# GeoBasis-DE

Geodaten der deutschen Landesvermessung

Bundesamt für Kartographie und Geodäsie

# **Documentation**

Administrative Areas 1: 250 000 VG250 and VG250-EW



valid from the product as of 31.12.2022

# Administrative Areas 1: 250 000

VG250 and VG250-EW

# **Contents**

1	Overvie	ew of the dataset	3			
2	Genera	l information	5			
	2.1 Terr	ritorial code	6			
	2.1.1	Key number of the administrative association	6			
	2.2 Office	cial municipality key	6			
	2.3 Spe	cifics in the administrative structure	6			
	2.3.1	Unincorporated areas in Schleswig-Holstein	6			
	2.3.2	Inter-district association of administrations (Schleswig-Holstein)	7			
	2.3.3	Unincorporated areas in Bayern (Bavaria)	7			
	2.3.4	Former Regierungsbezirke (administrative districts)	7			
	2.3.5	Common German-Luxembourgish territory	7			
	2.4 Und	letermined boundary sections	7			
	2.5 Con	nmunalized waters	7			
3	Descrip	tion of the dataset	8			
	3.1 Spe	cification	8			
	3.2 Attri	butes	g			
	3.2.1	General Object Attributes	9			
	3.2.2	Lines	9			
	3.2.3	Areas	11			
	3.2.4	Points	14			
	3.2.5	Tables	15			
	3.2.6	Table Administrative assignment (VGTB_VZ_GEM)	16			
4	Descrip	tion of the data formats	17			
	4.1 SHA	APE format	17			
	4.1.1	Overview of the SHAPE data	17			
	4.1.1	File structure of the SHAPE format	17			
	4.2 Geo	ppackage format	18			
	4.2.1	Geopackage data overview	18			
	4.2.2	Overview of the views in the geopackage	19			
	4.3 Exc	el format	20			
	4.3.1	Excel workbook overview	20			
5	Annexe	es	20			
6	Data ac	quisition	21			
7	7 Terms of use					
8	Copyrig	yht	21			
9	Contact	•	21			

# 1 Overview of the dataset

Product:	VG250 and VG250-EW
Content:	The dataset includes the administrative units of the hierarchical administrative levels from the country (state) down to the "Gemeinden" (municipalities) with:  - administrative boundaries, - key-numbers, - names as well as - designations.  The data are structured according to levels (country/state, Länder (federal states), Regierungsbezirke (administrative districts), Kreise (districts/counties), Verwaltungsgemeinschaften (administrative associations), Gemeinden (municipalities).  In addition, the dataset includes: - official additional designations - names of national minorities or names in regional languages - overview of administrative assignment - overview of the administrative units.  The borders are also included as line geometry. For each "Gemeinde" (municipality) a point object is additionally included in the dataset.  The product VG250-EW additionally contains population numbers and the cadastral area.  The lines are of the type "SingleLine".  The areas are of the type "MultiPolygone" (also "Multipart").  Each area can comprise several single areas, such as regular area with exclaves or inset areas, each of these MultiPolygones corresponding to a dataset in the attribute table.
Area:	Bundesrepublik Deutschland (Federal Republic of Germany)
Spatial structure:	Complete data set without spatial breakdown
Spatial reference:	<ul> <li>Geographic coordinates in decimal degrees, Ellipsoid GRS80, Datum ETRS89</li> <li>Gauß-Krüger projection in the 3<sup>rd</sup>, 4<sup>th</sup> or 5<sup>th</sup> meridional strip Bessel Ellipsoid, Potsdam Datum, (central point Rauenberg)</li> <li>UTM projection in zone 32 or 33 Ellipsoid GRS80, Datum ETRS89</li> </ul>

The geometry of the boundaries is with respect to accuracy and resolution designed to the DLM250 (Digital Landscape Model 250). There is a gradual adjustment of the boundary courses to boundary-forming topographical objects of the DLM250.  The geometry of these points is taken from the built-up sitepoints (Ortslagen) of the DLM250 (Digital Landscape Model 250).		
1-year revision cycle with the statuses 31.12. and 01.01. of each year As of 31 <sup>st</sup> December is it possible to georeference the German federal statistics. The status 01.01. is a working status, which includes the changes as of 1 <sup>st</sup> January. In addition, the status of 31.12. appears, enriched with the population figures and the cadastral areas.		
<ul><li>Shape</li><li>Geopackage</li><li>Excel-Table</li></ul>		
<ul> <li>Dataset via Download or Disk</li> <li>Web Map Service (WMS)</li> <li>Web Feature Service (WFS)</li> </ul>		
none		
available from 1997		
<ul> <li>SHAPE: 109 MB</li> <li>Geopackage: 111 MB</li> <li>Excel-Table: 4 MB</li> </ul>		
Municipal directories and originals of acquisition on the basis of the Land Offices of Statistics, the Federal Statistical Office as well as the Land Survey Offices		

<sup>\*</sup> 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 General information

The dataset includes the administrative units of the Federal Republic of Germany from the national down to the municipal level.

With the exception of the administrative district level, the administrative levels have been created on a nationwide basis. To this end, the independent cities have additionally been adopted into the municipality and administrative association level, and likewise the non-associated municipalities into the administrative association level. By means of the IBZ attribute included in the data product it is possible to make a distinction between these levels (see **Annex B** for a list of the IBZ values). On the national and Land levels also the area of the respective territorial sea (12 nautical-mile-zone) is included.

The boundaries are also available as line geometry. For each municipality is also included a point object in the dataset.

Delimitation of boundaries in Lake Constance is of a technical nature (see Annex C.1.2).

The hierarchical structure of the administrative levels is represented by the Amtliche Regionalschlüssel (ARS) (territorial code). In addition, the Amtliche Gemeindeschlüssel (AGS) (Official Municipality Key) is kept with the data, which is derived from the ARS through omission of the administrative association.

ARS and AGS constitute the keys of the products of the statistical offices of the Federal Government and of the Länder. Thus, the integration of statistical data and data synchronization, respectively, can easily be performed (cf. also <a href="http://www.destatis.de">http://www.destatis.de</a>).

The complex administrative structure is shown country-specifically in the PDF file Verwaltungsgliederung VG.pdf dargestellt (see Annex).

The lines of the boundaries are of the geometry type "SingleLine".

The areas are of the type "MultiPolygone" (also "Multipart"). Each area can comprise several single areas, such as regular area with exclaves or inset areas, each of these MultiPolygones corresponding to a dataset in the attribute table.

Each administrative unit has precisely one record entry with the GF value 4. In addition, an administrative unit may have a record entry with further GF values. For more information, see **item 3.2.3** for the attribute GF.

The data record usually appears with the status 31.12. and 01.01. of each year. As of 31<sup>st</sup> December is it possible to georeference the German federal statistics. The German federal statistics are as of 31<sup>st</sup> December of each year. The status 01.01. is a working status, which includes the changes as of 1<sup>st</sup> January. In addition, the status of 31.12. appears, enriched with the population figures and the cadastral areas.

The appendices mentioned in this document with further information can be found in the file annex vg.pdf (see Annex).

#### 2.1 Territorial code

The territorial code (TC/ARS) is broken down as follows:

 $1^{st} - 2^{nd}$  digit = identification number of the Land

3<sup>rd</sup> digit = identification number of the administrative district

 $4^{th} - 5^{th}$  digit = identification number of the district (county)

6<sup>th</sup> - 9<sup>th</sup> digit = identification number of the administrative association

10<sup>th</sup> – 12<sup>th</sup> digit = community identification number

# 2.1.1 Key number of the administrative association

The leading digit of the administrative association key indicates the type of the community:

0 = municipality not adhering to an administrative association

5 = municipality adhering to an administrative association

9 = unincorporated area

With municipalities not adhering to an administrative association and unincorporated areas the leading digit (0 or 9) in the administrative association key is followed by the three-digit municipality key as the 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> digit in the territorial code. This way, the level of the administrative associations is represented on a nationwide basis.

# 2.2 Official municipality key

The official municipality key is analogously to the territorial code subdivided as follows:

 $1^{st} - 2^{nd}$  digit = identification number of the Land

3<sup>rd</sup> digit = identification number of the administrative district

 $4^{th} - 5^{th}$  digit = identification number of the district (county)

6<sup>th</sup> - 8<sup>th</sup> digit = community identification number

Through omission of the administrative association key the official municipality key can be formed from the territorial code. In the converse case knowledge of the key number of the administrative association is absolutely necessary.

#### 2.3 Specifics in the administrative structure

Specifics in the administrative structure result in the following exceptions.

#### 2.3.1 Unincorporated areas in Schleswig-Holstein

The two unincorporated areas located in Schleswig-Holstein belong to an association of administrations (Amt/supra-municipality). Given that this aspect cannot be implemented as a key number, these two unincorporated areas are treated as not belonging to a collectivity.

ARS (TC)	Unincorporated area	ARS (TC)	Amt (supra- municipality)	Kreis (district)
010539105105	Sachsenwald (Forstgutsbez.)	010535323	Hohe Elbgeest	Herzogtum Lauenburg
010609014014	Buchholz (Forstgutsbez.)	010605053	Leezen	Segeberg

#### 2.3.2 Inter-district association of administrations (Schleswig-Holstein)

The municipalities Bosau and Tangstedt (Kreis Stormarn) in Schleswig-Holstein are members of an administrative community (Amt) in a neighbouring district. Given that this aspect cannot be implemented as a key number, these two municipalities are treated as communes not belonging to a collectivity.

ARS (TC)	Municipality	Kreis (district)	ARS (TC)	Amt (supra- municipality)	Kreis (district)
010550007007	Bosau	Ostholstein	010575739	Großer Plöner See	Plön
010620076076	Tangstedt	Stormarn	010605034	Itzstedt	Segeberg

# 2.3.3 Unincorporated areas in Bayern (Bavaria)

In the past, the unregistered areas in Bavaria were also summarized in statistical lists, as a rule by districts. In this case the respective municipality key in the ARS (TC) and the AGS (OMK) figure was disclosed each with 444 at the end. In the described VG (AB) product the Bavarian unincorporated areas are shown individually.

#### 2.3.4 Former Regierungsbezirke (administrative districts)

In Niedersachsen, Rheinland-Pfalz and Sachsen the 3rd digit of the ARS (TC) and the AGS (OMK) (administrative district), respectively, serves only to clearly identify the district level. In these Länder (states) administratively there are no more administrative districts existant. The attribute FK\_S3 characterizes these cases by the value K.

#### 2.3.5 Common German-Luxembourgish territory

For reasons of generalization the common territory is not available in the dataset. This concerns the German-Luxembourgish boundary line in the rivers Our, Sauer and Moselle. Within the area of the Luxembourgish city of Vianden the otherwise jointly managed territory is interrupted. A list of the parts of the joint territory is given in **Annex D**.

#### 2.4 Undetermined boundary sections

Not mutually agreed sections of national and state (Länder) boundary sections are labelled at the line geometry by the attribute value RDG 2 (legally not defined boundary). The relevant boundary sections constitute a technical delimitation and are illustrated in **Annex C**.

#### 2.5 Communalized waters

Administrative units whose territory also extends over the North Sea or the Baltic Sea or Lake Constance are separated along the coast. A distinction between the two parts of the management units concerned is possible via the attribute GF (geofactor). The partial area on the waters referred to above has the GF value 2. On the other hand, the land areas have the GF value 4. (Description GF see **item 3.2.3**)

Administrative Areas 1: 250 000

VG250 and VG250-EW

# 3 Description of the dataset

### 3.1 Specification

The dataset is divided into the different administrative levels of Germany:

<ul><li>Staat (country)</li></ul>	VG250_STA
<ul><li>Länder (states)</li></ul>	VG250_LAN
<ul> <li>Administrative districts</li> </ul>	VG250_RBZ
<ul><li>Districts</li></ul>	VG250_KRS
<ul> <li>Administrative associations</li> </ul>	VG250_VWG
<ul> <li>Municipalities</li> </ul>	VG250 GEM

Each of these levels forms an object class containing the area geometry of the administrative units. Except for the administrative district level, all other levels constitute in each case a nationwide dataset, in which the areas contained directly carry the attributive information.

Also, in the dataset are comprised:

Boundary lines
 VG250\_LI

In each case the respective highest level is included.

In addition, each municipality has a point, representing the heart of the municipality.

PointsVG250\_PK

More information is contained in additional tables:

<ul> <li>Overview of the administrative units</li> </ul>	VGTB ATT VG
<ul> <li>regional language names of the administrative units</li> </ul>	VGTB_RGS_VG
<ul> <li>regional language names of municipality points</li> </ul>	VGTB_RGS_OTL
<ul> <li>Official additional designations of the municipalities</li> </ul>	VGTB_AZB_VG
<ul> <li>Administrative assignment</li> </ul>	VGTB_VZ_GEM

The tables are linked to the respective geometry via the ARS attribute.

The regional language names also include the names of the minorities.

A simple overview of the data model with the attributes and the values is contained in the following 3 tables:

<ul> <li>Attributes and their meaning</li> </ul>	VG_DATEN
<ul> <li>Designations of the administrative units and IBZ</li> </ul>	VG_IBZ
<ul> <li>Values of the attributes and their meaning</li> </ul>	VG_WERTE

#### 3.2 Attributes

#### 3.2.1 General Object Attributes

The general object attributes are based on the AFIS-ALKIS-ATKIS basic schema of the AdV (Working Committee of the Surveying Authorities of the Laender of the Federal Republic of Germany). The basic traits are defined in the main document of the GeoInfoDok (documentation for modeling the geoinformation of the official surveying system) of the AdV.

OBJID unique object identifier

BEGINN beginning of lifetime interval

Date at which this object was inserted or changed in the data set.

### 3.2.2 Lines

AGZ Type of boundary

Survey of values

1 = National border

2 = Federal State boundary

3 = Boundary of an administrative district

4 = Boundary of a Kreis (district/county)

5 = Boundary of an administrative association

6 = Boundary of a municipality

9 = Coastline

In each case the respective highest level is meant of the administrative unit limited by the boundary section.

This means: For example for the illustration of all district boundaries all higher boundaries are needed as well. (AGZ values 1, 2, 3 and 4)

The coast line (value 9) comprises the separation of land and water areas within an administrative unit and has no meaning as a dividing line between different administrative units, nor with regard to the foreign shores of Lake Constance and the non-German national border running through this lake. For the values 5 and 6 see also the GM5 attribute.

RDG Legal definition of the boundary section

Survey of values

1 = defined

2 = not defined

9 = coast line

For the purpose of this attribute "defined" means that the relevant boundary section has been precisely defined in a legal act, or taken from a representation serving cartographic needs.

# GM5 Boundary feature of the AGZ 5

Survey of values

8 = boundary not limiting an association

0 = boundary feature according to AGZ

The attribute GM5 describes the function of the boundaries of administrative associations (AGZ 5). All boundary sections with the value 8 exclusively limit municipalities not adhering to an association.

### GMK Coast/sea boundary feature

Survey of values

7 = at sea (unusual representation)

8 = in addition at sea (usual representation)

9 = on coast

0 = without any particular feature

The attribute GMK describes the function of the boundary geometry on the coast or on the sea. The value 9 denotes the boundaries which in the dataset run on the on the coast of North Sea, Baltic Sea and Lake Constance.

With the value 8, additional boundary lines in the North Sea, Baltic Sea and Lake Constance are shown in the data set, which have been officially established and whose graphic representation is common. The remaining boundary lines on the waters, the graphical representation is not common are marked with the value 7.

# DLM\_ID DLM object identifier

Object identifierr of the DLM250

#### 3.2.3 Areas

#### ADE Administrative level

Survey of values

- 1 = Country
- 2 = State
- 3 = Administrative district
- 4 = District
- 5 = Administrative association
- 6 = Municipality

#### GF Geofactor

Survey of values

- 1 = Waters without structures
- 2 = Waters with structures
- 3 = Land without structure
- 4 = Land with structure

The areas for which below the Land (state) level there exist no further levels are assigned the designation "without structure". The indication "waters" refers to the North and Baltic Seas as well as to Lake Constance.

Administrative units whose territory also extends over the North Sea or the Baltic Sea or Lake Constance are separated along the coast. A distinction between the two parts of the administrative units concerned is possible with the attribute GF (Geofactor). The partial area on the mentioned waters has the GF value 2. On the other hand, the land areas have the GF value 4.

For the exclusive representation without the areas on the North Sea, Baltic Sea or Lake Constance filter on GF = 4. The coastal form is thus retained.

#### Basically:

Each administrative unit has precisely one record entry with the GF value 4. In addition, an administrative unit may have a record entry with the GF value of 2.

### BSG Particular areas

Survey of values

- 1 = Germany
- 9 = Lake Constance (Bodensee)

#### ARS Territorial Code (TC)

This key is the statistical key. It is structured hierarchically and reflects the different administrative levels as existing in the Federal Republic of Germany.

The territorial code (ARS) is broken down as follows:

 $1^{st} - 2^{st}$  digit = identification number of the Land

3<sup>rd</sup> digit = identification number of the administrative district

 $4^{th} - 5^{th}$  digit = identification number of the district (county)

6<sup>th</sup> - 9<sup>th</sup> digit = identification number of the administrative association

10<sup>th</sup> - 12<sup>th</sup> digit = community identification number

The ARS is also used to link to the other information tables.

# AGS Official municipality key

The key is structured hierarchically and is derived from the ARS shortened by the key number of the administrative association.

The AGS is broken down as follows:

1<sup>st</sup> - 2<sup>st</sup> digit = identification number of the Land

3<sup>rd</sup> digit = identification number of the administrative district

 $4^{th} - 5^{th}$  digit = identification number of the district (county)

6<sup>th</sup> - 8<sup>th</sup> digit = community identification number

#### SDV\_ARS Seat of the administration (territorial code)

ARS of the municipality representing the seat of the municipality (for ADE 6 identical with ARS)

#### GEN Geographical name

BEZ Designation of the administrative unit

(see also IBZ).

IBZ Identificator

The identificator is a product-specific identification number for the BEZ attribute.

BEM Note

The note constitutes a differential description for the BEZ attribute.

#### NBD Generation of names

Survey of values

ja = designation is part of the name nein = designation is not part of the name

The attribute indicates whether the BEZ attribute should be used for the full name formation.

IBZ	BEZ	GEN	NBD	full name	not
42	Kreis	Oberbergischer Kreis	nein	Oberbergischer Kreis	Kreis Oberbergischer Kreis
43	Landkreis	Salzlandkreis	nein	Salzlandkreis	Landkreis Salzlandkreis
42	Kreis	Dithmarschen	ja	Kreis Dithmarschen	
43	Landkreis	Prignitz	ja	Landkreis Prignitz	

NUTS European statistics key

for further details, see Annex E

Prepared NUTS regions are found in the NUTS250 product.

(see www.geodatenzentrum.de → Open Data → Administrative areas (VG) or Verwaltungsgebiete).

ARS 0 filled territorial code

basically 12-digit ARS (filled in with zeros on the right side)

AGS\_0 filled Official Municipality Key

basically 8-digit AGS (filled in with zeros on the right side)

WSK Effectiveness

The attribute describes the legally relevant date for the effectiveness of the change. This date is not communicated by all sources, so that there is no entitlement to completeness.

Further attributes include structural key number fractions of the keys ARS and AGS:

 $SN_L = Land (state)$ 

SN\_R = administrative district

SN K = district

SN\_V1 = administrative association – front part SN\_V2 = administrative association – rear part

SN\_G = municipality

FK\_S3 Function of the 3rd key digit

R = administrative district

K = district

In the case of Länder (states) with administrative districts the attribute is assigned the value R. Länder without an administrative district or 3-digit district key are also assigned the value R, and the 3<sup>rd</sup> key digit the value 0, respectively. In the case of the Länder with a 3-digit district key number the third key digit only serves to unambiguously mark the Kreis (district) level, and the attribute is assigned the value K. In these Länder there exist no longer any administrative districts.

DLM ID DLM object identifier

By means of this key the administrative units can be linked with the data stock of the DLM250 (Digital Landscape Model 250).

#### In addition, the product VG250-EW comprises:

EWZ Population

The population numbers of the Statistisches Bundesamt (www.destatis.de) (Federal Statistical Office) with the status of 31<sup>st</sup> December of the year in question.

KFL Cadastral area in km<sup>2</sup>

Specification of the cadastral areas in km² from the area statistics of the Statistisches Bundesamt (www.destatis.de) with the status of 31<sup>st</sup> December of the year in question.

By accumulation rounded values slight inaccuracies are possible.

The annually updated administrative areas are published contemporaneously in the product VG250 (without population and without cadastral areas) with the topicality statuses 31st December and 1st January. Upon receipt of the population numbers and the cadastral areas from the Statistisches Bundesamt the dataset is provided as the product VG250-EW (including population and cadastral areas) with the status of topicality 31st December of the respective year.

#### **3.2.4 Points**

ARS, AGS, GEN, BEZ, IBZ, BEM and NBD

These attributes correspond to the same attributes of the areas (see **item 3.2.3**).

OTL Location

Name of the location of the point. The location of the points and the name are taken from the spatial location feature type of the DLM250 (Digital Landscape Model 250).

The following 4 attributes represent the geographical coordinates of the points in the WGS84 datum.

LON\_DEZ Geographic Longitude in Decimal Degrees
LAT\_DEZ Geographic Latitude in Decimal Degrees
LON\_GMS Geographic Longitude in Degrees, Minutes and Seconds
LAT\_GMS Geographic Latitude in Degrees, Minutes and Seconds

The indication of the seconds is as an integer.

DLM\_ID DLM object identifier

By means of this key the built-up site-points (Ortslagen) can be linked with the data stock of the DLM250 (Digital Landscape Model 250).

#### **3.2.5 Tables**

In addition to the attributes of the areas (see **item 3.2.3**), further information tables contain further attributes. The tables are linked to the respective geometry via the ARS attribute.

# RGS Regional Language

Regional language contains the names of the administrative units in a regional language or in the languages of the national minorities.

The respective language is listed under SPR.

### SPR Language

Survey of values

dan = Danish

dsb = Lower Sorbian frr = Northern Frisian hsb = Upper Sorbian nds = Low German stq = Saterland Frisian

The language refers to RGS (Regional Language) and indicates the language used.

### RGS\_OTL Regional Language Location

Regional language location contains the names of the locations in the points of the municipality in a regional language or in the languages of the national minorities. The respective language is under SPR\_OTL.

# SPR\_OTL Language Location

Survey of values

dan = Danish

dsb = Lower Sorbian frr = Northern Frisian hsb = Upper Sorbian nds = Low German stq = Saterland Frisian

The language location refers to RGS\_OTL (Regional Language Location) in the points of the municipalities and indicates the language used.

#### AZB Official Additional Designation

#### LGS Length of the key ARS

Number of the digits counted from the left of the territorial code (ARS) not filled with zeros to 12 digits, which identifies the units.

#### 3.2.6 Table Administrative assignment (VGTB\_VZ\_GEM)

The Administrative assignment includes the "Gemeinden" (municipalities) of the Federal Republic of Germany with the superior administrative units and the corresponding NUTS regions.

This table can be linked to the geometry of the municipalities with the attribute ARS\_G. The connection is made on the municipality geometry side via the attribute ARS.

The attributes ARS\_..., AGS\_..., GEN\_..., BEZ\_... and IBZ\_... described below, are distinguished by appending the identifiers G, V, K, R and L instead of .... So, the administrative level is marked by the identifier. AGS is contained only with the identifier G. As regards the other identifiers, the AGS (OMK) is identical with the respective ARS (TC).

The underlying attributes ARS, AGS, GEN, BEZ, IBZ correspond to the attributes of the areas of the same name (see **item 3.2.3**).

Survey of identifiers of the administrative level

G = Gemeinde (municipality)

V = Verwaltungsgemeinschaft (administrative association)

K = Kreis (district)

R = Regierungsbezirk (administrative district)

L = Land (federal state)

The following attributes Attribute NUTS...\_Code and NUTS...\_Name are distinguished with the identifiers 3, 2 and 1 instead of ... . So, the respective level of the NUTS region (NUTS level) is marked.

Survey of the identification of the NUTS level

3 = NUTS 3

2 = NUTS 2

1 = NUTS 1

NUTS... CODE Hierarchical key of the NUTS region

3-digit NUTS 1

4-digit NUTS 2

5-digit NUTS 3

NUTS... NAME Name of the NUTS region

The NUTS code (Nomenclature des unités territoriales statistiques) represents the "European classification of territorial units for statistics" of the Statistical Office of the European Union (EUROSTAT) according to the Regulation (EC) No 1059 / 2003 (of the European Parliament and of the Council) of 26<sup>th</sup> May 2003 in its latest version.

See also the separate data set NUTS regions NUTS250.

# 4 Description of the data formats

#### 4.1 SHAPE format

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

Each dataset consists of the following files in UTF-8 character coding (Unicode).

#### 4.1.1 Overview of the SHAPE data

area level Staat (country)	VG250_STA.SHP
area level Land (federal state)	VG250_LAN.SHP
area level Regierungsbezirk (administrative district)	VG250_RBZ.SHP
area level Kreis (district)	VG250_KRS.SHP
area level Verwaltungsgemeinschaft (Administrative associations)	VG250_VWG.SHP
area level Gemeinde (Municipality)	VG250_GEM.SHP
boundary lines	VG250_LI.SHP
points of municipalities	VG250_PK.SHP
table regional language names (also minorities) (administrative units)	VGTB_RGS_VG.DBF
table regional language names (also minorities) (points)	VGTB_RGS_OTL.DBF
table official additional designations	VGTB_AZB_VG.DBF
table overview of the administrative units	VGTB_ATT_VG.DBF
table administrative assignment	VGTB_VZ_GEM.DBF

Tables with a simple overview of the data model with the attributes and the values:

table attributes and their meaning VG\_DATEN.DBF

table designations of the administrative units and IBZ VG\_IBZ.DBF

table values of the attributes and their meaning VG WERTE.DBF

#### 4.1.1 File structure of the SHAPE format

The shape files have the following file structure:

\*.SHP Geometry

\*.SHX Geometry index

\*.PRJ Projection

\*.DBF Attributes

\*.CPG Character set

The pure tables consist only of the DBF and CPG files.

# 4.2 Geopackage format

The Geopackage Data Format (GPKG) is an open source format from the Open Geospatial Consortium (OGC) for storing, managing and exchanging geospatial data. The GeoPackage is based on an SQLite database.

The GPKG databases provided are based on the profile for the geopackage of the AdV (Working Committee of the Surveying Authorities of the Laender of the Federal Republic of Germany).

# 4.2.1 Geopackage data overview

The data correspond to those of the Shape format.

vg250\_sta area level Staat (country)

vg250\_lan area level Land (federal state)

vg250\_rbz area level Regierungsbezirk (administrative district)

vg250\_krs area level Kreis (district)

vg250\_vwg area level Verwaltungsgemeinschaft (Administrative associations)

vg250\_gem area level Gemeinde (Municipality)

vg250\_li boundary lines

vg250\_pk points of municipalities

vgtb\_rgs\_vg table regional language names (also minorities)

(administrative units)

vgtb\_rgs\_otl table regional language names (also minorities) (points)

vgtb\_azb\_vg table official additional designations

vgtb\_vz\_gem table administrative assignment

Note: The overview of the administrative units is only contained in the

geopackage as view v\_vgtb\_att\_vg.

Tables with a simple overview of the data model with the attributes and the values:

vg\_daten table attributes and their meaning

vg\_ibz table designations of the administrative units and IBZ

vg\_werte table values of the attributes and their meaning

# 4.2.2 Overview of the views in the geopackage

The views are a special view of the data with integrated value tables for itemized value information and resolved attribute labels.

v_vg250_gem	View to the Gemeinde (Municipality)
v_vg250_vwg	View to the Verwaltungsgemeinschaft (Administrative associations)
v_vg250_krs	View to the Kreis (district)
v_vg250_rbz	View to the Regierungsbezirk (administrative district)
v_vg250_lan	View to the Land (federal state)
v_vg250_sta	View to the Staat (country)
v_vg250_f	View of the base areas (lowest level in each case)
v_vz250_gem	View area of Gemeinde (Municipality) with administrative assignment
v_vg250_li	View to the boundary lines
v_vg250_pk	View to the points of municipalities
v_vgtb_att_vg	View overview of the administrative units
v_vgtb_rgs_vg	View to the regional language names (also minorities) (administrative units)
v_vgtb_rgs_otl	View to the regional language names (also minorities) (points)
v_vgtb_azb_vg	View to the official additional designations
v_vg_ibz	View overview of designations of the administrative units (IBZ)
v_vg_sn_zahl	View key ARS/AGS as number

# Note:

With the view v\_vg\_sn\_zahl, the ARS/AGS keys formatted as text are also output as numbers. The SQL function Cast used for this purpose is not supported by all GIS programs.

In the view v\_vg250\_sta, the SQL function Case is used for the value resolution of the attribute FK\_S3. This is not supported by all GIS systems. In this case, FK\_S3 is not broken down into the long form under the name Funk\_Schlüsselstelle3. At the State level, this attribute has no meaning.

The various views v\_werte\_xxx and v\_at\_vg only serve as a basis for the other views.

#### 4.3 Excel format

For a quick overview, the attributive information is provided in Excel xlsx format. The xlsx data format is an XML-based file format that can be opened from Excel version 2007 and newer.

#### 4.3.1 Excel workbook overview

The <code>verwaltungsgebiete.xlsx</code> file is structured as a scaleless attribute and information table collection and contains the following sheets:

Deckblatt	contents
VGTB_ATT_VG	overview of the administrative units
VGTB_VZ_GEM	administrative assignment of the Gemeinden (municipalities)
VG250_PK	information and coordinates of points of municipalities
VGTB_AZB_VG	official additional designations
VGTB_RGS_VG	regional language names (also minorities) (administrative units)
VGTB_RGS_OTL	regional language names (also minorities) (points)
VG_DATEN	overview of attributes and their meaning
VG_IBZ	overview of designations of the administrative units and IBZ
VG_WERTE	overview of values of the attributes and their meaning

#### 5 Annexes

Further information can be found in the above-mentioned enclosed appendix for documentation, which can be found in the attached file annex vg.pdf.

There is also a country-by-country representation of the complex administrative structure in the file <code>verwaltungsgliederung\_vg.pdf</code> (administrative structure). At the end of the file there is also a brief overview of the data model of the VG data.

They can be found on our homepage  $\underline{www.bkg.bund.de}$  under the heading "Products & Services"  $\rightarrow$  "Digitale Geodaten".

Administrative Areas 1: 250 000

VG250 and VG250-EW

# 6 Data acquisition

The database can be obtained free of charge on our website <a href="www.bkg.bund.de">www.bkg.bund.de</a> under the heading "Products and Services" → "Open Data". Historical data is also available in our archive.

#### 7 Terms of use

The data are protected by copyright. The data are made available free of charge in accordance with the "<u>Datenlizenz Deutschland Namensnennung 2.0</u>". The use of the dataset for the maintenance and expansion of the data of the OpenStreetMap project is expressly permitted in compliance with the naming information described in the supplementary text. The source note must be observed.

<u>Ergänzung der "Datenlizenz Deutschland – Namensnennung – Version 2.0" für die Nutzung von Daten der Behörden durch das OpenStreetMap Projekt (PDF, 135 KB)</u>

# 8 Copyright

The licensee is obliged to attach a clearly visible source note to any public reproduction, distribution or presentation of the data as well as the following <a href="mailto:change notice">change notice</a> to any publication or external use of an adaptation or transformation. When displayed on a website, "BKG" shall be linked to the URL "<a href="https://www.bkg.bund.de">https://www.bkg.bund.de</a>" and "dl-en/by-2-0" to the URL "<a href="https://www.govdata.de/dl-de/by-2-0">https://www.govdata.de/dl-de/by-2-0</a>".

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Data sources: <a href="https://sgx.geodatenzentrum.de/web\_public/Datenquellen\_vg\_nuts.pdf">https://sgx.geodatenzentrum.de/web\_public/Datenquellen\_vg\_nuts.pdf</a>

#### 9 Contact

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