

# New Monitoring Process

## Spanish case

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# 1 Spanish context

- Geoportal Spanish SDI has two catalogues:
  1. IDEE catalogue has 6300 data sets:
    - Local, regional, national data sets
    - Some data sets aren't in electronic format or they relate to one or more of the themes listed in Annex I, II, or III (like old maps or topographic maps)
  2. Official Catalogue of INSPIRE Data and Services (CODSI) has 242 data sets:
    - Local, regional, national data sets too
    - All of them relate to one or more of the theme listed in Annex I, II, or III
    - All of them must comply or committed to comply with INSPIRE

The geoportal INSPIRE harvests metadata files of the CODSI

# 2 Impact of new rules on monitoring and reporting

A decreasing number of Spatial Data Sets (SDS) in each monitoring. It depends on the requirements of each year, the SDS of a year weren't same as SDS another year.

1. The list of SDS didn't be established, because the requirements were different each year.
2. Priority SDS were missing
3. The SDS of an only theme didn't cover whole territory

Year	Total SDS
2009	2712
<b>2010</b>	<b>5290</b>
2011	4373
2012	3514
2013	1166
2014	1431
2015	1435
2016	279
<b>2017</b>	<b>218</b>



4. The scale of SDS weren't the same



- Temporal evolution of Spanish indicators

Years	Spatial Data Set	Compliance metadata	Compliance Data Sets	Network Services	Compliance Services
2009	2712	4 %	0 %	240	0 %
2010	5290	9 %	0 %	1988	0 %
2011	4373	36 %	0 %	1716	0 %
2012	3514	51 %	1 %	2465	0 %
2013	1166	71 %	12%	2692	9 %
2014	1431	90,36 %	1 %	2844	3,48 %
2015	1435	83.05 %	1.81 %	1279	16.8 1%
2016	279	100 %	10.03 %	251	12.74 %
<b>2017</b>	<b>218</b>	<b>100 %</b>	<b>20.64 %</b>	<b>223</b>	<b>80.26 %</b>

2017 →

	Meta Data		Data Sets		Services			
	Existence	Compliance	Extend	Compliance	MD Accessibility	DS Accessibility	Use	Compliance
Indicator Name	MDi1	MDi2	DSi1	DSi2	NSi1	NSi2	NSi3	NSi4
Indicator Value	100%	100%	100%	20.64%	100%	64.22%	0	80.26%
Numerator	441	441	27045269	45	441	140	0	179
Denominator	441	441	27045269	218	441	218	223	223

# Nowadays, there are 242 spatial data sets (2019-03-26)

1º Spain's aim is to inform the SDS national cover.

2º Comply with INSPIRE Regulation

3º Obtain national SDS in all themes

	Annex I	SDS
1	Coordinate reference systems	0
2	Geographical grid systems	0
3	Geographical names	6
4	Administrative units	5
5	Addresses	18
6	Cadastral parcels	4
7	Transport networks	3
8	Hydrography	10
9	Protected sites	9

	Annex II	SDS
1	Elevation	7
2	Land cover	7
3	Orthoimagery	5
4	Geology	2

	Annex III	SDS
1	Statistical units	2
2	Buildings	2
3	Soil	5
4	Land use	17
5	Human health and safety	2
6	Utility and governmental services	20
7	Environmental monitoring facilities	28
8	Production and industrial facilities	2
9	Agricultural and aquaculture facilities	2
10	Population distribution — demography	0
11	Area management/restriction/regulation zones and reporting units	41
12	Natural risk zones	34
13	Atmospheric conditions	0
14	Meteorological geographical features	0
15	Oceanographic geographical features	1
16	Sea regions	1
17	Bio-geographical regions	1
18	Habitats and biotopes	1
19	Species distribution	2
20	Energy resources	2
21	Mineral resources	3

# New monitoring indicators:

[ENVIRONMENTAL DOMAIN]

- Number of spatial datasets for eReporting (DSi1,3):
  - Priority Data sets in Spain
    - We included in Spatial data Set metadata records a keyword for priority list of spatial data set last year



  80 |  80 |  79

[GEOGRAPHICAL SCOPE]

- Distribution of spatial datasets with regional (DS1,4) ) and national (DS1,5) coverage
  - National and regional
    - It's a easy task and we think that those keywords are beneficial to distinguish the Data Sets

# National and regional examples

**National:** The scope of the data set intends to cover the national territory. A dataset with national scope is (intending to) contain all objects of a certain theme for the national territory.

5 organizations complete “Cadastral parcels” theme

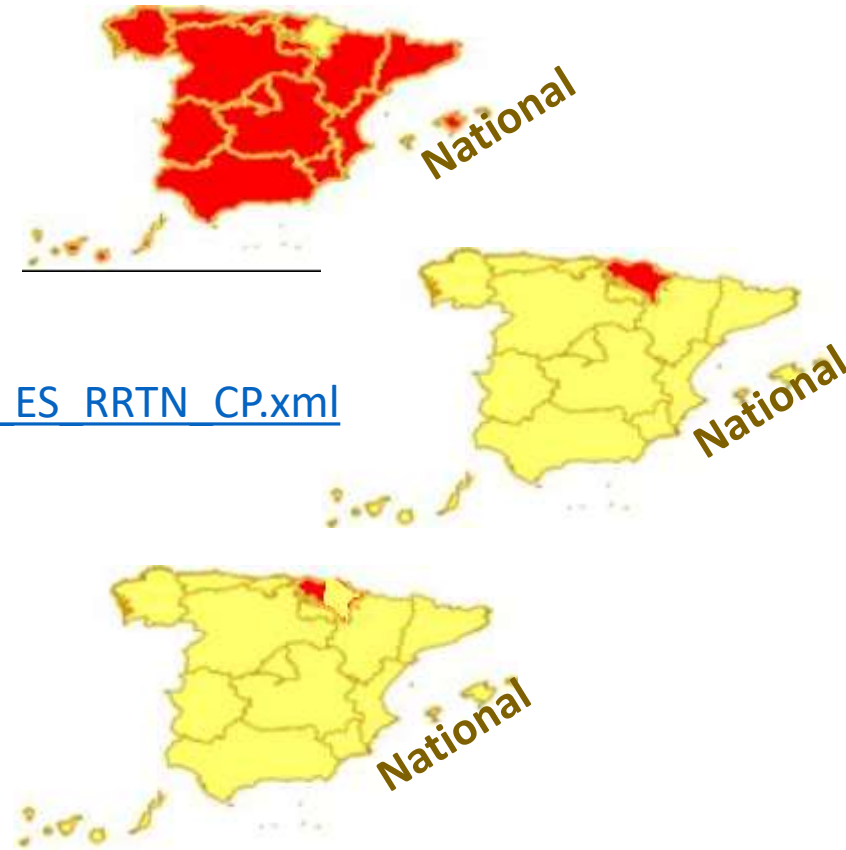
**Spanish General Directorate for Cadastre:**

[http://www.ideo.es/csw-codsi-ideo/srv/spa/catalog.search#/metadata/ES\\_SDGC\\_CP](http://www.ideo.es/csw-codsi-ideo/srv/spa/catalog.search#/metadata/ES_SDGC_CP)

**Regional Community of Navarra**

[http://www.ideo.es/csw-codsi-ideo/srv/spa/catalog.search#/metadata/engSITNAINSPIRE\\_ES\\_RRTN\\_CP.xml](http://www.ideo.es/csw-codsi-ideo/srv/spa/catalog.search#/metadata/engSITNAINSPIRE_ES_RRTN_CP.xml)

**3 local: Álava, Guipuzcoa, Bizkaia (Basque Government)**



# National and regional examples

**National:** *The scope of the data set intends to cover the national territory. A dataset with national scope is (intending to) contain all objects of a certain theme for the national territory.*

## Many organizations participate in the same data: Land cover and Land use

IGN Spain

Ministry of Agriculture, Livestock, Fish and Environment

Autonomous communities (regions)

Ministry of Finance

Ministry of Defense



<http://www.ideo.es/csw-codsi-ideo/srv/spa/catalog.search#/metadata/spaignsiose2014>

<http://www.ideo.es/csw-codsi-ideo/srv/spa/catalog.search#/metadata/spaignCLC2018>

## Each region publishes its spatial data, the same data: Land cover and Land use

Example: Canary



[http://www.ideo.es/csw-inspire-](http://www.ideo.es/csw-inspire-ideo/srv/spa/catalog.search#/metadata/spagrafcan_131MOS2002_20160101)

[ideo/srv/spa/catalog.search#/metadata/spagrafcan\\_131MOS2002\\_20160101](http://www.ideo.es/csw-inspire-ideo/srv/spa/catalog.search#/metadata/spagrafcan_131MOS2002_20160101)



# Geoportal INSPIRE

The screenshot shows the INSPIRE Geoportal interface. At the top, there is the European Commission logo and the text "INSPIRE GEOPORTAL" and "Enhancing access to European spatial data". Below this is a navigation bar with "European Commission > INSPIRE > Geoportal > Results". The main content area is titled "Data sets in Spain" and shows a list of data sets with filters for "Downloadable" and "Viewable". The list includes five data sets related to flood risk in Spain. The interface also shows a sidebar with "Countries" and "Themes" filters, and a summary of results: 219 data sets, 141 features, and 143 layers.

Title	Properties
Mapa de áreas de riesgo ambiental por inundación fluvial T=10 años	
Zonas inundables con alta probabilidad ( T= 10 años)	
Peligrosidad por inundación fluvial T=10 años	
Mapa de riesgo inundación fluvial afección a población T=10 años	
Mapa de riesgo inundación fluvial económico T=10 años	

<http://inspire-geoportal.ec.europa.eu/results.html?country=es&view=details&theme=none>

219 | 141 | 143 ← Layers

↑ Data Sets      ↑ Features

How many feature types are left?

# How many Feature Types do Spain publish?

INSPIRE Themes	Feature Types	Feature Types publish on WFS o ATOM	Percentage
Annex I.1 - Coordinate reference systems			
Annex I.2 - Geographical grid systems			
Annex I.3 - Geographical names	1	1	100%
Annex I.4 - Administrative units	6	3	50%
Annex I.5 - Addresses	6	4	67%
Annex I.6 - Cadastral parcels	4	4	100%
Annex I.7 - Transport networks	107	51	48%
Annex I.8 - Hydrography	25	17	68%
Annex I.9 - Protected sites	7	1	14%
Annex II.1 - Elevation	8	2	25%
Annex II.2 - Land cover	3	2	67%
Annex II.3 - Orthoimagery	4	1	25%
Annex II.4 - Geology	30	7	23%

AdministrativeBoundary	Is published though WFS and ATOM
AdministrativeUnit	Is published though WFS and ATOM
Condominium	There isn't in Spain
Baseline	Isn't published, it needs to be published
MaritimeBoundary	Isn't published, it needs to be published
MaritimeZone	Isn't published, it needs to be published

# How many Feature Types do Spain publish?

INSPIRE Themes	Feature Types	Feature Types publishes on WFS o ATOM	Percentage
Annex III.1 - Statistical units	7	1	14%
Annex III.2 - Buildings	8	6	75%
Annex III.3 - Soil	12	2	17%
Annex III.4 - Land use	9	2	22%
Annex III.5 - Human health and safety	7	2	29%
Annex III.6 - Utility and governmental services	22	6	27%
Annex III.7 - Environmental monitoring facilities	8	2	25%
Annex III.8 - Production and industrial facilities	6	1	17%
Annex III.9 - Agricultural and aquaculture facilities	9	0	0%
Annex III.10 - Population distribution / Demography	1	0	0%
Annex III.11 - Area management / Restriction / Regulation zones and reporting units	19	0	0%
Annex III.12 - Natural risk zones	12	4	33%
Annex III.13 - Atmospheric conditions			
Annex III.14 - Oceanographic geographical features	1	0	0%
Annex III.15 - Sea regions	9	1	11%
Annex III.16 - Bio-geographical regions	1	0	0%
Annex III.17 - Habitats and biotopes	1	0	0%
Annex III.18 - Species distribution	2	0	0%
Annex III.19 - Energy resources	5	1	20%
Annex III.20 - Mineral resources	5	2	40%

# Conclusions

- **Spain has undertaken a major effort to inform of Priority Data Sets**
  - All Priority Data Sets are identified.
- **The Data Sets of annex I covers national territory:**
  - Some regional SDS take part in national SDS (Transport Network or Orthoimagery)
  - But, there are regional and local SDS with a mayor detail that they don't inform to Commission
- **There are some themes without data sets** (Bio-geographical regions or Population distribution / Demography)
- **We are working at feature types level, and the second step we'll analyze the attributes of feature types**

Thank you