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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 Implementing Decision (EU) 2019/1372 on the 19th August 2019.

This country fiche highlights the progress in the various areas of INSPIRE implementation. It includes information on monitoring 2019 acquired in December 2019 and Member States update.

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 Environmenal 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

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Contact Person: Jitka Faugnerová
Email: Jitka.Faugnerova@cenia.cz
MIG T Contacts: Contact Person: Lenka Rejentova

Email: lenka.rejentova@cenia.cz Contact Person: Jiří Poláček Email: jiri.polacek@cuzk.cz

3 member - management **Coordination Committee (Kovin) 3 member - management **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
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Telephone number	+ 420 267 225 226
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Organisation's website URL	www.cenia.cz
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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 established in 2010. Members of Coordination Committee
 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 the national GI association joining stakeholders
 from 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 Coordination Committee, 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). GeoInfoStrategy coordinated by the Ministry of the Interior also includes mandatory implementation of the INSPIRE Directive. INSPIRE

Implementation Strategy was endorsed as a separate document by Coordination Committee and Minister of the Environment in July 2015. Implementation of INSPIRE is aligned with the approved strategy.

Functioning and coordination of the infrastructure

- Coordination Committee meets on regular basis, chaired by Deputy Minister of the Environment, co-chaired by Deputy
 Minister of the Interior with responsibility for e-government and by vice-chair of Czech Office for Surveying, Mapping and
 Cadastre. Practical implementation issues are solved in dedicated Technical Working Groups (currently 7, but only 6
 operational). Technical Working Group for Education is officially established, its members participate in organizing
 awareness rising events, but in practice there has never been any meeting of the group). Results from the Technical
 Working Groups 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 has concluded by identification of coordinators of INSPIRE themes. These organizations are
 responsible for fulfilment of the scope of the INSPIRE theme within the extent of the whole country and 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 specific spatial data objects or attributes are responsibility of various organizations.
- In April-May 2019 the process of identification of data providers resulted in a draft of amendment of a law 123/1998 Coll. on access to environmental information, which includes also transposition of the INSPIRE Directive in the Czech Republic. This draft defines institutions and organisations responsible for each of the INSPIRE themes. On the top of current obligations, a new obligation is foreseen. This is a cross sectoral coordination of data providers contributing to harmonized data set. The draft proposal has gone through several rounds of comments and discussions within the Coordination Committee. This lasted more than 6 months, on the other hand a commonly approved amendment is now about to enter the legislative process. (for the moment slowed down by the overall situation)
- 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. Consequently, the number of datasets published on EU Geoportal has increased and
 remains stable.
- A major improvement has been made in theme Utilities and Governmental services, where the theme coordinator Ministry of the Interior has set up a project team for building an information system for collection and harmonisation of relevant datasets (inputs are expected in various formats from various data providers). This information system will be a source of INSPIRE harmonised data sets for the theme III.6. It is important to note that the level of making utility data of the Czech Republic available is now under inspection of National Cyber and Information Security Agency. The Coordination Committee has expressed certain doubts about making this kind of data available, because of the overall security situation. Especially download of data of electricity, gas and drinking water lines might remain restricted to expert users.
- Large improvement is expected in the theme Land use (III.4), as the responsible ministry, Ministry for Regional Development, is now building a National geoportal of urban planning within an EU co-funded project. One of the outputs of the project is also INSPIRE compliant data sets for the theme Land use (specifically data for planned land use). However, first results are expected in July 2023.
- Despite the improvement in all other themes, data of theme Health and Security remains an issue. This is caused by rather low involvement of the responsible ministry. The amendment of the law 123/1998 Coll. will define the Ministry of Health to be responsible for all the theme, which may change the situation.
- The monitoring process 15th December 2019 has been widely discussed throughout all the year 2019 in Coordination Committee. The Czech national metadata profile, which is a technical document serving as a national implementation document of technical guidance for metadata, was updated according to the Metadata TG 2.0 already by the end of 2018. However, the specific implementation of some ISO metadata elements which would have to be changed due to the TG 2.0 had to be discussed with the JRC. The Czech Republic raised several issues regarding the reference validator, this communication lasted several months. Czech data providers were not asked to change their metadata until late 2019, therefore most of the Czech metadata for the data sets published in December 2019 were compliant to the last valid version of metadata TG (1.3.). As the monitoring was done using only the new validation (TG 2.0), Czech Republic has reached almost zero in compliance of metadata for data sets. Metadata for services were validated according the rules for TG 1.3, the ratio of compliance is therefore much higher. Czech Republic understands the year 2019 as a transitional year and expects the same from the EU.
- Currently, in case of INSPIRE data sets of Czech Office for Surveying, Mapping and Cadastre only metadata of dataset series are harvested on the European INSPIRE Geoportal. This approach has been applied because one dataset series contains a large number of datasets (in tents of thousands) and it is much for convenient for the users to search for the whole series rather than for each particular data set. However, this approach may cause some data does not appear downloadable at the European INSPIRE Geoportal. This can affect the monitoring results. Czech Republic is are aware that this situation is not sustainable for a long time and there have been several attempts to solve this issue (for example within the MIG-T group).
- On top of the technical implementation, INSPIRE information and networking events are organised several times a year.

INSPIRE info day was organised 3rd July 2019 in Prague. International Czech-Slovak INSPIRE conference was organised 8th – 9th October 2019 in Strbske Pleso, Slovakia. Last event of 2019 was the workshop for collection of user feedback on current National Czech INSPIRE geoportal and ideas for new geoportal, serving also as a national one.

Usage of the infrastructure for spatial information

- In general, use of spatial data and services is continuously increasing.
- The access to the data sources is not provided only via central portals with national relevance (e.g. National 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.
- Three new portals/systems with high relevance for INSPIRE are planned or already under development. These portals should solve issues of a specific domain and at the same time the INSPIRE obligations.
 - Information system for Utilities and Governmental services under coordination of the Ministry of the Interior
 - National geoportal of urban planning, under coordination of Ministry for Regional Development
 - Digital Technical Map of the Czech Republic, coordination shared among Ministry for Regional Development,
 Czech Office for Surveying Mapping and Cadastre and Regional Authorities.
- The National MD / data harvesting is functioning well therefore users have usually several options to find and use published spatial data.
- 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

- A significant progress in harmonisation conditions for access and use of spatial data sets and services was done in year 2019. Efforts have been made within the Coordination Committee to harmonise data in the INSPIRE infrastructure and use Creative Commons licence (CC 4.0).
- Many of the data providers already use this licence. But there are still others whose legislative burdens prevents them from making data available under the CC 4.0.
- From the technical point of view a new code list is introduced in the document National metadata profile that offers CC as one of the options. The data providers were asked to follow the new updated metadata profile and use the code list.
- Many data providers publish their INSPIRE data as the open data to National Open Data Catalogue (https://opendata.gov.cz/)

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. Costs separately only for the year 2019 have not been
 collected.
- Benefits were not precisely financially quantified; however, these are the major benefits agreed by the Coordination Committee:
 - 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 an issue that big as 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) stems from the availability of standardized services, open data and ICT development.
 - Contribution to cross-border and/or EU projects and services

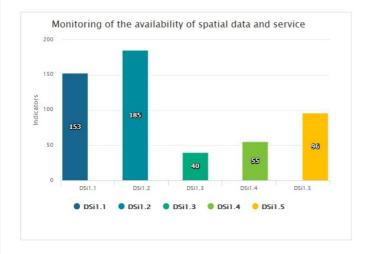
Key facts and figures



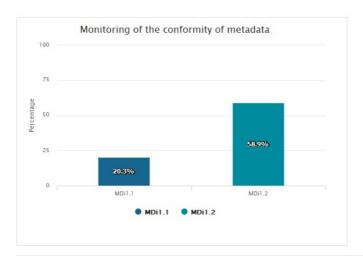
Indicators in support of Commission Decision (EU) 2019/1372 implementing Directive 2007/2/EC (INSPIRE) as regards to monitoring and reporting

Graphs generated with data taken from: https://inspire-geoportal.ec.europa.eu/mr2019_details.html?country=cz

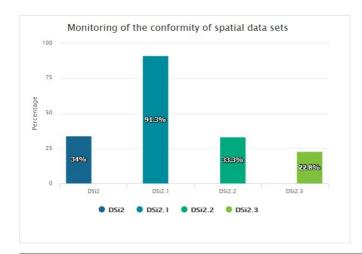
The date of harvest metadata: 17/12/2019



Indicator	Definition
DSi1.1	The number of spatial data sets for which metadata exist
DSi1.2	The number of spatial data services for which metadata exist
• DSi1.3	The number of spatial data sets for which the metadata contains one or more keywords from a register provided by the Commission indicating that the spatial data set is used for reporting under the environmental legislation
● DSi1.4	The number of spatial data sets for which the metadata contains a keyword from a register provided by the Commission indicating that the spatial data set covers regional territory
OSi1.5	The number of spatial data sets for which the metadata contains a keyword from a register provided by the Commission indicating that the spatial data set covers national territory

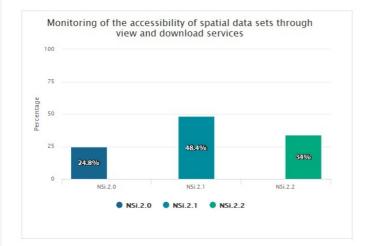


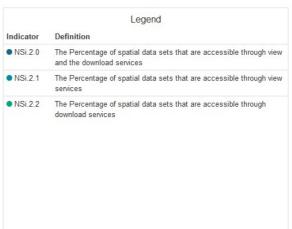
Legend		
Indicator	Definition	
MDi1.1	Percentage of metadata for spatial data sets conformant with Commission Regulation (EC) No 1205/2008 as regards metadata	
MDi1.2	Percentage of metadata for spatial data services conformant with Commission Regulation (EC) No 1205/2008 as regards metadata	

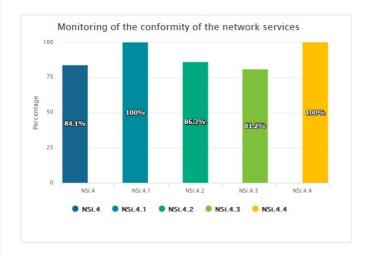


Indicator	Definition
● DSi2	Percentage of spatial data sets that are in conformity with Commission Regulation (EU) No 1089/2010 as regards interoperability of spatial data sets
● DSi2.1	Percentage of spatial data sets, corresponding to the themes listed in Annex I, that are in conformity with Commission Regulation (EU) No 1089/2010 as regards interoperability of spatial data sets
● DSi2.2	Percentage of spatial data sets, corresponding to the themes listed in Annex II, that are in conformity with Commission Regulation (EU) No 1089/2010 as regards interoperability of spatial data sets
• DSi2.3	Percentage of spatial data sets, corresponding to the themes listed in Annex III, that are in conformity with Commission Regulation (EU) No 1089/2010 as regards interoperability of spatial data sets

Legend







Indicator	Definition
maicator	Definition
NSi.4	Percentage of the network services that are in conformity with Commission Regulation (EC) No 976/2009 as regards the Network Services
● NSi.4.1	Percentage of the discovery services that are in conformity with Commission Regulation (EC) No 976/2009 as regards the Network Services
● NSi.4.2	Percentage of the view services that are in conformity with Commission Regulation (EC) No 976/2009 as regards the Network Services
● NSi.4.3	Percentage of the download services that are in conformity with Commission Regulation (EC) No 976/2009 as regards the Network Services
NSi.4.4	Percentage of the transformation services that are in conformity with Commission Regulation (EC) No 976/2009 as regards the Network Services