Status of implementation of the INSPIRE Directive – 2016 Country Fiches

COUNTRY FICHE Slovenia 

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 of Slovenia 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 2016** as a summary of the information acquired through:

- the 2016 tri-annual INSPIRE implementation report,
- monitoring report in May 2016,

- a bilateral meeting on the implementation of the INSPIRE Directive between the Commission and Slovenia representatives.

1. State of Play

A high-level view on the governance, use and impact of the INSPIRE Directive in Slovenia. More detailed information is available on the INSPIRE knowledge base.

The content of the chapter is tagged according to 5 criteria of better regulation:

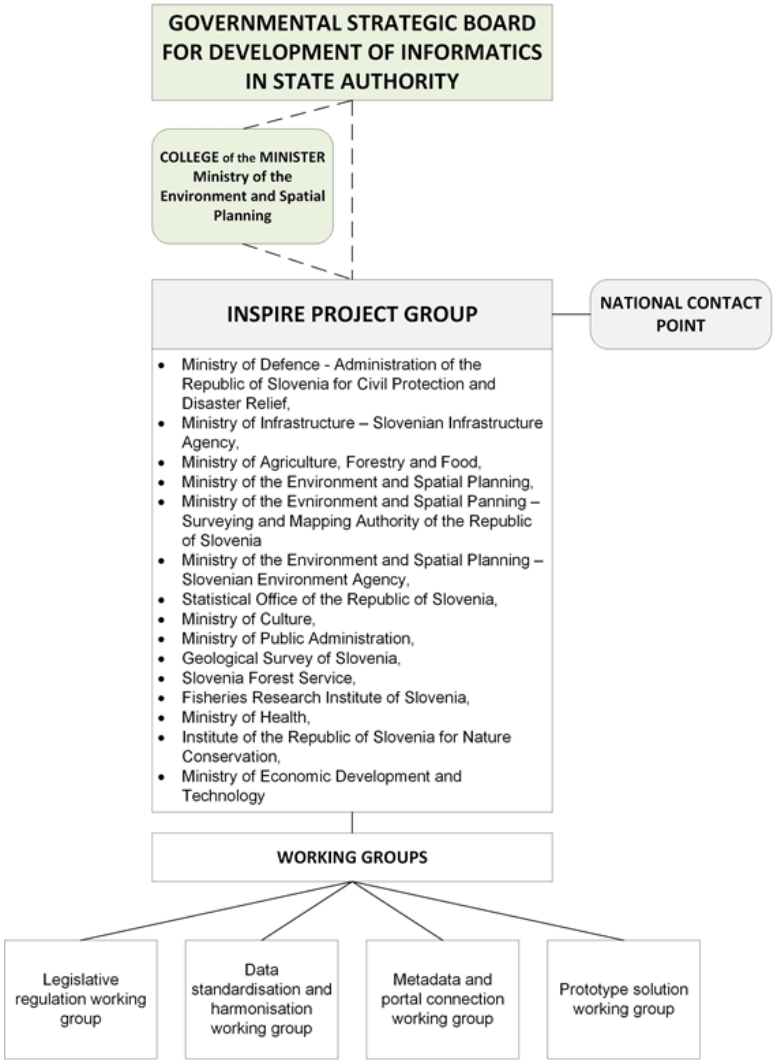
- **[Effectiveness]** How successful has the INSPIRE implementation been in achieving, progressing towards its objectives; progress made, gaps, what factors have influenced or why it has not yet been achieved regarding availability of services, data interoperability, sharing, data policy obstacles
- **[Efficiency]** Costs (numbers or difficulties to evaluate them); benefits (qualitative or quantitative) already visible.
- **[Relevance]** Is it still relevant to make data interoperable, remove obstacles of data sharing, drive collaboration between public services, necessary for National SDI, use cross-sector, requested by eGovernment, modernisation of public admin, etc.; support given by National Institutions for implementation
- **[Coherence]** Internal coherence of INSPIRE provisions proved by implementation; cross-border applications; coherence with other National and EU policies
- **[EU-added value]** Improvement of EU cross-border data management and use; use for environmental monitoring and reporting, use for and with Copernicus data; use cross-sector.

1.1 Coordination

- National Contact point

Name of public authority	MINISTRY OF THE ENVIRONMENT AND SPATIAL PLANNING SURVEYING AND MAPPING AUTHORITY OF THE REPUBLIC OF SLOVENIA
Mailing address	Zemljemerska ulica 12, LJUBLJANA
Telephone number	+386 1 478 48 00
Fax number	+386 1 478 49 09
E-mail	Pisarna.gu@gov.si
Website address	http://www.gu.gov.si
Contact person	Tomaž Petek (MIG-P and MIG-T representative)
Telephone number	+1 478 4903
E-mail	Tomaz.petek@gov.si
Contact person substitute	Mag. Irena Ažman
Telephone number	+386 478 4804
E-mail	Irena.azman@gov.si

- Coordination Structure



- Progress
  - The Republic of Slovenia abolished the discrepancies with the passing of the Act Amending the Infrastructure for Spatial Information Act (Official Gazette of RS 84/2015) along with supplementing the ISI Act with Article 17 (3) of the INSPIRE Directive. **[Effectiveness]**
  - First Slovenian INSPIRE Day organised in 2015. **[Relevance]**

1.2 Functioning and coordination of the infrastructure

- Information available through Slovenian INSPIRE geoportal http://www.geoportal.gov.si/.
- Inclusion of INSPIRE in to the broader strategy for managing spatial data and administration processes – eSpatial. **[Coherence]**
- The principles of the INSPIRE Directive have become an integral part of national strategies for managing spatial data, their use and linking with other national data. **[Relevance]**
- All key instructions, recommendations and technical guidelines were translated. **[Effectiveness]** Additionally strategic documents were prepared along with education program, which are accessible on the Slovenian INSPIRE geoportal.

1.3 Usage of the infrastructure for spatial information

- The public use of spatial data services and spatial data themselves has increased in 2014 whereby the INSPIRE geoportal currently provides only view network services. **[Efficiency]**

- Project for the establishment of INSPIRE compliant network services was carried out in 2015. Services are in the final stages of testing (informational and compliance with the INSPIRE Directive and ISI Act) and not yet accessible to the public.
- A practical example of cross-border cooperation is being carried in the scope of flood protection with neighbouring countries. **[EU-added value]**

1.4 Data Sharing Arrangements

- National interoperability framework – NIO was established as a tool to ease the cooperation inside public administration **[Effectiveness] [Coherence]**
- In the time period 2013-2015 no practical examples of performed data sharing agreements between public authorities and European Union institutions and bodies were recorded
- Public Information Access Act has been slightly changed on 8 May 2016 according to the Directive on the re-use of public sector information **[Coherence]**

1.5 Costs and Benefits

- The transparency and opening of data stimulates the efficiency in the public sector and help with the broadening of digital economy and business development. **[Efficiency]**
- Monitoring the advantages and benefits is not systematically regulated.

2 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.

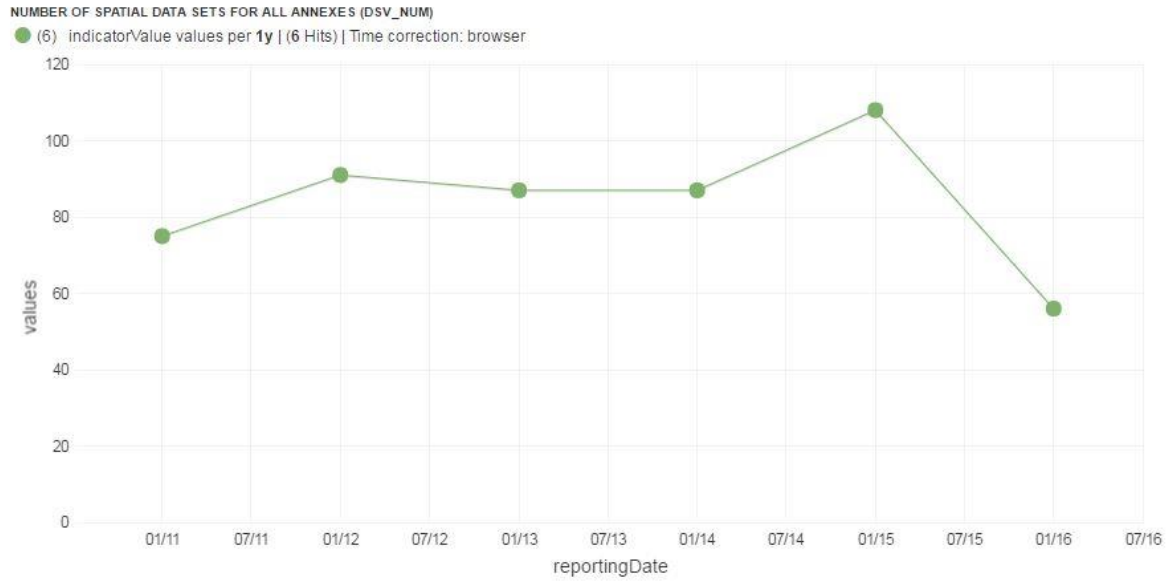
The key facts and figures presented in this country fiche are based on the information provided by Slovenia on the INSPIRE dashboard. **The provided statistics is not reflecting the data available on** INSPIRE geoportal. The INSPIRE geoportal is updated on a regular and ongoing basis, whilst the INSPIRE 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.

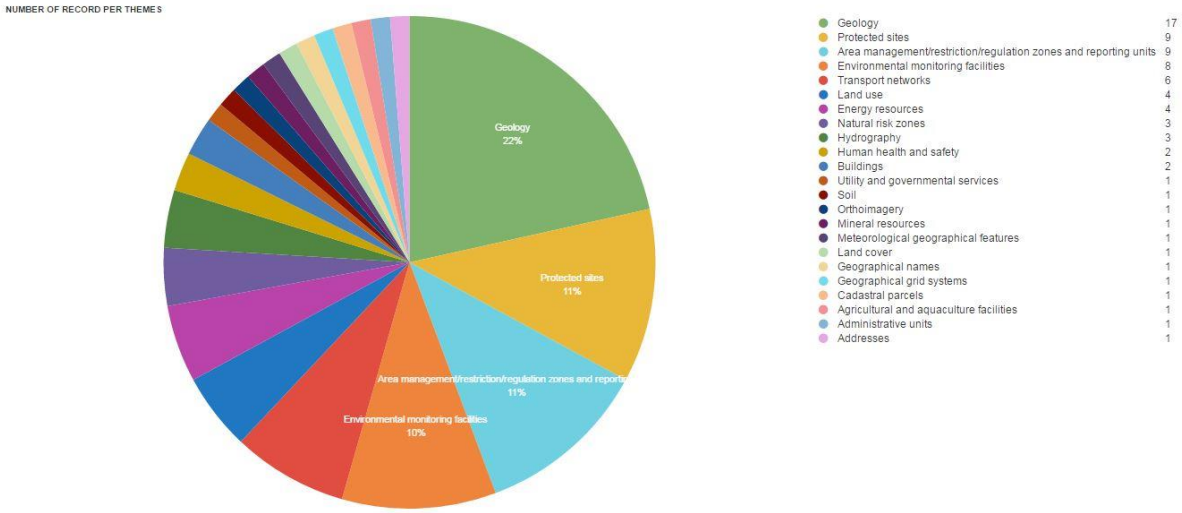
2.1. Identification of spatial data with relevance to the environment (step 1)

a. Evolution of the data offering

DSv_Num: number of spatial data sets for all Annexes

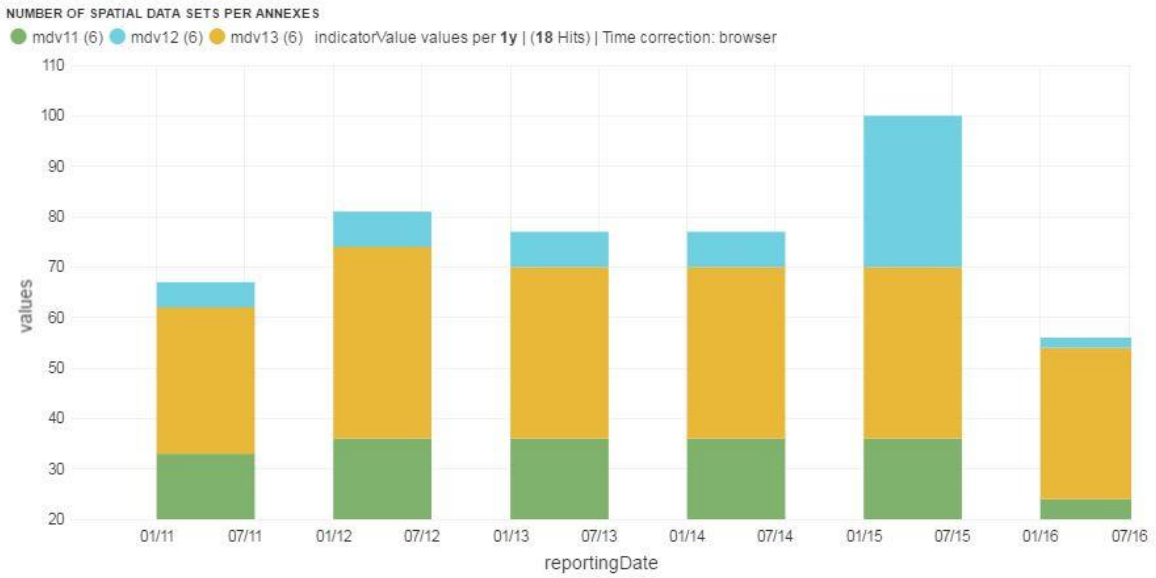


b. Data sets made available per INSPIRE theme in 2015



c. Data sets per annex (Annex 1 & 2: spatial reference data; Annex 3: environmental spatial data)

MDv1.1 (green): number of spatial data sets for Annex I that have metadata
MDv1.2 (blue): number of spatial data sets for Annex II that have metadata
MDv1.3 (yellow): number of spatial data sets for Annex III that have metadata



Evaluation of progress for step 1:

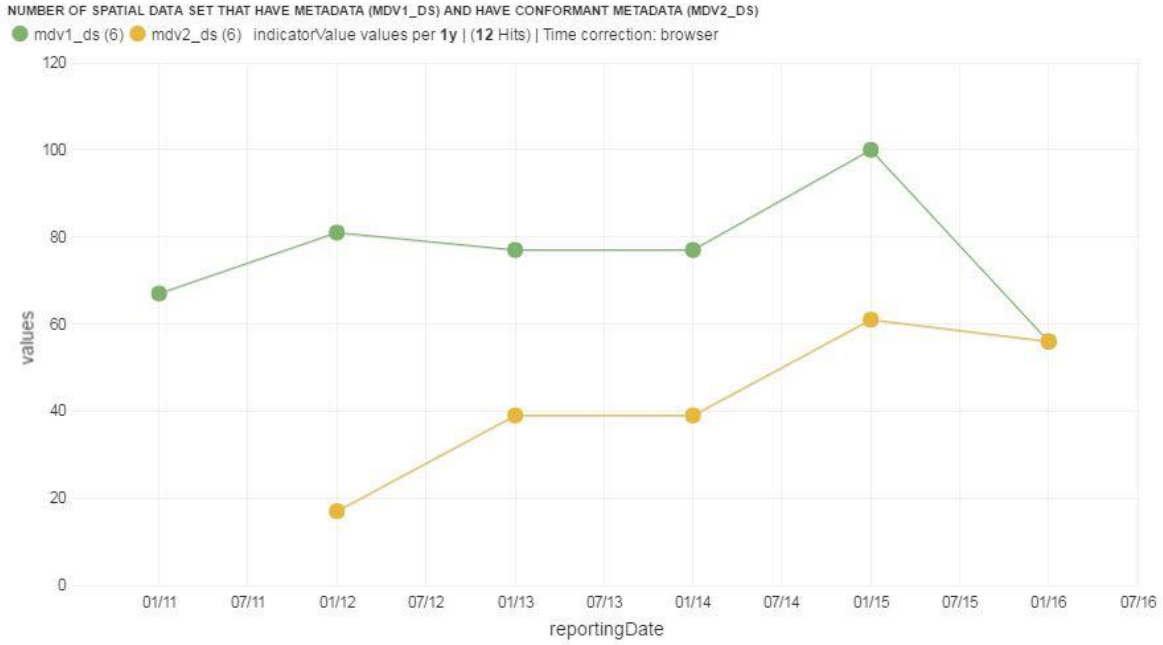
Slovenia has identified a total of 56 spatial data sets with relation to the themes listed in the INSPIRE annexes.

The number of spatial data sets decreased from 2015. A lot of relevant spatial data sets have already been identified for the different data themes. However, the identification still seems incomplete and Slovenia could further improve by identifying and documenting spatial data sets required under the existing reporting and monitoring regulations of EU environmental law.

2.2 Documentation of the data (metadata) (step 2)

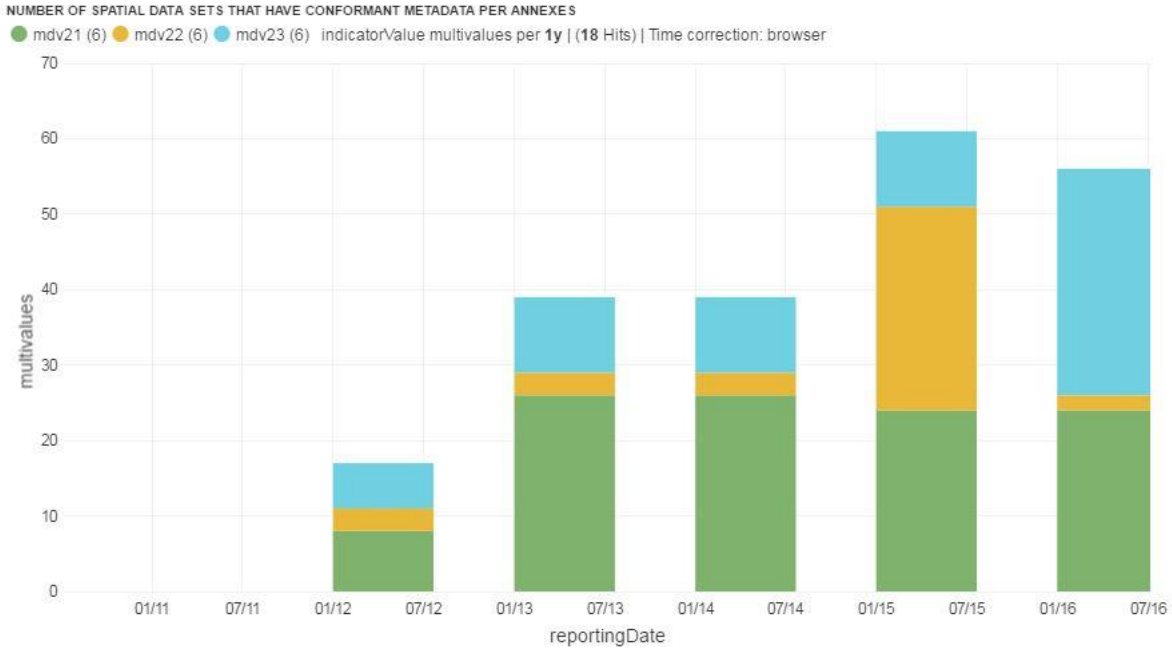
a. Evolution of documented data and conformity of the documentation

MDv1_DS (green): number of spatial data sets for all Annexes that have metadata
MDv2_DS (yellow): number of spatial data sets for all Annexes that have conformant metadata



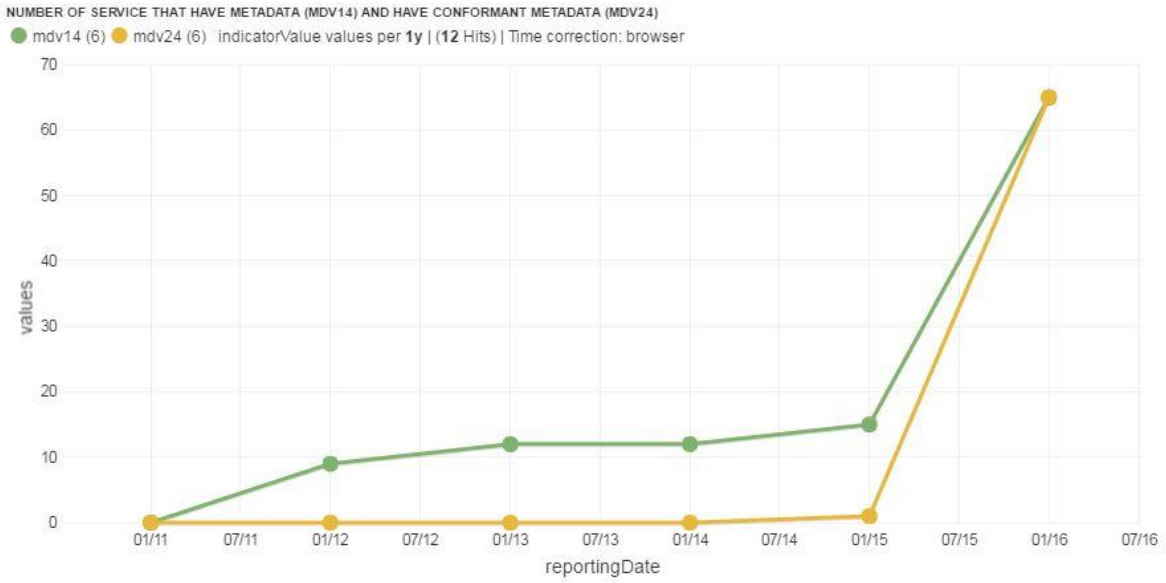
b. Documented data per annex in 2015

MDv2.1 (green): number of spatial data sets for Annex I that have conformant metadata
MDv2.2 (yellow): number of spatial data sets for Annex II that have conformant metadata
MDv2.3 (blue): number of spatial data sets for Annex III that have conformant metadata



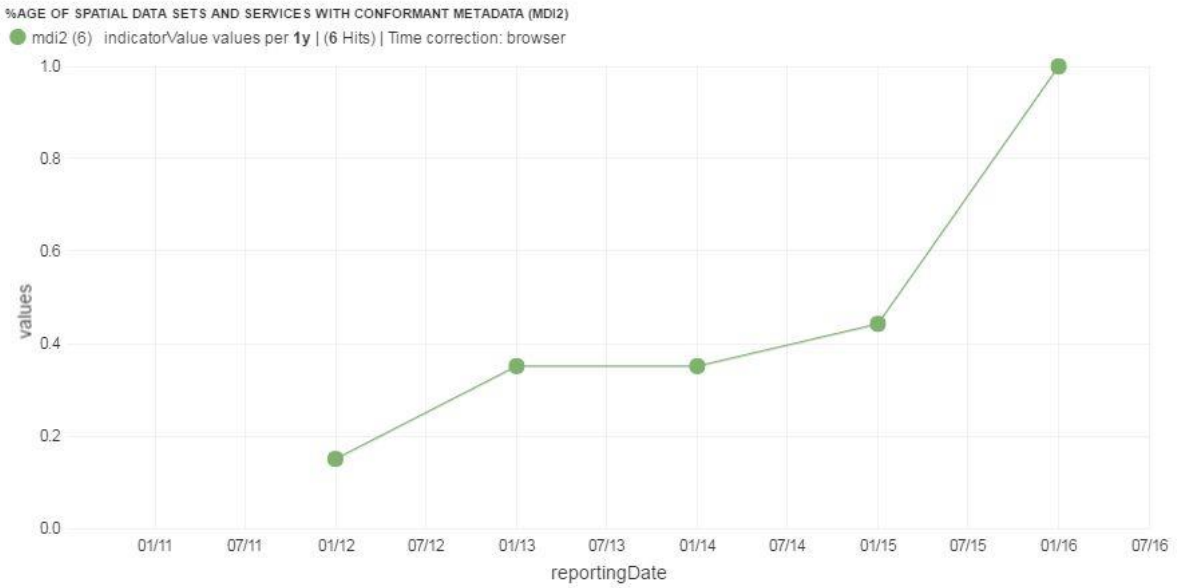
c. Evolution of documented services and conformity of the documentation

MDv1.4 (green): number of spatial data services that have metadata
MDv2.4 (yellow): number of spatial data services that have conformant metadata



d. Evolution of the overall conformity of the documented metadata

MDi2 = (number of spatial data sets for all Annexes that have conformant metadata + number of spatial data services that have conformant metadata) / (number of spatial data sets for all Annexes + number of spatial data services)



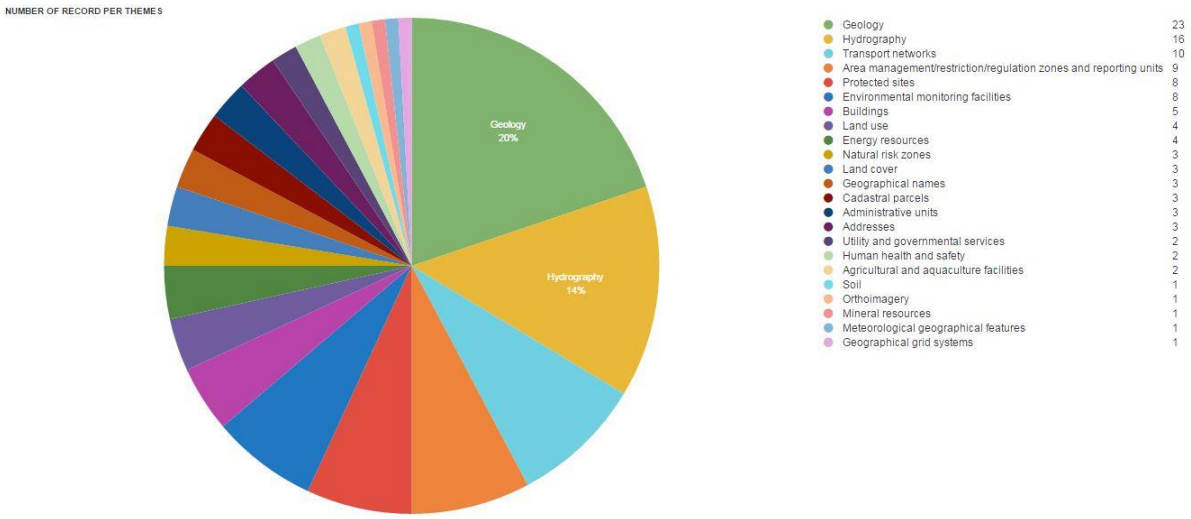
Evaluation of progress for step 2:
Slovenia has documented and published metadata through a digital discovery service for 100% (56) of the identified spatial data sets and 100% (65) of the digital services. Overall, 100% of the Slovenian metadata conforms to the INSPIRE metadata specifications.

It shows a high level of maturity. Particular improvement can be seen in 2015 and 2016.

2.3. Accessibility of the data through digital services (step 3)

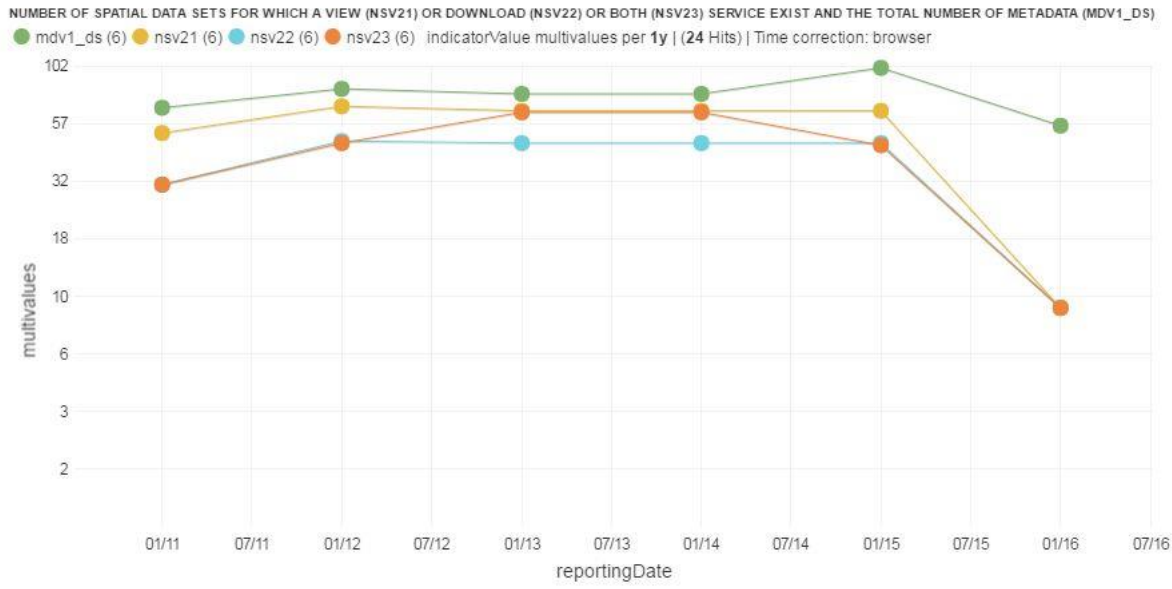
a. Digitally accessible spatial data per INSPIRE theme in 2015

Note: This figure reflects the amount of spatial data sets made available through a digital service, not the amount of available digital services. A digital service can make several spatial data sets available.

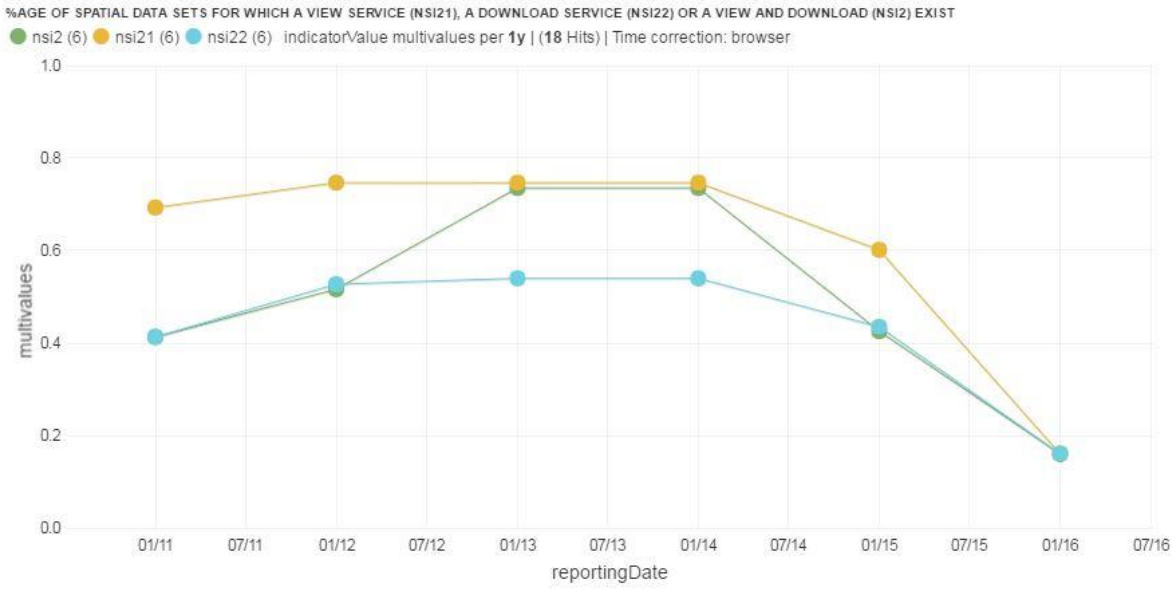


b. Evolution of spatial data made accessible through digital services

MDv1_DS (green): number of spatial data sets for all Annexes that have metadata
NSv2.1 yellow): number of spatial data sets for which a view service exists
NSv2.2 (blue): number of spatial data sets for which a download service exists
NSv2.3 (orange): number of spatial data sets for which both a view and a download service exists

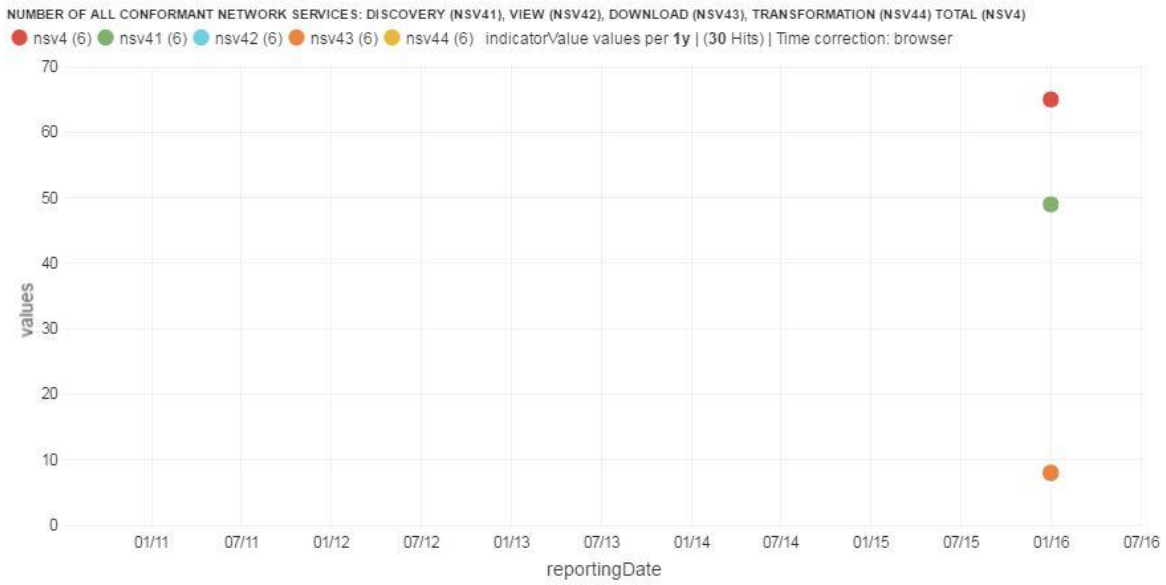


NSi2 (green) = number of spatial data sets for which both a view and a download service exists / number of spatial data sets for all Annexes
NSi2.1 (yellow) = number of spatial data sets for which a view service exists / number of spatial data sets for all Annexes
NSi2.2 (blue) = number of spatial data sets for which a download service exists / number of spatial data sets for all Annexes



c. Evolution of the conformity of the digital services

NSv4 (red): number of all conformant network services
NSv4.1 (green): number of conformant discovery network services
NSv4.2 (blue): number of conformant view network services
NSv4.3 (orange): number of conformant download network services
NSv4.4 (yellow): number of conformant transformation network services



Evaluation of progress for step 3:

Slovenia has:

- 16,07% of its data sets accessible for viewing through a view service;

- 16,07% of its data sets accessible for download through a download service.

100% of the available digital services are conform to the INSPIRE network service specifications.

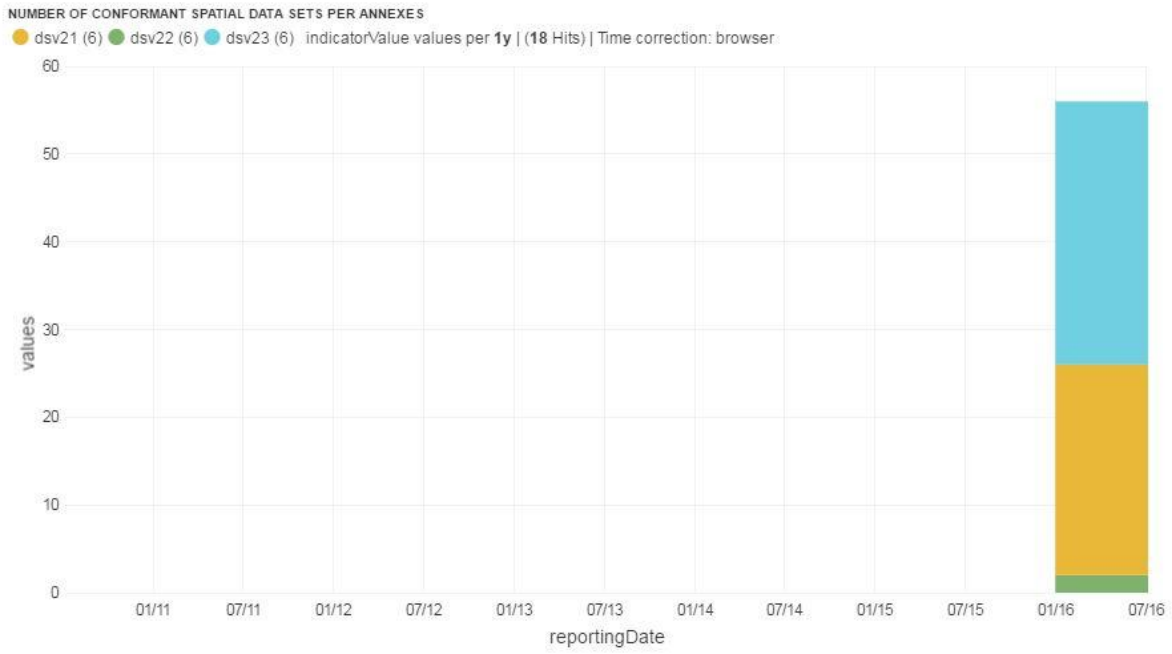
Slovenia shows that it has built the necessary capacity and competences to make data accessible through digital INSPIRE network services. However, the offering is small and stagnating. Significant amount of the spatial data still has to be brought online. The technical conformity of the available services with the INSPIRE network service specifications is very high. Slovenia should boost their effort to further improve the accessibility of their spatial data through digital INSPIRE services.

2.4. 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). The deadlines for implementation of the spatial data interoperability are in the future: 23/11/2017 for Annex I data and 21/10/2020 for Annex II and III data.

a. Evolution of the conformity with INSPIRE interoperability specifications for spatial data

DSv2.1 (yellow): number of conformant spatial data sets with conformant metadata for Annex I
DSv2.2 (green): number of conformant spatial data sets with conformant metadata for Annex II
DSv2.3 (blue): number of conformant spatial data sets with conformant metadata for Annex III



Evaluation of progress for step 4:

Slovenia has reported 56 data sets to be conform to the INSPIRE interoperability specifications in 2016.

We can conclude that Slovenia has already started its preparations for the 2017/2020 data interoperability deadlines.

3. Outlook

Slovenia has critically reviewed their INSPIRE implementation and provided an action plan in 2016 to remediate existing implementation issues and further improve the overall conformity of the implementation. The following actions are set up to directly address previously identified issues:

a. Coordination (1.1; 1.2)

- ***Strengthening cooperation (Regular task for the period 2016-2020)***: strengthening the cooperation and connection od individual initiatives like eSpatial, eWater, eEnvironment in the frame of the MESP and eGovernment in the frame of MPA and other authorities.
- Furthermore, the following continuous tasks have been defined to guarantee maintenance, capacity building and further development of the INSPIRE infrastructure:
    - ***Realization of NCP obligation (monitoring report, data management, geoportal maintenance …).***
    - ***Education and awareness raising (training program and awareness raising).***
    - ***Activities of individual subgroups of the INSPIRE project group (metadata, standardization, open data, data quality, service quality).***

b. Data sharing and exchange (1.4)

- The following continuous tasks have been defined to install a data policy for spatial datasets aligned with INSPIRE implementation rules:
    - ***Ensuring data sharing and reuse:*** agreements on data sharing; monitoring of actual response times.
    - ***Coordination of data sharing and data exchange:*** connecting activities with tasks of eGovernment and the ISA2 program (Re3gistry, Are3na, EULF, GeoDCAT, NIF); open data initiative.
    - ***Educating and training:*** regular informing and training on unifying data policy for spatial data; updating recommendations and best practices regarding data access policy and data reuse policy.

c. Metadata (2.2)

- ***Metadata for the national infrastructure for spatial information (NSI) (Regular task):*** ensuring complete compliance of metadata descriptions for all datasets from the list (view network service) as stated in the INSPIRE Directive and Commission regulation for metadata; creation of metadata for new datasets and network services.
- ***Maintaining the metadata system of the geoportal (Regular task):*** software upgrade for the metadata system; geoportal publishing of updated instructions for metadata description; working harvesting for SEA metadata; working harvesting for Geological Survey of Slovenia metadata; working harvesting from the national metadata system on the European INSPIRE geoportal.

d. Network services (2.3)

- ***Working and accessible network services compliant with the implementation rules for all new and substantively renewed spatial data (by 10 December 2016):*** production of a compliant view network service for spatial dataset – WMS for new and substantively renewed spatial data; production of a download network service for spatial data (ensuring data in and INSPIRE compliant scheme) – WFS for new and substantively renewed spatial data.
- ***View, download and transformation network services for all datasets from the spatial data themes corresponding with the themes of Annex I and compliant with the implementation rules for interoperability (by 23 December 2017):*** establishment of missing network services compliant with the implementation rules for interoperability for all datasets from the spatial data themes corresponding with the themes of Annex I;

implementation of the Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data services for the remaining spatial datasets from Annex I which are still being used in the timeframe of the bill passing.

- ***Network services for all datasets from the spatial data themes (Annex II and Annex III) compliant with the implementation rules for interoperability (by 21 October 2020):*** establishment of all network services; for all datasets from the spatial data themes (Annex II and Annex III) compliant with the implementation rules for interoperability; enabling access to the other spatial datasets from Annex II and III in compliant with the implementation rules for Annex II and Annex III.
- ***Network services allowing spatial data services to be invoked compliant with the implementation rules for all datasets from the spatial data themes (by 10 December 2021):*** establishment of working and accessible services allowing spatial data services to be invoked.
- ***Maintenance and upgrades of the SEA network services (by the end of 2020):*** upgrade of the SEA geoportal; establishment of connections between discovery, view and download network services; implementing new technology for application development; upgrade of the data viewer; maintenance of the whole system

e. Data Interoperability (2.4)

- ***Harmonization of spatial datasets to ensure interoperability (by 10 December 2021):*** establishment of a code list register and unique identifiers for defining and classifying spatial objects published on the Slovene INSPIRE geoportal; forming of rules for geo-referencing and interrelations between spatial objects; establishment of a common system of identifiers for spatial objects and defining of key attributes; forming connections to multilingual glossaries; unified way for data exchange of the time dimension of spatial datasets and a defined way for exchange automatically maintained (changed) dataset content.

4. Summary - How is Country doing?

INSPIRE key obligation	Overall implementation status and trend	Outlook
Ensure effective coordination	☺↗	○
Data sharing without obstacles	😐↗	○
Step 1: Identify spatial datasets	😐↘	○
Step 2: Document 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.	😐↗	○

Dashboard Legend

Implementation Status:

☺: implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily.

😐: implementation of this provision has started and made some progress but is still far from being complete. Outstanding issues are significant and need to be addressed to ensure that the objectives of the legislation can still be reached by 2020.

☹: implementation of this provision is falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap.

Trend:

↗: the trend of the implementation is positive.

→: the trend of the implementation is neutral.

↘: the trend of the implementation is negative.

Outlook:

○: clear and targeted actions have been identified which allow reaching the objectives of the legislation in an effective way.

○: No real progress has been made in the recent past or actions which have been identified are not clear and targeted enough to predict a more positive outlook.

○: no actions have been identified to overcome identified implementation gaps.

Specific recommendations:

For each Member State, the accessibility of environmental data (based on what the INSPIRE Directive envisages) as well as data-sharing policies have been systematically reviewed.

Slovenia has indicated in the 3-yearly INSPIRE implementation report that the necessary data-sharing policies allowing access and use of spatial data by national administrations, other Member States' administrations and EU institutions without procedural obstacles are available but not fully implemented. Recently amendments were made to the Slovenian Public Information Access Act to implement the Directive on the re-use of public sector information. Data gathered in the public administration during the execution of public tasks will have to be available for reuse without charging fees.

Assessments of monitoring reports issued by Slovenia and the spatial information that Slovenia has published on the INSPIRE geoportal indicate that not all spatial information needed for the evaluation and implementation of EU environmental law has been made available or is accessible. The larger part of this missing spatial information consists of the environmental data required to be made available under the existing reporting and monitoring regulations of EU environmental law.

Suggested action

- Critically review the effectiveness of its data policies and amend them, taking 'best practices' into consideration.
- Identify and document all spatial data sets required for the implementation of environmental law, and make the data and documentation at least accessible 'as is' to other public authorities and the public through the digital services foreseen in the INSPIRE Directive.