



EXHIBITION OBJECT DATA EXCHANGE MODEL

LIDO Terminology and application profiles

Rupert Shepherd, CIDOC Documentation Standards Working Group

@rgs1510 | @icomCIDOC | #EODEM

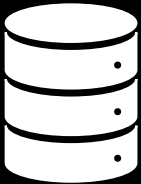


What we're trying to do ...

A framework that will enable museum databases to export objects' data from one system at the press of a button, and import the data into another system at the press of a button.

How it should work

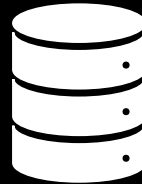
Lender



EODEM export



Borrower



EODEM import

... and why: time

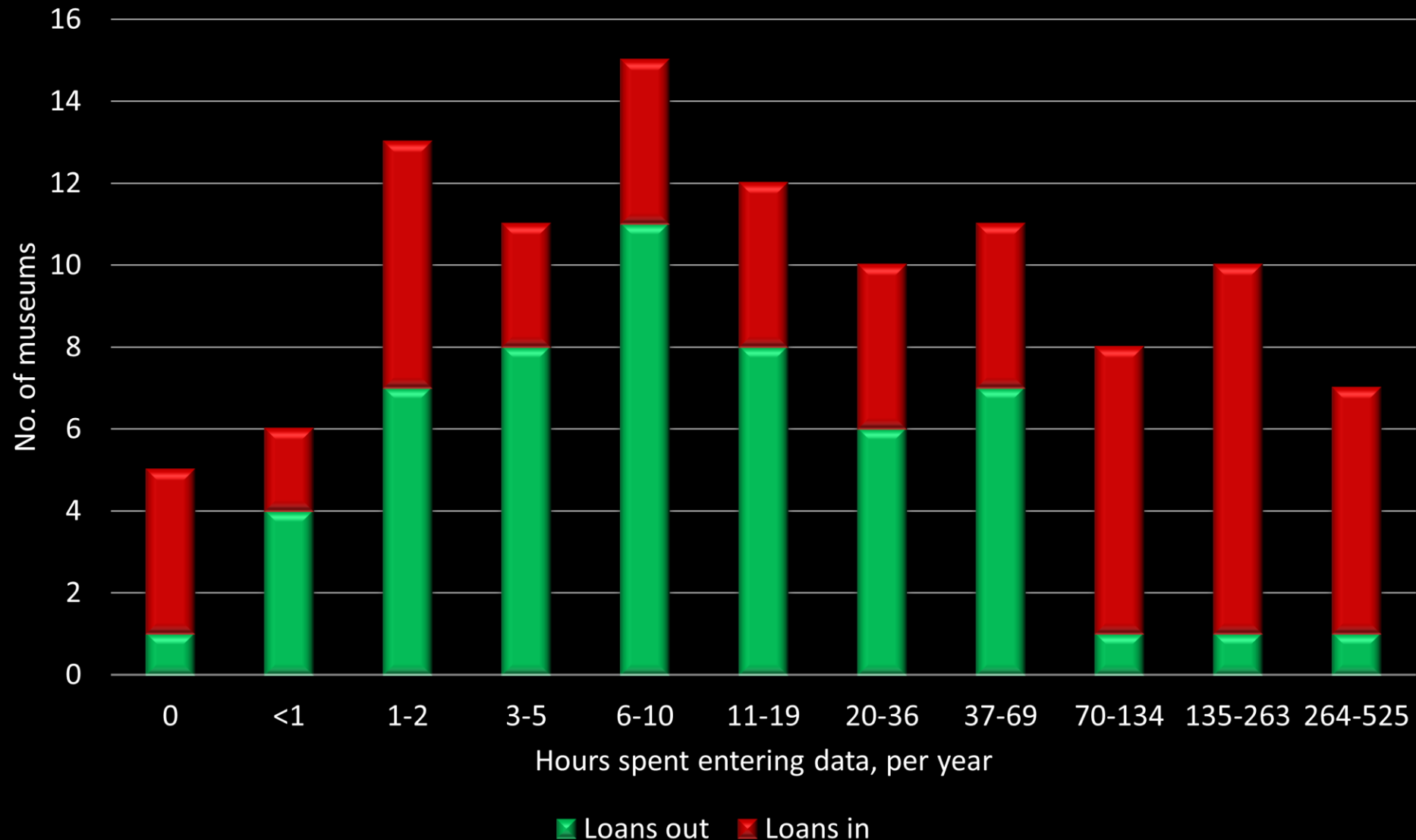
Loans out

minimum 0.00
median 8.75
mean 26.42
maximum 375.00

Loans in

minimum 0.00
median 35.33
mean 88.93
maximum 525.00

Data entry time per year (n=55 (out) / 53 (in))



... and why: time

Time spent on data entry for loans in over 10 years

- Median: 50 days = 0.2 years
- Mean: 127 days = 0.6 years
- Maximum: 750 days = 3.4 years

How we're doing it

2016 – Milan



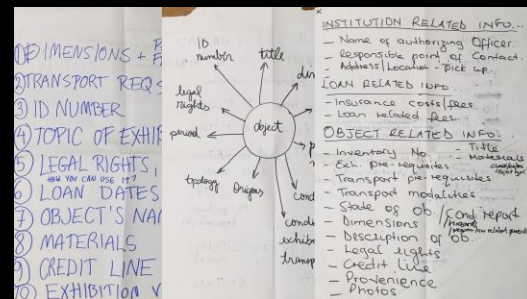
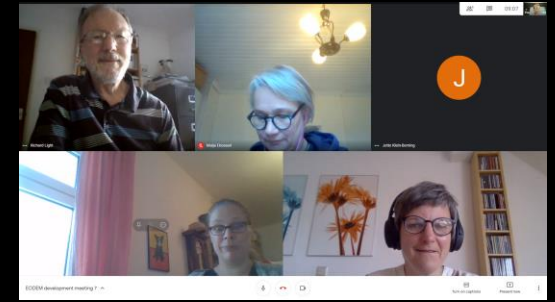
2017 – Tbilisi



2018 – Heraklion



2020-now – online



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Where are we now?

EODEM 1.0

- LIDO profile (machine- and human-readable)
- Sample record
- Schematron
- Online EODEM viewer
- Tools and templates
- Live importers / exporters ...

Next steps

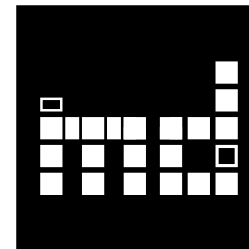
axiell

 **GallerySystems**
Collect. Manage. Share.

 Knowledge
Integration

_KulturIT

 modes



MUSOFT
part of the Axiell Group



 **SISTEMAS_{Do}FUTURO**

Userix Oy



zetcom

Next steps

Company	Product	Exporter	Importer
axiell	Axiell Collections, Mimsy XG	under development	under development
axiell /  MUSOFT part of the Axiell Group	Museion	under development	possibly
 GallerySystems Collect. Manage. Share.	TMS	planned	under development
 Knowledge Integration	CIIM	planned	no
_KulturIT	Primus, DigitaltMuseum	under development	under development
 modes	Modes	next major release	next major release
	musdb	released	released
 SISTEMASdoFUTURO	in arte, in patrimonium	planned	no
 skin	S-MUSEUM	under development	planned
 Userix Oy	Collecte	planned	possibly
 zetcom	MuseumPlus	released	released

Resources

- Home page: <https://cidoc.mini.icom.museum/working-groups/documentation-standards/eodem-home/>
 - FAQs
 - Presentations
 - Implementers
- EODEM file viewer: <https://cidoc-dswg.org/eodem/>
- Email help: eodem-support@googlegroups.com

Ask your software supplier!

Data standard



Lightweight Information Describing Objects

LIDO version 1.1

Document structure

lidoWrap

lido

descriptiveMetadata

objectClassificationWrap

objectIdentificationWrap

eventWrap

eventSet (production)

eventSet (etc.)

administrativeMetadata

Document structure

lido:lidoWrap	EODEM Exchange
lido:lido	EODEM Object
lido:lidoRecID	LIDO Record ID
lido:objectPublishedID	URI
lido:applicationProfile	LIDO Application Profile
lido:descriptiveMetadata	Object Metadata, Record Language
lido:objectClassificationWrap	Object Type Group
lido:objectIdentificationWrap	
lido:titleWrap	Title/Name Group
lido:repositoryWrap	Lender Group [1: repository]
lido:workID	Object Identifier
lido:objectDescriptionWrap	Brief Description
lido:objectMeasurementsWrap	Measurement Group
lido:objectMaterialsTechWrap	Materials/Techniques Group
lido:eventWrap	
lido:eventSet	Object Production Group
lido:eventActor	Maker Group
lido:eventDate	Production Date Group

Document structure

lido:eventSet	Loan Assessment Group
lido:eventObjectMeasurements	Value Group
lido:eventDescriptionSet	Insurance/Indemnity
lido:eventDescriptionSet	Condition Of Object
lido:eventSet	Object Move Requirements Group
lido:eventDescriptionSet	Handling
lido:eventDescriptionSet	Transport
lido:eventDescriptionSet	Condition Checking
lido:eventDescriptionSet	Hazards
lido:eventSet	Object Display Requirements Group
lido:eventObjectMeasurements	Temperature Requirements Group
lido:eventObjectMeasurements	Relative Humidity Requirements Group
lido:eventObjectMeasurements	Visible Light Exposure Requirements Group
lido:eventObjectMeasurements	Ultraviolet Light Exposure Requirements Group
lido:eventDescriptionSet	Installation Method
lido:eventDescriptionSet	Display Method
lido:eventDescriptionSet	Security
lido:eventDescriptionSet	Photography And Filming

Document structure

lido:administrativeMetadata	Administrative Metadata, Record Language
lido:rightsWorkWrap	Credit line
lido:recordWrap	
lido:recordID	Local Record ID
lido:recordType	LIDO Record Type Group
lido:recordSource	Lender Group [2: record source]
lido:recordInfoSet	Export Date/Timestamp
lido:resourceWrap	
lido:resourceSet	Image Group

Terminologies

Mandatory

- **IANA media types list**: Image Type
- **IETF language code list**: Record Language, Title Language
- **ISO 4217 (currencies)**: Value Currency
- **ISO 8601 (dates)**: Earliest Production Date, Latest Production Date, Export Date/Timestamp
- **Individual SI units of measurement** for quantified environmental requirements

Recommended

- **ISO 8601 (dates)**: Maker Earliest Date, Maker Latest Date
- **SI units** and their abbreviations: Unit

Terminologies

Mandatory

- **IANA media types list:** Image Type
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- **LIDO Terminology:**
 - actor_type: Maker Type
 - identifier_type: ...ID@type
 - pref: @pref
 - recordType: LIDO Record Type Identifier, LIDO Record Type Keyword
 - termMaterialsTech_type: Material Group

Recommended

- **ISO 8601 (dates):** Maker Earliest Date, Maker Latest Date
- **SI units** and their abbreviations: Unit

Terminologies

Terminologies

Measurements

- Object itself, or object's requirements?
- objectMeasurementsSet_type
 - Measurement object proper: <http://terminology.lido-schema.org/lido00927>
 - Measurement object requirement: <http://terminology.lido-schema.org/lido00923>

eventObjectMeasurements @type="<http://terminology.lido-schema.org/lido00923>" [= Measurement object requirement]

Terminologies

Events

- Historical, or generic?

Terminologies

Events

- Historical, or generic?
- eventType > Activity > Object requirement assessment
 - Object display assessment: <http://terminology.lido-schema.org/lido00794>
 - Object loan assessment: <http://terminology.lido-schema.org/lido00795>
 - Object move assessment: <http://terminology.lido-schema.org/lido00793>

eventSet
event

eventType

conceptID @type="http://terminology.lido-schema.org/lido00099" [= URI]
http://terminology.lido-schema.org/lido00795 [= Object loan assessment]

term

Object loan assessment

Terminologies

Measurement groups

- How to identify?

Terminologies

1. Loan Assessment

1. Value
2. Insurance/Indemnity
3. Condition Of Object

2. Object Move Requirements

1. Handling
2. Transport
3. Condition Checking
4. Hazards

3. Object Display Requirements

1. Temperature Requirements
2. Relative Humidity Requirements
3. Visible Light Exposure Requirements
4. Ultraviolet Light Exposure Requirements
5. Installation Method
6. Display Method
7. Security
8. Photography And Filming

Terminologies

Collections management concepts – Spectrum

Existing terms

- brief description:
<http://purl.org/spectrum/units/brief-description>
- condition note:
<http://purl.org/spectrum/units/condition-note>
- display recommendations:
<http://purl.org/spectrum/units/display-recommendations>
- handling recommendations:
<http://purl.org/spectrum/units/handling-recommendations>
- hazards note:
<http://purl.org/spectrum/units/hazards-note>
- security requirements:
<http://purl.org/spectrum/units/security-requirements>
- shipping note:
<http://purl.org/spectrum/units/shipping-note>

New terms

- condition checking requirements:
<http://purl.org/spectrum/units/condition-checking-requirements>
- imaging requirements:
<http://purl.org/spectrum/units/imaging-requirements>
- installation note: <http://purl.org/spectrum/units/installation-note>
- insurance or indemnity requirements:
<http://purl.org/spectrum/units/insurance-or-indemnity-requirements>
- security requirements:
<http://purl.org/spectrum/units/security-requirements>

Terminologies

Terminology regarding requirements – Getty AAT

Existing terms

- illuminance: <http://vocab.getty.edu/aat/300266203>
- light (energy): <http://vocab.getty.edu/aat/300056024>
- relative humidity:
<http://vocab.getty.edu/aat/300192097>
- temperature: <http://vocab.getty.edu/aat/300056066>
- temperature fluctuation:
<http://vocab.getty.edu/aat/300443559>
- ultraviolet radiation:
<http://vocab.getty.edu/aat/300056056>
- valuation: <http://vocab.getty.edu/aat/300412096>
- valuation note: <http://vocab.getty.edu/aat/300435426>

New terms

- duration: <http://vocab.getty.edu/aat/300443981>
- exposure (functional concept):
<http://vocab.getty.edu/aat/300443982>
- maximum: <http://vocab.getty.edu/aat/300443983>
- minimum: <http://vocab.getty.edu/aat/300443984>
- relative humidity fluctuation:
<http://vocab.getty.edu/aat/300443985>
- targets (multidisciplinary concept):
<http://vocab.getty.edu/aat/300443986>
- wavelength: <http://vocab.getty.edu/aat/300443987>

Terminologies

eventObjectMeasurements @type="<http://terminology.lido-schema.org/lido00923>" [= Measurement object requirement]

Terminologies

eventObjectMeasurements @type="<http://terminology.lido-schema.org/lido00923>" [= Measurement object requirement] @measurementsGroup="<http://vocab.getty.edu/aat/300056066>" [= temperature]

objectMeasurements

measurementsSet

measurementType

conceptID

<http://vocab.getty.edu/aat/300443984>

term

minimum

measurementUnit

°C

measurementValue

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Terminologies

- Event types – LIDO Terminology
- Measurement types – LIDO terminology
- Collections management concepts – Spectrum
- Terminology regarding requirements – Getty AAT



<http://cidoc.mini.icom.museum/working-groups/documentation-standards/eodem-home/>

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