**Name of Standard:** MARC21 (for authorities)

**URL:** <https://www.loc.gov/marc/authority/>

**Related Resources:**

* MADS <https://www.loc.gov/standards/mads/>
* MARC21 GND application profile <https://d-nb.info/1162294213/34>
* MARC21 GND application profile table (<http://www.dnb.de/SharedDocs/Downloads/DE/DNB/standardisierung/marc21FeldbeschreibungNormdatenExcel201803.zip?__blob=publicationFile>)
* AgRelOn Agent Relationship Ontology <https://d-nb.info/standards/elementset/agrelon>

**Summary (1-2 sentences):**

MARC21 is the dominating international reference standard for data encoding in libraries. It is used for both bibliographic and authority records.

It is the objective to understand elements of encoding relations between entities by examining approaches from the library domain. Insights can support the revision of the Encoding Archival Standards, and thus lead to better data sharing capabilities across the cultural heritage domain.

The analysis will give special attention to examples from the [Integrated Authority File](http://www.dnb.de/EN/Standardisierung/GND/gnd_node.html) of the German National Library which is used by libraries, but also Archives and Museums in Germany.

**Discussion:**

1. **Background (a few words)**
   1. **What kind of a standard is it? (Conceptual model, ontology, …)**

MARC21 is a library data encoding standard for bibliographic and authority data.

* 1. **Who maintains this standard?**

The standard is maintained by the Library of Congress.

* 1. **How old is it?**

The encoding standard had been developed in the 1960s and became US national standard in 1971 and international standard in 1973.

* 1. **What is its stated purpose and scope?**

It was established for data exchange (data transmission standard).

1. **Relation to Archival Description (1-2 sentences)**
   1. **expand on 1d**

MARC21 has been used by the archival and related communities (rare book, manuscripts, personal papers) - depending on the description systems in use.

* 1. **If archival description is outside the state purpose/scope, explain how it could be used for archival metadata**

MARC21 is a related standard. A basic crosswalk is provided by the EAD standard.

1. **What it does well (1-2 sentences)**

MARC21 is a very elaborated encoding standard, well structured and established. Its granularity makes it applicable to various entity types.

1. **Shortcomings (1-2 sentences)**

The standard itself is very old. The encoding is based on field codes and indicators makes it very complex. Therefore, the library community is making efforts to replace MARC21 by BIBFRAME in the future. However, MARC21 is still - and will remain for a longer time - the reference model.

1. **Possible Impact on Structured Archival Data (2-5 sentences)**

MARC21 has a long tradition. Its focus on data exchange and its apparent compatibility with entity-relationship-models (as reflected by the FRBR family/LRM and adapted by RDA) makes it suitable for examining encoding statements about relationships between entities in context of structured archival data and data exchange requirements/automated data workflows.

**Example (GND - Gemeinsame Normdatei (Integrated Authority File)):**

<http://d-nb.info/gnd/1031255427>

Field group: 5\*\* (used by GND: 500, 510, 511, 548, 550, 551)

Field 500: Relationships to Persons

Field 510: Relationships to Corporate Bodies

Field 511: Relationships to Conferences

Field 548: Temporal Relationships

Field 550: Relationships to Subjects (Occupations, Positions, Events, Predecessor, …)

Field 551: Relationships to Places

Ontology: <https://d-nb.info/standards/elementset/gnd> for types of relationship and description

**Encoding of** [**http://d-nb.info/gnd/1031255427**](http://d-nb.info/gnd/1031255427) **in WinIBW/OCLC:**

**510** !000074098!Ruhr-Universität Bochum [Tb1]**$4**affi**$v**Wissenschaftlicher Mitarbeiter**$Z**1968-1972

**510** !000074098!Ruhr-Universität Bochum [Tb1]**$4**affi**$v**Promotion**$Z**1971

**510** !004653858!Archivschule Marburg [Tb1]**$4**affi**$v**Archivreferendariat**$Z**1972-1974

**510** !004802322!Stadtarchiv Dortmund [Tb1]**$4**affi**$v**Stellvertretender Archivleiter**$Z**1974-1987

**510** !942193822!Historische Kommission für Westfalen [Tb1]**$4**affi**$v**Mitglied**$Z**1986-

**510** !00731227X!Westfalen-Lippe**$b**Westfälisches Archivamt [Tb1]**$4**affi**$v**Leitender Archivdirektor**$Z**1987-2008

**510** !004822900!Verein Deutscher Archivare [Tb1]**$4**affi**$v**Vorsitzender**$Z**1993-2001

**510** !952415968!Fachhochschule Potsdam**$b**Fachbereich Archiv-Bibliothek-Dokumentation [Tb1]**$4**affi**$v**Lehrauftrag**$Z**1994-2003

**548** 1943**$4**datl

**550** !040250989!Historiker [Ts1]**$4**berc

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**551** !040406083!Münster (Westf) [Tg1]**$4**ortw

**551** !04108750X!Wünschelburg [Tg1]**$4**ortg

**Attributes of Relationship:**

* “!{ID}!” = ID of related entity
* \_ = Name of related entity
* $4 = Relationship-Code/Type of Relationship (s. Ontology)
* $v = Description of Relationship (currently not standardized)
* $Z = Date/Time-span of relationship

**Encoding of** [**http://d-nb.info/gnd/1031255427**](http://d-nb.info/gnd/1031255427) **in MARC21 XML (note: (DE-588) = Persistent Authority Record Identifier of related entity):**

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