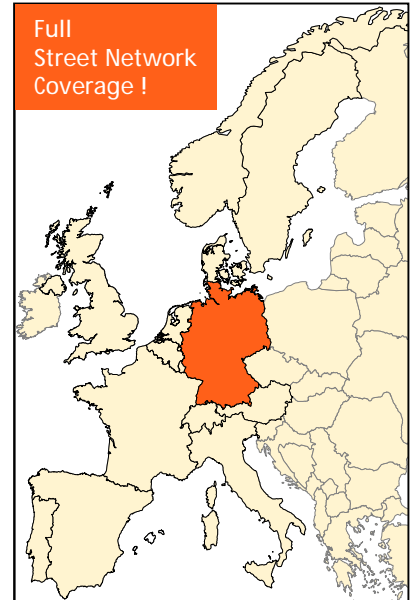


MultiNet Germany Release 00.7

For turn-by-turn navigation and
all your high-end mapping applications

General Country Information	
Area (km ²):	375.592
Population:	82.080.563
N° of Municipalities:	14.368
Capital:	Berlin



About MultiNet

MultiNet is an outstanding vector database carrying highly detailed information on the roads of an entire country with details of intersections and junctions plus information on railways and waterways. The Street Network includes house number ranges in many cities and urban areas.

The street and road data provides complete traffic information, including restrictions and blocked passages, indications of toll roads and ferry connections, RDS/TMC information and signposts. MultiNet also has two classifications of the road network, specially tuned for navigation and optimal route calculation.

Administrative areas — ranging from national to local level — are identified, and postal codes are included for many countries. A full categorization of land use indicates the presence of, for example industrial areas, harbors and beaches, woodland and parks, woods, heaths and moors.

Thousands of points of interest (POI) are recorded. These include airports, railway stations, hospitals, garages, petrol stations, hotels, restaurants, post offices, car rental facilities and many more.

MultiNet also contains Update Information on creation, modification and deletion of geographic data, allowing customers to selectively, incrementally or differentially update the digital core map of their application.

Phonetic transcriptions can be obtained optionally. These allow 'Text to Speech' and 'Automatic Speech Recognition' in a variety of applications.

Available countries

Austria, Belgium, Denmark, France & Monaco, Germany, Great-Britain, Italy, Luxembourg, Norway, Portugal, Spain & Andorra, Sweden, Switzerland & Liechtenstein, The Netherlands

New

- ✓ House number ranges for more than 900 municipalities
- ✓ Increase of Points of Interest & introduction of importance attribute
- ✓ Introduction of back roads
- ✓ Signposts, RDS/TMC information, Postal Districts and postal codes now completely available
- ✓ Country and municipality borders included
- ✓ Belts for The Netherlands, Belgium and Switzerland
- ✓ ...

Apart from the normal field surveys, quality checks and the processing of product defect reports, a number of improvements have been made.

In 936 municipalities (49% population) house number ranges have been captured in the database which allows you to find an address in no time.

An increase of POI has brought the total up to 164.696. The new 'importance attribute' allows you to directly select a POI of national importance.

A new attribute -Back Road- has been introduced: this is a road that has no destination function; it is not really designed for through traffic (e.g. agricultural roads, forest roads, ...)

Avoid traffic jams with RDS/TMC path information, now included for the whole country and delivered as an attribute of a road element. Also signposts and postal codes are fully available.

In order to assure connectivity on important roads that leave the country, continue in the neighbouring country and enter the first country again, belts for The Netherlands, Switzerland and Belgium have been made available. In those situations, the complete municipality in the adjacent country is delivered.

Format / Co-ordinate System

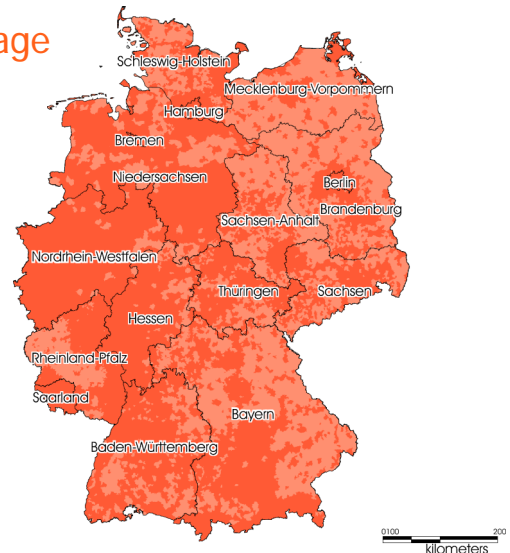
Format: GDF-AS (ASCII-Sequential) and GDF-AR (ASCII-Relational)
Co-ordinate System: WGS'84

Contents

- ✓ Roads (Name, Alternate Name, Back Road, Blocked Passage, Composite Form of Way, Direction of Traffic Flow, House Number Ranges, Form of Way, Freeway, Functional Road Class, Net 1&2 Class, Opening Period, Plural Junction, Positional Accuracy, RDS/TMC Path information, Restricted Time Validity, Road Condition, Road Display Class, Road Geometry Completeness, Route Number, Side of Line, Slip Road Type, Special Restrictions, Stubble, Processing Status, Toll Road, Vehicle Type, Z-Level Information)
- ✓ Intersections (Type)
- ✓ Junctions (Type)
- ✓ Address Areas (Name)
- ✓ Ferry Connections (Alternate Name, Direction of Traffic Flow, Type, Form of Way, Functional Road Class, Net 1&2 Class, Opening Period, RDS/TMC Path information, Road Display Class, Route Number, Vehicle Type)
- ✓ Administrative Areas (Centre Point of Feature, Boundary Element, Boundary Element Junction)
 - ✓ Country (ISO Code, Name)
 - ✓ Federal State (Official Code & Name)
 - ✓ District (Official Code & Name)
 - ✓ Municipality (Network Type, Official Code & Name, Population, Population Class)
 - ✓ Sub-municipality (Official Code)
- ✓ Settlements and Named Areas (Name, Postal Code)
- ✓ Brunnels (Type, Name)
- ✓ Railways (Railway Edge, Element & Element Junction, Railway Node)
- ✓ Land Cover and Land Use (Name, Type)
 - ✓ Woodland
 - ✓ Park/Garden
 - ✓ Island
 - ✓ Beach/Dune/Sand Area
 - ✓ Company Ground
 - ✓ Industrial Area
 - ✓ Industrial Harbour Area
 - ✓ Moor/Heath
- ✓ Waterways (Name, Display Class)
- ✓ Points of Interest (Entry Point, Name, Brand Name, Telephone & Fax Number)
 - ✓ Airline Access
 - ✓ Airport
 - ✓ Car Dealer
 - ✓ City Centre
 - ✓ Company
 - ✓ Embassy
 - ✓ Entertainment
 - ✓ Exhibition Centre
 - ✓ Ferry Terminal
 - ✓ Frontier Crossing
 - ✓ Government Office
 - ✓ Hospital/Polyclinic
 - ✓ Hotel or Motel
 - ✓ Open Parking Area
 - ✓ Parking Garage
 - ✓ Petrol Station
 - ✓ Police Station
 - ✓ Post Office
 - ✓ Railway Station
 - ✓ Rent-a-Car Facility
 - ✓ Rent-a-Car Parking
 - ✓ Rest Area
 - ✓ Restaurant
 - ✓ Shopping Centre
 - ✓ Stadium
- ✓ Relationships (e.g. Road Element in Administrative Area, Service in Administrative Area, Road Element in Built-up Area, etc.)

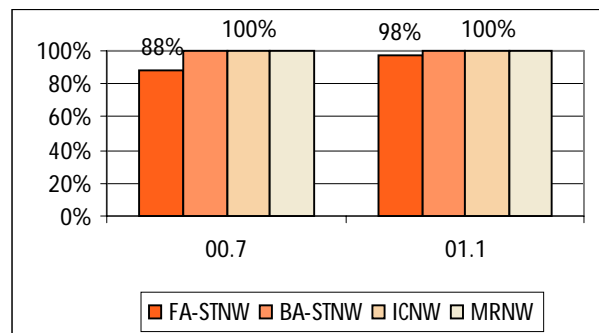
⚠ Please note that the contents can differ from region to region

Coverage



	# of Mun.	% of Pop.
Street Network Fully Attributed	7.521	88%
Street Network Basic Attributed	14.368	100%
House Number Ranges	936	49%

Overview of present and future Coverage



Applications

MultiNet can be used in applications such as GIS, on-line mapping and PC applications and in new technologies like WAP and PDA.

It is the ideal base map for advanced turn-by-turn navigation applications and sophisticated traffic management and telematics applications.

Why?

- ✓ MultiNet contains features like RDS/TMC location codes, relationships, phonetic transcriptions* and signposts specially tuned for navigation applications. On top, additional network classifications enable optimal route calculation.
- ✓ The format GDF (CEN: international standard) allows for possible content extensions to meet future technology requirements
- ✓ The product is being updated twice a year.
- ✓ A MultiNet product "Major Roads of Europe" connecting most cities of Europe, is available and can be combined with the detailed country products.

* currently only toponyms for Germany are available.

GPS GmbH

Lochhamer Schlag 5A

D - 82166 Graefelfing/Munich (Germany)

Phone : 0049-89-85836430

Fax : 0049-89-85836444

e-mail : Chessing@gps-nav.de