

11 March 2024

# Metadata services: Changes in RDF format from 18 June 2024 (Export Release 2024.02)

## 1. Release schedule

In accordance with the German National Library's (DNB) release planning for export formats<sup>1</sup>, the next change in the conversion and data modelling will take place on 18 June 2024. There may be disruptions to the interfaces and the Data Shop between 08:00 and 12:00 noon during the technical changeover.

## 2. Linked Data Service in general

### 2.1. Full copies

Following the export releases, it is expected that updated full copies of the Integrated Authority File (GND<sup>2</sup>) and the DNB's bibliographic data will be made available for download in the serialisation formats RDF/XML, Turtle, JSON-LD, as an HDT file<sup>3</sup> and in N-Triples as of March, June/July (cancelled for 2024 due to the update of the library system), and October/November.<sup>4</sup>

Metadata provenance dump deliveries are effected at the same intervals. The provenance information is modelled along the lines of PROV Ontology<sup>5</sup> and published in the form of a separate data copy. Additional information regarding planning, documentation and modelling is available on the DNB Wiki<sup>6</sup>.

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<sup>1</sup> <https://wiki.dnb.de/x/wgcbBQ> (in German language only)

<sup>2</sup> <https://www.dnb.de/EN/gnd>

<sup>3</sup> Header, Dictionary, Triples; <https://www.rdfhdt.org/what-is-hdt/>

<sup>4</sup> <https://data.dnb.de/opendata/>

<sup>5</sup> <https://www.w3.org/TR/prov-o/>

<sup>6</sup> <https://wiki.dnb.de/x/46G5C> (in German language only)

Full copies of the bibliographic data from the German Union Catalogue of Serials (ZDB)<sup>7</sup> and the Adress data of the German ISIL- and Library Codes Agency<sup>8</sup> will be updated in March and October/November.

The full copy for Entity Facts<sup>9</sup> is released monthly, albeit only in the format JSON-LD.

The full copies of the GND cross-concordances are updated once a year in October/November.

## 2.2. Prefixes used in this document

coar:	<a href="https://vocabularies.coar-repositories.org/version_types/">https://vocabularies.coar-repositories.org/version_types/</a>
dcat:	<a href="https://www.w3.org/TR/vocab-dcat-2/">https://www.w3.org/TR/vocab-dcat-2/</a>
dct:	<a href="https://www.dublincore.org/specifications/dublin-core/dcmi-terms/">https://www.dublincore.org/specifications/dublin-core/dcmi-terms/</a>
dnb:	<a href="https://d-nb.info/standards/elementset/dnb">https://d-nb.info/standards/elementset/dnb</a>
gndo:	<a href="https://d-nb.info/standards/elementset/gnd">https://d-nb.info/standards/elementset/gnd</a>
owl:	<a href="https://www.w3.org/2002/07/owl#">https://www.w3.org/2002/07/owl#</a>
rdf:	<a href="https://www.w3.org/1999/02/22-rdf-syntax-ns#">https://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
skos:	<a href="https://www.w3.org/2004/02/skos/core#">https://www.w3.org/2004/02/skos/core#</a>
wdrs:	<a href="https://www.w3.org/2007/05/powder-s">https://www.w3.org/2007/05/powder-s</a>

## 3. Changes in GND conversions

- | Correction:  
Until now, the destinations of redirects have been delivered as strings. In future, they will be delivered as URI with `rdf:resource`. The data type `http://www.w3.org/2001/XMLSchema#anyURI` will be assigned to `dnbt:canonicalUri`.  
Work data records containing a first author, artist or composer were previously redirected to two target records (Work data record and first author, artist or composer). This has now been corrected so that only the work data record is linked.

Example in RDF/XML:

```
<rdf:Description rdf:about="https://d-nb.info/gnd/1151913685">  
  <dnbt:canonicalUri  
rdf:datatype="http://www.w3.org/2001/XMLSchema#anyURI">https://d-  
nb.info/gnd/300428561</dnbt:canonicalUri>  
  <owl:sameAs rdf:resource="https://d-nb.info/gnd/300428561"/>  
</rdf:Description>
```

Examples in the test file:

```
https://d-nb.info/gnd/1151913685  
https://d-nb.info/gnd/300699700  
https://d-nb.info/gnd/4128613-3  
https://d-nb.info/gnd/122535669  
https://d-nb.info/gnd/1182475418  
https://d-nb.info/gnd/1230074678  
https://d-nb.info/gnd/4588716-0  
https://d-nb.info/gnd/1222012251
```

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<sup>7</sup> <https://zeitschriftendatenbank.de/startseite>

<sup>8</sup> <https://sigel.staatsbibliothek-berlin.de/en>

<sup>9</sup> <https://www.dnb.de/EN/entityfacts>

- | New feature:  
Two new statements have been introduced in order to support editorial processes in the GND. `dct:creator` is used in each GND data record to link to the institution which created it. Along with this information, the responsible library network editorial office is delivered as `dcat:maintainer`. The corresponding ISILs<sup>10</sup> are used for both links.

Example in Turtle:

```
<https://d-nb.info/gnd/7566886-5> a gndo:Manuscript;  
  wdrs:describedby <https://d-nb.info/gnd/7566886-5/about> .  
<https://d-nb.info/gnd/7566886-5/about> dct:creator isil:DE-576 ;  
  dcatde:maintainer isil:DE-576 .
```

Examples in the test file:

```
https://d-nb.info/gnd/7566886-5  
https://d-nb.info/gnd/1299218490  
https://d-nb.info/gnd/1302323911  
https://d-nb.info/gnd/1299605885  
https://d-nb.info/gnd/1271361183
```

## 4. Changes in the conversion of cross-concordances

- | Correction:  
`madsrdf:ComplexSubject` is no longer generated for AND relations in external thesauri. However, the relations are still delivered with `skos:closeMatch`.

No example.

Examples in the test file:

```
https://d-nb.info/gnd/120332197X  
https://d-nb.info/gnd/1219097969  
https://d-nb.info/gnd/040708640  
https://d-nb.info/gnd/4121851-6  
https://d-nb.info/gnd/041344995
```

## 5. Changes in the conversion of bibliographic data from the German National Library and the German Union Catalogue of Serials (ZDB)

- | New feature:  
This release delivers information on the file format of digital resources. The delivery is limited to the most common values. These include: `pdf`, `epub`, `html`, `mp3`, `wav` and `zip`. The IANA Media Types vocabulary<sup>11</sup> is used for this purpose.

Example in Turtle:

```
<https://d-nb.info/962828246> dcterms:format  
<https://www.iana.org/assignments/media-types/application/pdf> .
```

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<sup>10</sup> <https://sigel.staatsbibliothek-berlin.de/en>

<sup>11</sup> <https://www.iana.org/assignments/media-types/media-types.xhtml>

Examples in the test file:  
<https://d-nb.info/962828246>  
<https://d-nb.info/961946717>  
<https://d-nb.info/1264234279>  
<https://d-nb.info/1030188696>  
<https://d-nb.info/1014101530>  
<https://d-nb.info/972290508>  
<https://d-nb.info/982008554>

- | New feature:  
Resources deposited with the German National Library as open access publications are delivered with the property <http://purl.org/dc/terms/accessRights> and the subject [http://purl.org/coar/access\\_right/c\\_abf2](http://purl.org/coar/access_right/c_abf2).

Example in Turtle:

```
<https://d-nb.info/1132360587> dcterms:accessRights  
<http://purl.org/coar/access\_right/c\_abf2> .
```

Examples in the test file:  
<https://d-nb.info/1132360587>  
<https://d-nb.info/130243568X>  
<https://d-nb.info/1197143866>  
<https://d-nb.info/1255608196>

## 6. Test data and further information

The following test files, including the announced changes, can be accessed in the serialisation formats RDF/XML, Turtle and JSON-LD by visiting <https://data.dnb.de/testdat/> :

- | GNDTestRelease\_LDS\_2024\_02..." for GND authority data
- | CKTestRelease\_LDS\_2024\_02..." for GND cross-concordance data
- | DNBTestRelease\_LDS\_2024\_02..." for DNB and ZDB bibliographic data

All the information regarding the German National Library's Linked Data Service can be found on our website<sup>12</sup>.

Preliminary information for the next but one release (2024.03) with announcement in June 2024 (go live in September 2024): This release is subject to reservation and is likely to be cancelled due to the update of the library system.

If you have any questions please do not hesitate to mail us at [metadatendienste@dnb.de](mailto:metadatendienste@dnb.de).

Yours faithfully  
on behalf of Deutsche Nationalbibliothek (German National Library)

Tracy Arndt (Information Infrastructure)  
and Florian Betz (Digital Services)

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<sup>12</sup> <https://www.dnb.de/EN/lds>