal.







GEOCODED

DIGITAL CULTURAL

CONTENT



YOUR TERMINOLOGY

AS A PART OF THE SEMANTIC WEB

RECOMMENDATIONS

FOR DESIGN AND MANAGEMENT



DIGITAL STORYTELLING

AND CULTURAL HERITAGE:

STAKES AND OPPORTUNITIES



digital exhibitions

METADATA FOR THE DESCRIPTION

OF DIGITAL EXHIBITIONS:

THE DEMES ELEMENT SET

Version 0.9 (August 2015)





A METHODOLOGY FOR IMPLEMENTING LIDO  
(LIGHTWEIGHT INFORMATION DESCRIBING OBJECTS),  
AND IN DOING SO GIVE HELP AND ADVICE TO POTENTIAL  
AND NEW USERS OF LIDO SEEKING TO EMPLOY IT.

