



The Europeana Data Model for Cultural Heritage

What is the issue?

A vast number of Europe's cultural heritage objects are digitised by a wide range of data providers from the library, museum, archive and audio-visual sectors, and they all use different metadata standards. This data needs to appear in a meaningful way in a cross-cultural, multilingual context such as Europeana. Numerous cultural heritage resources such as thesauri exist worldwide and have the potential to add valuable content at low cost when re-used. Duplication of effort, however, needs to be avoided. The Linked Open Data environment lacks authoritative data from the cultural heritage community to contribute to the development of new knowledge.

What is the solution?

The Europeana Data Model (EDM) aims to bridge these gaps in the Europeana context. EDM is a major improvement on ESE, Europeana's first data model.

- EDM transcends domain-specific metadata standards, yet accommodates the range and richness of community standards such as LIDO for museums, EAD for archives or METS for digital libraries.
- It facilitates Europeana's participation in the Semantic Web, basing itself on an open, cross-domain, semantic web-based framework.
- EDM is a more developed data model that brings more meaningful links to Europe's cultural heritage data. Data from partners or external information resources with references to persons, places, subjects, etc., will connect to other initiatives and institutions. This will result in sharing enriched content, adding to it and thereby generating more content in ways that no single provider could achieve alone.
- The EDM semantic approach will translate into the richer resource discovery and improved display of more complex data.

How was EDM developed?

EDM has been developed together with technical experts from the library, museum, archive and audio-visual collection domains. It has been designed to accommodate standards such as DC, EAD and LIDO with the help of experts in these standards.



How will Europeana resource discovery change with EDM?

EDM will allow users to find far more associations between Europe's cultural data and the stories surrounding it. It will provide more answers to what, where, and who questions. This will result in a richer Europeana resource discovery experience, in turn bringing increased traffic to data providers. EDM will, as a result, contribute to the creation of new knowledge.

In addition, Europeana will be better able to represent data which is closely associated to one and the same object, i.e. complex objects or bundles of resources curated by a provider. In terms of a digitised book, for example, the individual chapters, illustrations and index can be visualized as one whole. In addition, EDM can show multiple views on an object, including information on the physical and digitised representation – distinct, yet together.

How can EDM contribute to enriching my data?

EDM enables data enrichment from a range of selected authoritative sources. For example, a digital object from Provider A may be contextually enriched by Europeana by the addition of data from authority files held by Provider B, or from a web-based thesaurus offered by Publisher C. The provenance of such additional data is also provided. It may:

- Link across language, domain and institutional views through alignment to both authoritative vocabularies (persons, object types, places, periods) and to other rich resources such as DBpedia. This finds new meaningful associations between different objects from different institutions on the one hand and, on the other, translates metadata by way of association.
- Contribute to the improvement of existing data by potentially identifying duplicate records.

How does EDM contribute to the Web of Data or Semantic Web?

EDM is a framework for *collecting*, *connecting* and *enriching* metadata. It does this by adhering to the modelling principles that underpin the approach of the Web of Data ("Semantic Web") connecting to generate new knowledge between nodes in the cultural heritage sector.

The Europeana EDM dataset will in principle be able to link into the Web of Data once open, meaning that visibility and access to Europe's cultural heritage resources will increase for those who contribute. Europeana could potentially be the new cultural node in the Web of Data.

How do I deliver EDM?

Before, during and after the implementation of EDM, data that is compliant only with ESE will continue to be accepted. EDM is compatible with ESE and no data will need to be resubmitted. Any provider who wishes to resubmit data, in order to increase its richness within Europeana, will be able to do so if they wish but will be under no obligation.

Where can I find more information?

For a more technical description of the EDM model, see:

- The Europeana Data Model Primer
- The Europeana Data Model Specification V5.2.3
- The EDM Mapping Guidelines

at <http://pro.europeana.eu/edm-documentation>

