WFS INSPIRE Services

ADDRESSES (AD)

Version 1.0

July 2016

1 Description WFS service for the theme AD

This document contains basic information about the INSPIRE WFS service for the theme AD (Address) and the different ways of download information with diverse reference systems, limitations and examples of consultation.

The description of this data set is defined in the document "Description of the Data Set"

2 Metadata of service

The metadata of the service are included in the service of catalogue of the IDEE (Spanish Spatial data infrastructure).

http://www.idee.es/csw-inspire-idee/srv/spa/csw?SERVICE=CSW&VERSION=2.0.2&REQUEST=GetRecordById&outputSchema=http://www.isotc211.org/2005/gmd&ElementSetName=full&ID=ES_SDGC_AD_WFS

The main features of the WFS download service, included in this metadata are:

- **Completeness:** The set of data that can be downloaded from this service is complete for 95% of the territory of Spain that it is under the responsibility of the DG of the cadastre (the whole of Spanish territory except Basque country and Navarre).

- **Spatial resolution**: the scales of production are, for urban areas, 1: 1000 or greater and rustic areas 1:5000 or higher.

- **Conditions of access and use**: access to this service shall be carried out under a license to be obtained automatically, and it implies the knowledge and acceptance of the requirements and conditions of the license.

- **Update process:** the dataset offered in this WFS service is continuously updated.

3 Technical Specifications of the service WFS

Web services will be applied in accordance with the implementing rules of INSPIRE. Web services provide the information as files in format GML version 3.2.1

Data and services are in accordance with the following specifications:

- Draft Implementing Rules for Download Services version 3.1
- INSPIRE Data Specification on Addresses - Guidelines version 3.0.1

The data are obtained directly from the General Directorate for Cadastre database, updated at the time of the invocation of the service.

The Compatible functions for the service WFS (Web Feature Service), are:

- GetFeature
- GetCapabilities
- DescribeFeatureType
- StoredQuerie
- ListStoredQueries
- DescribeStoredQueries

OGC Especifications WFS 2.0.0

http://portal.opengeospatial.org/files/?artifact_id=39967

To connect to some applications it is necessary to indicate the version, including the requirements for GetCapabilities:

GETCAPABILITIES:

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=WFS&Version=2.0.0&request=GetCapabilities

The XSD schema for addresses is found:

http://inspire.ec.europa.eu/schemas/ad/3.0/Addresses.xsd

4   Restrictions for the service WFS

The WFS service is limited by the number of features and by extension.

Each type of feature has different limitations, since it contains a variety of size of space objects.

The features type of INSPIRE (AD) is only one: AD.Address.

Limitations of the WFS service:

- For AD.Address. $4km^2$ of extensión y 5.000 features.
- The generic SQL query is not supported.

5 The WFS service request

The service supports various types of requests that are described below.

5.1 GetFeature

Mandatory parameters from **GetFeature**:

- o Typenames:
  - ADDRESS o AD.ADDRESS
- o SrsName (Optional, if not specified it returns the data in the SRS that are stored on BD).
  - EPSG::25830
  - urn:ogc:def:crs:EPSG::25830
- o BBOX
  - minimum X
  - minimum Y
  - maximum X
  - maximum Y

The call can be made with the following conditions:

- Call by a BBOX
- Call by predefined queries (StoredQueries)

EXAPLES:

Example by BBOX

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&request=getfeature&Typenames=ad.address&SRSname=EPSG::25830&bbox=233673,4015968,233761,4016008

5.2 StoredQueries

The service WFS of INSPIRE for the theme AD (Addresses) supports storedQueries

The list of supported queries can be obtained calling to request *listStoredQueries.*

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&version=2.0.0&request=listStoredQueries

For a description of a query stored in particular, the call would be as follows:

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&version=2&request=describeStoredQueries&StoredQuerie_id=GetADByRefcat

In order to get the description of a particular StoredQuerie the parameter describeStoredQueries is used and the identifier of the procedure described in the following table:

Query types:

Identifier	Description	Parameters	Description of parameters	Return Value
GetADByCodVIA	Addresses of a street of a municipality	CODVIA DEL MUN	Code of street Code of cadastre office Code of municipality CADASTRAL CODES	AD:Address AD:ThoroughfareName AD:PostalDescriptor AD:AdminUnitName
GetADByRefCat	Cadastral reference	REFCAT	Cadastral reference of 14 positions for urban and rural	AD:Address AD:ThoroughfareName AD:PostalDescriptor AD:AdminUnitName
GetADByPostalCode	Postal Code	POSTALCODE	Postal Code	AD:Address AD:ThoroughfareName AD:PostalDescriptor AD:AdminUnitName

Example of a request with StoredQuerie by cadastral reference:

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&version=2.0.0&request=getfeature&StoredQuerie_id=GetADByRefCat&REFCAT=3662303TF3136B

5.3 DescribeFeatureType

The INSPIRE WFS for address (AD) uses DescribeFeatureType .

This request to the service shows the XSD schema with the contents of the layers. In accordance with the 2.0.0 version standard OGC WFS service.

DescribeFeatureType:

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&version=2.0.0&request=describeFeatureType&Typenames=Address

6 Reference systems compatible with WFS services

Reference systems	Parameter	EPSG code
Geographical coordinates WGS84	4326	EPSG:4326
Geographical coordinates ETRS89	4258	EPSG:4258
ETRS89 / UTM zone 29N	25829	EPSG:25829
ETRS89 / UTM zone 30N	25830	EPSG:25830
ETRS89 / UTM zone 31N	25831	EPSG:25831
Web Mercator	3785	EPSG:3785
Web Mercator	3857	EPSG:3857

7 Examples of request to the services

Addresses by BBOX

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&request=getfeature&Typenames=ad.address&SRSname=EPSG::25830&bbox=233673,4015968,233761,4016008

Addresses by cadastral reference

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&version=2&request=getfeature&STOREDQUERIE_ID=GetadByRefcat&refcat=3556804TF3135F&srsname=EPSG::25830

Addresses of a street of a municipality

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&version=2&request=getfeature&STOREDQUERIE_ID=getadbycodvia&del=11&mun=39&codvia=1&srsname=EPSG::25830

Addresses by a Postal Code

http://ovc.catastro.meh.es/INSPIRE/wfsAD.aspx?service=wfs&version=2&request=getfeature&STOREDQUERIE_ID=getadbypostalcode&postalcode=11009&srsname=EPSG::25830