

1. November 2018

Data service and interfaces: Machine assignment of keywords from the Library of Congress Subject Headings beginning for English-language university dissertations published online

Since June 2018, the German National Library (DNB) has been assigning keywords¹ to all English-language university dissertations for which full-text versions are available (online publications²) by machine. This relates to series O metadata of the Deutsche Nationalbibliografie³.

In future, this information will also be enriched in the metadata for parallel issues in series A, B and H of the Deutsche Nationalbibliografie.

Topical terms are now assigned using Library of Congress Subject Headings (LCSH⁴). For the proper names the vocabulary from the Integrated Authority File⁵ (GND entities: persons, geographical information, corporate bodies, conferences and works) will be used.

Delivery using export formats

1. MARC 21 format

Export release 2019.01⁶ on 12 February 2019 will contain the machine-assigned LCSH keywords in export format MARC 21⁷. Delivery will be effected in the known MARC fields 6XX (Subject Access Fields). The information "maschinell gebildet" (machined generated) will be entered in the corresponding MARC field 883 (Machine-Generated Metadata Provenance), subfield \$a.

¹ <http://www.dnb.de/subjectcataloguing>

² <http://www.dnb.de/EN/netzpublikationen>

³ <http://www.dnb.de/EN/nationalbibliografie>

⁴ <http://id.loc.gov/authorities/subjects.html>

⁵ <http://www.dnb.de/EN/gnd>

⁶ <https://wiki.dnb.de/x/IoiRAg>

⁷ <http://www.dnb.de/EN/marc21>

Example in MARC 21 format: new from 12 February 2019

LDR XXXXXnam a22XXXXXuc 4500
001 1160478767
003 DE-101
005 20180605133837.0
007 cr|||||||||
008 180604s2017____gw_|||||om|||_00|||eng__
015 __ \$a18,007\$d2dnb
016 7_ \$2DE-101\$a1160478767
020 __ \$a9783845278759\$9978-3-8452-7875-9
024 7_ \$2urn\$aurn:nbn:de:101:1-2018060411203945855898
035 __ \$a(DE-599)DNB1160478767
040 __ \$a1240\$bger\$cDE-101\$d1150
041 __ \$aeng
044 __ \$cXA-DE-BW
082 74 \$83\p\$a340\$qDE-101\$223sbnb
100 1_ \$0(DE-588)1139213490
\$0http://d-nb.info/gnd/1139213490\$0(DE-101)1139213490\$aJütte, Bernd Justin\$eVerfasser\$4aut
245 00 \$aReconstructing European Copyright Law for the Digital Single
Market\$bBetween Old Paradigms and Digital Challenges\$cBernd Justin Jütte
250 __ \$a1. Auflage
259 __ \$a11
264 _1 \$aBaden-Baden\$bNomos Verlagsgesellschaft mbH & Co. KG\$c2017
300 __ \$aOnline-Ressource, 594 Seiten
336 __ \$aText\$btxt\$2rdacontent
337 __ \$aComputermedien\$bc\$2rdamedia
338 __ \$aOnline-Ressource\$bcr\$2rdacarrier
490 1_ \$aLuxemburger Juristische Studien - Luxembourg Legal Studies\$v10
500 __ \$aLizenzpflichtig
502 __ \$bDissertation\$cUni. Luxembourg\$d2016
583 1_ \$aLangzeitarchivierung gewährleistet\$iLZA
**610 2_ \$81\p\$0(DE-588)5098525-5\$0http://d-nb.info/gnd/5098525-5
\$0(DE-101)940431181\$aEuropäische Union\$2gnd**
**650 _7 \$82\p\$0(DLC)sh85032446
\$0http://id.loc.gov/authorities/subjects/sh85032446\$aCopyright\$2lcsb**
653 __ \$a(Produktform)Electronic book text
653 __ \$a(VLB-WN)1778
653 __ \$a(BISAC Subject Heading)LAW051000
710 2_ \$0(DE-588)117513-0
\$0http://d-nb.info/gnd/117513-0\$0(DE-101)001175130\$aNomos
Verlagsgesellschaft\$eVerlag\$4pbl
776 08 \$iErscheint auch als\$nDruck-Ausgabe\$z9783848735426
776 08 \$iErscheint auch als\$nDruck-Ausgabe\$aJütte, Bernd Justin\$tReconstructing European
copyright law for the digital single market\$dBaden-Baden : Nomos, 2017\$h593
Seiten\$w(DE-101)1135946981
830 _0\$aLuxemburger Juristische Studien - Luxembourg Legal Studies\$v10
850 __ \$aDE-101a\$aDE-101b
856 40 \$uhttps://nbn-resolving.org/urn:nbn:de:101:1-2018060411203945855898
\$xResolving-System
856 _0 \$uhttp://d-nb.info/1160478767/34\$xLangzeitarchivierung Nationalbibliothek
856 4_ \$qapplication/pdf
883 0_ \$81\p\$amaschinell gebildet\$c0,00119\$d20180605\$qDE-101

883 0_ \$82\p\$amaschinell gebildet\$c0,20713\$d20180605\$qDE-101

883 0_ \$83\p\$amaschinell gebildet\$c0,99414\$d20180605\$qDE-101

925 r_ \$aro\$ara

926 1_ \$aLB\$o93\$v1.0

2. RDF format

The delivery of LCSH and the corresponding provenance information is planned for the same time as export release 2019.01 as part of the DNB's Linked Data Service⁸. The provenance information will be provided as a separate data copy in RDF for the data set "DNBTitel". Further details will be provided in an announcement⁹ scheduled for November 2018.

Example in RDF format (Turtle serialisation):

```
@prefix dnb: <http://d-nb.info/standards/elementset/dnb#>.
@prefix prov: <http://www.w3.org/ns/prov#>.
@prefix xsd: <http://www.w3.org/2001/XMLSchema#>.
@prefix agrelon: <http://d-nb.info/standards/elementset/agrelon#>.
@prefix dnb-prov-a: <http://d-nb.info/provenance/activity/>.

<http://d-nb.info/115505668X> dnb:hasqualifiedSubject [
  a prov:Entity, dnb:QualifiedSubject ;
  dnb:qualifiesSubject <http://id.loc.gov/authorities/subjects/sh85134146> ;
  prov:generatedAtTime "2018-05-22"^^xsd:date ;
  agrelon:metadataConfidence "0.18692"^^xsd:float ;
  prov:wasGeneratedBy dnb-prov-a:aep-lcsh:2018-05-22
] .
```

From export release 2019.02, the machine-generated LCSH keywords – excluding provenance information – will also appear in the regular profile "DINI-AG KIM recommendations":

```
@prefix dcterms: <http://purl.org/dc/terms/> .

<http://d-nb.info/115505668X> dcterms:subject
<http://id.loc.gov/authorities/subjects/sh85134146> .
```

Display in DNB catalogue

It is expected that the machine-assigned subject headings will be displayed in the full bibliographic information provided in the catalogue from 2019.

Example: <http://d-nb.info/1165650355>

⁸ <http://www.dnb.de/EN/lds>

⁹ <http://www.dnb.de/dataservicesnews>