**Landesamt für Digitalisierung,
Breitband und Vermessung**

Data format description of Official Land Parcel Information of Germany (FS-DE)

For the data distribution from the data stock of the Central Office for House Coordinates and Building Polygons (ZSHH)

Version 1.2.1   **State: 14 April 2025**

valid from the provision of the FS-DE 06-2024

1. Description of the data format

The distribution format for Land Parcel Information (FS) is the AdV Shape format as described in the AdV specifications on the data format "Shape" (AdV product specification ALKIS-WFS and export format (Shape, CSV) Version 2.0.0, Stand 08 March 2019). Further information on the AdV Shape format can be found at https://www.adv-online.de/AdV-Produkte/Standards-und-Produktblaetter/Standards-des-Liegenschaftskatasters/ (only available in German language).

2. Data contents

FS are objects with spatially referenced surrounding polygons that describe the geometry of the land parcels of the real estate cadastre. Here the object field land parcel defined (definition according to ALKIS-OK) in ALKIS (Authoritative Real Estate Cadastre Information System) applies.

Permitted geometries of the surroundings are polygons and multi-polygons according to the description of the OGC (Open Geospatial Consortium) standard of the OGC specification

„06-103r4_Implementation_Specification_for_Geographic_Information_-_Simple_feature_ access_-_Part_1_Common_Architecture_v1.2.1.pdf".

For the data stock of the Land Parcel Information all the objects modelled as areas from the following object groups are used:

- AX_Flurstück   *("land parcel")*

added by location information

- AX_LagebezeichnungOhneHausnummer   *("place name without house number")*
- AX_LagebezeichnungMitHausnummer   *("place name with house number")*

The following catalogues are added:

- AX_Bundesland   *("land")*
- AX_Gemarkung   *("district of parcel")*
- AX_GemarkungsteilFlur   *("part of district of parcel, field/named place")*
- AX_Gemeinde   *("municipality")*
- AX_Gemeindeteil   *("part of municipality")*

- AX_KreisRegion   *("rural district")*

- AX_LagebezeichnungKatalogeintrag   *("place name")*

- AX_Regierungsbezirk   *("administrative region")*

A detailed summary of all attributes is shown in **Annex 1**.

The coordinates are specified in the spatial reference system ETRS89/UTM in zone 32 and zone 33 in metres with three decimal places* (East-value EEEEE,EEE / North-value NNNNNNN,NNN). The notation of the UTM coordinates is obtained from the descriptions of the currently valid "Documentation for the Modelling Geoinformation of Official Surveying and Mapping" – GeoInfoDok (currently the main concept as of: 01 December 2022, chapter 4.4.4 Coding of geometry properties in the NAS) on the spatial reference system ETRS89/UTM <zn> in the respective zone <zn> 32 (=EPSG-Code 25832) or 33 (=EPSG-Code 25833).

* An exception to this are coordinates that result from the derivation of the database by breaking up circular arcs into circular segments. In order to minimize geometry errors, the coordinates are not rounded, so they are not limited to three decimal places. These coordinates with more than three decimal places are created by calculation and therefore do not reflect a higher cadastral accuracy.

3. Data files, file names

Das Shape-Format besteht aus fünf getrennten Dateien einer Gemeinde, dem Encoding-File, dem Main-File, dem Index-File, dem dBASE-File und der Projektionsdatei. Diese Dateien haben die festgelegten Dateierweiterungen „.cpg", „.shp", „.shx", „.dbf" und „.prj". Der Dateiname stimmt bei allen fünf Dateien überein.

The Shape format consists of five separate files from a community: the encoding file, the main file, the index file, the dBASE file and the projection file. These files have the specified file extensions ".cpg", ".shp", ".shx", ".dbf" and ".prj". The file name is the same for all five files.

Example:

Encoding-File: Flurstueck.cpg

Main-File: Flurstueck.shp

Index-File: Flurstueck.shx

dBASE-File: Flurstueck.dbf

Projektion: Flurstueck.prj

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4. Update

The Official Land Parcel Information data stock is updated through the **provision of complete data sets**, which the Laender provide to the ZSHH as complete data sets or difference data quarterly on the first Wednesday of March, June, September and December each year.

The provision of Updates is scheduled approximately 4 to 6 weeks after these deadlines.

For more details on this information, please do not hesitate to contact ZSHH.

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Annex 1: Structure and data content of Shape

Coding: UTF-8. Only two-dimensional geometries are provided. The "land parcel" layer from ALKIS simplified schema of the AdV specification contains the essential information on the land parcel, supplemented by information on the place name.

Attribute	Allocation	Datatype	Description	Example 1	Example 2
oid	Mandatory	C(18)	Object ID + Suffix FL	DEBWL51690001QAwFL	DERPLP110000X3r3FL
aktualit	Mandatory	C(11)	Start of lifetime interval of the object in JJJJ-MM-TT	2017-05-19Z	2011-05-10Z
geometrie	Mandatory	Polygon	Multipolygon of the Object		
idflurst	Mandatory	C(16)	Relation to ID of the corresponding AX_Flurstueck	DEBWL51690001QAw	DERPLP110000X3r3
flaeche	Mandatory	N(12.2)	Land parcel – official parcel area	12425,00	1091,00
flstkennz	Mandatory	C(20)	Land parcel code	083310___19489001500	074031000022970029__
land	Mandatory	C(254)	Name of the land	Baden-Württemberg	Rheinland-Pfalz
landschl	Mandatory	C(2)	Land key	08	07
gemarkung	Mandatory	C(254)	Name of the district of parcel	Mannheim	Altrip
gemaschl	Mandatory	C(6)	District of parcel key	083310	074031
flur	Optional	C(254)	Field/named place – name	Mannheim	Flur 0
flurschl	Optional	C(9)	Field/named place – key	083310___	074031000
flstnrzae	Mandatory	C(5)	Land parcel number - numerator	19489	2297
flstnrnen	Optional	C(4)	Land parcel number - denominator	15	29
regbezirk	Optional	C(254)	Name of the administrative region	Karlsruhe	Rheinhessen-Pfalz
regbezschl	Optional	C(3)	Administrative region key	082	073
kreis	Optional	C(254)	Name of the rural district	Stadtkreis Mannheim	Rhein-Pfalz-Kreis
kreisschl	Mandatory	C(5)	Rural district key	08222	07338
gemeinde	Mandatory	C(254)	Name of the municipality	Mannheim	Altrip
gmdschl	Mandatory	C(8)	Official municipality key	08222000	07338001
abwrecht	Optional	C(31)	Divergent legal status true="different legal status" false="no different legal status"	Kein abweichender Rechtszustand	Kein abweichender Rechtszustand
lagetxt	Mandatory	C(254)	Composed string of place name	Ruhrorter Straße 33a	Richard-Wagner-Straße 32

Notes:

- The 'gml_id' attribute in the data is maintained for technical reasons and corresponds to the 'oid' attribute
- The different legal status (value 'true') indicates that there is a legally binding status outside of the real estate cadastre. The background are land consolidation or reallocation procedures that have not yet been recorded into the real estate cadastre. As soon as these have been incorporated, the value is set to 'false'.