



ENCODED ARCHIVAL DESCRIPTION (EAD) AND RECORDS IN CONTEXTS (RIC): A CULTURAL HERITAGE DATA ECOSYSTEM FOR HUMANITIES RESEARCH

ENCODED ARCHIVAL DESCRIPTION (EAD)

The **Encoded Archival Description (EAD)**¹ has been promoted since the 90'ies by the International Council on Archives (ICA) as the only international digital standard for describing archival holdings, alongside with EAD's (slightly younger) siblings Encoded Archival Context (EAC)² for archival authority records and Encoded Archival Guide (EAG)³ for institutions with archival holdings.

From a cultural-heritage data perspective, EAD has several advantages:

- It is **XML**-based, i.e., it is written in the utmost preferred language for cultural heritage data.
- EAD datasets can be automatically harvested by means of e.g. the Open Archives Initiative Protocol for Metadata Harvesting (**OAI-PMH**).
- EAD was successfully mapped to among others **MARC21**,⁴ **CIDOC-CRM**⁵ and **Dublin Core** in order to enhance Galleries, Libraries, Archives and Museums (GLAM) FAIRness.

EAD gave birth in 2016 to two children: Records in Contexts Conceptual Model (RiC-CM)⁶ and Records in Contexts Ontology (RiC-O).⁷ These two semantic artifacts make EAD compatible to the Semantic Web (Linked Open Data).

RECORDS IN CONTEXTS (RIC)

EADs and EACs have powered online archival catalogues and thus allowed remote research to archival holdings. RiC will cause in the next years a similar paradigmatic shift for machine-processable, SemanticWeb-driven research in the humanities.

First steps are encouraging: since June 2022⁸ it possible to query online the Archives Nationales de France (French National Archives) RDF/RiC-O knowledge graph.⁹ A converter from EACs and EADs to RDF/RiC-O has been made available¹⁰. Thanks also to the partnership binding the Universitätsarchiv Hamburg and the Service des Archives de l'Université de Strasbourg¹¹, the former follows with high interest technical innovations occurring in French archives.

CULTURAL HERITAGE DATA AT THE UNIVERSITÄTSARCHIV HAMBURG

The Universitätsarchiv Hamburg runs moreover two research-data-driven, cultural-heritage portals:

- The [Hamburger Professorinnen- und Professorenkatalog](#)¹², where more than 5'900 members of the teaching staff can be found;
- The [Hamburger Matrikelportal](#)¹³, showing scanned register cards and biographic info about all 35'000 students who enrolled in Hamburg between 1919 and 1935.

As first step in this direction, XSLT files mapping projects' XML exports to to-be-generated EACs are already available¹⁴.

NOTES

[1] <https://www.loc.gov/ead/>

[2] <https://eac.staatsbibliothek-berlin.de/>

[3] <http://apex-project.eu/index.php/en/outcomes/standards/eag-2012/>

[4] Ana Vukadin and Tamara Štefanac, 'Collection-Level and Item-Level Description in the Digital Environment: Alignment of Conceptual Models IFLA LRM and RiC-CM', in *Information and Knowledge Organisation in Digital Humanities* (Routledge, 2021), <https://doi.org/10.4324/9781003131816-3>.

[5] Inês Koch, Cristina Ribeiro, and Carla Teixeira Lopes, 'ArchOnto, a CIDOC-CRM-Based Linked Data Model for the Portuguese Archives', in *Digital Libraries for Open Knowledge*, ed. Mark Hall et al., Lecture Notes in Computer Science (Cham: Springer International Publishing, 2020), 133–46, https://doi.org/10.1007/978-3-030-54956-5_10.

[6] <https://www.ica.org/en/records-in-contexts-conceptual-model>

[7] <https://www.ica.org/en/records-in-contexts-ontology>

[8] Florence Clavaud and Pauline Charbonnier, 'From Classic Finding Aids to RiC-O Knowledge Graphs: Providing New Perspectives For End Users', 2022, <https://hal-enc.archives-ouvertes.fr/hal-03957423>.

[9] <https://sparna-git.github.io/sparnatural-demonstrateur-an/index-A.html>

[10] <https://github.com/ArchivesNationalesFR/rico-converter>

[11] Francesco Gelati and Kristina Rothaug, 'Die Universitätsarchive Straßburg und Hamburg im Austausch', *Universitäten - Geschichte - Quellen* (blog), 18 May 2022, <https://uniquellen.hypotheses.org/574>.

[12] <https://www.hpk.uni-hamburg.de/>

[13] <https://www.matrikelportal.uni-hamburg.de/>

[14] <https://gitlab-ce.rrz.uni-hamburg.de/uahh-digitale-dienste/hamburger-professorinnen-und-professorenkatalog/-/tree/main/code> and <https://gitlab-ce.rrz.uni-hamburg.de/uahh-digitale-dienste/matrikelportal>

Francesco Gelati (he/him)

orcid.org/0000-0002-6066-1308

Universitätsarchiv Hamburg University Archives
Head of Section Digital Services and Internal Consultancy

francesco.gelati@uni-hamburg.de

www.archiv.uni-hamburg.de

This poster is licensed under CC BY SA 4.0.

<https://creativecommons.org/licenses/by-sa/4.0/>

This poster is available here:

<https://doi.org/10.25592/uuhfdm.12049>

