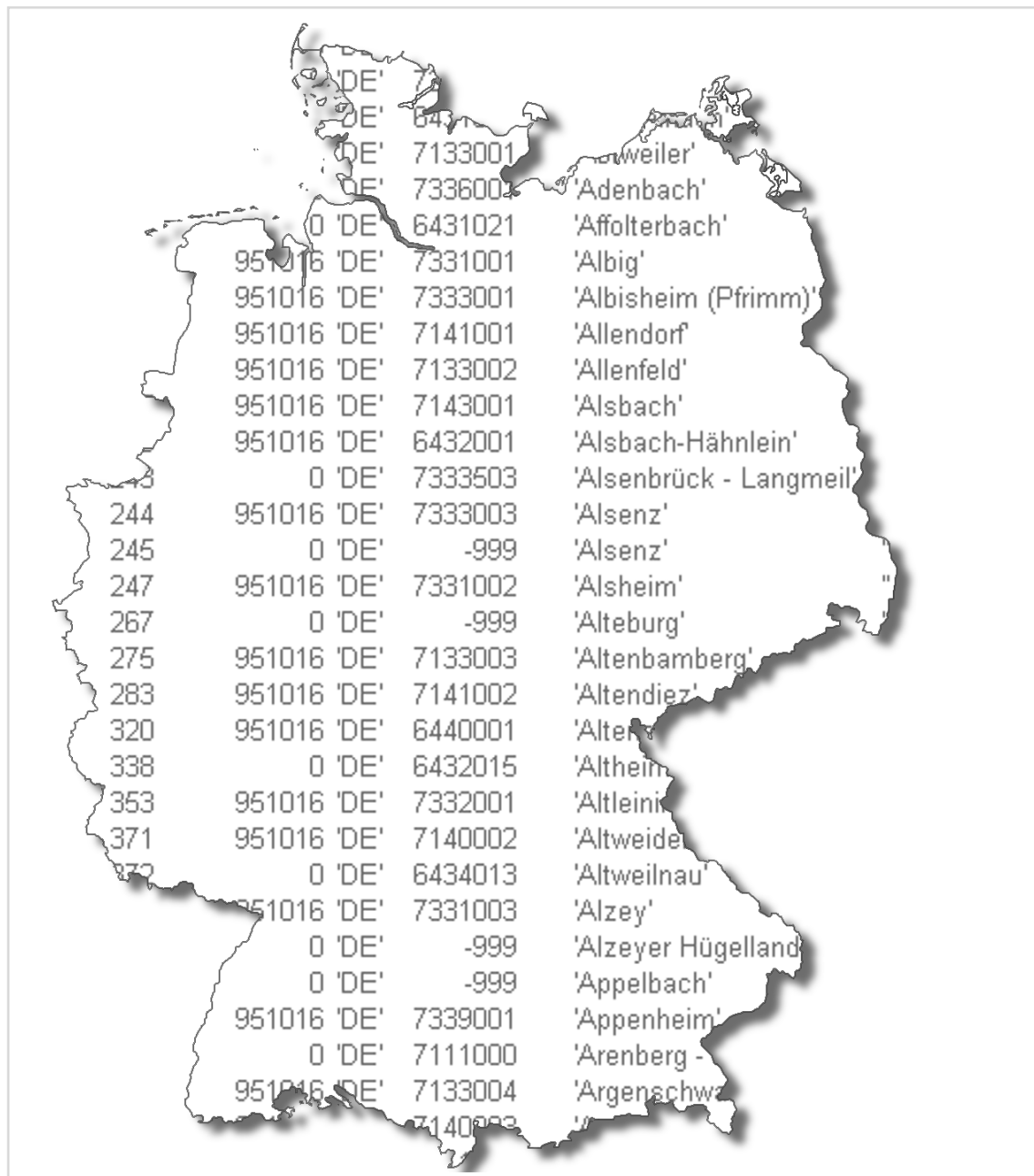


## Documentation

## Geographical Names 1:250 000

# GN250



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## 1 Overview of the dataset

<b>Product:</b>	GN250
<b>Content:</b>	<p>Geographical names of municipalities or parts thereof, landscapes, mountain ranges, mountains, islands, rivers, canals, lakes, seas, etc.</p> <p>The selection of the geographical names is based on the map scale 1:250 000.</p>
<b>Area:</b>	Federal Republic of Germany
<b>Spatial structure:</b>	1 File
<b>Spatial reference:</b>	<p>UTM projection in the zones 32 and 33 Ellipsoid GRS80, Datum ETRS89 (EPSG: 25832 or 25833)</p> <p>Gauss-Krüger projection in the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> meridional strip Bessel Ellipsoid, Potsdam Datum (EPSG: 31466, 31467, 31468)</p> <p>Geographical coordinates in decimal degrees Ellipsoid GRS80, Datum ETRS89 (EPSG:4326)</p>
<b>Currentness:</b>	31.12.2018
<b>Data formats:</b>	<p>ArcInfo-SHAPE format (character encoding UNICODE in UTF-8)</p> <p>CSV format (character encoding UNICODE in UTF-8)</p>
<b>Data supply*:</b>	<p>free of charge as download and view service</p> <p>subject to a charge when using the ordering system (CD, FTP)</p>
<b>Historical data:</b>	Available up to 1997, one Dataset per year
<b>Data volume:</b>	<p>Shape-Format: 475 MB</p> <p>CSV-Format: 64 MB</p>
<b>Data source:</b>	<p>Registers of the statistical offices of the Länder (federal states)</p> <p>Federal Statistical Office (populations, Regional and Official Municipality Key)</p> <p>Digital Landscape Models 1:250 000 (DLM250)</p> <p>DGM10 (for determination of the calculated heights with locations)</p> <p>Federal Network Agency (area codes)</p>

\* Please note that not all forms of delivery can be provided with each georeferencing and data format.  
If you have any questions, feel free contact the Service Centre (DLZ).

## **2 Description of the dataset and online services**

### **2.1 Data content**

#### **2.1.1 General**

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 Geographical Names involve names of the object themes settlement, traffic, vegetation, water bodies, relief and areas. They contain information about status and language of the name and also, depending on the nature of the object, about administrative division (statistical key number), population, area codes, hydrological area code number, height and position. The further attribute for postal codes (PLZ) is available in the CSV format exclusively for federal institutions due to licensing reasons.

For classification of the names the object types of the Amtliches Topographisch-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 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 available surface geometries of the respective locations (captured from a minimum size of 0,4 km<sup>2</sup>) and for smaller locations a standard size of 1 km<sup>2</sup> were used.

#### **2.1.2 Description of the attributes of the dataset**

<b>attribute name</b>	<b>meaning</b>
NNID	National name identifier
DATUM	Date of last modification of the name object (DD.MM.YYYY)
OBA	Name of the ATKIS object type to which the name object belongs
OBA_WERT	More precise specification of the name object type
NAME	Name of the geographical name object (official name, SPRACHE = „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 (i.a. sorbian or friesian 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 (for all administrative units)
HOEHE	Height above sea level stated in metres (for settlements and special elevation points)
HOEHE_GER	Calculated height above NHN stated in metres (for settlements)
EWZ	Population of municipalities (only for administrative units)
EWZ_GER	Calculated population (for settlements)
GEWK	Hydrological area code number (unique 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 settlement)
GEMEINDE	Name of the municipality (for settlements, municipalities)
VERWGEM	Name of the administrative association (for settlements, municipalities)
KREIS	Name of the district (county) (for settlements, municipalities, administrative associations)
REGBEZIRK	Name of the administrative district (for settlements, municipalities, administrative associations, districts)
BUNDESLAND	Name of the Land (federal state) (for settlements, municipalities, administrative associations, districts)
STAAT	Two-letter code according ISO 3166, DIN-NABD 10.2 2-92 (for settlements, municipalities, administrative associations)
HOCH	Northing of the point coordinate
RECHTS	Easting of the point coordinate
BOX	Smallest circumscribing rectangle for the object, for point objects an artificial rectangle (e.g. 1km x 1km in UTM-projection) with (RECHTS, HOCH) as the centre. OGC Well Known Text (WKT) format

### **2.1.3 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 federal state (1<sup>st</sup> and 2<sup>nd</sup> digit),
- to the administrative district (3<sup>rd</sup> digit),
- to the district (4<sup>th</sup> and 5<sup>th</sup> digit),
- to the administrative association (6<sup>th</sup> to 9<sup>th</sup> digit) and
- to the municipality (10<sup>th</sup> to 12<sup>th</sup> 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 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 federal state (1<sup>st</sup> and 2<sup>nd</sup> digit),  
to the administrative district (3<sup>rd</sup> digit),  
to the district (4<sup>th</sup> and 5<sup>th</sup> digit) and  
to the municipality (6<sup>th</sup> to 8<sup>th</sup> 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 are listed below.
- Location :** The “location of the objects” is designated by easting and northing in the selected projection 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.  
  
The coordinate of all object types marks a coincidentally selected point in the central area of the respective object.
- Height:** Height indication determined 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:** Locations carrying the attribute VIRTUELL = “Ja” represent names of municipalities without a real location. The coordinates originate from the point of the domicile in the data of DLM250 who is carrying the name of the municipality.  
For instance, the city of “Maintal” consists of four municipality parts: “Bischofsheim”, “Dörnigheim”, “Hochstadt”, and “Wachenbuchen“. Entries referring as locations to these municipality parts have the attribute VIRTUELL = “Nein”, whereas for the entire city the attribute VIRTUELL is set to “Ja”. The relevant coordinate for the city “Maintal” 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 available surface geometries of the respective locations, captured from a minimum size of 0,4 km<sup>2</sup>. For smaller locations a standard size of 1 km<sup>2</sup> were used.

#### **2.1.4 Listing of the ATKIS object types used**

<b>ATKIS object type</b>	<b>ATKIS object type key</b>
AX_Gebaeude	31001
AX_IndustrieUndGewerbeflaeche	41002
AX_Halde	41003
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_Hafenbecken	44005
AX_StehendesGewaesser	44006
AX_Meer	44007
AX_Turm	51001
AX_BauwerkOderAnlageFuerIndustrieUndGewerbe	51002
AX_BauwerkOderAnlageFuerSportFreizeitUndErholung	51006
AX_HistorischesBauwerkOderHistorischeEinrichtung	51007
AX_SonstigesBauwerkOderSonstigeEinrichtung	51009
AX_Ortslage	52001 <sup>2</sup>
AX_Hafen	52002
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_SchiffahrtslinieFaehrverkehr	57002
AX_BoeschungKliff	61001
AX_DammWallDeich	61003
AX_Hoehleneingang	61005
Besonderer_Hoehenpunkt	62090 <sup>3</sup>

AX_NaturUmweltOderBodenschutzrecht	71006
AX_SonstigesRecht	71011
AX_Schutzzone	71012
AX_Nationalstaat	73001
AX_Bundesland	73002
AX_Regierungsbezirk	73003
AX_KreisRegion	73004
AX_Gemeinde	73005
AX_Verwaltungsgemeinschaft	73009
AX_Landschaft	74001
AX_Insel	74004

<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 conform to the GeoInfoDok.

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

<sup>3</sup> The object type Besonderer\_Hoehenpunkt is not conform to the GeoInfoDok.

## **2.2 Data provisioning**

### **2.2.1 SHAPE format**

The SHAPE format is a de-facto standard for the exchange of geodata. It is 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

### **2.2.2 CSV format**

Text file containing the attribute table (see section 2.1.2). 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.
GN_VORWAHL.CSV	1:N relation between the NNID of the name objects and one or several related area codes.

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.
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The character encoding is UNICODE in UTF-8.

### **2.2.3 Online services**

The service center is providing standardised OGC (Open Geospatial Consortium) conform web services for the Geographical Names:

Mapping service (Web Map Service) *wms\_gn250*  
Download service (Web Feature Service) *wfs\_gn250*

### **2.3 Modification regarding to the earlier version of the dataset**

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 following zeros

(Example: Land (state) "Niedersachsen": OLD → 030000000000; NEW → 03).

## **3 Data acquisition**

The data can be obtained free of charge on our website under the heading „Products & Services“ → „Open Data“.

Historical data is also available in our Open Data Portal.

## **4 Terms of use and copyright**

The geodata offered here are available via geodata services for download and for online use free of charge according to the Open Data Datenlizenz Deutschland – Namensnennung – Version 2.0.

Especially, each user has to place the source reference to all geodata, metadata and geodata services recognisably and optically linked. Alterations, processings, new designs or other adaptations have to be affixed with an indication of the alteration in the source reference.

Source reference and indication of alteration have to be formulated as follows. The source reference has to be linked with the URL "<http://www.bkg.bund.de>" for the representation at a website.

© GeoBasis-DE / BKG <year of last data download>

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

## **5 Contact**

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