



lido-schema.org

CIDOC LIDO Working Group

2024-11-11

CIDOC Conference 2024

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CIDOC LIDO Working Group Overview

1. Welcome
2. What is LIDO? (5 min)
3. LIDO Terminology: new developments (10 min)
4. LIDO Application Profiles (55 min)
5. LIDO2RDF (10 min)
6. Conclusion

Agenda: https://docs.google.com/document/d/1My-eg3uJrmhkdwY2o8xhKPbrxV_qI_PXJPbTauLUPWk/edit?usp=sharing

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Welcome

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What is LIDO?

LIDO – Lightweight Information Describing Objects

What is LIDO?

LIDO (Lightweight Information Describing Objects) is a versatile metadata schema for describing objects/works. LIDO is defined as an XML schema and was developed by the [CIDOC LIDO Working Group](#). LIDO can be used for all types of objects, not just works of art. It is used, for example, as a format for data deliveries to portals. LIDO is a flexible schema that provides a variety of elements for descriptive and administrative purposes. It has very few mandatory elements and can be tailored to different use cases in the form of [LIDO application profiles](#). LIDO [recommends the use of controlled vocabularies](#) for a variety of elements and attributes.

For more information see <https://lido-schema.org> and the [LIDO Primer](#).

What is LIDO?

LIDO Introduction

- Slides: https://lido-schema.org/documents/presentations/2023_LIDO-Introduction/PRE_LIDO-Introduction.pdf
- Video: https://lido-schema.org/documents/presentations/2023_LIDO-Introduction/recording/video1725007890.mp4

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LIDO Terminology

LIDO Terminology

- The LIDO Terminology complements the LIDO specification and is intended to further enhance the interoperability of LIDO data across different collections by introducing controlled type vocabularies for certain LIDO elements and attributes.
- <http://terminology-view.lido-schema.org>

LIDO Terminology – Event Types

LIDO Event Type Vocabulary: <http://terminology.lido-schema.org/eventType>

The following additions to the LIDO Event Type Vocabulary are now ready for release as recommendation:

New or refined event types with particular relevance for documenting

- **collection objects from colonial contexts**
- **architecture and other immovable works**

LIDO Terminology – Event Types

New or refined event types with particular relevance for documenting **collection objects from colonial contexts**:

- Terms around „**Change of physical control or legal title**“
- Terms around „**Attribute assignment**“
- Note that due to the ambiguity of the term, the value „Provenance event“ is no longer recommended as LIDO Event Type.

This work has been carried out in the context of the portal „Collections from Colonial Contexts“ of the Deutsche Digitale Bibliothek: <https://ccc.deutsche-digitale-bibliothek.de/en>

LIDO Terminology – Event Types

- **„Change of physical control or legal title“** with its narrower terms:
<http://terminology.lido-schema.org/lido01151>

-  Change of physical control **or** legal title (en)
 -  Change of legal title (en)
 -  Restitution (Cultural policy) (en)
 -  Change of physical control (en)
 -  Collecting (en)
 -  Loss (en)
 -  Repatriation (Cultural policy) (en)
 -  Change of physical control **and** legal title (en)

LIDO Terminology – Event Types

- „**Attribute assignment**“ with its narrower terms:
<http://terminology.lido-schema.org/lido00024>

- Attribute assignment (en)

-  Assignment to a curated holding (en)
-  Condition assessment (en)
-  Cultural context assignment (en)
-  Designation (Historic preservation activity) (en)
-  Inscription deciphering (en)
-  Meaning assignment in contexts of origin (en)
-  Name assignment (en)
-  Type assignment (en)

LIDO Terminology – Event Types

New or refined event types with particular relevance for documenting **architecture and other immovable works**:

- „**Alteration**“ introduced as non-indexing concept - this is to distinguish between natural processes and man-made activities that result in the modification or the (partial) destruction of an object.
- „**Adaptive reuse**“
- „**Ceremony**“
- „**Transformation**“ with refined sub-hierarchy

LIDO Terminology – Event Types

- „**Alteration**“ introduced as non-indexing concept with refined sub-hierarchy and some new terms: <http://terminology.lido-schema.org/lido01154>
 - eventType (en)
 - +  Activity (en)
 -  Alteration (en)
 - +  Modification (Activity) (en)
 - +  Modification (Process) (en)
 - +  Partial destruction (Activity or process) (en)
 - +  Beginning of existence (en)
 - +  End of existence (en)

This is to distinguish between natural processes and man-made activities that result in the modification or the (partial) destruction of an object.

LIDO Terminology – Event Types

- „**Adaptive reuse**“ with its narrower terms: <http://terminology.lido-schema.org/lido01161>
 -  Activity (en)
 -  Adaptive reuse (en)
 -  Decommissioning (en)
 -  Opening (Object-related activity) (en)

LIDO Terminology – Event Types

- „**Ceremony**“ with its narrower terms: <http://terminology.lido-schema.org/lido01182>

-  Ceremony (en)
 -  Consecration (en)
 -  Cornerstone ceremony (en)
 -  Deconsecration (en)
 -  Groundbreaking (Ceremony) (en)

LIDO Terminology – Event Types

- „**Transformation**“ with refined sub-hierarchy:
<http://terminology.lido-schema.org/lido00029>
 -  Beginning of existence (en)
 - +  Creation (en)
 - +  Production (en)
 -  Transformation (en)
 -  Reconstruction (en)
 -  Object translocation (en)

LIDO Terminology – Event Types

Terms under review are assigned with status „Review“.
Please support us with your review and feedback via email
lido-feedback@sub.uni-goettingen.de by December 15.



Questions? Comments?

Status
✓ Review

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LIDO Profiles

LIDO Profiles

Application profiles are a way of economizing the use of broadly scoped standards. They allow users to specify rules and recommendations for specific use cases, define rules to improve data editing and quality, or solve possible ambiguities of the relevant standard. A LIDO application profile might include element restrictions or recommend or mandate specific vocabularies, and more.

For more information see:

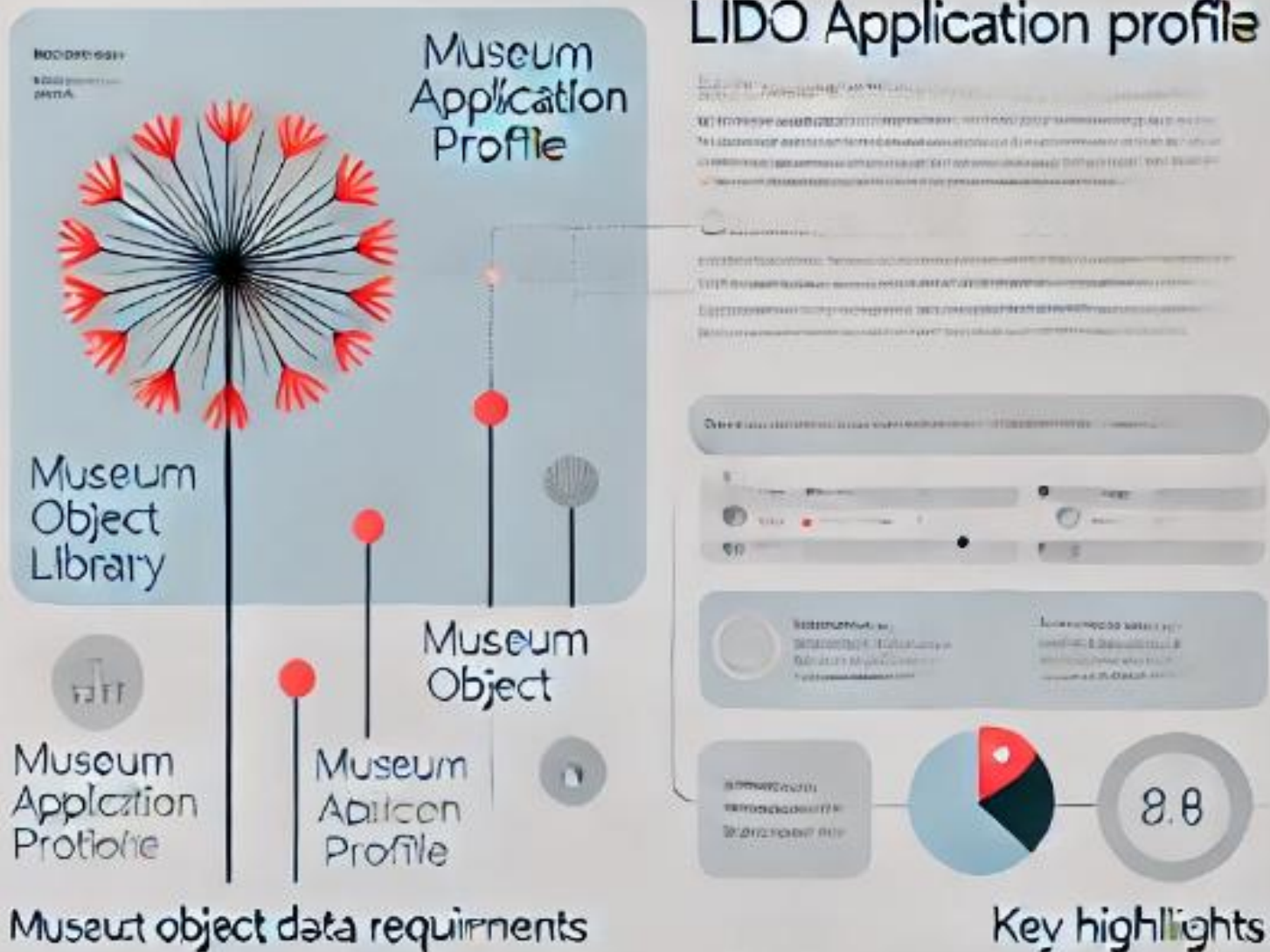
[LIDO Primer](#) and <https://cidoc.mini.icom.museum/working-groups/lido/lido-overview/profiles/>

LIDO Profiles

- Architecture and Other Immovable Works
- German Digital Library (DDB LIDO)
- Minimum Record Recommendation for Museums and Collections
- finna.fi
- LIDO Profiles in the LIDO Mapping Table
 - https://lido-schema.org/documents/trainings/v1-1/tables/LIDO-v1-1_EN_mapping-table.xlsx

New LIDO Example: Mona Lisa

- http://www.lido-schema.org/documents/examples/LIDO-v1.1-Example_LIDODE0001_Mona-Lisa.xml



DDB-LIDO

A Lido application profile of
the German Digital Library

Dr. Domenic Städtler
Institute for Museum Research



Cover image created with DALL-E 2024

What is DDB-LIDO?



Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/cwiuB>

- Import format for data deliveries to the German Digital Library
 - Museum section
 - Media library Photography/Sound section
 - Department for monuments
- We documented all data elements that play a role for...
 - Display (on object pages)
 - Search filters
 - Special features of the Portal
 - Forwarding data to Europeana
- Mandatory elements in DDB-LIDO are
 - Elements that are mandatory in the LIDO format
 - Elements documented on the page “Metadata requirements for data provision“
 - Elements that are mandatory in the Minimum Record Recommendation

What does the documentation look like?



Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/cwiuB>

<objectWorkType> / <term> [Pflicht]

DDB View-Label	Objektyp
LIDO Elementname	<objectWorkType> / <term>
Elementpfad	/lidoWrap/lido/descriptiveMetadata/objectClassificationWrap/objectWorkTypeWrap/objectWorkType/term
Attribute	xml:lang
Definition	Bezeichnung für den Objektyp
Anmerkung	Für die Angabe des Objektyps sollte immer der spezifischste Begriff aus der Hierarchieleiter des kontrollierten Vokabulars benutzt werden.
Anwendung	Suchfilter & Anzeige Europeana-Weitergabe
Verpflichtungsgrad	Pflicht
Wiederholbar	Ja (nur bei Sprachvarianten) ⚠
Datentyp	Text (kontrolliertes Vokabular)
Werte	Im Attribut <i>xml:lang</i> steht der jeweilige Sprachcode aus ISO 639-2 / ISO 639-3 .

Beispiel

What does the documentation look like?

<objectWorkType> / <term> [Pflicht]

View Label	Object type
LIDO Element name	<objectWorkType> / <term>
Element path	/lidoWrap/lido/descriptiveMetadata/objectClassificationWrap/objectWorkTypeWrap/objectWorkType/term
Attributs	xml:lang
Definition	Designation for the object type
Note	The most specific term from the hierarchy ladder of the controlled vocabulary should always be used to specify the object type.
Application	Search filter & Display Forwarding data to Europeana
Obligation level	Mandatory
Repeatable	Yes (only language variants) ⚠
Type of data	Text (controlled vocabulary)
Data values	The <i>xml:lang</i> attribute contains the respective language code from ISO 639-2 / ISO 639-3.

Example



Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/cwiuB>

How do our “examples” look like?



Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/cwiuB>

Beispiel

```
<objectWorkType>
```

```
<lido:objectClassificationWrap>
  <lido:objectWorkTypeWrap>
    <lido:objectWorkType>
      <lido:conceptID lido:type="http://terminology.lido-schema.org/lido00099">http://vocab.getty.edu/aat/300037222</lido:conceptID>
      <lido:term xml:lang="deu">Münze (Geld)</lido:term>
      <lido:term xml:lang="eng">coins (money)</lido:term>
    </lido:objectWorkType>
  </lido:objectWorkTypeWrap>
</lido:objectClassificationWrap>
```

What else do we offer?



Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/cwiuB>



Confluence Bereiche ▾



DDBinfo für Daten

SEITENHIERARCHIE

- › Anforderungen an die Lieferdaten
- ▼ Lieferformate
 - › DDB-EDM
 - ▼ DDB-LIDO
 - Einführung in DDB-LIDO
 - › Dokumentation von DDB-LIDO
 - ➔ • **Beispiele & Vorlagen zu DDB-LIDO**
 - › DDB-MARC
 - › DDB-METS/MODS
 - › DFF-EDM
 - › EAD(DDB)
 - DDB-ALTO
 - › DDB-DC_RDF/XML
 - › Minimaldatensatz-Empfehlung für Museen und Sammlungen (v1.0.1)
 - › Werkzeuge

Seiten / ... / DDB-LIDO

Beispiele & Vorlagen zu DDB-LIDO

Erstellt von Sophie Rölle (slub-dresden), zuletzt geändert von Städtler, Domenic vor weniger als einer Minute

Normdatenfokussierter Beispieldatensatz

in Lido 1.0

als XSLX-Datei: FOLGT

als CSV-Datei: FOLGT

auf GitHub

Example data record
focused on authority files
and controlled vocabulary

Mapping-Vorlage

als XSLX-Datei: FOLGT

als CSV-Datei: FOLGT

DDB-Lido in der LIDO v1.1-Mapping-Tabelle

Mapping-Tabelle Deutsch

Mapping-Tabelle Englisch

Contact us!

 museum@deutsche-digitale-biliothek.de



Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/cwiuB>

A Minimum Data Quality Standard for Museum Object Data



The Minimum Record Recommendation for Museums & Collections (v.1.0.1)

Dr. Domenic Städtler
Institute for Museum Research



Cover image created with DALL-E 2024

What is the Minimum Record?

- Specifies the most important data elements for the online publication
- The smallest possible intersection of relevant data elements
-> minimum level of data quality
- The Minimum Record Recommendation is therefore a good starting point.
In-depth cataloguing can build on this if required



Minimum Record Recommendation v1.0.1 (2024), Minimum Record Working Group, [CC0 1.0 Universal](#)
Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/AQAIDQ>
PDF: <https://doi.org/10.5281/zenodo.14007413>

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Who has developed the Recommendation?

MINIMUM RECORD WORKING GROUP



Landesstelle für
die nichtstaatlichen
Museen in Bayern



Since Octobre 2024
Working Group in



We want to further
develop the Minimum
Record Recommendation
internationally



Scan me!

Minimum Record Recommendation v1.0.1 (2024), Minimum Record Working Group, [CC0 1.0 Universal](https://creativecommons.org/licenses/by/4.0/)
Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/AQAIDQ>
PDF: <https://doi.org/10.5281/zenodo.14007413>

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Which data elements are taken into account?

Data elements (cataloguing)

Data elements that are usually populated during data entry:

- [Object title or name \(mandatory\)](#)
- [Object type or designation \(mandatory\)](#)
- [Classification \(recommended\)](#)
- [Inventory number \(mandatory\)](#)
- [Object description \(recommended\)](#)
- [Materials \(recommended\)](#)
- [Techniques \(recommended\)](#)
- [Measurements \(recommended\)](#)
- [Event in object history \[element set\] \(mandatory\) *\)](#)
- [Subject keyword \(recommended\)](#)
- [Media file \[element set\] \(mandatory\) **\)](#)

*) [Event Type \(mandatory\) + Person/Corporate Body AND/OR Place AND/OR Date](#)

**) [Link to media file, Usage rights of media file, rights holder of media file \(all mandatory\), alternative text \(recommended\)](#)

Data elements (export)

Data fields that are usually populated during or after export from the local database system:

- [Record ID \(mandatory\)](#)
- [Record language \(mandatory\)](#)
- [Record type \(mandatory\)](#)
- [Repository of object \(mandatory\)](#)
- [Institution providing record \(mandatory\)](#)
- [Media file: type of media file \(mandatory\)](#)
- [Usage rights of metadata record \(mandatory\)](#)
- [Link to published metadata record \(recommended\)](#)
- [Record date \(recommended\)](#)



Minimum Record Recommendation v1.0.1 (2024), Minimum Record Working Group, [CC0 1.0 Universal](#)

Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/AQAIDQ>
PDF: <https://doi.org/10.5281/zenodo.14007413>

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What has it to do with LIDO?

The „Minimum Record Recommendation“ is a LIDO application profile



Application profiles may be stricter than the LIDO specification, but not more relaxed. If an element is mandatory in LIDO, it must also be mandatory in the application profiles.

Expression in LIDO (v1.0 and v1.1)

```
<lido:objectIdentificationWrap>
  <lido:titleWrap>
    <lido:titleSet lido:type="http://vocab.getty.edu/aat/300417200">
      <lido:appellationValue xml:lang="en">Four dancing muses</lido:appellationValue>
    </lido:titleSet>
    <lido:titleSet lido:type="http://vocab.getty.edu/aat/300417227">
      <lido:appellationValue xml:lang="en">Dancing goddesses</lido:appellationValue>
    </lido:titleSet>
  </lido:titleWrap>
</lido:objectIdentificationWrap>
```

In LIDO the object information must be specified at least at the general record level

-> Minimum Record: the Record language is mandatory!



Two Questions for Discussion

1) Standards already considered:

- German Digital Library: Metadata requirements for data provision
- application profile DDB-LIDO
- DFG Basic Data Record
- DFG Practical Guidelines on Digitisation: LIDO core metadata
- Europeana Data Model (EDM)
- EODEM application profile
- database models: digiCULT and museum-digital
- guidelines of the German Museum Association for basic cataloguing (1993, 2011, 2022)

Implementation in progress:

- CIDOC Conceptual Reference Model (CRM)
- SPECTRUM
- CCC-LIDO (= Collections from Colonial Contexts) profile
- Categories for the Description of Works of Art (CDWA)

Planned:

- ObjectID
- Linked Art

Which standards do you miss?

2) Data elements (cataloguing)

- Object title or name (mandatory)
- Object type or designation (mandatory)
- Classification (recommended)
- Inventory number (mandatory)
- Object description (recommended)
- Materials (recommended)
- Techniques (recommended)
- Measurements (recommended)
- Event in object history [element set] (mandatory): *Event Type (mandatory) + Person/Corporate Body AND/OR Place AND/OR Date*
- Subject keyword (recommended)
- Media file [element set] (mandatory): *Usage rights of media file, rights holder of media file (all mandatory), alternative text (recommended)*

Data elements (export)

- Record ID (mandatory)
- Record language (mandatory)
- Record type (mandatory)
- Repository of object (mandatory)
- Institution providing record (mandatory)
- Media file: type of media file (mandatory)
- Usage rights of metadata record (mandatory)
- Link to published metadata record (recommended)
- Record date (recommended)

Excluded for good reason

- Rights of the work (<rightsWorkWrap>)
- Photographer / Scan operator / Digitization
- Position of the object in the museum's depot

Which data elements do you miss?



Scan me!

Minimum Record Recommendation v1.0.1 (2024), Minimum Record Working Group, [CCO 1.0 Universal](https://www.cco-1.0.org/)

Wiki: <https://wiki.deutsche-digitale-bibliothek.de/x/AQAIDQ>

PDF: <https://doi.org/10.5281/zenodo.14007413>

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LIDO2RDF



lido-schema.org

LIDO working group

LIDO2RDF

coordinated by:

Anja Gerber and Angela Kailus

Klassik Stiftung Weimar | Deutsches Dokumentationszentrum für Kunstgeschichte.
Bildarchiv Foto Marburg

NFDI4Objects | NFDI4Culture
LIDO-DE AG

Why LIDO2RDF?

Goals:

- join forces to map LIDO2CRM
 - needed for semantic web applications such as knowledge graphs
 - avoiding uncoordinated parallel developments restricting interoperability of outcomes, now that use cases emerge
- exchange about the difficult decisions within the mapping process (both conceptual and technical)
- shared software library
- working with real use cases (running code, real data)

Why LIDO2RDF?

Actual developments:

- mappings of difficult groups already exist and need to be brought together (NFDI4Culture, NFDI4Objects, digiCULT, digiS, ...)
- focus on Minimaldatensatz-Empfehlung für Museen und Sammlungen: www.minimaldatensatz.de (engl.: [Minimum Record Recommendation for Museums and Collections](http://www.minimaldatensatz.de) (v1.0.1))
- 25 of LIDO elements, also key elements for DDB and Europeana
- create and provide examples (LIDO) as use cases for the transformation LIDO2CRM within a spreadsheet as first step
 - first step generic use cases, specialized mappings follow later)
 - mapping for events / activities in a spreadsheet (LIDO 1.1 > CRM 7.1.3)

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Conclusion

Thank you!



Lightweight Information Describing Objects

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lido-feedback@sub.uni-goettingen.de