German National Library
16 October 2013

Data Service Integrated Authority File (GND):
Changes in MARC 21 format for authority data from week 03, 2014

Dear Sir or Madam

This is to inform you of the upcoming changes in the MARC-21 format for authority data which apply as of week 03, 2014 (13 - 17 January 2014):

Geographic co-ordinates

Right from the inception of the Integrated Authority File (GND) it was always intended to add geographic coordinates to the geographic authority records. The exchange format MARC 21 is now being adjusted accordingly in field 034 to enable geographic coordinate information to be supplied. From January 2014 it is planned to enter roughly 40,000 coordinates from the "GeoNames"[1] database for geographic entities (Tg records) into the GND. Only the centre point coordinates will first be adopted, as these are the only ones which are freely usable.

MARC field 034 Coded cartographic mathematical data (R)

Indicators

First	Not defined	
	"_" – Not defined	
Second	Type of ring	
	"_" – Not applicable (= default)	
	"0" - Outer ring	
	"1" – Exclusion ring	

Subfield codes

$d (NR)	Coordinates - westernmost longitude
$e (NR)	Coordinates - easternmost longitude
$f (NR)	Coordinates - northernmost longitude
$g (NR)	Coordinates - southernmost longitude
$j (NR)	Declination - northern limit
$k (NR)	Declination - southern limit
$m (NR)	Right ascension - eastern limit
$n (NR)	Right ascension - western limit
$p (NR)	Equinox
$r (NR)	Distance from Earth
$s (NR)	G-ring latitude
$t (NR)	G-ring longitude
$x (NR)	Beginning date
$y (NR)	Ending date
$z (NR)	Name of extraterrestrial body
$0 (R)	Authority record control number or standard number

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[1] https://en.wikipedia.org/wiki/GeoNames

$2 (NR)		Source
$3 (NR)		Materials specified
$9A: (R)		Indicator of representations:
	Pos. 1:	
	"x"	Representation not applicable
	"a"	Analogue representation
	"d"	Decimal representation
	Pos. 2:	
	"x"	Exactness not applicable
	"g"	Exact coordinates
	"c"	Inexact (approximate) coordinates
	Pos. 3:	
	"x"	Ring type not applicable
	"0"	Outer ring
	"1"	Excluded ring
$9v: (R)	Comments	

Notes on the content and format of the following fields:

$d, $e, $f and $g
The coordinates in $d, $e, $f and $g are given in fixed positions:

- Analogue entries: "h¬ddd¬mm¬ss" (hemisphere, degrees, minutes, seconds)
- Decimal entries: "hddd.dddddd" (hemisphere-degrees.decimal degree)

The hemispheres have the following abbreviations: N = North, S = South, E = East, W = West.
In centre point coordinates, the latitude and longitude coordinates are given twice - in the subfields $d and $e and in $f and $g.

$j and $k
The subfields $j and $k are each eight characters long and determine the declination using the following system: hdddmmss (hemisphere-degrees-minutes-seconds). Each of these subelements is right-aligned, with zeros representing each unused position.

$m and $n
The subfields $m and $n are each six characters long and consist of the right ascension which is described using hhmmss (hour-minute-second). Each subelement is right-aligned, with zeros representing each unused position.

$p
The subfield is based on the Gregorian calendar and uses the yyyy (year) format, although a decimal point can also be added to include the month - yyyy.mm (year, month, e.g. 2013.05).

$r
The distance of celestial bodies to the Earth is given in light years based on the information provided in star charts.

$s and $t
For digital applications, the edge coordinates of a G-ring can be given in the repeatable subfields $s and $t. These fields have not yet been fully defined in MARC 21. The DNB currently has no plans to use these fields.

$x and $y
The start and end dates constitute the time span in which the given coordinates are valid. The date is given as YYYYMMDD. If no date is given, it is assumed that the coordinate information is still valid.

$z
Coordinate information for extraterrestrial bodies is disambiguated by including the name of the planet or star to which the coordinates in the subfields $d, $e, $f and $g refer in subfield $z. The Earth is the standard entry and is not given in this subfield.

$0
The ISIL or MARC Org. code of the reference file in the form "(ISIL)"; followed by the identification number of the reference file. The ISIL and identification number may only be given together. The URI must start with "http://" or "ftp://" and is introduced by "(uri)".

Example:

034 __$9A:**agx**$dE 008 41 00**$e**E 008 41 00**$f**N 050 07 00**$g**N 050 07 00**$2**wikiped
034 __$9A:**dgx**$dE008.683333**$e**E008.683333**$f**N050.116666**$g**N050.116666**$2**wikiped
[Centre point coordinates of Frankfurt am Main, first in analogue and then in decimal form]

Further test data is contained in the sample file GNDTestRelease01_2014 provided on
http://datendienst.dnb.de/cgi-bin/mabit.pl?userID=testdat&pass=testdat&cmd=login .

The official documentation of field 034 of the Library of Congress can be found at
http://www.loc.gov/marc/authority/ad034.html.

The full format concordance for the authority data is available at http://www.dnb.de/EN/marc21.
In order to provide a brief summary of the changes made since publication of the previous concordance, all changes to the previous version are given on the first pages of the latest concordance in each case.

The text of this circular is also available on our homepage at
http://www.dnb.de/EN/dataservicesnews

If you have any questions please do not hesitate to mail us at datendienste@dnb.de or phone us on the usual numbers.

Best regards,
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