



INSPIRE WMS VIEW SERVICE

DIRECTORATE GENERAL FOR CADASTRE

Version 1.0

July 2016

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1 Description of WMS service

This document contains basic information about the WMS INSPIRE service. Service characteristics such as layers, styles, reference systems supported, image formats, limitations, etc. It includes different examples of requests with various combinations of layers and styles and image response.

The description of the contents of the data set is described in the document “[Description of the Data Sets](#)” .

2 Metadata of service

Metadata services are included in the service of catalogue of the Spanish Spatial Data Infrastructure IDEE (Infraestructura de Datos Espaciales de España).

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_WMS

The main features of these download ATOM services, collecting in this metadata are as follows:

- **Completeness:** The INSPIRE dataset contains the official data of the DGC transformed directly to the data model defined by the INSPIRE directive, the dataset is complete including urban and rural areas for 95% of the territory under the responsibility of the DGC, (except the Basque country and Navarre).
- **Spatial Resolution:** the scales of production are, for urban areas 1: 1000 or higher and for rural areas 1:5000 or higher.
- **Conditions of access and use:** Access to these services shall be carried out under a license of transfer of rights to be obtained automatically, assuming its use the knowledge and acceptance of the access requirements and the terms of the license.
- **Update process:** the dataset offered in this WMS service is continuously updated.

3 Technical Specifications of the service WMS

Web services will be applied in accordance with the implementing rules of INSPIRE. The view services are WMS services in versión 3.0

The WMS services are in accordance with the following specification:

[Technical Guidance for the implementation of INSPIRE View Services](#)

The graphical representation of each layer and style is described in the specifications of each data set:

Cadastral Parcel:



http://inspire.ec.europa.eu/documents/Data_Specifications/INSPIRE_DataSpecification_CP_v3.0.1.pdf

Addresses:

http://inspire.ec.europa.eu/documents/Data_Specifications/INSPIRE_DataSpecification_AD_v3.0.1.pdf

Buildings:

http://inspire.ec.europa.eu/documents/Data_Specifications/INSPIRE_DataSpecification_BU_v3.0rc2.pdf

Specifications WMS 1.3.0 of OGC (Open Geospatial Consortium):

<http://www.opengeospatial.org/standards/wms#overview>

The data obtained by the WMS service are the officers that exist in the graphical database of cadastre at the time of the invocation of the service. The update of cadastral data is done through continuous maintenance.

There are other symbology specifications for the product "ELF Cadastre" of ELF (European Location Framework) project.

Specifications :

<http://elfproject.eu/documentation/specification>

4 WMS service

<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?>

The Compatible functions for the service WMS (Web Map Service), are:

- GetCapabilities
- GetMap
- GetFeatureINFO

GETCAPABILITIES:

<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getcapabilities>

5 Service WMS features

The service provides a continuous map of the rural and urban cadastral mapping of the entire territory. The territory over which it has competence the General Directorate of Cadastre is the whole of Spain, except Navarra and the Basque country that have their own cadastral system.

Cadastral Mapping originally derives from the photogrammetric restitution in the case of urban mapping or digitizing on aerial orthophotos for the case of rural cartography. And it has the following characteristics:



- Projection: U.T.M. zone 27, 28, 29, 30 y 31
- Geodesic system: ETRS89 for Peninsula and Balearic Islands (zone 29, 30 y 31) and WSG84 for Canary Islands (zone 27 y 28).
- Scope of processing units: Municipality:
 - Urban mapping:
 - Scales 1:500 y 1:1.000
 - Rural mapping:
 - Scales 1:2.000 y 1:5.000

SPATIAL AREA

West longitude = -18.5

East Longitude = 5.3

South latitude= 26.2

North latitude= 44.8

IMAGE FORMAT

image/png

image/jpeg

image/gif

image/bmp

image/tif

IMAGE SIZE

The image size (width y height) in request GETMAP it may be 4000 x 4000 max.

REFERENCE SYSTEMS

Reference system	Parameter	EPSG code
Geográficas WGS84	4326	EPSG:4326
Geográficas 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

6 Layers and styles

The WMS service shows the several layers corresponding to the themes: Cadastral parcel, Addresses and Buildings.

There are two more layers to complete product specifications ELF Cadastre, and provide a unique service with a set of layers and styles. These layers are the administrative units (AU) that have been imported from the data published by the CNIG as part of the data of "National Geographic equipment" and are produced by the National "© National Geographic Institute of Spain» Geographic Institute. The Directorate General of the Cadastre does not have the legal mandate on the responsibility of this administrative unit layer.

6.1 Cadastral Parcel (CP)

The specification of cadastral parcel contains two layers which can be represented in view services and which in turn have different representation styles. In addition to provide better performance, in combination with other themes, it has incorporated some own styles for the ELF (European location Framework)project of the European Commission in order to provide a European CATASTRE product which is uniform and is standardized display continuously throughout Europe.

CP.CadastralParcel	
Default	
BoundariesOnly	
ReferencePoinOnly	+
ELFCadastre	
CP.CadastralZoning	
Default	
BoundariesOnly	
ELFCadastre	

6.1.1 CP.CADASTRAL PARCEL

Styles: Default and LabelOnReferencePoint

Style name	CP.CadastralParcel.Default y CP.CadastralParcel.LabelOnReferencePoint
Title	Default style.
Style definition	Perimeter line of parcel and text with label inside the enclosure. <ul style="list-style-type: none"> • fill: transparent • line color: black (RGB 0, 0, 0) • line thickness: : 1 px • text Font and size: Arial 10 • text color: black (RGB 0, 0, 0)
Display scales	From 1:1 to 1:20.000

Style: BoundariesOnly

Style name	CP.CadastralParcel.BoundariesOnly
Title	Style only line without label.
Style definition	Perimeter line of parcel. <ul style="list-style-type: none"> • fill: transparent • line color: black (RGB 0, 0, 0) • line thickness : : 1 px
Display scales	From 1:1 to 1:40.000

Style: ReferencePointOnly

Style name	CP.CadastralParcel.ReferencePointOnly
Title	Parcelas by point
Style definition	Centroid of parcel. <ul style="list-style-type: none"> • Symbol cross 2 pixels • Symbol color: magenta (RGB 255, 0, 255)
Display scales	From 1:1 to 1:60.000

Style: ELFCadastre

Style name	CP.CadastralParcel.ELFCadastre
Title	ELF Style for Cadastral Parcel
Style definition	<p>Perimeter line of parcel and text with label inside the enclosure.</p> <ul style="list-style-type: none"> • fill: transparent • line color: black (RGB 0, 0, 0) • line thickness: : 1 px • text Font and size: Arial 9 • text color: black (RGB 0, 0, 0).
Display scales	From 1:100 to 1:2.000

6.1.2 CP.CADAstralZONING

Style: Default

Style name	CP.CadastralZoning.Default
Title	Default style for cadastral zones
Style definition	<p>Perimeter line of cadastral zone and text with label inside the enclosure.</p> <ul style="list-style-type: none"> • fill: transparent • line color: black (RGB 0, 0, 0) • line thickness: : 2 px • text Font and size : Arial 20 • text color: negro (RGB 0, 0, 0)
Display scales	From 1:1 to 1:20.000

Estilo: ELFCadastre

Style name	CP.CadastralZoning.ELFCadastre
Title	ELF Style for Cadastral zoning
Style definition	<p>Perimeter line of cadastral zone and text with label inside the enclosure.</p> <ul style="list-style-type: none"> • fill: transparent • line color: black (RGB 0, 0, 0) • line thickness: : 2 px • text Font and size : Arial 15 • text color: negro (RGB 0, 0, 0)

Display scales	From 1:1 to 1:20.000
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6.2 ADDRESSES (AD)

AD.Address	
Default	□
Number.ELFCadastre	72

Style: default

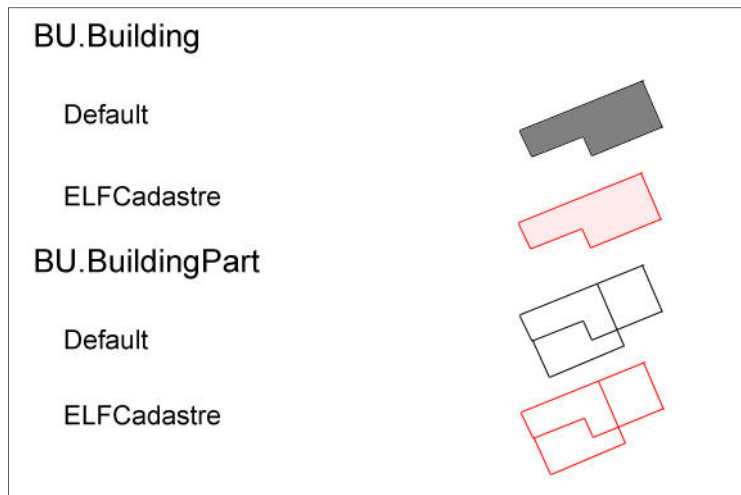
Style name	AD.Address.Default
Title	Default style representing georeferencing address. Georeferencing to the centroid
Style definition	Point symbol. <ul style="list-style-type: none"> Square symbol, size 6pixel, black edge and grey fill RGB(192,192,192)
Display scales	Unlimited.

Estilo: Number.ELFCadastre

Style name	AD.Address.Number.ELFCadastre
Title	ELF style. Number text portal address. Georeferencing to access.
Style definition	Text <ul style="list-style-type: none"> Font and size: Arial 7 Text color: black (RGB 0, 0, 0)
Display scales	From 1:100 to 1:2.000

6.3 BUILDINGS (BU)

In the specifications of buildings there are two layers that can be represented in visualization services: Building and BuildingPart. Only one symbology described by default and the ELF project has defined other symbols allowing a better interpretation of the map to be displayed in combination with the other layers to form the ELF Cadastre.



6.3.1 BU.BUILDING

Style: Default

Style name	Bu.Building.Default
Title	Default style for building.
Style definition	Perimeter line of building. <ul style="list-style-type: none"> • fill: grey (RGB 128,128,128) • line color: black (RGB 0, 0, 0) • line thickness : 1 px
Display scales	From 1:50 to 1:25.000

Style: ELFCadastre

Style name	Bu.Building.ELFCadastre
Title	ELF style for building in ELF Cadastre project.
Style definition	<p>Perimeter line of building.</p> <ul style="list-style-type: none"> • fill: RGB 255, 235, 235 • line color: red (RGB 255, 0, 0) • line thickness: 1 px
Display scales	From 1:100 to 1:10.000

6.3.2 BU.Building Part

Style: Default

Style name	Bu.BuildingPart.Default
Title	Default style for building parts.
Style definition	<p>Perimeter line of building part.</p> <ul style="list-style-type: none"> • fill: transparent • line color: black (RGB 0, 0, 0) • line thickness: 1 px
Display scales	From 1:50 to 1:10.000

Style: ELFCadastre

Style name	Bu.BuildingPart.ELFCadastre
Title	ELF style for building parts in ELF Cadastre project.
Style definition	<p>Perimeter line of building part.</p> <ul style="list-style-type: none"> • fill: transparent • line color: red (RGB 255, 0, 0) • line thickness : 1 px
Display scales	From 1:100 to 1:2.000

6.4 Unidades administrativas (AU)

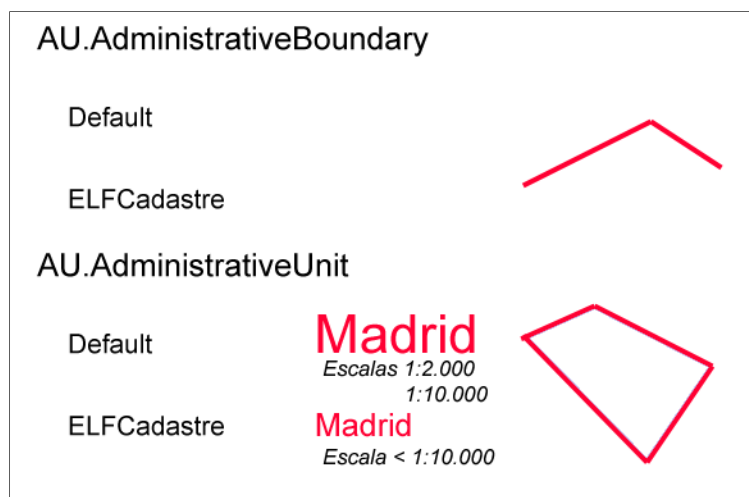
Administrative units are represented with 2 layers: AdministrativeBoundary and AdministrativeUnit.

NOTE:

The theme of administrative units is imported from the data published by the CNIG as part of national reference data is produced by the National Geographic Institute of Spain.

<http://centrodedescargas.cnig.es/CentroDescargas/index.jsp>

The Directorate General of Cadastre is not responsible agency with legal mandate of the Administrative Units.



6.4.1 AU.ADMINISTRATIVEBOUNDARY

Styles: Default y ELFCadastre

Style name	AU.AdministrativeBoundary.Default y AU.AdministrativeBoundary.ELFCadastre
Title	ELF style and default style. Lines of municipalities boundary (IGN data)
Style definition	Lines. <ul style="list-style-type: none"> • Line color: red (RGB 255, 0, 51) • Thickness line : : 4 px
Display scales	Unlimited

6.4.2 AU.ADMINISTRATIVEUNIT

Estilos: Default y ELFCadastre

Style name	AU.AdministrativeUnit.Default y AU.AdministrativeUnit.ELFCadastre
Title	ELF style and default style for administrative unit. Perimeter line and texts with municipality name (IGN Data)
Style definition	Administrative unit. Municipalities . <ul style="list-style-type: none"> • Color line: red(RGB 255, 0, 51) • Thickness line: : 4 px • Text color: rojo (RGB 255, 0, 51) Scales from 1:2.000 to 1:10.000 <ul style="list-style-type: none"> • Text Font and size: Arial 20 Scale < 1:10.000 <ul style="list-style-type: none"> • Text Font and size : Arial 12
Display scales	<1:2.000

7 GETFEATUREINFO

The queryable layers are the GetFeatureInfo request cadastral parcel, addresses and buildings. The answer is an html file containing a table with attributes and values. In the case of cadastral parcel attributes it includes a hyperlink to the cadastral data of the Electronic Office of Cadastre.

GETFEATUREINFO of CadastralParcel:

http://ovc.catastro.meh.es/Cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getfeatureinfo&srs=epsg:25830&width=50&height=50&FORMAT=image/png&query_Layers=CP.CADASTRALPARCEL&bbox=441825,4480560,441827,4480562&i=25&j=25

Get Feature Info Response		
Requested Layer: CadastralParcel		
inspireId	localId	1907401VK4810H
	Namespace	ES.SDGC.CP
AreaValue	4558 m2	
beginLifespanVersion	2015-04-28T00:00:00	
nationalCadastralReference	1907401VK4810H	
otherReference	Public remote access	

GETFEATUREINFO of Address

http://ovc.catastro.meh.es/Cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getfeatureinfo&srs=epsg:25830&width=50&height=50&FORMAT=image/png&query_Layers=AD.ADDRESS&bbox=441825,4480560,441827,4480562&i=25&j=25

Get Feature Info Response	
Requested Layer: Address	
fulltextAddress	PS CASTELLANA, 272 28046 MADRID
inspireId	localId 28.900.1213.272.1907401VK4810H
	Namespace ES.SDGC.AD
validFrom	2015-04-28T00:00:00
beginLifespanVersion	2015-04-28T00:00:00
nationalReference	<ul style="list-style-type: none"> Public remote access

GETFEATUREINFO of Building

http://ovc.catastro.meh.es/Cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getfeatureinfo&srs=epsg:25830&width=50&height=50&FORMAT=image/png&query_Layers=BU.BUILDING&bbox=441825,4480560,441827,4480562&i=25&j=25

Get Feature Info Response	
Requested Layer: Building	
inspireId	localId ES.SDGC.BU.1907401VK4810H
	Namespace ES.SDGC.BU
beginLifespanVersion	2015-04-28T00:00:00
conditionOfConstruction	functional
DateOfConstruction	beginning 1963-01-01T00:00:00
	end 1988-01-01T00:00:00
ExternalReference	1907401VK4810H
addresses	Link address object
cadastralParcels	Link Cadastral Parcel object
currentUse	4_1_office
numberOfBuildingUnits	1
numberOfDwellings	0
Document	Link document
OfficialArea (grossFloorArea)	12718

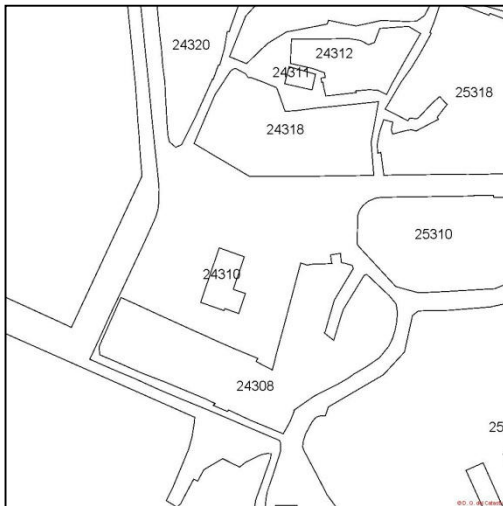
8 Examples

CP.CadastralParcel.Default



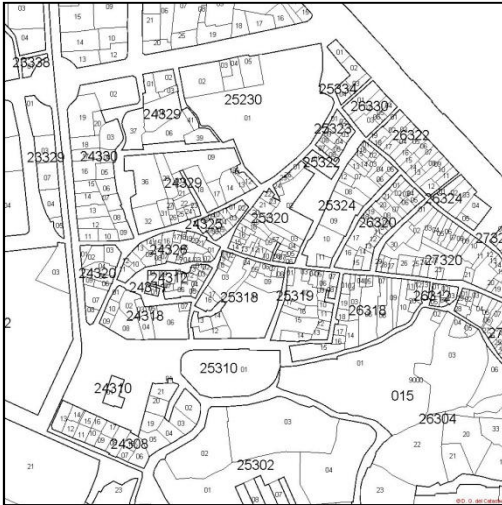
<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getmap&format=image/jpeg&bbox=512300,4663000,512500,4663200&width=1000&height=1000&srs=epsg:23029&layers=cp.cadastralparcel>

CP.CadastralZoning.Default



<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getmap&format=image/jpeg&bbox=512300,4663000,512500,4663200&width=1000&height=1000&srs=epsg:23029&layers=cp.cadastralzoning>

CP.CadastralParcel.Default + CP.CadastralZoning.Default



<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getmap&format=image/jpeg&bbox=512300,4663000,512700,4663400&width=1000&height=1000&srs=epsg:23029&layers=cp.cadastralparcel,CP.Cadastralzoning>

CP.CadastralParcel.BoundariesOnly + CP.CadastralParcel.ReferencePointOnly + CP.Cadastralzoning.BoundariesOnly

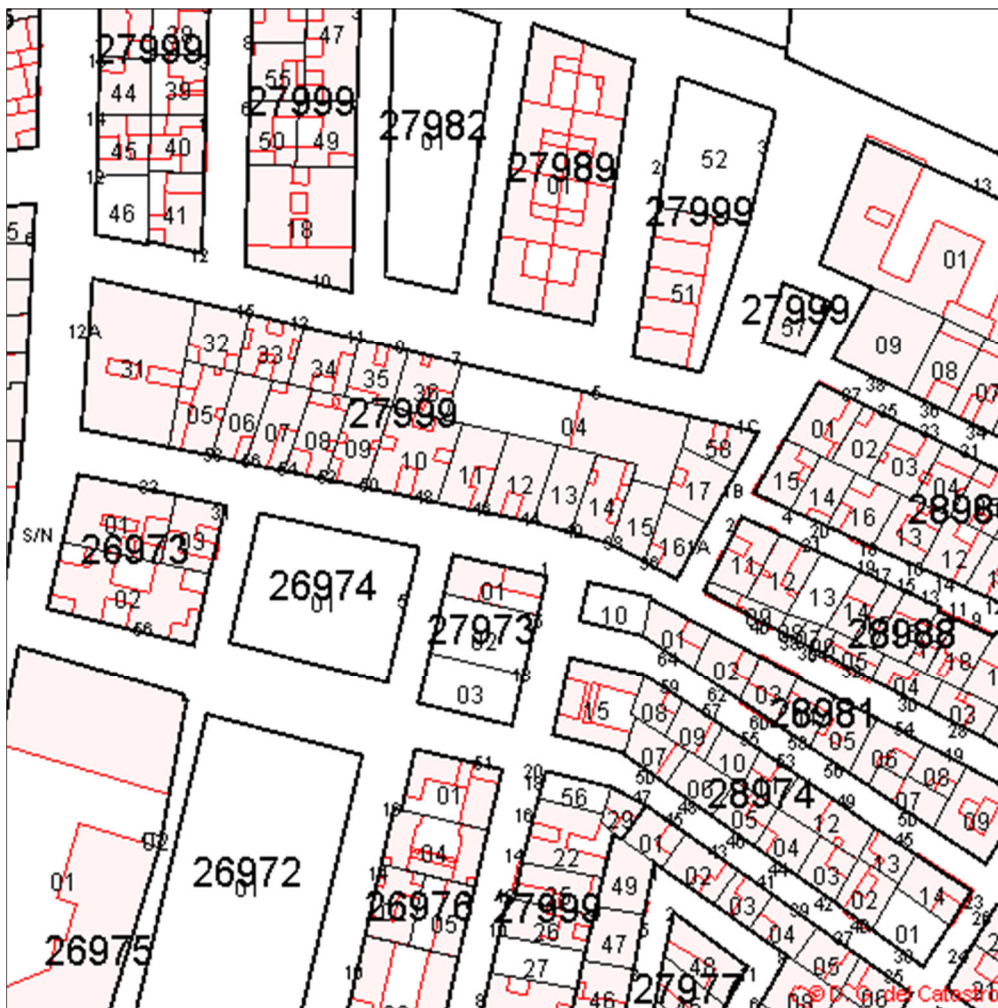


<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getmap&format=image/jpeg&bbox=511000,4662500,513500,4664900&width=1000&height=1000&srs=epsg:23029&layers=cp.cadastralparcel,cp.cadastralparcel,CP.Cadastralzoning&styles=boundariesonly,referencepointonly,boundariesonly>

8.1 Examples of ELF Cadastre

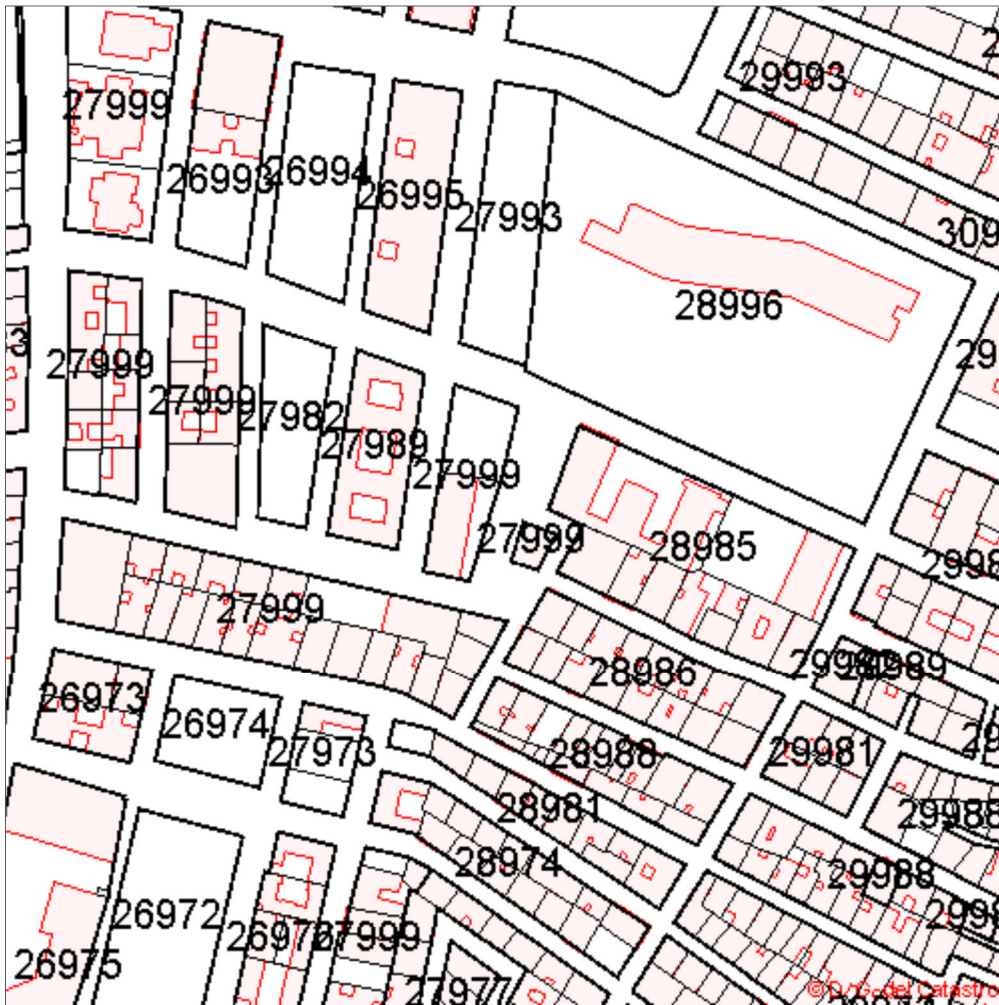
Scales > 1:2.000

<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getmap&format=image/png&bbox=222500,4019500,222700,4019700&width=500&height=500&sr=epsg:25830&layers=cp.cadastralparcel,bu.building,bu.buildingpart,ad.address,au.administrati veunit,au.administrativeboundary,cp.cadastralzoning&styles=elfcadastre,elfcadastre,elfcadastre,number.elfcadastre,elfcadastre,elfcadastre,elfcadastre>



Scales from 1:2.000 to 1:5.000

<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getmap&format=image/png&bbox=222500,4019500,222800,4019800&width=500&height=500&sr=epsg:25830&layers=cp.cadastralparcel,bu.building,bu.buildingpart,ad.address,au.administrati veunit,au.administrativeboundary,cp.cadastralzoning&styles=elfcadastre,elfcadastre,elfcadastre,number.elfcadastre,elfcadastre,elfcadastre,elfcadastre>



Scales from 1:5.000 to 1:10.000

<http://ovc.catastro.meh.es/cartografia/INSPIRE/spadgcwms.aspx?service=wms&request=getmap&format=image/png&bbox=222500,4019500,223700,4020700&width=500&height=500&srs=epsg:25830&layers=cp.cadastralparcel,bu.building,bu.buildingpart,ad.address,au.administrativeboundary,cp.cadastralzoning,au.administrativeunit&styles=elfcadastre,elfcadastre,elfcadastre,number.elfcadastre,elfcadastre,elfcadastre,elfcadastre>

