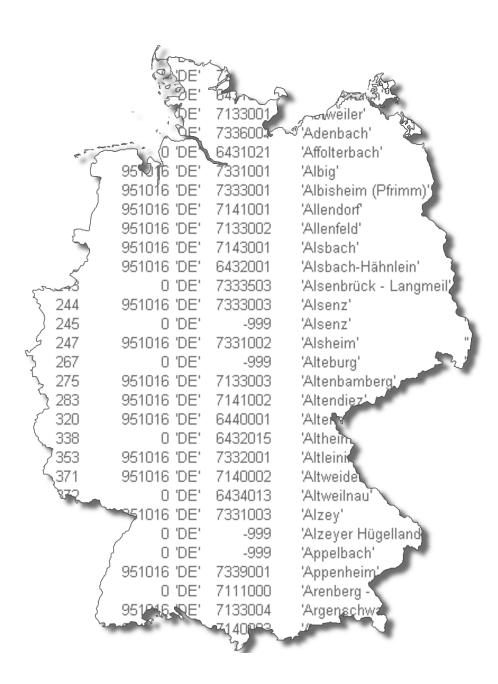
Geodaten der deutschen Landesvermessung

Bundesamt für Kartographie und Geodäsie

# Geographical Names 1:250 000 *GN250*



Status of the documentation: 13.04.2018 Status of the data: 31.12.2016

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#### 1 Overview of the dataset

Product : GN250

**Contents** : Geographical names of municipalities or parts thereof, landscapes,

mountain ranges, mountains, islands, rivers, canals, lakes, seas, etc.

The selection of the geographical names is based on the map scale

1:250 000.

Area : Federal Republic of Germany

**Georeferencing** : - Gauss-Krüger projection in the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> meridional strip,

Bessel ellipsoid, Potsdam Datum (origin of Rauenberg)

- UTM projection in the zones 32 and 33,

Ellipsoid GRS80, Datum ETRS89

- Geographical coordinates in decimal degrees,

Ellipsoid GRS80, Datum ETRS89

Further georeferencings on request – as a free download only a selection thereof

**Topicality** : Annual updating

Sources : - Registers of the statistical offices of the Länder (federal states)

- Federal Statistical Office (populations, Regional and Official Municipality Key)

- Digital Landscape Models 1:250 000 (DLM250)

- DGM 10 (for determination of the calculated heights with locations)

**Production method** : Manual digitization

Resolution : 1" geographical coordinates, 100 m Gauß-Krüger, UTM and Lambert

Data formats : - ArcInfo-SHAPE format (character encoding UNICODE in UTF-8)

- CSV format (character encoding UNICODE in UTF-8)

**Data carrier** : free of charge as download and view service

subject to a charge when using the ordering system (CD, FTP)

## 2 Description of contents of the dataset

#### 2.1 General

The Geographical Names contain names of the object areas

- settlement
- traffic
- vegetation
- water bodies
- relief
- areas

#### with attributes about:

- administrative division (statistical key-number)
- stream system (hydrological area code number according to LAWA)
- population
- position (geometrical data from the Digital Landscape Model on a scale of 1:250 000 as well attributive geographical coordinates GGMMSS -)
- status of the geographical name
- language of the geographical name
- height (height in metres above sea level).

Moreover, the following attribute is additionally available in CSV format, but for licensing reasons *exclusively to federal institutions*:

- postal codes (PLZ) for the object type "AX Ortslage".

For classification of the names the object types of the AmtlichesTopographisch-Kartographisches Informationssystem (ATKIS) (official topographic-cartographic information system) of the most up-to-date version are generally used (see: http://www.adv-online.de -> AAA-Modell -> Dokumente der GeoInfoDok).

The dataset GN250 orientates itself on the scale of 1:250 000. The position of the objects is described as a punctiform geometry via one single coordinate and via "smallest circumscribing rectangles" (bounding boxes).

The dataset GN250 includes an attribute for the calculated population figures of the object type "AX\_Ortslage". The calculation is made via the official population of the respective municipality and is distributed to the locations in percent. For the distribution in percent the sizes of the circumscribing rectangles (Bounding Box) as well as the surface geometries of the respective locations (if available) were used.

As of 31.12. 2011 a conversion of the dataset was effected for the purpose of achieving further harmonization of the administrative structures of the Länder as well as obtaining an adaption to the standards of the Federal Statistical Office. It concerns the attribute RS.

By its number of digits the previous 12-digit RS now reflects the respective administrative level. It is no longer filled with succeeding zeros

(Example: Land (state) Niedersachsen (Lower-Saxony): OLD->030000000000 : NEW->03).

#### 2.2 Description of the attributes of the dataset

#### Attribute name meaning

NNID National name identificator

DATUM Date of last modification of the name object (YYYYMMDD)

OBA Name of the ATKIS-object type to which the name object belongs

OBA WERT More precise specification of the name object within the ATKIS-object type

NAME Name of the geographical name object (official name of the LANGUAGE 'DEUTSCH')

SPRACHE Language to which "NAME" is to be assigned

GENUS Gender assigned to "NAME" (m, f, n, p)

NAME2 Synonym of the object name (amongst others, Sorbian or Frisian or Danish name)

SPRACHE2 Language, to which "NAME2" is to be assigned

GENUS2 Gender assigned to "NAME2" (m, f, n, p)

ZUSATZ Name affix (in case of several affixes one is selected coincidentally)

AGS Official Municipality Key [the AGS is explicitly stated for all Gemeinden, Kreise, Regierungsbezirke

and Bundesländer

RS Regional Key [exists for all administrative units "Gemeindeteil", "Gemeinde",

"Verwaltungsgemeinschaft", "Kreis", "Regierungsbezirk", "Land", "Staat"]

HOEHE Height above sea level (stated in metres; for the object types "Ortslage" and "Besonderer Hoehen-

punkt")

HOEHE GER Calculated height above NHN (heights measured above the base height level) (stated in metres for

the object type "Ortslage")

EWZ Population of municipalities [only stated for administrative units]
EWZ GER Calculated population for all "Ortslagen" (locations)

GEWK Hydrological area code number [unique hydrological area code number according to "Bund/Länder-

Arbeitsgemeinschaft Wasser" (LAWA)]

GEMTEIL Yes/No [is/is not a municipality]

VIRTUELL Yes/No [is/is not an independent municipality without a real "Ortslage"]
GEMEINDE Name of the municipality [for "Ortslagen", "Gemeindeteile"]

VERWGEM

Name of the administrative association [for "Ortslagen", "Gemeindeteile", "Gemeind

schaften"]

REGBEZIRK Name of the administrative district [for "Ortslagen", "Gemeindeteile", "Gemeinden", "Verwaltungsge-

meinschaften", "Kreise"]

BUNDESLAND Name of the Land (federal state) [for "Ortslagen", "Gemeindeteile", "Gemeindeteile",

"Verwaltungsgemeinschaften", "Kreise", "Regierungsbezirke"]

STAAT Two-letter code (ISO 3166, DIN-NABD 10.2 2-92) [for "Ortslagen" and "Verwaltungseinheiten"]

GEOLA Geographical longitude (degree, minutes, seconds (GGMMSS))
GEOBR Geographical latitude (degree, minutes, seconds (GGMMSS))
GKRE Gauss-Krüger easting (m; cf. georeferencing under point 1 for details)
GKHO Gauss-Krüger northing (m; cf. georeferencing under point 1 for details)

UTMRE UTM easting (m; cf. georeferencing under point 1 for details)
UTMHO UTM northing (m; cf. georeferencing under point 1 for details)

BOX GEO Smallest circumscribing rectangle for the object in geographical coordinates,

for point objects an artificial rectangle 0,00001 degree x 0,00001 degree with (GEO-

LA, GEOBR) as the centre. OGC Well Known Text (WKT) format

BOX\_GK Smallest circumscribing rectangle for the object in Gauß-Krüger coordinates, for

point objects an artificial rectangle 1m x 1m with (GKRE, GKHO) as the centre. OGC

Well Known Text (WKT) format

BOX\_UTM Smallest circumscribing rectangle for the object in UTM coordinates,

for point objects an artificial rectangle (1m x 1m) with (UTMRE, UTMHO) as the cen-

ter. OGC Well Known Text (WKT) format

#### 3 Data volume

Number of datasets : ca. 145.000
 Data volume in the SHAPE format : 660 MB
 Data volume in the CSV format : 122 MB

#### 4 Data formats

#### 4.1 SHAPE format

The SHAPE format is as a de-facto standard for the exchange of geodata a very widespread and suitable data exchange format.

Each dataset in the SHAPE format consists of the files with file extension:

.SHP Geometry file

.SHX ID and coordinates

.DBF DBASE attribute file (ID and attributes)

.PRJ Georeferencing

.CPG Indication of the character encoding

Here, the character encoding of the attributes is UNICODE in UTF-8.

Alternatively, two types of representation can be used:

GN250\_p.\* Representation as point geometry GN250\_b.\* Representation as bounding boxes

#### 4.2 CSV format

Text file containing the attribute table (see section 2). The semicolon is used as separator between the attributes of a dataset.

Files:

GN250.CSV Datasets in alphabetic order of the geographical names

GN\_DLMLink.CSV 1:N relation between the NNID of the name objects and one or several UI\_ID

of the related DLM objects.

#### Exclusively to institutions of the Federal Government postcodes are also available:

GN\_PLZ.CSV 1:N relation between the NNID of the name objects and one or several related

postcodes.

The character encoding is UNICODE in UTF-8.

## **General hints on interpretation**

RS:

The Regional Key (RS) is a 12-digit statistical key as used by the statistical offices. The key number is structured hierarchically and reflects the administrative levels existing in the Federal Republic. The RS indicates the assignment of the locations

to the Land (federal state) (1st and 2nd digit),

to the Regierungsbezirk (administrative district) (3rd digit),

to the Kreis (district) (4th and 5th digit),

to the Verwaltungsgemeinschaft (administrative association) (6th to 9th digit), and

to the Gemeinde (municipality) (10th to 12th digit).

Parts of cities and municipalities carry the statistical key number of the city or municipality they belong to.

AGS:

The 8-digit Official Key-Number (AGS) is derived from the regional key. However, it is shortened by the code number of the administrative association and constitutes the official statistical key of the municipalities. The AGS indicates the assignment of the locations

to the Land (1st and 2nd digit) to the Regierungsbezirk (3rd digit), to the Kreis (4th and 5th digit), and

to the municipality "Gemeinde" (6th to 8th digit).

Parts of cities and municipalities carry the statistical key number of the city or municipality they belong to.

RS / AGS:

The regional key as well as the official key-number are shown in the ATKIS object types 'administrative units and locations'.

LAWA:

The Gewässerkundliche Gebietskennzahl (Hydrological Area Code Number) has been replaced from the DLMs by the unique Waterbody Code Number according to the "Bund/Länder Arbeitsgemeinschaft Wasser" (LAWA)) (German Working Group on Water Issues of the Federal States and the Federal Government).

Object type:

The type of the object is described by the ATKIS object type (according to the current AAA model). All object types used listed in section 6.

Location:

The "location of the objects" is designated by Geographical Coordinates (longitude and latitude), by national coordinates in the Gauss-Krüger system (easting, northing) as well as by UTM coordinates (easting, northing) which, as a rule, were measured off from the corresponding sheets of the General Topographic Map 1:200 000 and the Topographic Map 1:50 000.

In the case of settlements, mountains and lakes the coordinate marks a coincidently selected point in the central area of the respective object. In the case of rivers it marks the mouth or the leave out of the Federal territory.

Height:

Height indication either by manual digitization from maps or taken out of lists (deviations to official heights from statistical reports are possible).

HOEHE GER: The calculated height indication of the object type "Ortslage" (location) was determined from the DGM10 (digital terrain model; grid width = 10 m) using the point coordinate. Deviations to official heights from statistical reports are possible.

VIRTUELL:

With locations carrying the attribute VIRTUELL = "Yes" represent names of municipalities without a real location. The coordinates originate from the DLM250 location of the domicile carrying the name of the municipality. For instance, for the city of "Maintal", which consists of four municipality parts: "Bischofsheim", "Dörnigheim", "Hochstadt", and "Wachenbuchen", entries as locations referring to these municipality parts with the attribute Virtual = "no", whereas

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for the entire city the attribute Virtual is set to "yes". The relevant coordinate lies in an agricultural area between the municipality parts.

#### EWZ\_GER:

Only for the object type "AX\_Ortslage". The calculation is made via the official population of the respective municipality and is distributed to the locations in percent. For the distribution in percent the sizes of the circumscribing rectangles (Bounding Box) as well as the surface geometries of the respective locations (if available) were used.

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# 6 Listing of the ATKIS object types used

OBA	ATKIS object type key
AX_Gebaeude	31001
AX_IndustrieUndGewerbeflaeche	41002
AX_TagebauGrubeSteinbruch	41005
AX_FlaecheBesondererFunktionalerPraegung	41007
AX_SportFreizeitUndErholungsflaeche	41008
AX Friedhof	41009
AX_Strasse	42002
AX Bahnstrecke	42014
AX_Flugverkehr	42015
AX_Landwirtschaft	43001
AX_Wald	43002
AX_Heide	43004
AX_Moor	43005
AX_Sumpf	43006
AX_UnlandVegetationsloseFlaeche	43007
Gewaesser	44000 <sup>1</sup>
AX_StehendesGewaesser	44006
AX_Meer	44007
AX_Turm	51001
AX_BauwerkOderAnlageFuerIndustrieUndGewerbe	51002
AX_BauwerkOderAnlageFuerSportFreizeitUndErholung	51006
AX_SonstigesBauwerkOderSonstigeEinrichtung	51009
AX_Ortslage	52001 <sup>2</sup>
AX_Schleuse	52003
AX_BauwerkImVerkehrsbereich	53001
AX_Strassenverkehrsanlage	53002
AX_WegPfadSteig	53003
AX_Bahnverkehrsanlage	53004
AX_SeilbahnSchwebebahn	53005
AX_Flugverkehrsanlage	53007
AX_EinrichtungenFuerDenSchiffsverkehr	53008
AX_BauwerkImGewaesserbereich	53009
AX_Gewaessermerkmal	55001
AX_SchifffahrtslinieFaehrverkehr	57002
AX_BoeschungKliff AX_DammWallDeich	61001
	61003 61005
AX_Hoehleneingang	
Besonderer_Hoehenpunkt AX NaturUmweltOderBodenschutzrecht	62090 <sup>3</sup>
AX_NaturomweitOderBoderischdizrecht AX SonstigesRecht	71006 71011
AX_Schutzzone	71011
AX_Schulzzone AX Nationalstaat	73001
AX_Nationalstaat AX_Bundesland	73001
AX_Regierungsbezirk	73002
AX_Kegierungsbezirk AX_KreisRegion	73003
AX_ReisRegion AX_Gemeinde	73004
AX Verwaltungsgemeinschaft	73009
AX_verwallungsgemeinschaft  AX Landschaft	74001
AX Insel	74004
7.01_111001	, 100 <del>-1</del>

# Geographische Namen 1:250 000

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<sup>&</sup>lt;sup>1</sup> The object types of DLM250 AX\_Fliessgewaesser (44001), AX\_Gewaesserachse (44004) and AX\_Gewaesserstationierungsachse (57003) are merged into the Gewaesser (44000) as a geographic name object. This object type is not GeoInfoDok conform.

<sup>&</sup>lt;sup>2</sup> The object types of DLM250 AX\_Siedlungsflaeche (41010) are merged into AX\_Ortslage.

<sup>&</sup>lt;sup>3</sup> The object type Besonderer\_Hoehenpunkt is not GeoInfoDok conform.

#### 7 Terms of use and references

This dataset is available exempted from payment for download and online use via geodata services, according to the law on access to spatial data, for commercial and non-commercial usage.

Usage of the geodata and geodata services is regulated by the *Verordnung zur Festlegung der Nutzungsbestimmungen für die Bereitstellung von Geodaten des Bundes (GeoNutzV)* (Ordinance to determine the conditions for use for the provision of spatial data from the Federation) of 19 March 2013 (Bundesgesetzblatt Jahrgang 2013 Teil I Nr. 14) (Federal Law Gazette 2013, Part 1., No. 14).

In particular, every user must place the respective source note referring to all geodata, metadata and geodata services unambiguously and in optical relationship. Alterations, revisions, new designs or any other variations must be provided with an alteration notice in the source reference.

Source reference and alteration notice must be presented as follows: With the representation on a website the source reference must be linked with the URL "http://www.bkg.bund.de".

- © GeoBasis-DE / BKG <year of last data ordering>
- © GeoBasis-DE / BKG <year of last data ordering> (data changed)

Example:

© GeoBasis-DE / BKG 2018

### 8 Data supply

The dataset can be ordered free of charge in the most frequently requested specifications and as a Web service under

www.geodatenzentrum.de → Open Data

Against reimbursement of the relevant costs the dataset can be ordered in further georeferencings from the service center's geodata shop and be delivered on data carrier or via per FTP:

www.geodatenzentrum.de → Online-Shops → Geodata

The respective extraordinary expense will be invoiced by BKG.

Orders and enquiries may be sent to the following address:

Bundesamt für Kartographie und Geodäsie Referat GI5 - Dienstleistungszentrum Karl-Rothe-Straße 10-14 D-04105 Leipzig

Tel.: +49(0)341 5634 333 Fax: +49(0)341 5634 415 Email: dlz@bkg.bund.de

Further information and services can be found under <a href="www.geodatenzentrum.de">www.geodatenzentrum.de</a>.