



Session:

Managing a national names programme

v1.0

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		Longitude	Latitude	Height	Population
From	Frankfurt	8.682432754	50.11087997	100	701.350
To	Rio de Janeiro	-43.1728965	-22.9068467	31	6.429.923



Localize
people,
places,
events,
...



First access to geospatial information... through geographical names

IMMOPOOL-Regional wohnimmobilien.net gewerbeimmobilien.net gastroimmobilien.net

estatepool.com real estate database

Merkliste My Immobox Login

Properties Offerers Locations english

Properties Price index Financing My Immobox



Hessen

Apartments Hessen

Ort
City Frankfurt am Main

equally within a radius of 10 km

Property type

alle markieren

Apartment Atelier flat Basement flat

Flat Gallery flat Garden flat

Maisonette flat Pensioner's flat Penthouse

Student room / flat Studio flat Terrace flat

Top-floor (attic) flat


Rooms from to

Square metres from to m²

Year of construction from to

Price/Rent from to €

Zip from to



Legend

auto

Communication:





First access to geospatial information... through geographical names

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European Union Newsroom
europa.eu

EUROPA > Newsroom

Home Highlights ▾ Press releases ▾ Calendar ▾ Audiovisual Press contacts Press facilities ▾ About the EU ▾

Highlights ▸

Protecting all children in migration: Commission outlines priority actions



12/04/2017 - Asylum and migration

Over the past two years, a growing number of children in migration have arrived in the EU, many of them without their families.

PHOTOS | VIDEO

Questions and Answers

Factsheet: Actions for the protection of children in migration

Communication: The protection of children in migration

All press material on the European Agenda on Migration

15 - 19/05/2017

Latest press releases and statements ▸

Statement by Federica Mogherini and Johannes Hahn on the latest developments in **Albania**

Enlargement, external relations and trade, Security and defence | 12/04/2017 - 19:04 | European External Action Service

Statement on the executions scheduled in **Arkansas**

Enlargement, external relations and trade, Security and defence | 12/04/2017 - 15:17 | European External Action Service

Remarks by Commissioner Dimitris Avramopoulos at the press conference on protecting children in migration and relocation and resettlement

| 12/04/2017 - 14:57 | European Commission

Remarks of First Vice-President Frans Timmermans after the College discussion on legal issues relating to **Hungary**

| 12/04/2017 - 13:08 | European Commission

Republic of **Moldova: Council agrees to €100 million financial assistance**

Enlargement, external relations and trade, Security and defence | 12/04/2017 - 12:56 | European External Action Service

EU Trust Fund for Africa adopts €90 million programme on protection of migrants and improved migration management in Libya

risk areas,
natural hazards,
transport, ...



First access to geospatial information... through geographical names

Geoportal.de
suchen. finden. verbinden.

Home Maps Search Services

Map Map grey Aerophotos

2D maps for orientation

Which place are you searching for?
e.g. city, zip code, address

Frankfur



Content

- **Management in Germany**
 - Official surveying and mapping in Germany
 - Minority language areas and names in Germany
 - Rendering names in German datasets & publications
 - Finances & administration & human resources at BKG
 - Names data within the German Spatial Data Infrastructure (GDI-DE)



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Responsibilities in Germany



States/AdV

Authoritative surveying
and mapping is the
responsibility of the federal
states

Federation

Agreement
Federal Government - States
Mission of BKG to provide
the geodetic and
topographic reference data
(medium to small scale, from 1 : 200 k and smaller)

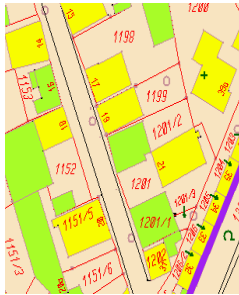
**AdV = Working Committee of the Surveying
Authorities of the States of the Federal Republic
of Germany**



Services of the State Survey Offices & BKG

ALK

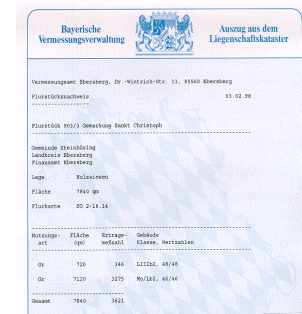
Automated Real Estate Map



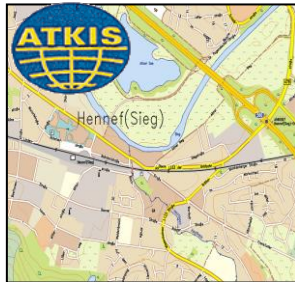
States/AdV

ALB

Automated Real Estate Register



**Geographical names
are essential part
of all services**



ATKIS

Authoritative topographic-cartographic information system



Geodetic control points

States/AdV & BKG



Standardization process for geographical names

Institutions involved in Germany:

- communes, counties, states
(for populated places and administrative units)
- state survey administration (for geographic regions/landscapes)
- federal and state hydrographic administration
(for hydrographic features)
- federal and state transport administration
(for streets and railways)
- StAGN – Permanent Committee on Geographical Names (responsible for orthographic rules and principles for place names)

→ **decentralized responsibility between federal government and states**

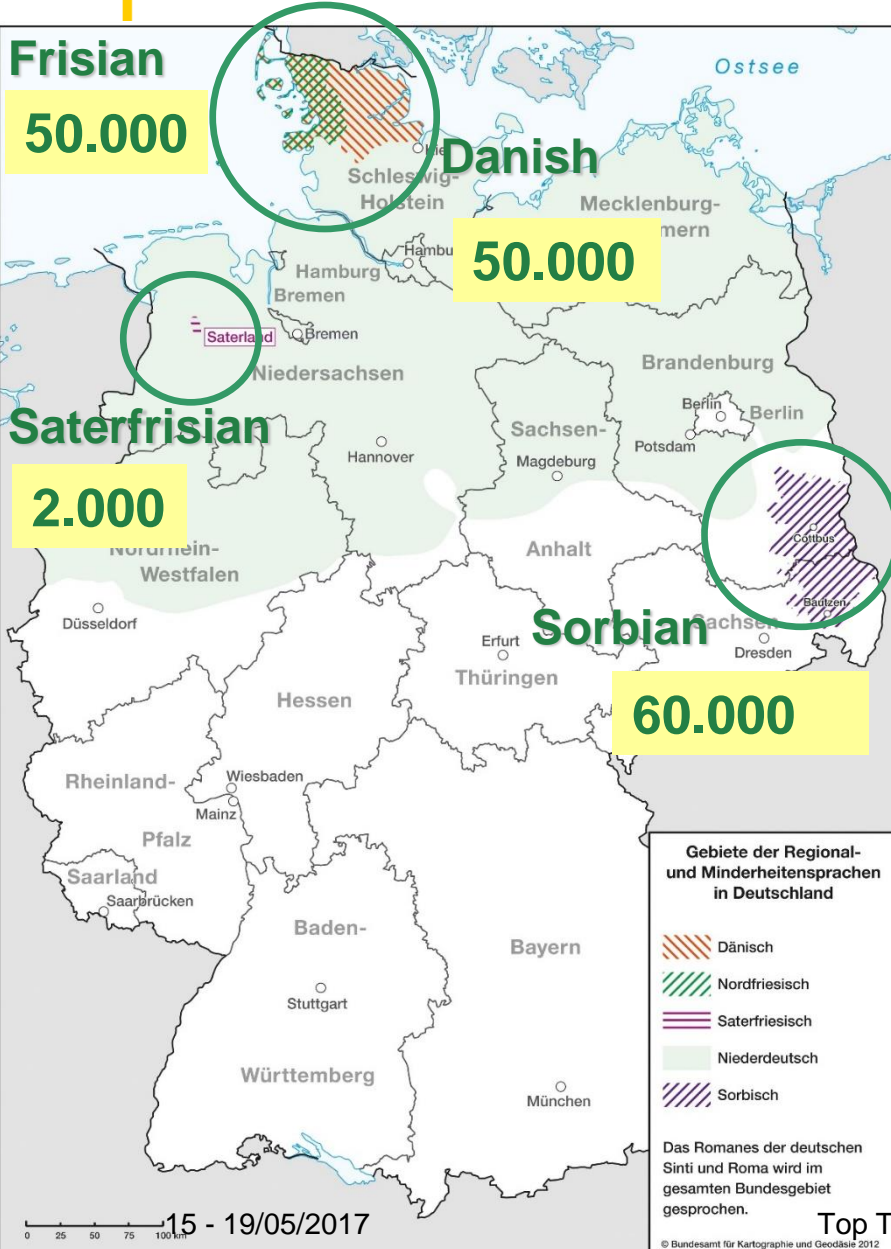


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Official surveying and mapping in Germany



Officially approved geographical names of minority and regional languages spoken in Germany

Sorbian	ca. 700
Frisian	ca. 500
Danish	ca. 80
Romany	0
	spoken by some 70.000 Sinti and Roma (spread all over Germany)



Legal framework regarding minority languages in the Federal Republic of Germany

1. Grundgesetz - Constitution of the Federal Republic of Germany (1949)
2. Protokollnotiz zum Einigungsvertrag - Special note to the minutes of the Unification Treaty (1990)
3. Framework Convention (Council of Europe) for the Protection of National Minorities (1995/1997)
4. European Charter (Council of Europe) for Regional or Minority Languages (1992/1998)
5. State laws in Saxony (1999), Brandenburg (1994), Schleswig-Holstein (2004)



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REIHE DER NATIONALEN GEOGRAPHISCHEN NAMENBÜCHER DER
VEREINTEN NATIONEN

GEOGRAPHISCHES NAMENBUCH BUNDESREPUBLIK DEUTSCHLAND

Band I

bearbeitet und herausgegeben vom
Institut für Angewandte Geodäsie
Frankfurt am Main 1981

nach den Empfehlungen der
VEREINTEN NATIONEN

unter Mitarbeit des
Ständigen Ausschusses für Geographische Namen (StAGN)
und der
Vermessungsverwaltungen der Länder der
Bundesrepublik Deutschland

VERLAG DES INSTITUTS FÜR ANGEWANDTE GEODÄSIE
FRANKFURT AM MAIN 1981

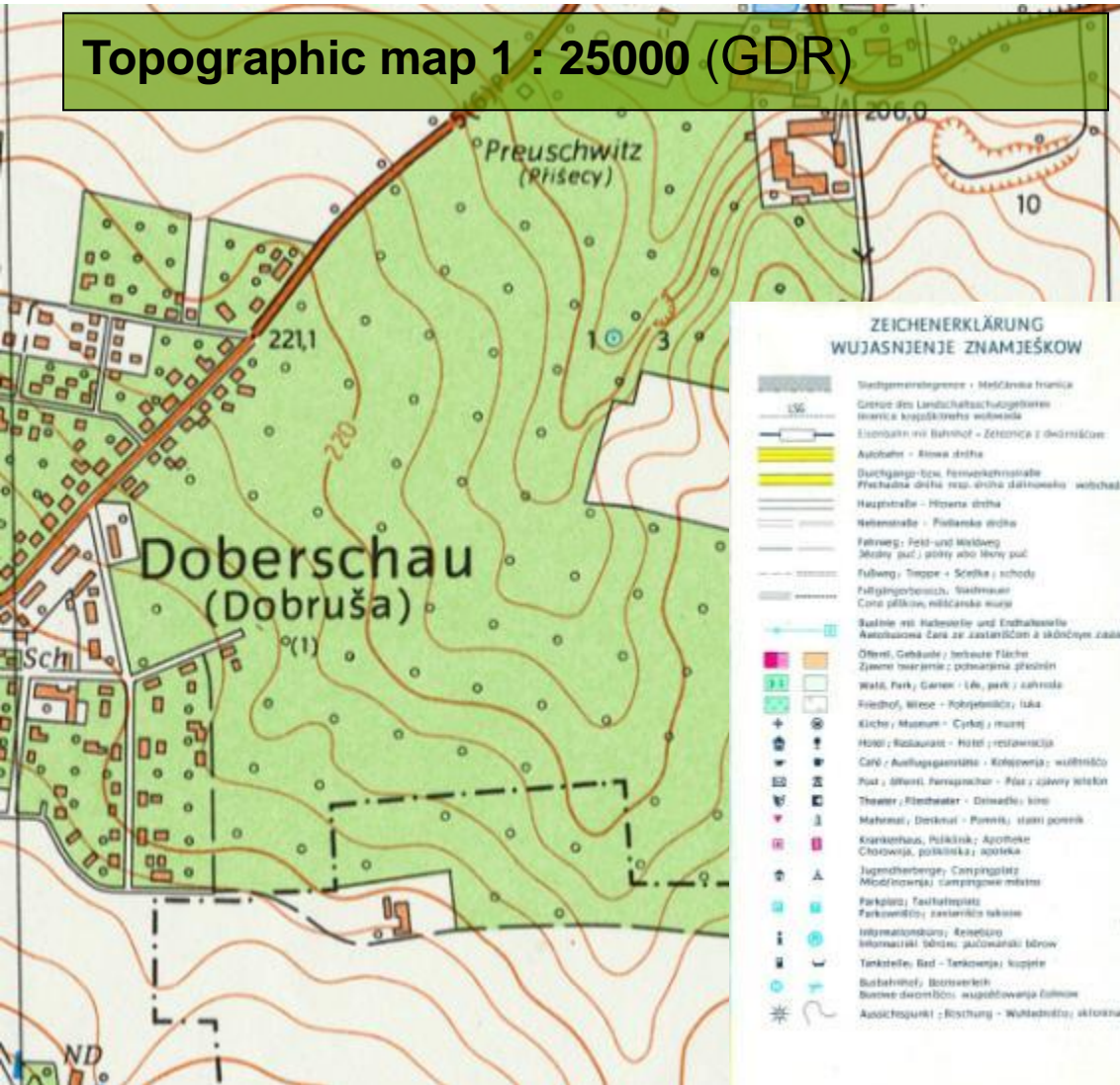
In 1981 the first edition of the Gazetteer Federal Republic of Germany („West Germany“) was published by the Institute for Applied Geodesy (IfAG; its name was changed to BKG in 1996).

It comprised some 21.500 geographical names contained on the 1:500 000 General Topographic Map series.

At that time it was the first gazetteer in Germany which had been prepared in accordance with the United Nations resolutions.



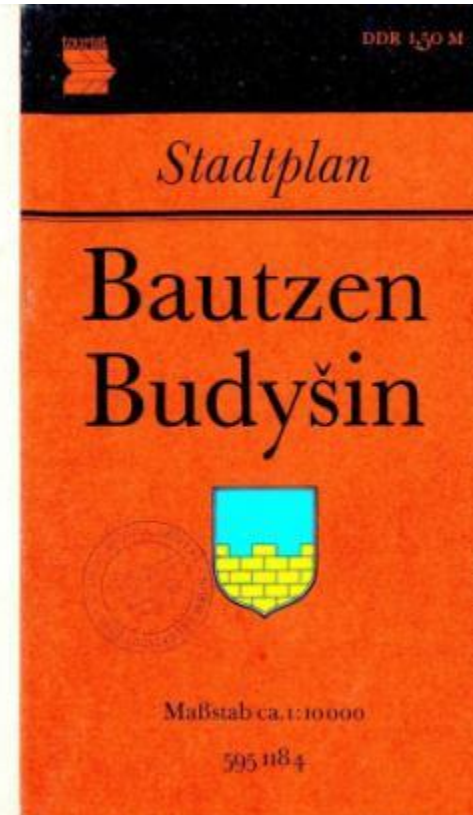
Topographic map 1 : 25000 (GDR)



Examples for the Sorbian area –
Saxony in the former GDR
(until 1990)

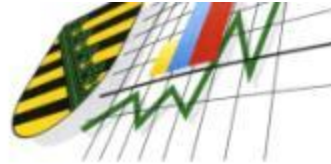
**ZEICHENERKLÄRUNG
WUJASNJENJE ZNAMJEŠKOW**

	Stadtgemeindegrenze - Meštarska hranica
	Grenze des Landschaftsschutzgebietes linijski a kupošćinski wobswěd
	Eisenbahn mit Bahnhof - Železnica z dwórnicom
	Autobahn - Awta dróha
	Durchgangs- bzw. Fernverkehrsstraße Přechodná dróha resp. dróha dalnoserwiske wotšachda
	Hauptstraße - Hłowna dróha
	Nebenstraße - Podlanska dróha
	Fahweg - Föld- und Mošćweg Mošćny puć; pućow rěko lěwaj puć
	Fußweg - Topow - Šćedka; schody
	Füllungsbereich, Straßenbau Cena přikładow, měšćanska wurša
	Stuhle mit Pegelwerte und Entlastungswerte Awčičowate čara ze zastajišćom a skłóčnyje zapawěšćom
	Öffentl. Gebäude / bebauter Fläche Zpawny měšćanski; pobawarski přezidij
	Wald, Park, Garten - Lěs, park; zahrad
	Friedhof, Wiese - Pohřebnišćo; lěs
	Kirche, Museum - Cerkwj; muzej
	Hotel; Restaurant - Hotel; restawracija
	Café / Ausflugsanstalt - Kafowarnja; wučičnišćo
	Post, öffentl. Fernsprecher - Pósta; zjawny telefon
	Theater, Filmtheater - Divadlo; kino
	Mahnen, Denkmal - Pomnik; stary pomnik
	Krankenhause, Poliklinik - Apotheke Chorownja, poliklinika; apteka
	Jugendherberge, Campingplatz Modřowarnja; campingowe městno
	Parkplatz; Freizeitanlage Parkownišćo; zastajenišćo rabate
	Informationsbüro; Rensdizjo Informacnišćo; informacnišćo
	Tankstelle, Bad - Tankowarnja; kupelja
	Busbahnhof; Břowowach Bustowe dwórnišćo; awtobusowarňo
	Aussichtspunkt; Břichung - Wuhlednistwo; akcion





Statistisches Landesamt
des Freistaates
Sachsen



Statistical register - Saxony

Schlüsselnummer	Gemeinde Gemeindeteil
-----------------	--------------------------

Noch: Regierungsbezirk Dresden

Landkreis Bautzen

14 2 72 010

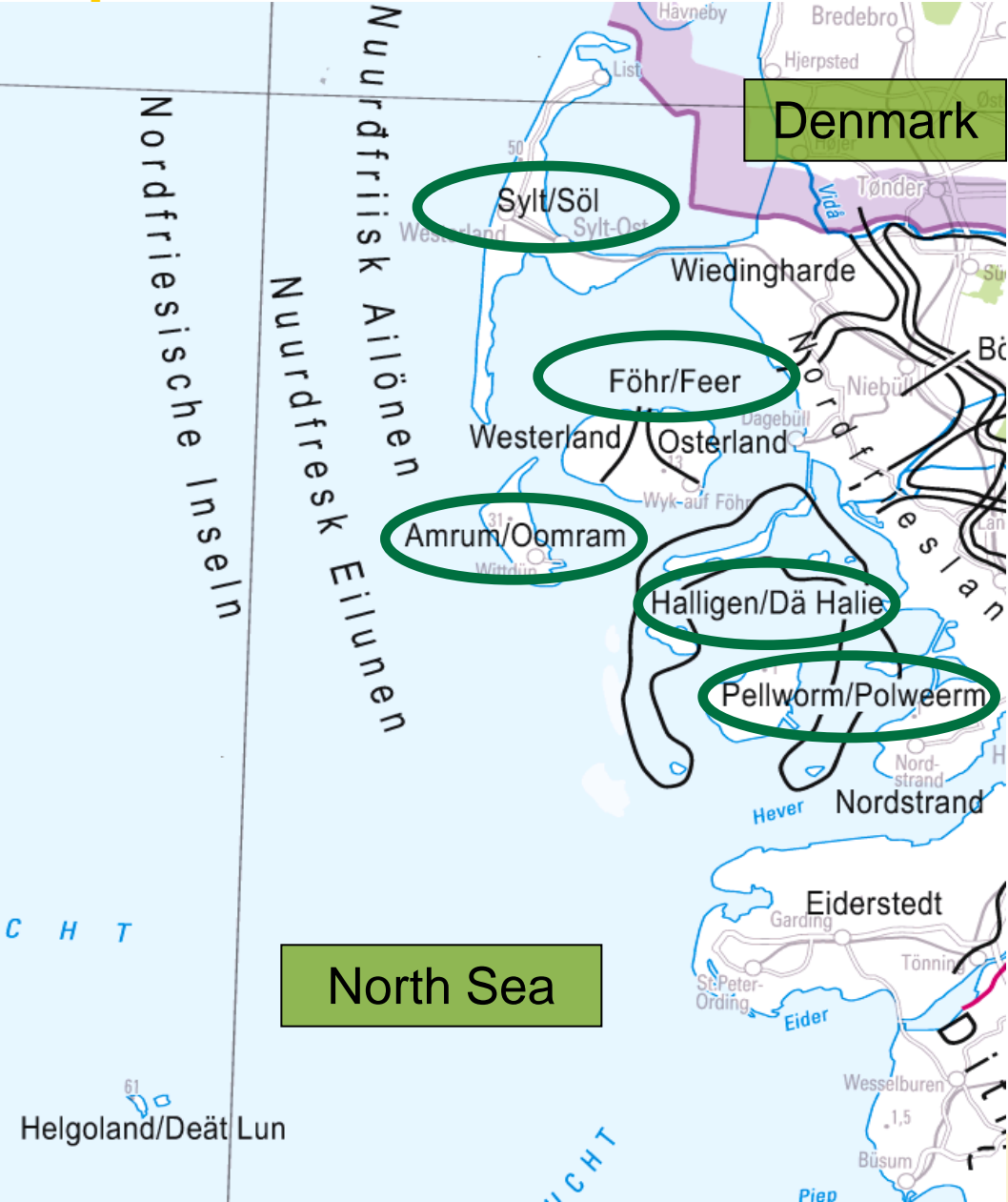
Bautzen, Stadt / Budyšin

- 010 Altstadt / Stare mesto
- 020 Burk / Bórk
- 030 Gesundbrunnen / Strowotna studnja
- 040 Nadelwitz / Nadžanecy
- 050 Niederkaina / Delnja Kina



Rendering names in German datasets & publications

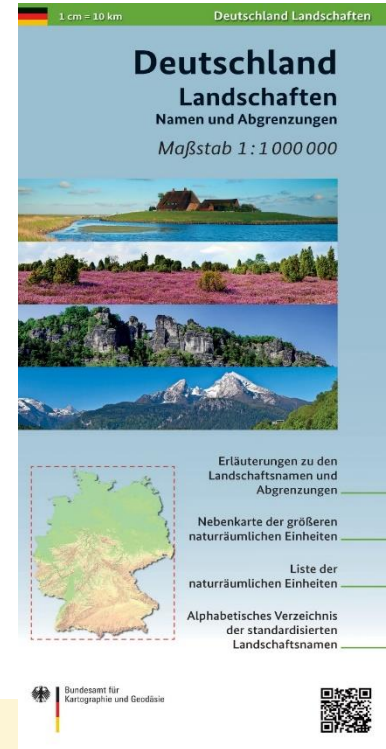
BKG / StAGN



„Landschaftsnamenkarte“
**Geographic regions (landscapes)
of Germany**

6th edition,
BKG/StAGN, 2014

Frisian minority
names

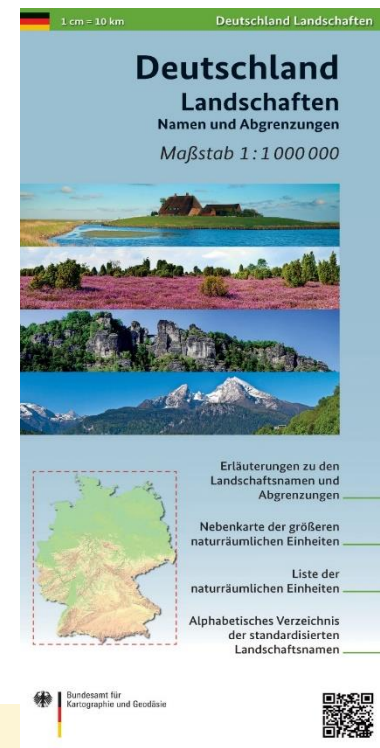




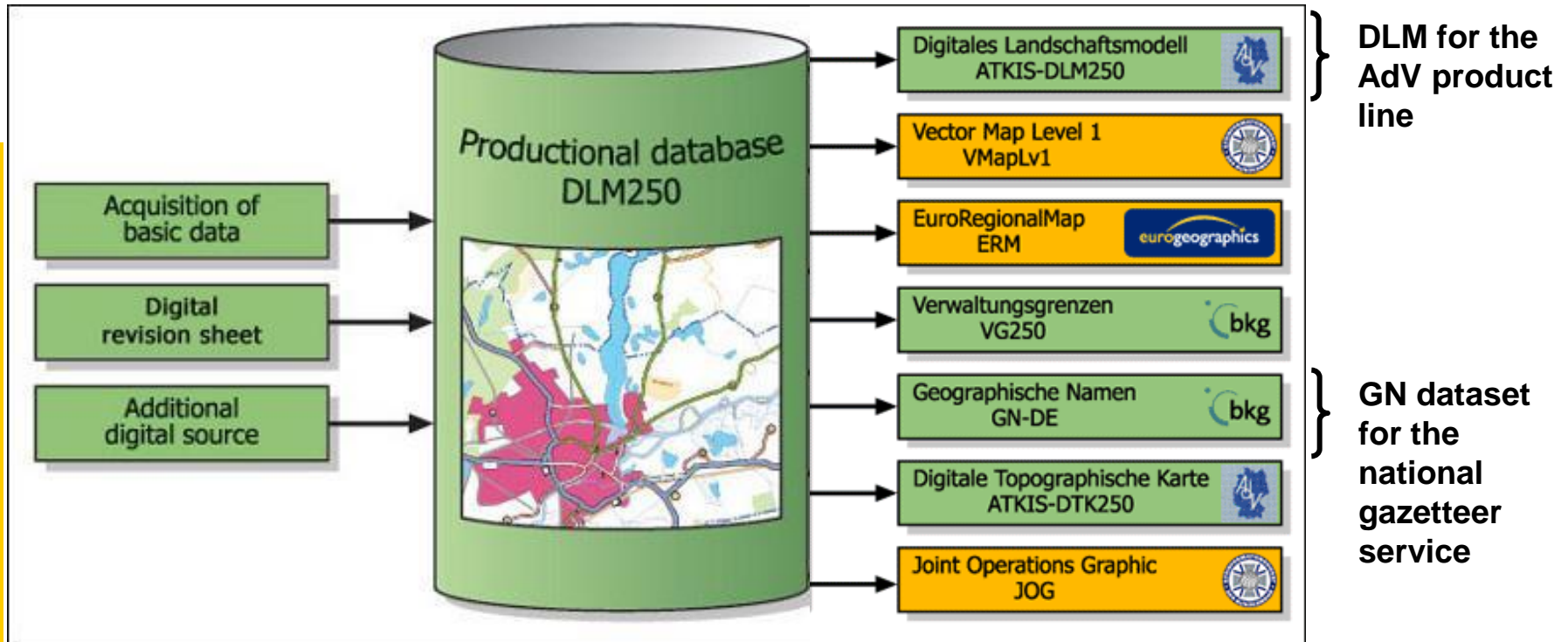
„Landschaftsnamenkarte“ Geographic regions (landscapes) of Germany

6th edition,
BKG/StAGN, 2014

German and
Sorbian names
of geographic
regions



BKG's produkt line – derived from the Digital Landscape Model (DLM250)



Geographical names data set **GN-DE** is essential part of the productional database and is unambiguously linked to the **spatial objects/features** through **unique identifiers (UIDs)**



Geographical names in production database – GN-DE

The object/feature themes of the GN-DE geographical names database are:

- **settlement, transportation, vegetation, hydrography, relief, areas and regions**
- with **attributes** regarding the administrative hierarchy (administrative code), river system (hydrographic key number in accordance with the German Working Group on water issues (Bund/Länder-Arbeitsgemeinschaft Wasser -LAWA) and
- **number of inhabitants, size** (area, length), **position** (geometry data from DLM250 as well as additional attributive geographical coordinates), **postcodes, status, language** of the geographical name and **height** data (in meters).



Geographical names in production database – GN-DE

Example: 1 spatial object/feature → *Bautzen/Budyšin*

GN_OBJEKT: ↕

NNID	Landescode	Karten	GeoL	GeoB
21000020369	276	4852; L4952; C5150; CC5550; JOG250; UK500GB; ; D1000	14,42944444	51,18222222

↕
ENDONYM: ↕

NNID	Name	Sprache	Status
21000020369	Bautzen	DEUTSCH	amtlich
21000020369	Budyšin	SORBISCH	amtlich

↕
GN_DLM: ↕

NNID	Layer	OBJECTID
21000020369	sie01_f	

↕
GNO_PLZ: ↕

NNID	PLZ
21000020369	02625

Entities for both languages
“Bautzen” (German) and “Budyšin”
(Sorbian)



The national gazetteer service – search for geographical names of Germany...

Find a Name

Name (min.3 characters * for arbitrary characters)


For experts and interested people:
Here you can have a look at the request to the standardized Web Feature Service (WFS) and the correspondig response in XML format.

[XML Request](#)

[XML Response](#)

Direct requests using our Applet [PostRequest](#).

Map Presentation and Search



Search in small map boxes only. At most 100 objects are shown.

Name	Object Type	Postcode	LAT	LON	Height	Area	Population	Language	Status	Map
Berlin	Ortslage	23823	10°26'56"	54°02'33"				deutsch	amtlich	
Berlin	Ortslage	<input type="text" value="10115"/>	13°24'37"	52°31'19"	34 m	892 km²	3387828	deutsch	amtlich	
Berlin	Siedlung		13°24'37"	52°31'19"				deutsch	amtlich	
Berlin	Verwaltungseinheit									
Berlin	Verwaltungseinheit									
Berlin	Verwaltungseinheit									

Gazetteer service based on the dataset **GN-DE**

- as graphical Web Application
- as OGC Web Feature Service (WFS)



United Nations Group on Experts on Geographical Names - UNGEGN

UN Statistics Home | UN Home



UNGEEN

United Nations Group of Experts on Geographical Names
8th UN Conference on the Standardization on
geographical Names, Berlin, 2002

Overview

Mandate

Conference

General

Conferences

UNGEEN

General

Sessions

Divisions

Working Groups

Bureau and Convenors

Liaison Officers

World Geographical Names

UN Conferences on the Standardization of Geographical Names

Upcoming conference

Resolution VIII/6

11th United Nations Conference on the Standardization of Geographical Names
2017

- Integration of geographical names data into national and international spatial data infrastructures

Previous conferences

10th United Nations Conference on the Standardization of Geographical Names
31 July - 9 August 2012, New York

9th United Nations Conference on the Standardization of Geographical Names
21 - 30 August 2007, New York

8th United Nations Conference on the Standardization of Geographical Names
27 August - 5 September 2002, Berlin, Germany

- The Conference, ... recommends, that standardized geographical names data should be considered in the establishment of national and regional spatial data infrastructures and included in their design, development and implementation.



“UNGEEN schema” (proposal): elements

Field Name	Data Type	Description	Example
RecordID	Index	This number is assigned automatically by the system. Do not change it.	
UID	Number (long integer)	A <u>unique identifier</u> assigned to the name (or named feature). In our exercise, each group may start to count from 1 and add the group number multiplied by 100, e.g. 201 for the first name by group 2.	20001 might indicate e.g. 2000 for feature type 'Populated places'
Name	Text (50 char.)	Geographical name in Romanian	Oran
Latitude	Number (double)	Geographical Coordinates, in degrees decimal.	35,...
Longitude	Number (double)		-0,5...
FeatureCode	Text (50 char.)	Feature codes, from an existing feature code table	DDS
AdminUnit	Text (50 char.)	Name of the administrative unit where the name is situated in	Departement d' Oran, Department of Oran
Language	Text (50 char.)	Language of the name	
Description	Text (255 char.)	Field remarks, meaning of the name, language of the name, historical names if any	e.g. capital of a political entity
VariantName	Text (50 char.)	Enter variant names, if any e.g. Hungarian name	Wilaya d' Oran, Wilaya d' Oran
MapSheet	Number (long integer)	Reference to a map sheet in a topographic map series, e.g. 1:250.000	80
Source	Text (255 char.)	Source of the information on the name: - Informant - Interviewer	Mr. XY, old person at xyz, interview by group 1
Status	Text (50 char.)	The status of the name. In our case, the names are not yet approved by the Board.	not approved
Pronunciation	OLE-Object	Audio-files of the pronunciation of the geographical name	e.g *.wav -file
Location information	OLE-Object	Digital pictures of the location	e.g *.jpg – image file



INSPIRE Data Specification on Geographical Names – Guidelines (Extract)

[...] Geographical names are widely used in every-day communication

[...] Geographical names are used extensively when searching for information in web-services [...]

[...] Correct usage of geographical names [...] are a prime interest of many users [...]

[...] The ... INSPIRE geographical names model **is a simple yet flexible structure** that allows geographical names to be used as an **attribute of a spatial object**.

The possibility of **linking more names with the same named places** gives the opportunity to **integrate minority languages and exonyms**, which are an **important contribution to European multilingualism**.

[...]



The European (INSPIRE) GN schema: elements

mandatory

- name(s) (text, spelling)
- geometry
- feature type
- unique identifier

‘voidable’

- language {three letter codes from ISO 639-3 or -5}
- nameStatus {official, standardised, historical, other}
- link to relatedSpatialObject
- script {four letters codes defined in ISO 15924}
- nativeness {endonym, exonym}
- transliterationScheme
- grammatical gender {masc., fem., neuter, common}
- grammatical number {singular, plural, dual}
- pronunciation
- sourceOfName
- typeLocal
- lifeCycleInfo (begin/end of the object in the source DB)
- ...



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Finances & administration & human resources

BKG personnel: about 90.000 Euros / year

- **Office of Permanent Committee on Geographical Names**
1 person, full time, about 40.000 Euros / year
- **Coordination of names activity at BKG**
2 person, 30 %, about 10.000 Euros / year
- **Technical staff for administration of databases**
1 person, 50 %, about 20.000 Euros / year
- **Technical staff for administration of web (gazetteer) service**
1 person, 50 %, about 20.000 Euros / year



Finances & administration & human resources

BKG investments: about 20.000 Euros / year

- **Database (hard- and software)**
2 databases, updates per year for 5.000 Euros / year
- **Server (hard- and software)**
1 server update per year for 5.000 Euros / year
- **IT-specific training**
2 person, about 10.000 Euros / year
- **Soft- and hardware amortization is different for server or database and varies between 3-5 years**



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Names data within the German Spatial Data Infrastructure (GDI-DE)

- The GN-DE dataset is currently used for the geographical names data provision within the '**German Spatial Data Infrastructure (GDI-DE)**' → UN Res VIII/6
- GN-DE is the rationale for the national data provision for **European purposes** as it is the only dataset in Germany that includes the mandatory and almost all optional European attributes (like language, status, gender ...).
- A wide range of **different applications** (e.g. geoportals) has been built up that provide discovery functionality for spatial data sets and services and generally make use of the functionality.
- Germany declared the federal government's geodata to be **open data** in the course of the revision to the Geodata Access Act (GeoZGÄndG) on 16 November 2012. Hence, the gazetteer web service of BKG is available free of charge, too.



Further discussion on logistics, production time needed and necessary upkeep costs

- The financial and human resources roughly estimated by BKG as necessary for maintaining the national geographical names programme amounted to about **€ 110,000** per year for both personnel and investments.
- Most of the German Länder might invest a similar small amount in logistics, the maintenance of geographical names database and the development and up keeping of services and applications, about the overall yearly costs would amount to **€ 1,8 million**.
- Considering that the data content for GN-DE is based on a map scale 1: 250,000 a cooperation of the Federal Government with the Länder– (the latter are responsible for data based on maps at scales 1:25,000 – 1:10,000) is envisaged to **increase the content** of the national web service.



Thank you for your attention!