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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 Sweden. More detailed information is available on the [INSPIRE knowledge base](#).

Coordination

National Contact Point

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Contact Email: [Click to email](#)

National INSPIRE Website: <http://www.geodata.se>
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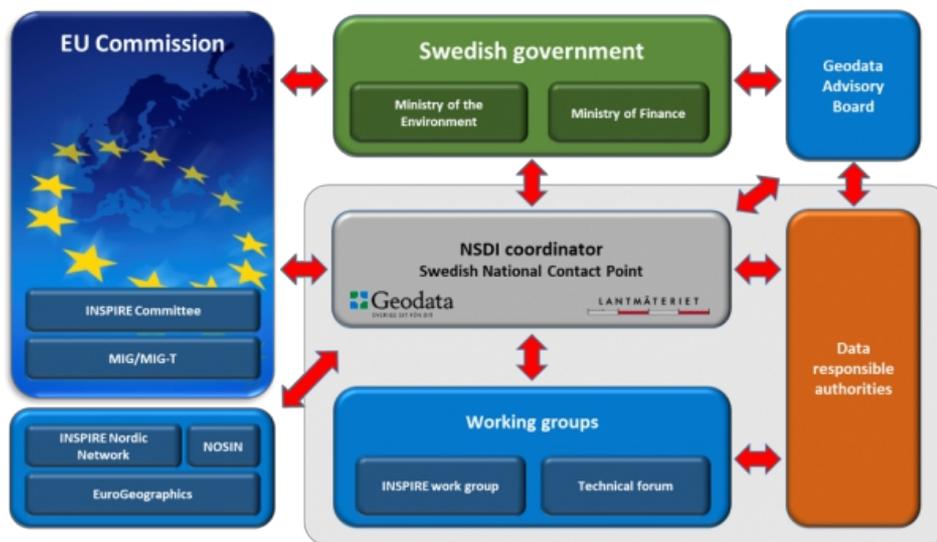
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Coordination Structure & Progress:

- The Ministry of the Environment is the responsible body for the implementation of the INSPIRE directive in Sweden. The Ministry has representatives in the INSPIRE committee.
- The national implementation of the INSPIRE Directive is coordinated by Lantmäteriet, which is governed by the Ministry of Finance. Lantmäteriet is the Swedish National Contact Point and has representatives in MIG-T, MIG and the INSPIRE committee.
- The Geodata Advisory Board supports Lantmäteriet on issues of national interests as related to the Swedish NSDI and the implementation of the INSPIRE directive. The Geodata Advisory is appointed by the Swedish Government.
- There are two main working groups;
 - the INSPIRE work group which is an information network with representatives from data-responsible authorities
 - the Technical forum which is similar to the INSPIRE work group but with focus on technical (IT-related) issues
- The Nordic countries cooperate and coordinate in an informal network (INSPIRE Nordic Network) with focus on cross-border activities and knowledge exchange on INSPIRE implementation issues in respective country.

Functioning and coordination of the infrastructure

- The INSPIRE directive is implemented by the Swedish law (2010:1767) and ordinance (2010:1770) on spatial environmental information. The ordinance also states which type of data a particular data-responsible authority is responsible for.
- The Swedish NSDI has a wider scope than only the INSPIRE directive and also caters for the needs from sectors, such as transport, spatial planning and emergency response sectors.
- Main stakeholders of the Swedish NSDI are public sector authorities responsible for collection, management or dissemination of spatial data and, authorities using spatial data in their operations.
- The implementation is guided by a national Geodata strategy. A first version was developed in 2007 and a second version in 2012. Currently, a third version of the strategy is in use, which focus on using the NSDI to address societal challenges.
- Further information on the Swedish NSDI can be obtained at <https://www.geodata.se>.

Usage of the infrastructure for spatial information

- The number of stakeholders actively participating in the Swedish NSDI has increased from 248 at the beginning of 2016 to 306 at the beginning of 2019.
- In April 2019, a total of 261 (out of 290) municipalities, 8 (out of 20) county councils and 37 governmental authorities and agencies were actively involved in the Swedish NSDI, either as users or producers of data and services in the NSDI.

Data sharing arrangements

- Data sharing between governmental authorities is regulated by the Swedish law (2010:1767) and ordinance (2010:1770) on spatial environmental information.
- A data sharing model (Geodatasamverkan) enables access to Geodata from governmental authorities with cost-recovery obligations. The model enable access to fee-charged Geodata for an annual fee. The size of the annual fee is calculated on the basis of a number of pre-defines parameters.
- The Swedish government finances the provision of no-cost access to selected datasets between governmental authorities. This is in line with a general trend of making all data "open data".
- A separate data sharing model provides Educational, Research and Cultural institutions with access to Geodata from governmental authorities.
- Data that are free-of-charge within Sweden are also available free-of-charge to EU and governmental authorities in other countries. For fee-charged data, the tariff developed by each authority apply.
- For open data, the CC0 is recommended.

Costs and benefits

- Studies on assessing benefits of the infrastructure and the INSPIRE implementation are:
 - In 2014, the Ministry of the Environment requested a quantitative assessment on benefits of the INSPIRE infrastructure. The result showed savings in the order of SEK 25 million from the infrastructure alone.
 - A study by the Institute for Economic and Business History Research in 2016 shows that open geodata from the public sector is economically profitable. With a conservative and cautious calculation, the savings are around SEK 200 million.

- In 2019, in a report to the Swedish government Lantmäteriet estimated the potential benefits from national governed access to geodata to be in-between 22.5 and 42.6 billion Swedish kronor in the area of societal development only.

Key facts and figures

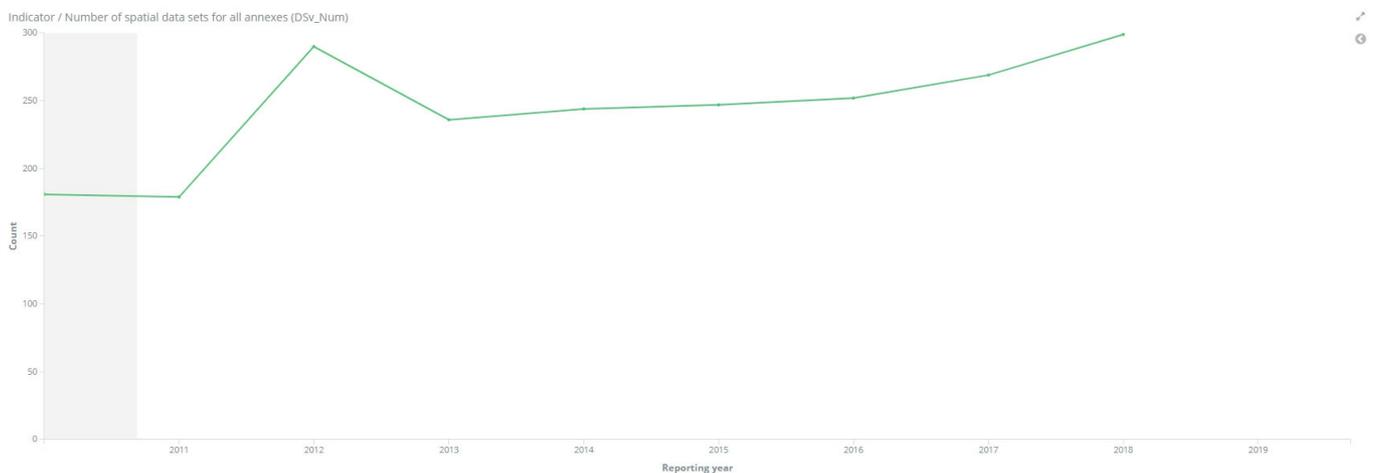
In addition to the above mentioned issues, the implementation of INSPIRE Directive requires Member States to take four main steps in relation to management of spatial datasets which fall under the Directive:

- 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 Sweden on the [INSPIRE dashboard](#). **The provided statistics is not reflecting the data available on INSPIRE geportal.** The INSPIRE geportal 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.

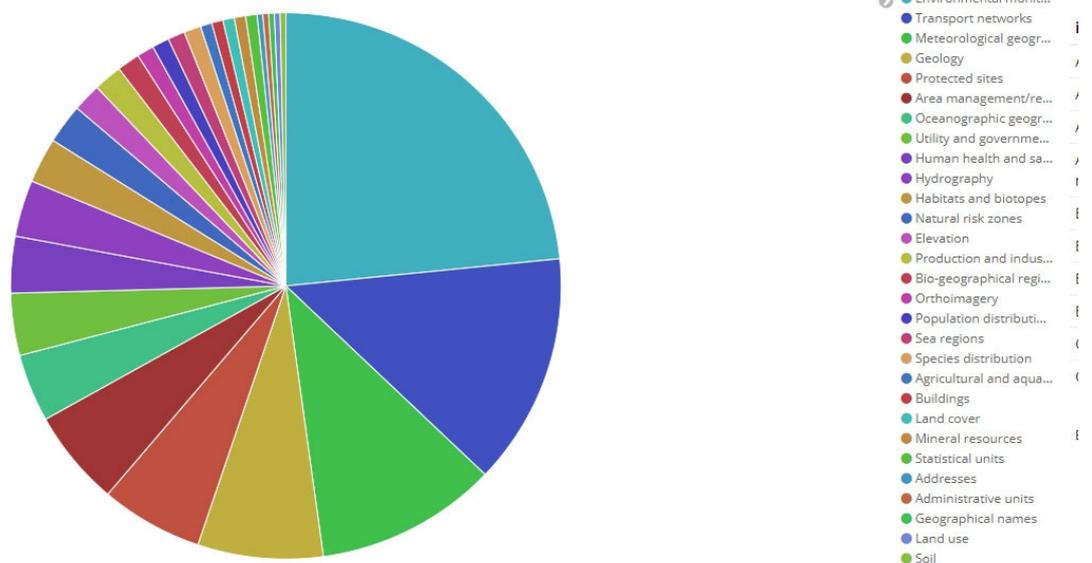
Identification of spatial data with relevance to the environment (step 1)



Country fiche / datasets by annex

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

INSPIRE Raw data (datasets) by themes

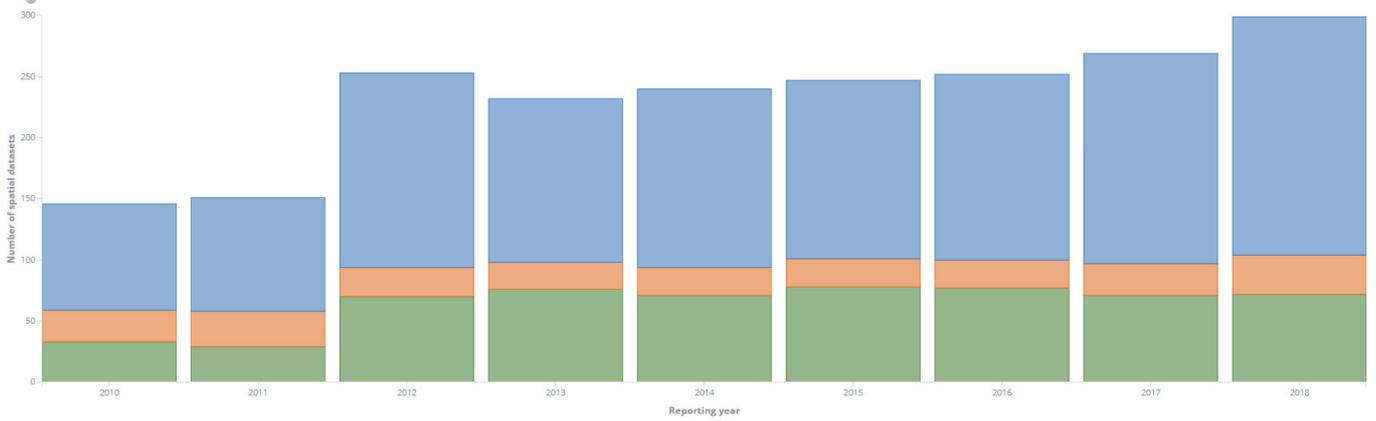


Country fiche / datasets by themes

Data sets made available per INSPIRE theme

Indicator / Number of spatial data sets per annexes

● MDv11 ● MDv12 ● MDv13



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

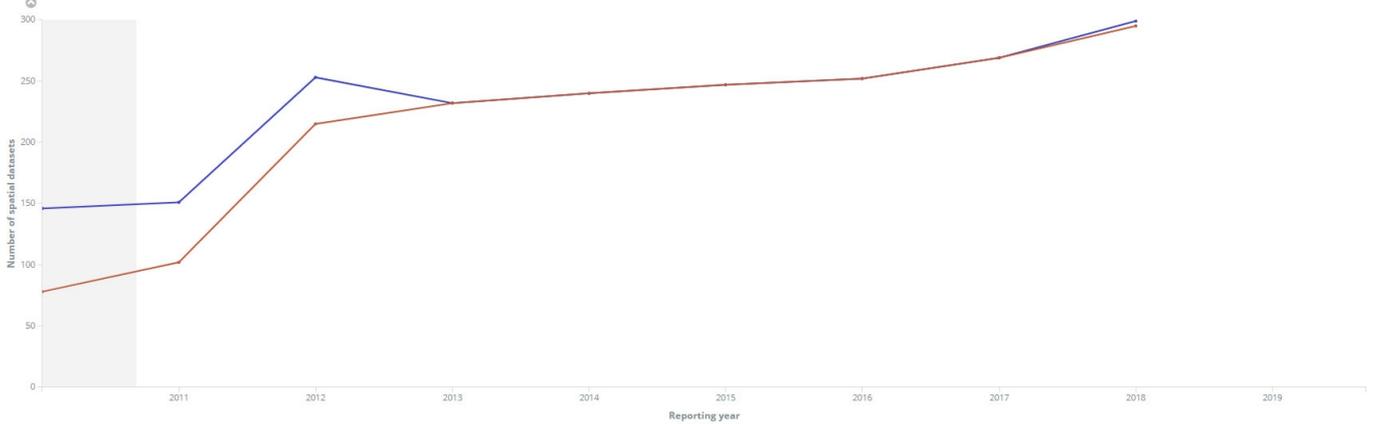
MDv1.3: number of spatial data sets for Annex III that have metadata

Documentation of the data (metadata) (step 2)

Evolution of documented data and conformity of the documentation

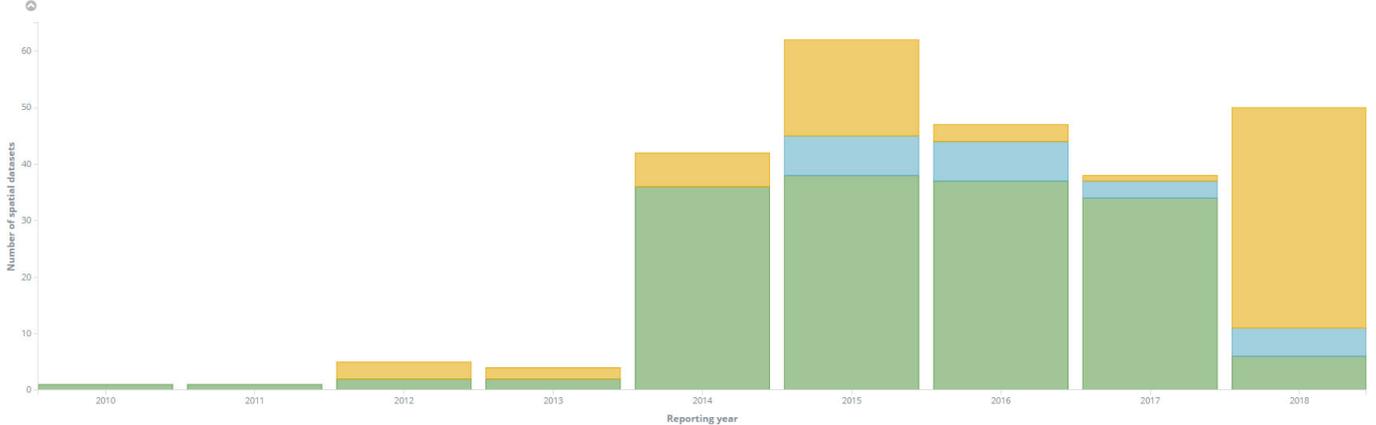
Indicator / Number of spatial data set that have metadata (MDv1_DS) and have conformant metadata (MDv2_DS)

● MDv1_DS ● MDv2_DS



Indicator / Number of conformant spatial data sets per Annexes

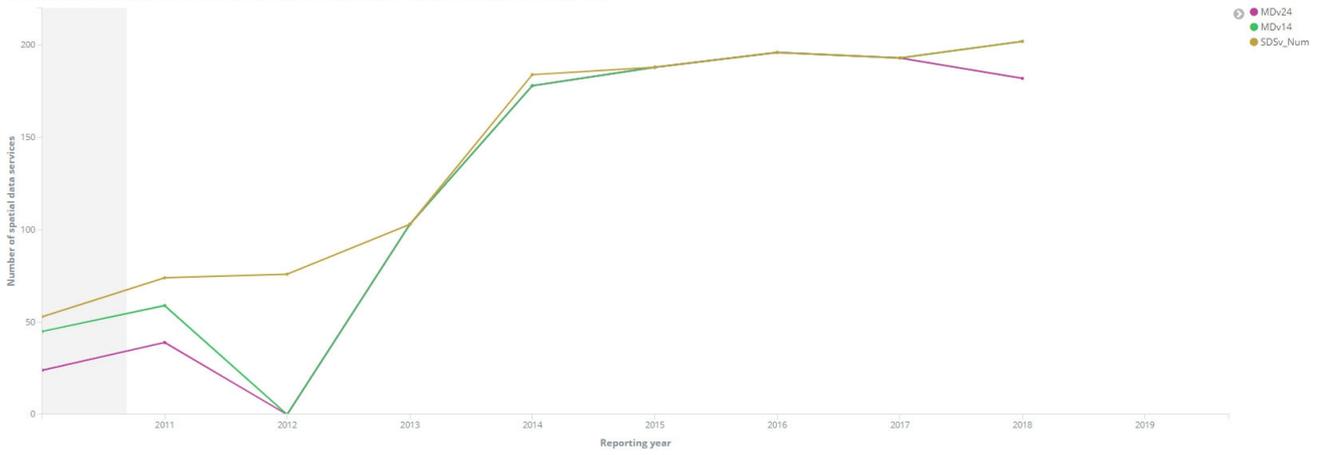
● DSv21 ● DSv22 ● DSv23



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

Evolution of documented services and conformity of the documentation

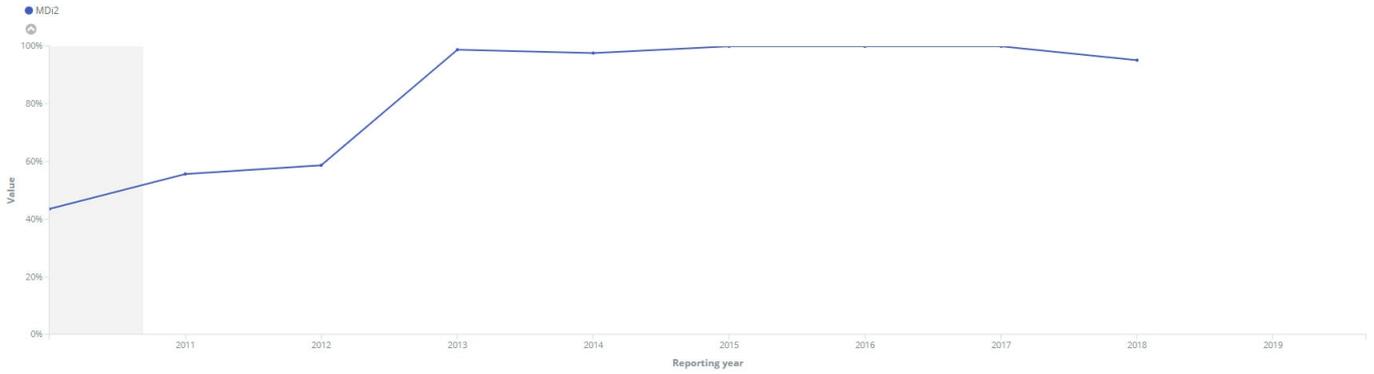
Indicator / Number of spatial data services (SDSv_Num) with metadata (MDv14) and conformant metadata (MDv24)



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)

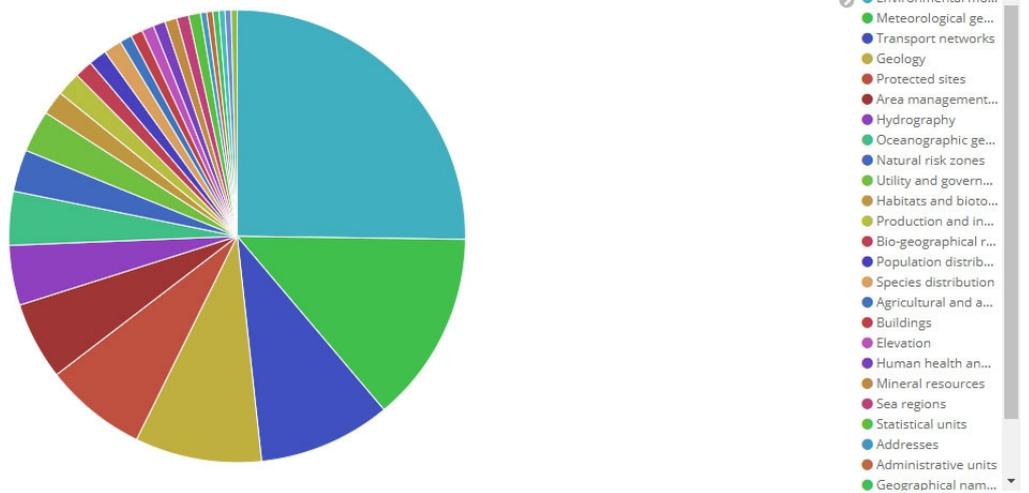


Country fiche / accessibility

Accessibility of the data through digital services (step 3)

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

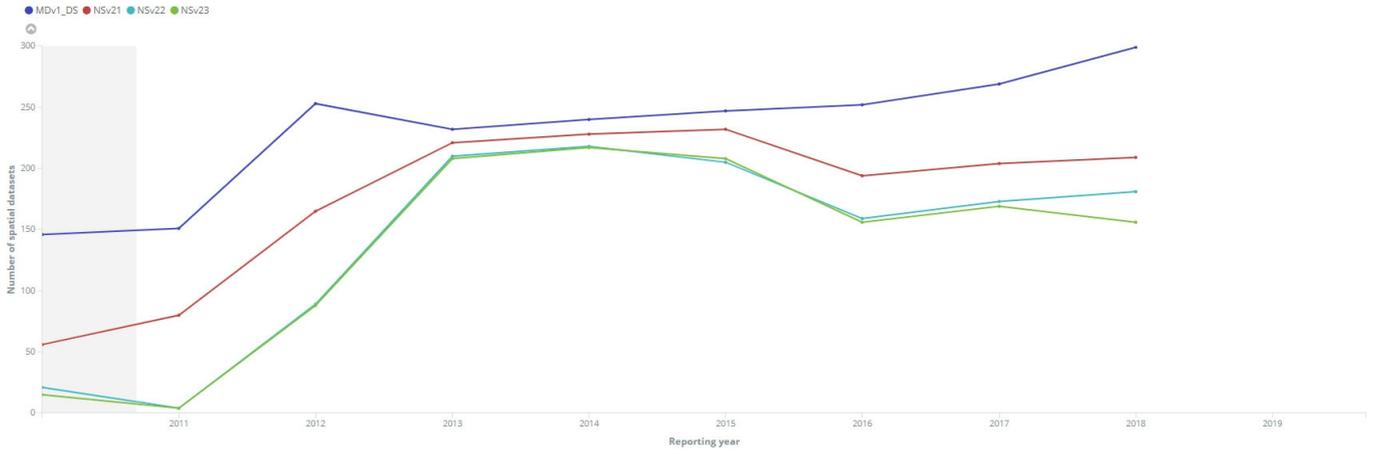
INSPIRE Raw data (datasets available through services) by themes



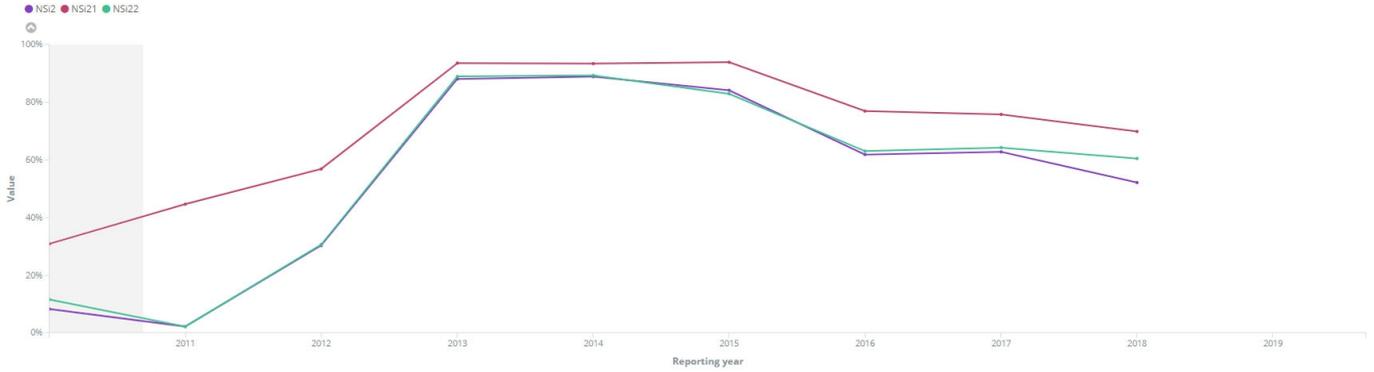
Country fiche / Evolution of spatial data accessible through services

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)



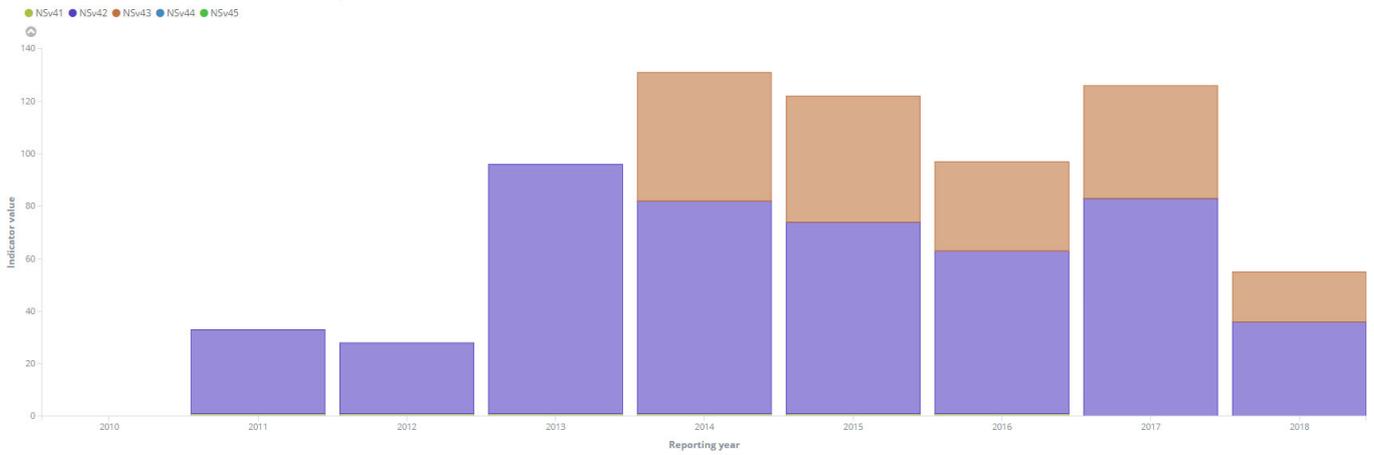
Indicator / Percentage of spatial data sets for which a view service (NSI21), a download service (NSI22) or a view and download (NSI2) exist



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

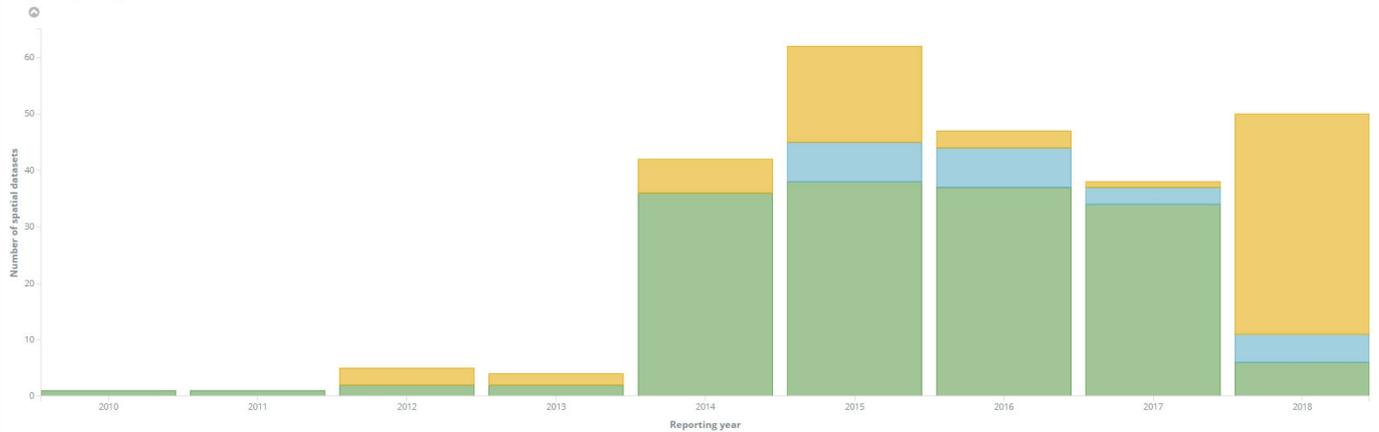
Interoperability of spatial data sets (step 4)

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

● DSv21 ● DSv22 ● DSv23



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