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Introduction

The INSPIRE Directive sets the minimum conditions for interoperable sharing and exchange of spatial data across Europe as part of a larger European Interoperability Framework and the e-Government Action Plan that contributes to the Digital Single Market Agenda. Article 21 of [INSPIRE Directive](#) defines the basic principles for monitoring and reporting. More detailed implementing rules regarding INSPIRE monitoring and reporting have been adopted as [COMMISSION DECISION regarding INSPIRE monitoring and reporting](#) on the 5th of June 2009.

This country fiche highlights the progress in the various areas of INSPIRE implementation and presents an outlook of planned actions for further improvement of the INSPIRE implementation. The country fiche includes information **until May 2019** as an update of the information acquired through:

- member states update,
- [monitoring report](#) in May 2019.

State Of Play

A high-level view on the governance, use and impact of the INSPIRE Directive in Czech Republic. More detailed information is available on the [INSPIRE knowledge base](#).

Coordination

National Contact Point

Name of Public Authority: Czech Environmental Information Agency (CENIA)

Postal Address: CENIA, Czech Environmental Information Agency

Vršovická 1442/65

Praha 10, 100 10

Czech Republic

Contact Email: [Click to email](#)

National INSPIRE Website: <http://inspire.gov.cz/>

MIG Contacts: Contact Person: Eva Kubátová

Email: Eva.kubatova@mvcz.cz

Contact Person: Jitka Faugnerová

Email: Jitka.Faugnerova@cenia.cz

MIG T Contacts: Contact Person: Lenka Rejentová

Email: lenka.rejentova@cenia.cz

Contact Person: Jiří Poláček

Email: jiri.polacek@cuzk.cz

COORDINATION COMMITTEE (KOVIN)

3 member - management



16 members - public authorities



2 members – associations of regional and local authorities



1 member – GI professional association



Coordination Structure & Progress:

- National Contact point

TECHNICAL WORKING GROUPS

METADATA

DATA

SERVICES, GEOPORTALS

MONITOR./REPORTING, FINANCE

DATA SHARING, LEGISLATION

EDUCATION

STRATEGY

Name of the public authority	CENIA, česká informační agentura životního prostředí
Contact information:	
Mailing address	Vršovická 1442/65, Praha 10, 100 10
Telephone number	+ 420 267 225 226
Telefax number	+ 420 271 742 306
Email address	inspire@cenia.cz , info@cenia.cz
Organisation's website URL	www.cenia.cz
Contact person (if available)	Jitka Faugnerová
Telephone number	+ 420 267 225 308
Email address	inspire@cenia.cz
Contact person - substitute (if available)	Lenka Rejentová
Telephone number	+ 420 267 225 294
Email address	inspire@cenia.cz

• Coordination Structure

- **Ministry of the Environment (MoE)** is responsible for the INSPIRE implementation in the Czech Republic. MoE coordinates the infrastructure using **the INSPIRE Coordination Committee (KOVIN)** established in 2010. Members of KOVIN are representatives of all the central bodies (Ministries) of the Czech Republic (18 members), 2 representatives of associations for regional and local authorities and one representative of private sector, users and universities.
- In agreement with MoE, **CENIA, Czech Environmental Information Agency** is in charge of **National INSPIRE Geoportal** (SW and HW maintenance and development, administration, updates and support to users), **communication** with data providers, communication with DG ENV and JRC, **secretariat of KOVIN, national contact point and primary contacts** in both, Maintenance and Implementation Groups (**MIG political and technical**).

• Progress

- Positive progress (from 2015) is attributed to the fact that the Czech Government in October 2014 endorsed the Strategy for development of infrastructure for spatial information in the Czech Republic till 2020 (GeoInfoStrategy). This Strategy, coordinated by the Ministry of Interior includes also mandatory implementation of the INSPIRE Directive. **INSPIRE implementation strategy was endorsed as a separate document by KOVIN and Minister of the Environment in July 2015.**

Functioning and coordination of the infrastructure

- Coordination Committee (KOVIN) meets on regular basis, chaired by deputy minister of the environment, co-chaired by director of e-government of Ministry of Interior and by deputy director of Czech Office for Surveying, Mapping and Cadastre. Practical implementation issues are solved in dedicated Technical Working Groups (currently 7, but only 6 operational. TWG for Education is officially established, but in practice there has never been any meeting of the group). Results from the TWGs are implemented by each of the data providers.

- In accordance with the INSPIRE implementation strategy the concept of identification and development of National INSPIRE Datasets is followed resulting in identification of **responsible organizations** for provision of the INSPIRE datasets. These organizations are responsible for the INSPIRE dataset within the extend of the whole country and also for all the spatial objects and their attributes required by the data specifications, if possible. In many cases cooperation of more data providers is needed to cover one INSPIRE theme, either because of the limited coverage of their data sets or because the management of the spatial data object or attributes is responsibility of a different organization.
- In April-May 2019 the process of identification of data providers resulted in a draft of amendment of law on INSPIRE infrastructure in the Czech Republic. This draft defines institutions and organisations responsible for each of the INSPIRE theme. On top of current obligations, a new obligation is foreseen. This is cross sectoral coordination of data providers contributing to harmonized data set.
- The quality of metadata, services and data itself has improved due to the coordinated approach taken. Increasing the quality has been supported by making available new EU geoportal and validator. EU geoportal is well appreciated, because it demonstrates, in a clear and user-friendly way, the level of implementation of INSPIRE data themes in all EU countries. By promoting the data accessibility in comparison with other EU countries, the geoportal supports quicker implementation in some institutions. As a consequence, the number of datasets published on EU Geoportal has increased and remains stable.
- Despite the improvement in identification and making compliant INSPIRE datasets available, data of theme Health and Security remains as an issue, together with Utilities themes. Health and Security is caused by rather low involvement of responsible ministry. The issue with utility theme has two aspects – firstly the data is owned mostly by private companies, secondly the security situation has changed over past ten years and even if, the data is available, there is not much will to display it online.
- On top of the technical implementation, INSPIRE events are organised at least once a year. INSPIRE info day usually and together with Ministry of the Environment of Slovakia, also Czech-Slovak INSPIRE conference. The two nearest events are 12th June for INSPIRE info day near Prague, Czech Republic and 8th-9th October in Strbske Pleso, Slovakia.

Usage of the infrastructure for spatial information

In general, use of spatial data and services has increased significantly during the past 10 years.

The access to these data sources is not provided only via central portals with national relevance (e.g. National Czech INSPIRE Geoportal - <https://geoportal.gov.cz> or National Open data portal - <http://opendata.gov.cz> or geoportal of Czech Office for Surveying Mapping and Cadastre - <https://geoportal.cuzk.cz>), but there are also many other sources. Domain specific geoportals exist and provide source geodata and services and are successfully in use mostly by the domain users. List of these geoportals is available via National INSPIRE geoportal at: <https://geoportal.gov.cz/web/guest/other-portals>

This link contains also links to the geoportals of 14 Czech regions. These regional geoportals are usually source of information about geoportals of cities and municipalities within the region.

With rather close deadline for the INSPIRE data harmonization, new portals are planned or already under development. These portals should solve issues of a specific domain and at the same time the INSPIRE obligations. Currently it is e.g. National geoportal for urban planning within Ministry for regional.

- The National MD / data harvesting is functioning well therefore users have usually several options to find and use published spatial data. On the other hand the accessibility and service stability is not always 100%.
- The use of National INSPIRE services (registered on EU Geoportal) is due to the limited data content often lower than of the services providing more detailed data required for national e-Government agendas (e.g. via Base Register of Territorial Identification, Addresses and Real Estates)

Data sharing arrangements

- Czech Republic has been aware of the issue of non harmonised conditions for access and use of spatial data sets and services. Since 2016, the last reporting period, several steps have been taken to overcome the issues of complicated data sharing. But, it is important to note, that these steps cover only the INSPIRE data sets and services, not in general all the spatial data sets in the Czech republic.
- In 2018, as a first step, Ministry of the Environment prepared 2 licences, based on previously published INSPIRE licences (basic and specific). However, the trends in society in general, and in spatial data community as well, lead up to the simplification. From this point of view, INSPIRE basic and specific licences were too complicated to use. Therefore, **Creative Commons 4.0** were suggested to use.
- In practice it means, that KOVIN requires, if possible and if there are no other limitations given by the domain legislation, to use CC 4.0 for the INSPIRE data sets and services published on the EU geoportal.
- This decision is based on an analysis made at the end of 2018. The analysis focused on two metadata elements “Access and Use” and “Licence” and it proved that already more than 85% of Czech data providers made their data sets and services available free of charge, openly or they used other kinds of “open” licences. As metadata elements “Access and Use” and “Licence” are “free text” elements, it was interesting to find out, that data providers often expressed the same meaning by using different wording, which created many different conditions for access and use, if “machine-analysed”.
- Various wording for the same information was decided to overcome quickly by preparation of a national code list. The TWG for licences has prepared a 4 page document/manual which suggests the code list to use. This code list will become “official” after approval of coordination committee (June 2019)
- The code list will consequently influence the national metadata profile that has been already prepared for the transition to Metadata 2.0. The national metadata profile will be updated again. After approval of coordination committee, the profile will be also implemented to the metadata editor on National INSPIRE geoportal.
- These changes will be promoted at the nearest INSPIRE info Day in June.
- The check of the current INSPIRE data providers will continue until the end of the year 2019 and will go beyond for the new data providers.

Costs and benefits

- Cost assessment was carried out by members of the coordination committee. The cost was estimated in terms of financial as well as

personal resources using a commonly approved template from 2015. The total sum estimated for the years 2016-2018 is 63,4 mil CZK (ca. 2.4 mil Euro) in total.

- Benefits were not precisely financially quantified; however, these are the major benefits agreed by the Coordination Committee (KOVIN):
 - Better accessibility of data in general
 - Ability to carry out analysis on up-to-date, reliable data (in this case payments for data seemed not to be such issue as an analyses published using outdated data)
 - Existence of new jobs due to the fact that spatial data is used more and more in official agendas of public organizations
 - Innovation potential (new services, apps) stem from availability of standardized services, open data and ICT development.
 - Contribution to cross-border and/or EU projects and services

Key facts and figures

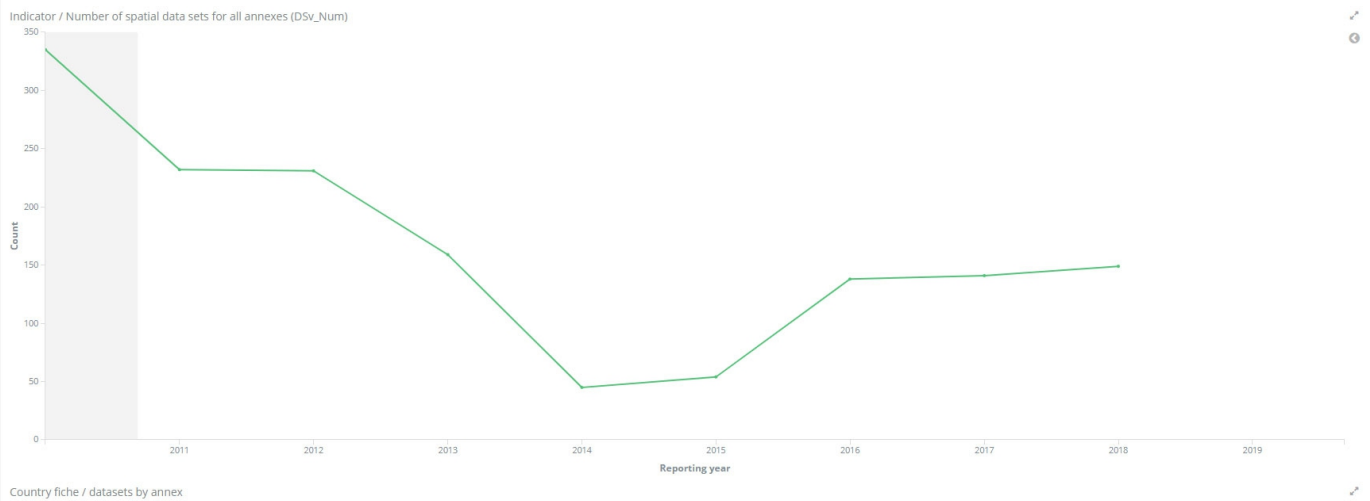
In addition to the above mentioned issues, the implementation of INSPIRE Directive requires Member States to take four main steps in relation to management of spatial datasets which fall under the Directive:

- Step 1: Identify spatial datasets
- Step 2: Document these datasets (metadata)
- Step 3: Provide services for identified spatial datasets (discovery, view, download)
- Step 4: Make spatial datasets interoperable by aligning them with the common data models.

The key facts and figures presented in this country fiche are based on the information provided by Czech Republic on the [INSPIRE dashboard](#). **The provided statistics is not reflecting the data available on INSPIRE geoportal.** The INSPIRE geoportal is updated on a regular and ongoing basis, whilst the INSPIRE dashboard is typically updated after every reporting round, on a yearly basis.

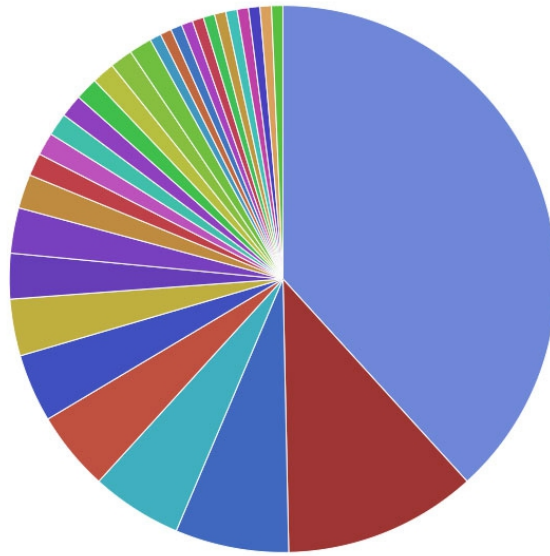
The conformity of the implementation is assessed against the full set of legal specifications set out by the Directive and the Implementing Rules and the commonly agreed good practices set out by the technical guidelines.

Identification of spatial data with relevance to the environment (step 1)



Data sets made available per INSPIRE theme (reference year 2018)

INSPIRE Raw data (datasets) by themes



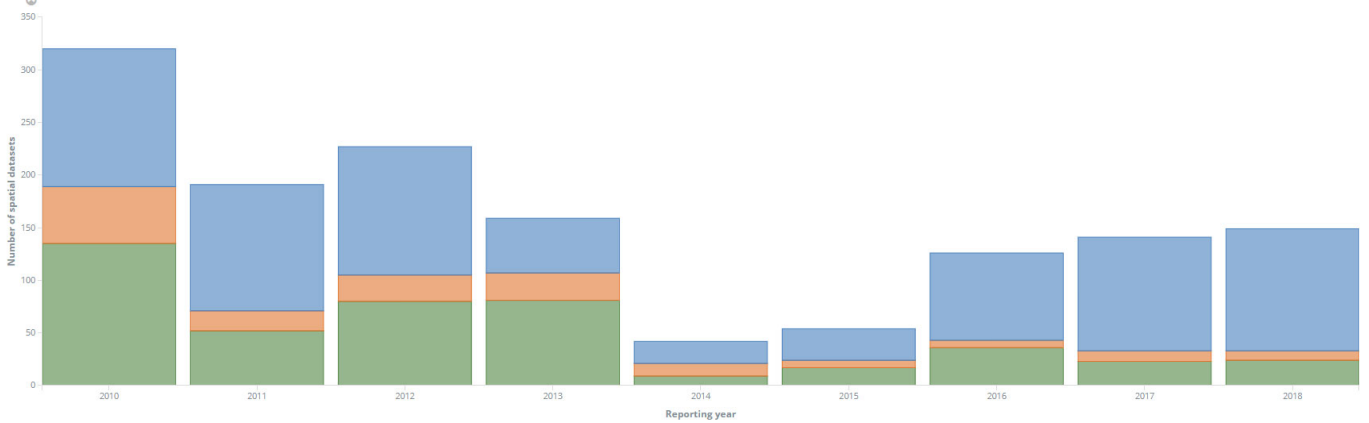
- Land use
- Area management/recovery
- Natural risk zones
- Environmental monitoring
- Protected sites
- Transport networks
- Geology
- Cadastral parcels
- Human health and safety
- Mineral resources
- Buildings
- Elevation
- Geographical grid systems
- Hydrography
- Meteorological geography
- Production and industry
- Soil
- Utility and government
- Addresses
- Administrative units
- Agricultural and aquaculture
- Atmospheric conditions
- Bio-geographical regions
- Geographical names
- Habitats and biotopes
- Land cover
- Orthoimagery
- Population distribution
- Species distribution
- Statistical units

Country fiche / datasets by themes

Data sets made available per INSPIRE theme

Indicator / Number of spatial data sets per annexes

MDv1.1 MDv1.2 MDv1.3



Country fiche / Documentation of the data

MDv1.1: number of spatial data sets for Annex I that have metadata

MDv1.2: number of spatial data sets for Annex II that have metadata

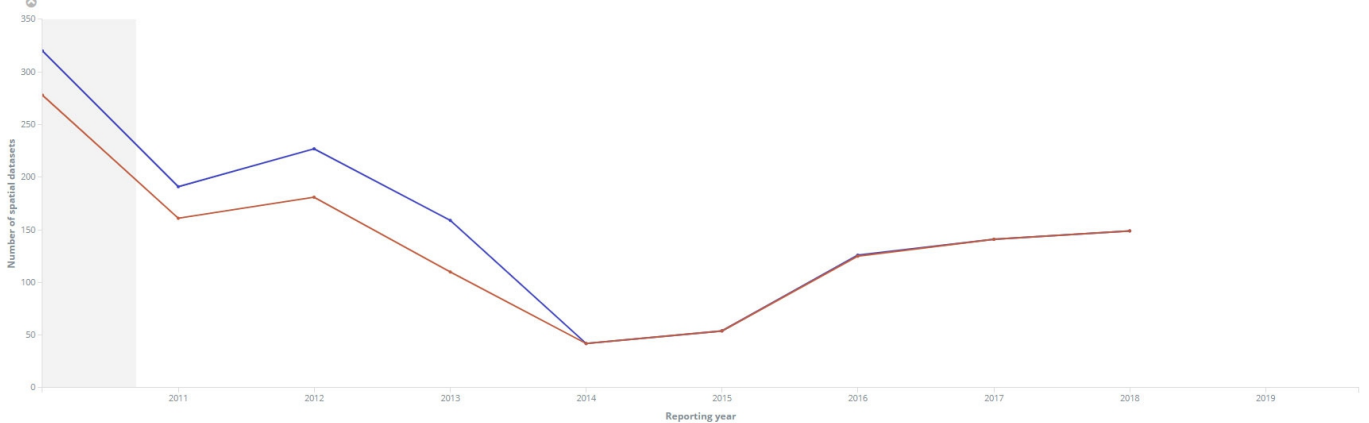
MDv1.3: number of spatial data sets for Annex III that have metadata

Documentation of the data (metadata) (step 2)

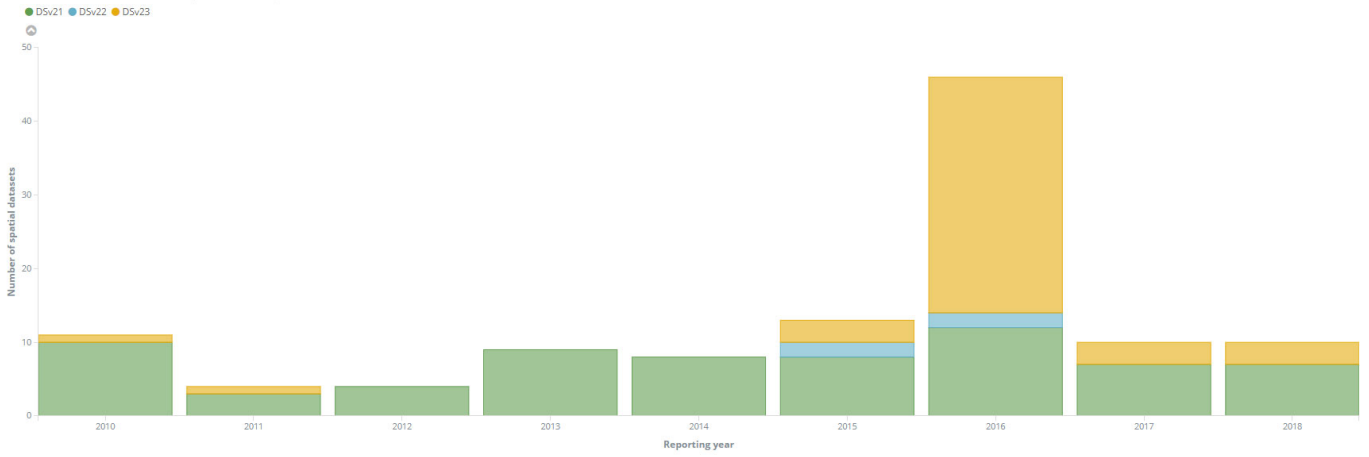
Evolution of documented data and conformity of the documentation

Indicator / Number of spatial data set that have metadata (MDv1_DS) and have conformant metadata (MDv2_DS)

MDv1_DS MDv2_DS



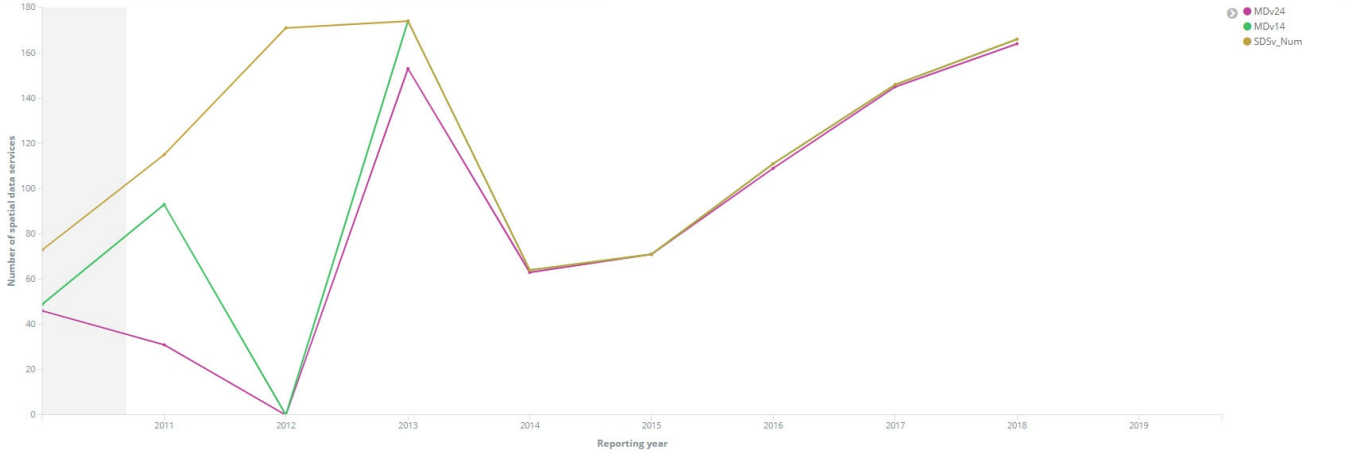
Indicator / Number of conformant spatial data sets per Annexes



Country fiche / Evolution of documented services and conformity of the documentation

Evolution of documented services and conformity of the documentation

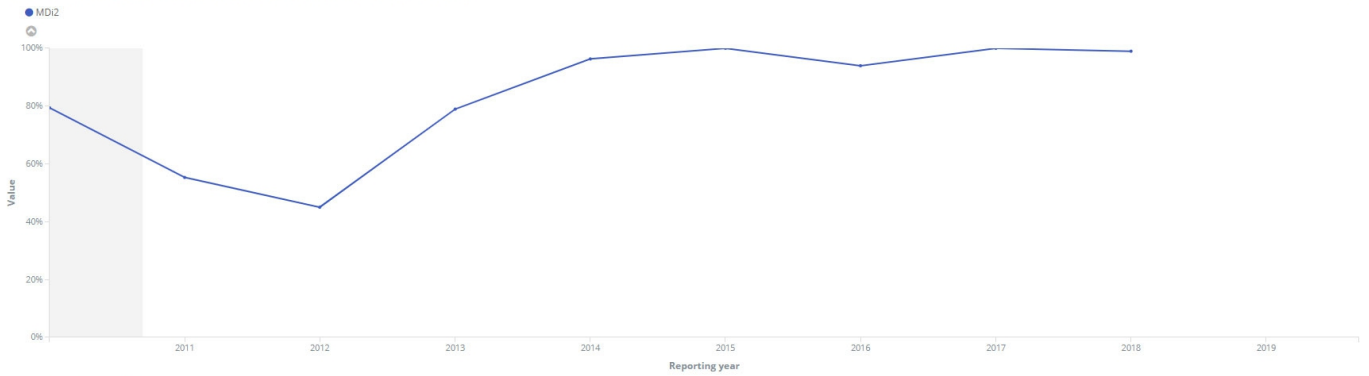
Indicator / Number of spatial data services (SDSv_Num) with metadata (MDv14) and conformant metadata (MDv24)



Country fiche / Evolution of the overall conformity of the documented metadata

Evolution of the overall conformity of the documented metadata

Indicator / Percentage of spatial data sets and services with conformant metadata (MDi2)

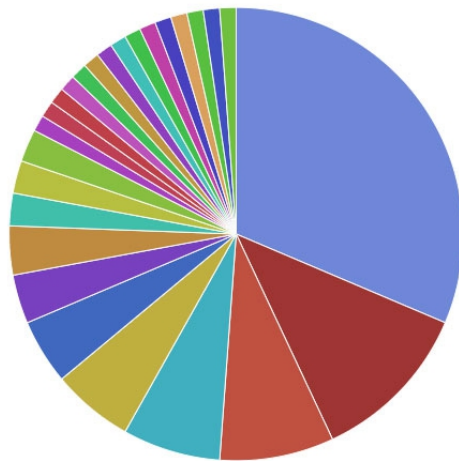


Country fiche / accessibility

Accessibility of the data through digital services (step 3)

Digitally accessible spatial data per INSPIRE theme (reference year 2018)

INSPIRE Raw data (datasets available through services) by themes

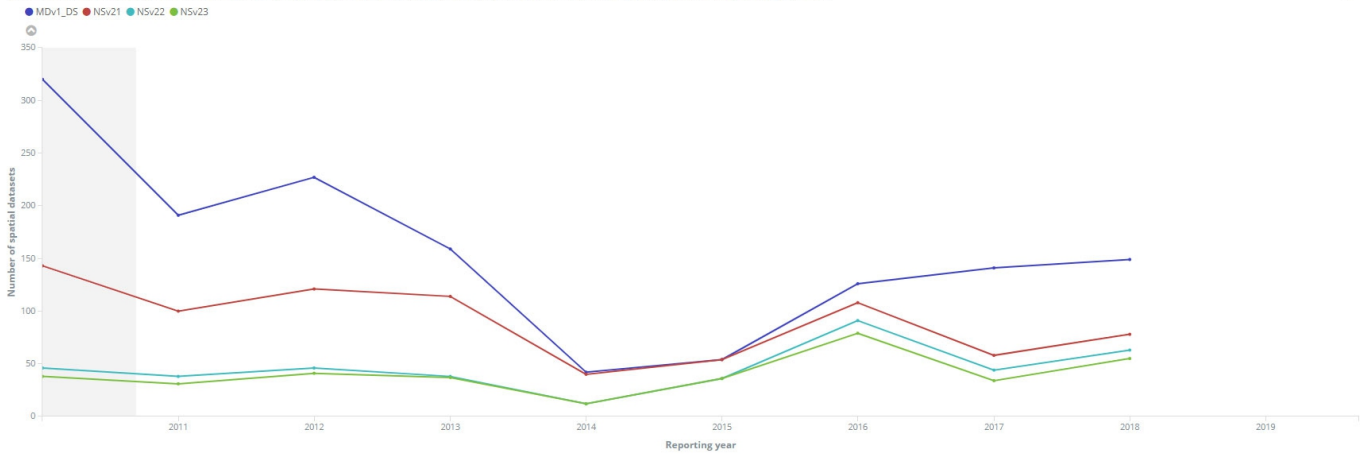


- Land use
- Area management...
- Protected sites
- Environmental mo...
- Geology
- Natural risk zones
- Human health an...
- Mineral resources
- Geographical grid ...
- Production and in...
- Soil
- Atmospheric cond...
- Bio-geographical r...
- Buildings
- Elevation
- Geographical nam...
- Habitats and bioto...
- Hydrography
- Land cover
- Meteorological ge...
- Orthoimagery
- Population distrib...
- Species distribut...
- Statistical units
- Transport networks

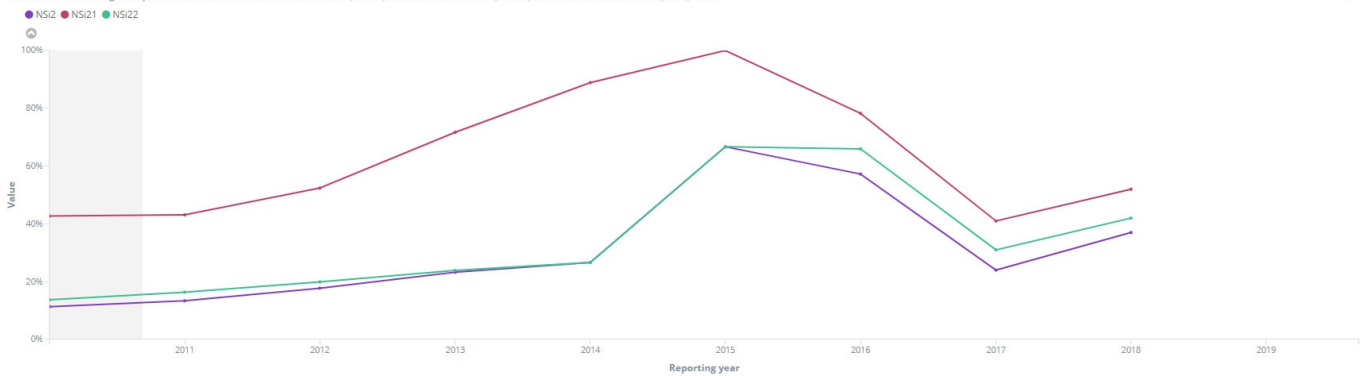
Country fiche / Evolution of spatial data accessible through services

Evolution of spatial data made accessible through digital services

Indicator / Number of spatial data sets for which a view (NSv21) or download (NSv22) or both (NSv23) service exist and the total number of metadata (MDv1_ds)



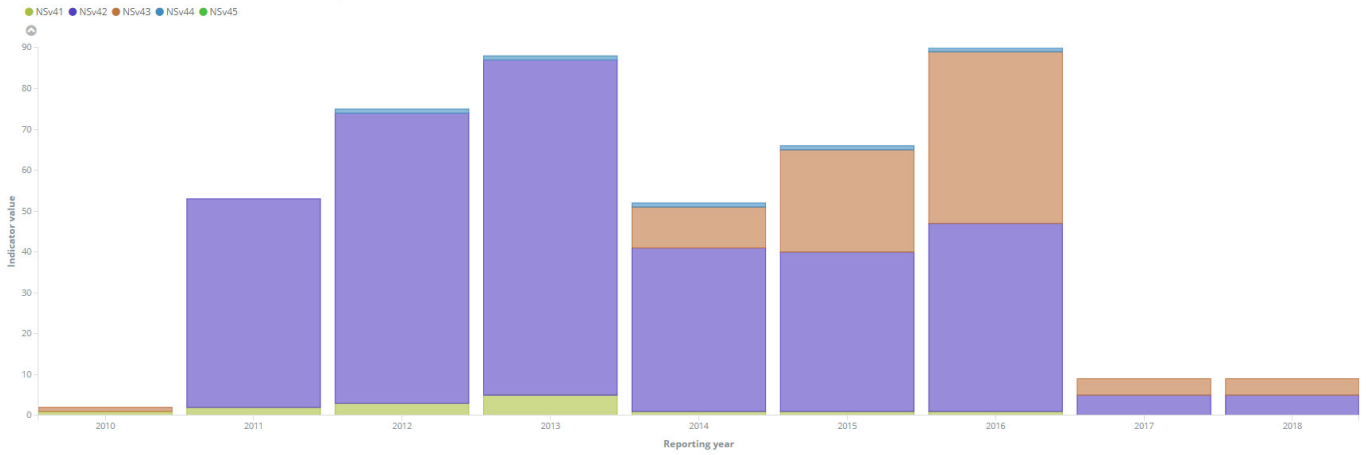
Indicator / Percentage of spatial data sets for which a view service (NSI21), a download service (NSI22) or a view and download (NSI2) exist



Country fiche / Evolution of the conformity of the digital services

Evolution of the conformity of the digital services

Indicator / Number of all conformant network services: discovery (NSv41), view (NSv42), download (NSv43), transformation (NSv44) total (NSv4)



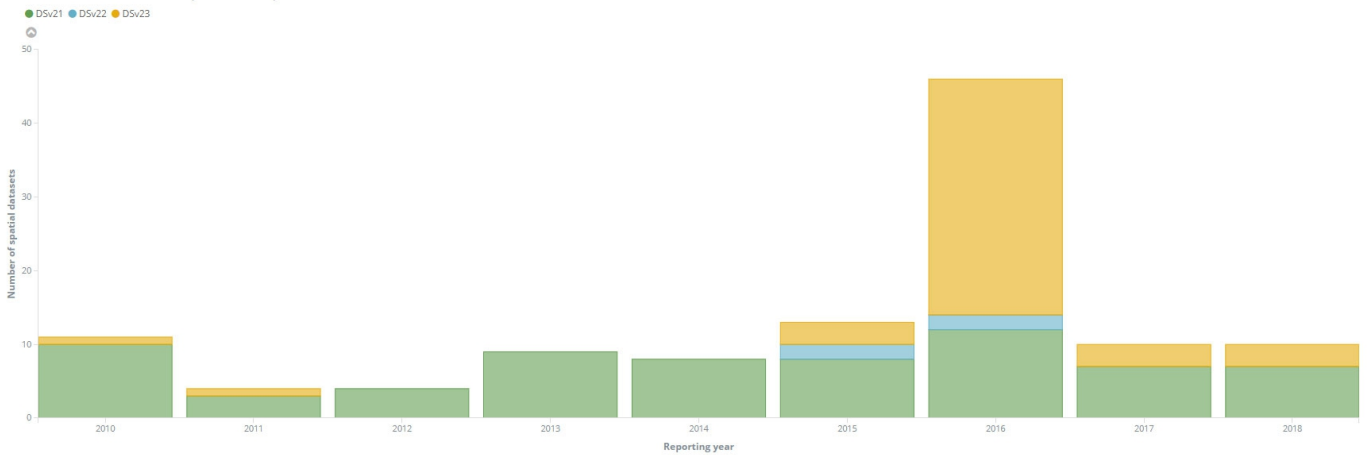
Country fiche / Interoperability

Interoperability of spatial data sets (step 4)

The interoperability of spatial data sets is an outlook on the readiness of Member States to make their spatial data interoperable according to the interoperability specifications laid down in the INSPIRE Interoperability Implementing regulation (Commission Regulation (EU) No 1089/2010 <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02010R1089-20131230&qid=1400675738563>). The deadlines for implementation of the spatial data interoperability are 23/11/2017 for Annex I data and 21/10/2020 for Annex II and III data.

Evolution of the conformity with INSPIRE interoperability specifications for spatial data

Indicator / Number of conformant spatial data sets per Annexes



DSv2.1: number of conformant spatial data sets with conformant metadata for Annex I

DSv2.2: number of conformant spatial data sets with conformant metadata for Annex II

DSv2.3: number of conformant spatial data sets with conformant metadata for Annex III