



Specification House Addresses Germany (Data Format)

Version 3.1

Status 01.07.2013

1. Specification data format

House addresses are offered in ASCII-Format to customers.

The character set is ISO Latin-1 (ISO 8859/1). In addition to the house addresses data file the key data file will always provide as a standard distribution.

1.1 Structure of house addresses data file

1. Status dataset (NBA)	(character, 1-digit)
2. Nationwide clear identifier for every dataset ¹ (OI)	(string, alphanumeric, 16-digit)
3. Quality of house address (QUA)	(character, 1-digit)
4. Key federal state (LAN)	(string, only numeric, 2-digit)
5. Key administrative district (RBZ)	(string, only numeric, 1-digit)
6. Key county/city (KRS)	(string, only numeric, 2-digit)
7. Key commune (GMD)	(string, only numeric, 3-digit)
8. Key communal district (OTT)	(string, only numeric, 4-digit)
9. Administrative street code (SSS)	(string, alphanumeric, 5-digit)
10. House number (HNR)	(string, only numeric, variable length) ²
11. Addition to house number (ADZ)	(string, alphanumeric, variable length)
12. First coordinate value ETRS89/UTM Easting / UTM-coordinates (EEEEEEEE,EEE)	(fix-point number, 8 digits before and 3 digits after decimal point)
13. Second coordinate value ETRS89/UTM Northing / UTM-coordinates (NNNNNNN,NNN)	(fix-point number, 7 digits before and 3 digits after decimal point)
14. Official syntax street name (STN)	(string, variable length)

¹ The clear identifier number will not be used twice after deletion of the house address / after abridgment of a house object.

² The street number in the federal state Bayern sometimes can included alphanumeric numbers, for example "A10"



15. Zip code (PLZ)	(string, only numeric, 5-digit) ³
16. City (ONM)	(string, variable length) ³
17. Adjunct to the name of city (ZON)	(string, variable length) ³
18. Postal district (POT)	(string, variable length) ³

Notes about the data elements (DaE):

All data elements are separated by semicolon in a dataset. Per dataset there are 17 semicolons. These is the reason why a semicolon was not use in a string of a data element.

- DaE 1:
Status of dataset after the yearly update differences between new (N), erased (L) und changed (A) datasets. Complete updates are signed general with "N".
- DaE 2:
The number of identifier (OI) in data element 2 is nationwide clear. The "OI" comes and goes with the livetime interval of a house coordinate object.
- DaE 3:
Data element 3 designates the quality of the house address and differences between:
 - A = position is certainly inside the building area and represents an existing building;
 - B = position is certainly inside the land parcel, on which the building is standing, but it is still unmapped;
 - R = position is certainly inside the land parcel, but it is not sure if it represents an existing building (unmapped building) or if it is only a reserved house number.
- DaE 4, 6, 7, 8, 9:
Data elements 4, 6, 7, 8 and 9 includes if necessary leading zeros (0).
- DaE 5, 6, 7, 8, 9:
If data elements 5, 6, 7, 8 or 9 are empty because of federal state-specific originalities (for example empty keys for communal districts) or other circumstances (for example if communes do not belong to a city, so in this case data element 7 is empty), this data elements have to be filled up with zeros.
This belongs to these special data elements which contain keys for administrative units in the dataset:

³ Not a component of the real estate cadastre in Germany. Source: Deutsche Post Direkt GmbH



Data element number	value for fill-up zeros
5. Key administrative district (KRS)	1 (0)
6. Key county/city (KRS)	2 (00)
7. Key commune (GMD)	3 (000)
8. Key communal district (OTT)	4 (0000)
9. Administrative street code (SSS)	5 (00000)

- DaE 11:
If there is no existing addition to a street number in these cases the data elements are empty – this means that two semicolons follows one after another.
- DaE 12 and 13:
The coordinate's values (data elements 12 and 13) are standardized distributed by using the reference system ETRS89/UTM <zn> counted in meter, divided by a comma with 3 digits after the decimal point. The notation to the UTM-coordinates result from the description about the reference system ETRS89/UTM in the respectively updated GeoInfoDok (currently chapter 7.1.2 nr. 3 version 6.0.1).
- DaE 14:
The syntax of street names (STN)) is a string with special characters (for example „-“) and with or without abbreviations (for example “Str.” or “Straße”). Generally the spelling conforms to the notation of the uncoded street name in the real estate cadastre.
- DaE 17 and 18:
In cases that the Deutsche Post AG has no adjunct to the name of city or the postal district the data elements are empty – this means that two semicolons follows one after another.

The following example shows the structure of a dataset:

Example (in common):

NBA;OI;QUA;LAN;RBZ;KRS;GMD;OTT;SSS;HNR;ADZ;EEEEEEEE,EEE;NNNNNNN,NNN;STN;PLZ;
ONM;ZON;POT



example (concrete):

N;DENW000002005478;A;05;3;15;000;0000;05705;43;a;32364664,130;5642408,726;

Wikingerstr.;51107;Köln;;Rath/Heumar

N;5DENWW000001885656;A;05;3;15;000;0000;00748;18;;32366661,335;5642916,518;

Donarstraße;51107;Köln;;Rath/Heumar

1.2 Structure of key data file

For the encryption of the key numbers in the data elements 4 to 7 – also called as communal indicator (LAN/RBZ/KRS/GMD) – and in the data element 8 (optional filled up communal districts (OTT)) there are key data files for every federal state in Germany. The datasets of the key data files are described by characters (for example L for „Land“) and defined by the numeric and described meaning of the keys (for example L;05;Nordrhein-Westfalen).

The structure of the key data file is as followed whereas the sequence of the datasets is optional:

federal state dataset	L;05;Nordrhein-Westfalen
administrative district datasets	R;05;1;Düsseldorf (per administrative district there is 1 dataset)
county datasets	K;05;1;66;Viersen (per county/city there is 1 dataset)
commune datasets	G;05;1;66;016;Nettetal (per commune there is 1 dataset)
communal district datasets	O;05;1;11;000;0001;Düsseldorf-Teil (per communal district 1 dataset)

- All data elements in a dataset are separated by semicolon.



2. Update

For update the house addresses are delivered as a complete update-dataset. Fixed date for update is April 1 of the current year. The updated datasets are available for delivery up to 1 of July of the current year.

3. glossary of data and key file

The syntax for the data files is as followed in lower case letters standardized:

Example:

adressen.txt

schluessel.txt