

Status of implementation of the INSPIRE Directive - 2016 Country Fiches

COUNTRY FICHE Poland

Introduction	1
1. State of Play	2
1.1 Coordination	2
1.2 Functioning and coordination of the infrastructure	4
1.3 Usage of the infrastructure for spatial information	4
1.4 Data Sharing Arrangements	5
1.5 Costs and Benefits	5
2. Key Facts and Figures	6
2.1. Identification of spatial data with relevance to the environment (step 1)	6
2.2 Documentation of the data (metadata) (step 2)	8
2.3. Accessibility of the data through digital services (step 3)10	0
2.4. Interoperability of spatial data sets (step 4)12	2
3. Outlook1	3
4. Summary - How is Country doing?14	4
Specific recommendations:	5

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 Poland 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 <u>bilateral meeting</u> on the implementation of the INSPIRE Directive between the Commission and Poland representatives.

1. State of Play

A high-level view on the governance, use and impact of the INSPIRE Directive in Poland. 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.

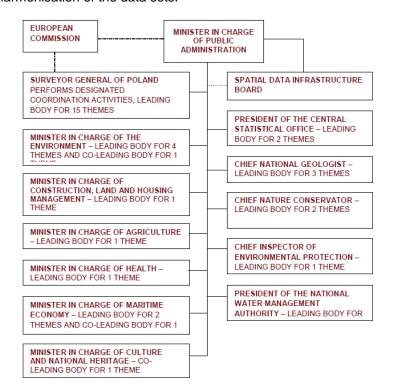
1.1 Coordination

National Contact point

Name of public authority	Surveyor General of Poland		
Mailing address	UI. Common 2, 00-926 Warsaw		
Telephone number	+48226618017		
Fax number	+48226291867; +48226293872		
E-mail	Pol-inspire@gugik.gov.pl		
Website address	http://www.gugik.gov.pl/		
Contact person	Ewa Surma		
Telephone number	+48226618275; +48225631329		
E-mail	ewa.surma@gugik.gov.pl		
Contact person substitute			
Telephone number			
E-mail			

- Coordination Structure
- The Polish coordination structure did not change between 2013 and 2015. It is hierarchically organised and comprises:
 - the coordinator of the entire infrastructure the minister in charge of public administration, who performs his/her tasks with the aid of the Surveyor General of Poland (GGK) and the Council for Spatial Information Infrastructure (SII);
 - leading bodies in 12 thematic sections of infrastructure ministers and heads of central offices;
 - o bodies holding public records containing spatial data covered by the infrastructure.
- The minister in charge of public administration acts as the coordinator for all IIP-related tasks, and has delegated certain activities to the GGK. Additionally, GGK is in charge of the development and maintenance of the geoportal, being the central access point to data sets and services, and holds a public record of spatial data sets and services covered by the infrastructure, assigning uniform identifiers. The Council for Spatial Information Infrastructure is attached to the minister, acting as an opinion-making and advisory body. The SII Council

- may put forward initiatives relating to the improvement of the infrastructure in organisational and technical terms and to extending its scope.
- Leading bodies, which include ministers and heads of central offices, are responsible for the
 preparation of data sets within their respective competences. They are responsible for the
 integration and harmonisation of data sets with a view to achieving interoperability.
 Furthermore, they share responsibility for the establishment, development and functioning of
 the infrastructure, and for monitoring and reporting with respect to its development and
 functioning.
- Government bodies and local self-government bodies participate in the establishment of IIP, provided that they hold digital public records containing spatial data sets relating to at least one of the themes referred to in the Annex to the Act on SII. In addition, administrative bodies implement technical solutions to ensure the interoperability of spatial data sets and services and the harmonisation of the data sets.



Progress

- o In the reporting period 2013-2015 there was a strong commitment from the leading bodies to further construct the SII. Inititiatives have been taken to strengthen cooperation between the leading bodies and other public administrations. A good example of cooperation is the cyclic strategic document entitled "Programme for the Construction of Infrastructure for Spatial Information", that was updated between 2014 and 2015. Other inititiatives included: training to build capacity, further identification of environmental source datasets, harmonisation of spatial data (Polish Geological Institute geology theme, Chief Inspectorate for Environmental Protection environmental monitoring facilities, ...), optimisation of metadata, development of specific use cases e.g. ISOK "IT System for the Protection of Poland against extraordinary risks",
- Among the most frequently encountered and identified bottlenecks to the implementation of the INSPIRE Directive are complex and difficult to understand implementing regulations and technical specifications. In addition it is also considered a major challenge to assess correctness of implementation and compliance with INSPIRE guidelines, in particular for the harmonisation of data. It should, however, be noted that despite these difficulties, in recent years, Poland has made considerable progress in preparing INSPIRE-compliant harmonised spatial data sets (including Annex III such as population, statistical unit or environmental monitoring facilities).

o In the case of Poland, a particular challenge is on coordination of spatial planning (land use) involving approximately 2500 municipalities that are competent local authorities holding potential data for the Land use theme. A lot of progress has already been made. Over the last three years there is more than 5-fold increase in the number of metadata for spatial planning acts and local plans, planning documents are being converted as part of the development of regional spatial information systems and there is a continuing increase in the involvement of the private sector in this topic.

1.2 Functioning and coordination of the infrastructure

- The Act on SII sets out the basic rules for the establishment and operation of the spatial data infrastructure in Poland. The Polish spatial data infrastructure encompasses all levels of public administration and, as a rule, serves all spatial information users nationally and in the European Community. Within the framework of the infrastructure, initiatives can be taken to establish regional, local and thematic infrastructures, provided that their interoperability and consistency with the provisions implementing the INSPIRE Directive and the Act on IIP are ensured.
- In 2012, a document was drawn up titled "Programme for the establishment of Spatial Data Infrastructure in Poland stage 2012 to 2013". This document was developed jointly by the 12 leading bodies defined in the Act on SII to prepare implementation programmes within their respective competences [Coherence]. This document was updated in 2015 to support the further construction of the infrastructure for spatial information. The document is available at http://www.radaiip.gov.pl/iip/programowanie-prac/programy-organow-wiodacych-2014-2015. A revision for the period 2016-2017 taking into account the maintenance and further aspects of cooperation with education institutions is currently been drafted.
- The leading bodies are responsible for public registers corresponding to INSPIRE themes.
 They play a coordination role for specific spatial data themes, as they are not always data
 producers and supervise the implementation of these tasks by other authorities. Users of the
 SII are citizens, businesses and administrations to a different extent and on different
 principles set out in the SII and the legislation governing the rules on the public registers in
 the country.
- The Surveyor General of Poland develops and maintains the SII geoportal (http://www.geoportal.gov.pl) as a central access point to a network of services relating to spatial data sets and services. A discover service sharing metadata for data sets and services forms an integral part of the geoportal. This service was notified to the European Commission as an official national discovery service for the area of Poland. Metadata shared via the national network service are cyclically downloaded by the catalogue server of the INSPIRE geoportal and shared at the level of that geoportal. Currently the geoportal publishes around 200 different types of spatial data services. Additional spatial data services published by other entities are available on the INSPIRE metadata catalogue server. [Effectiveness]

1.3 Usage of the infrastructure for spatial information

- All leading bodies report that the use of spatial data services offered through the Infrastructure for Spatial Information has continously grown over the period 2013-2015 [Relevance].
- The demand for downloadable data has increased as well.
- Seen the free availability and accessibility of most datasets and services the type of end-user (public administration, citizen, business) cannot be easily identified.
- Several applications serving specific use cases are provided by the leading bodies to the general public (protected sites, legal situation of buildings, tourist destinations, central geological database, portal and mobile app "Zabytki (monuments) in Poland", ...). Self-teritorial governments use geoportals for information on land use planning to strengthen public participation in the process of planning.
- The Polish Geological Institute is also involved in the development of the European infrastructure for spatial information in terms of geology: the projects Minerals4EU, EuroGeoSource and EGDI-Scope/EGDI-Bridge. [EU-added value]

- The e-zabytek Portal (historic monuments) connects to the EUROPEANA European portal (www.europeana.eu). This enables the pooling of data and analysis produced by other institutions (also foreign) publishing information on the Polish National Heritage.
- Furthermore Poland has engaged in several collaborative initiatives with neighbouring countries. E.g. "Study on the spatial integration of the Polish part of the border of Poland and Germany IPPON" to identify the main lines of development of the border between Poland and Germany for spatial cohesion for the implementation of integration challenges in the European Union; and the European Location Framework (ELF). [EU-added value]

1.4 Data Sharing Arrangements

- During the 2013-2015 reporting period, data access barriers were gradually removed [Effectiveness]. In 2014 the "Geodetic and Cartographic Law" was substantially amended. At GGK (Surveyor General of Poland):
- part of the resource was made available as open-access data (registers: boundaries, administrative divisions, address points, geographical names and digital terrain model);
- new licensing principles were introduced and the pricing policy was significantly amended.
 These amendments do not affect access to INSPIRE data and services for public administration bodies, Member States and the European Community;
- appropriate legal provisions were adopted with the aim of digitising the system for managing on-line access to data and associated services and of simplifying the system for granting appropriate licences to users.
- In addition, harmonised datasets are made available free of charge such as INSPIRE population distribution or statistical units.
- The Directorate-General for Environmental Protection (GDOS) does not foresee fees to be collected for the provision of spatial data sets and services of the components of INSPIRE. There are no plans to introduce a licensing model for data sharing:
- The National Water Management Authority (KZGW) has made an agreement with the GGK to make harmonised datasets available free of charge upon their completion.
- The Polish Geological Institute (PIG-PIB) services provided through the internet can be used by all, including public authorities(http://www.pgi.gov.pl/dane-geologiczne/geologiczne-bazy-danych/ikar.html). The data shall be made available in accordance with the applicable national law and on an application by a public authority;
- The Chief Inspector for Environmental Protection has set up and made available a set of services and tools to access data and metadata free of charge on the subject — "Environmental monitoring facilities".
- All operational arrangements are available within the framework of the http://inspire.gios.gov.pl geoportal. The arrangements are in accordance with the applicable regulations, standards and guidelines in the field of integration, processing and sharing of spatial data, including the INSPIRE data models [Effectiveness]. Solutions shall ensure the interoperability of data and services and allow for the free (unrestricted access to the resources collected regardless of the gear used. Logged and authorised users may benefit from advanced functionality such as editing, updating and publishing metadata and spatial data online.
- GUS (Central Statistical Office) makes data available in the Geostatistical portal (http://geo.stat.gov.pl) free of charge for all users.

1.5 Costs and Benefits

- The costs are difficult to quantify. It is also difficult to separate costs that are closely related to the implementation of INSPIRE from more general infrastructure costs. The estimated costs made by the leading coordination bodies for implementing the INSPIRE Directive (including the development of a national geoportal, the implementation of the ISOK use case, capacity building, infrastructure, human resources, data harmonisation, studies, conferences, ...) are in the range of PLN 90.000.000 or € 21,214,400 for the period 2013 -2015.
- In most leading bodies the principal benefits identified are the increased use of data by
 making them accessible and cost savings in the information management by better data
 integration, better organisational structures and interoperable IT Architectures [Efficiency].
 Moreover, the Environment Department stresses the benefits linked to the interoperability of
 systems for environmental information and the Polish Geological Institute (PIG-PIB) highlights

the shared use with other EU countries of services and spatial geology data, mineral resources and energy resources. The enhanced cooperation and coordination reinforces the awareness and use of spatial information at various levels of government.

• The Register of Historical Monuments is an example of a use case that brings these benefits also to the citizen and businesses. The availability of the data collected in the register of monuments in digital form reduces the costs of access to data on monuments and is likely to significantly improve and reduce the effort of preparing analyses and planning documents necessary in the process of spatial planning. The digital available cultural heritage data can be used to further develop tourism.

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.

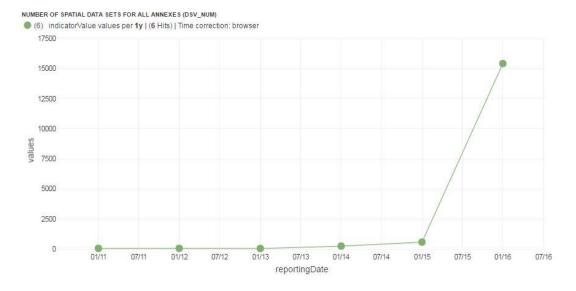
The key facts and figures presented in this country fiche are based on the information provided by Poland on the <u>INSPIRE dashboard</u>. **The provided statistics** is not reflecting the data available on <u>INSPIRE geoportal</u>. The INSPIRE geoportal is updated on a regular and ongoing basis, whilst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

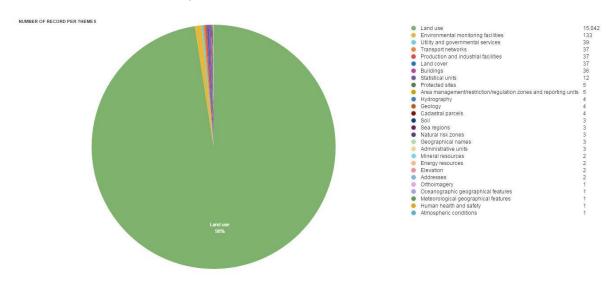
2.1. Identification of spatial data with relevance to the environment (step 1)

a. Evolution of the data offering

DSv_Num: number of spatial data sets for all Annexes

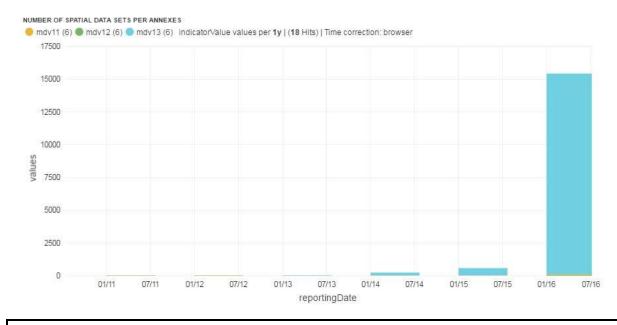


b. Data sets made available per INSPIRE theme in 2015



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

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



Evaluation of progress for step 1:

Poland has identified a total of 15430 spatial data sets with relation to the themes listed in the INSPIRE annexes.

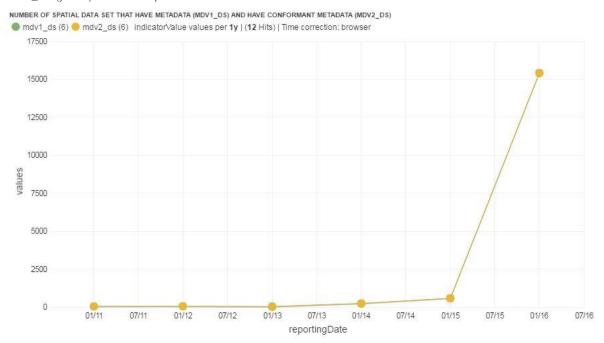
The number of identified spatial data sets significantly increased in 2015 with land use datasets (15042) which looks extremely high. These are probably local datasets, not provided as a national dataset. In addition, many other relevant spatial datasets have already been identified for the different data themes. However, the identification still seems incomplete and Poland 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)

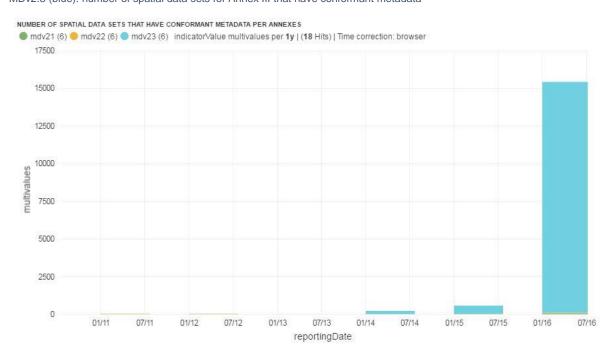
a. Evolution of documented data and conformity of the documentation

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

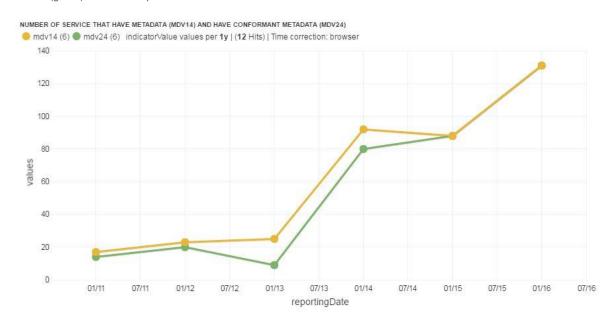
MDv2.1 (green): number of spatial data sets for Annex I that have conformant metadata MDv2.2 (yellow): number of spatial data sets for Annex II that have conformant metadata MDv2.3 (blue): number of spatial data sets for Annex III that have conformant metadata



c. Evolution of documented services and conformity of the documentation

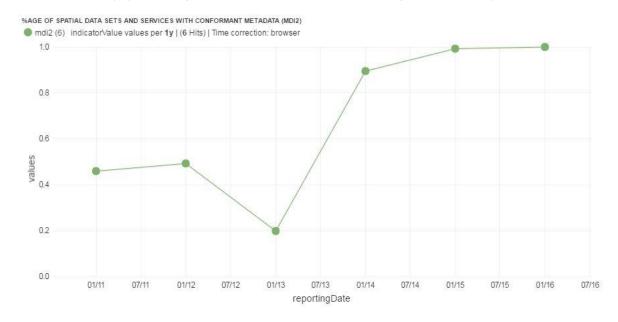
MDv1.4 (yellow): number of spatial data services that have metadata

MDv2.4 (green): 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:

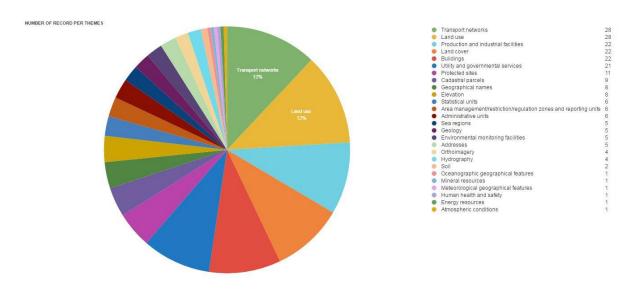
Poland has documented and published metadata through a digital discovery service for 100% of the identified spatial data sets and 100% (131) of the digital services. Overall, 100% of the metadata conforms to the INSPIRE metadata specifications.

It shows a very high level of maturity.

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.



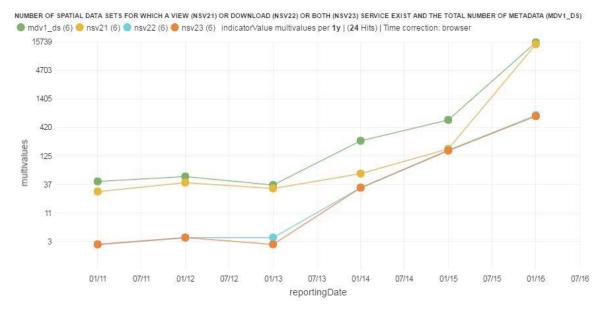
b. Evolution of spatial data made accessible through digital services

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

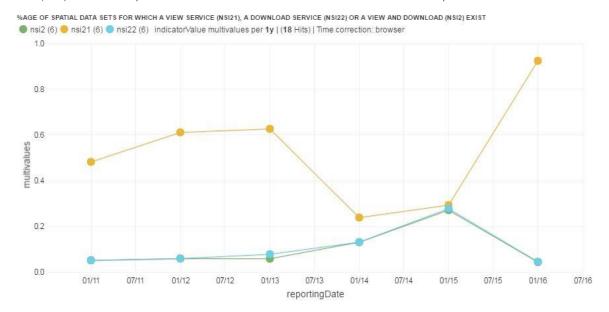
NSv2.2 (blue): number of spatial data sets for which a download service exists

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

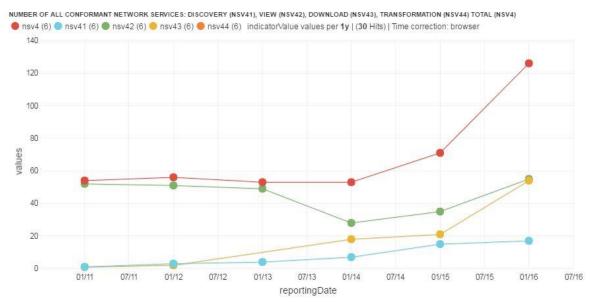
NSv4 (red): number of all conformant network services

NSv4.1 (blue n): number of conformant discovery network services

NSv4.2 (gree): number of conformant view network services

NSv4.3 (yellow): number of conformant download network services

NSv4.4 (orange): number of conformant transformation network services



Evaluation of progress for step 3:

Poland has:

- 92,56% of its data sets accessible for viewing through a view service;
- 4,58% of its data sets accessible for download through a download service.

96,18% (126 out of 131) of the available digital services are conform to the INSPIRE network service specifications.

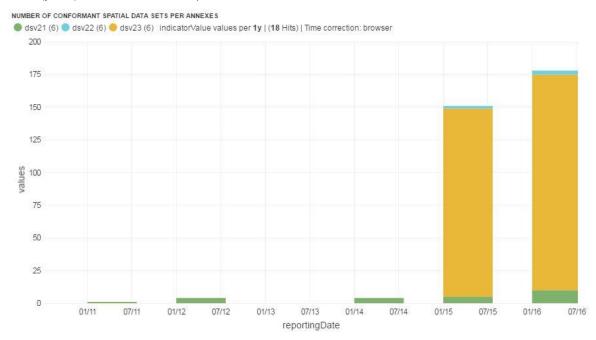
Poland shows that it has built the necessary capacity and competences to make data accessible through digital INSPIRE network services. However, accessibility of datasets through download services should be further improved.

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



Evaluation of progress for step 4:

Poland reported 178 data sets to be conform to the INSPIRE interoperability specifications in 2015.

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

3. Outlook

Poland has critically reviewed their INSPIRE implementation and provided an <u>action</u> <u>plan</u> in 2016 to remediate existing implementation issues and further improve the overall conformity of the implementation. The action plan documents were prepared by the appropriate administrations responsible for the INSPIRE themes for which implementation gaps were identified by the Commission.

Documents were provided by the following leading bodies:

- Surveyor General of Poland
 - Actions on the following themes: I.1 Coordinate reference systems, I.2 Geographical grid systems, I.3 Geographical names, I.4 Administrative units, I.5 Addresses (Addresses), I.6 Cadastral parcel, I.7 Transport networks, II.1 Elevation, II.2 Land cover, II.3 Orthoimages, III.2 Buildings, III.3 Soil, III.6 Services of general interest and governmental services (Uitility and governmental services), III.8 Production and industrial facilities, III.11 Management of restricted area and regulatory areas and reporting units.
- Ministry of the Environment
 - Actions on the following themes: I.8 Hydrography, III.12 Natural risk zones, III.17 biogeographic regions, III.18 habitats, III.19 distribution of species.
- Ministry of Infrastructure and Construction
 - Actions on Annex III.4 Land Use in support of "Spatial planning and development" as part of the by the leading bodies adopted strategic action plan 2020.
- Ministry of Agriculture
 - Actions on Annex III.9 Agricultural and aquaculture facilities.
- Ministry of Health
 - o Actions on Annex III.5 Human health and safety.

The following actions are set up to directly address previously identified issues:

a. Coordination (1.1; 1.2)

• The Ministry of Infrastructure and Construction has defined actions to coordinate the collection of data for spatial planning and development with the competent local authorities.

b. Data sharing and exchange (1.4)

No specific actions have been defined on data sharing and exchange.

c. Metadata (2.2), d. Network services (2.3), e. Data Interoperability (2.4)

- Clean up of metadata on I.3 Geographical names and I.5 Addresses.
- By end 2016 I.8 Hydrography and III.12 Natural risk zones datasets will comply with INSPIRE regulations.
- By end 2020 III.18 habitats and III.19 distribution of species will comply with INSPIRE regulations.

- By end 2020 Annex II.2 Land Cover and Annex III.4 Land Use datasets in support of "Spatial planning and development" will comply with INSPIRE regulations..

 By October 2017, Annex III.9 Agricultural and aquaculture facilities datasets will comply with
- INSPIRE regulations.
- No later than 6 months after specific regulation on Annex III.5 Human health and safety datasets will enter into force, these datasets will comply with INSPIRE regulations (end 2017-

4. Summary - How is Country doing?

INSPIRE key obligation	Overall implementation status and trend	Outlook	Dashboard Legend Implementation Status:
Ensure effective coordination	37	0	implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily.
Data sharing without obstacles	37	•	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
Step 1: Identify spatial datasets	3	0	ensure that the objectives of the legislation can still be reached by 2020. Implementation of this provision is
Step 2: Document datasets (metadata)	3	0	falling significantly behind or has not even started. Serious efforts are necessary to close implementation gap. Trend:
Step 3: Provide services for identified spatial datasets (discovery, view, download)	⊕7	0	 the trend of the implementation is positive. the trend of the implementation is neutral. the trend of the implementation is
Step 4: Make spatial datasets interoperable by aligning them with the common data models.	© 7 1	•	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.

Poland 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 and implemented. Poland has no common licensing model for data sharing. Existing regulations define who are entitled to receive data free of charge and to what extent. Poland does not foresee to collect fees for access to INSPIRE spatial data sets via discovery and view services.

Assessments of monitoring reports issued by Poland and the spatial information that Poland 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. While it is true that 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 Poland has taken steps to centralize information about the data (metadata) using the national geoportal (geoportal.gov.pl) and reforming the public environmental data policy aiming for a higher level of transparency.

Suggested action

 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.