

Table of Contents

- Introduction
- State of Play
 - Coordination
 - Functioning and coordination of the infrastructure
 - Usage of the infrastructure for spatial information
 - Data Sharing Arrangements
 - Costs and Benefits
- Key Facts and Figures.
 - Monitoring Indicators

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 2022](#) acquired in December 2022 and Member States update.

State Of Play

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

Coordination

National Contact Point

Name of Public Authority: Estonian Land Board

Contact Email: [Click to email](#)

National INSPIRE Website: <https://geoportaal.ee/>

MIG Contacts: Contact Person: Mart Randmäe

Email: mart.randmae@maaamet.ee

Contact Person: Artu Ellmann

Email: artu.ellmann@maaamet.ee

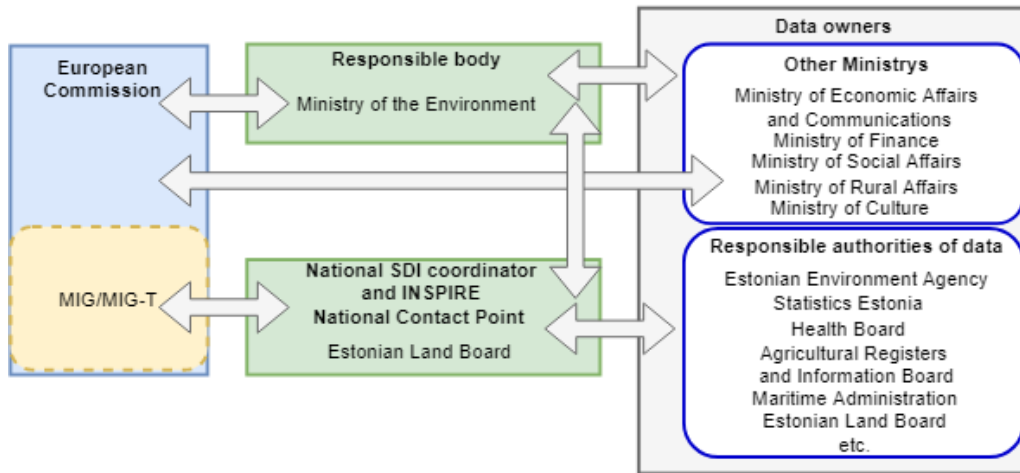
MIG T Contacts: Contact Person: Mart Randmäe

Email: mart.randmae@maaamet.ee

Contact Person: Kaire Veeperv

Email: kaire.veeperv@maaamet.ee

Estonian INSPIRE Coordination Structure



Coordination Structure & Progress:

- The **Ministry of the Environment** is the responsible body for the implementation of the INSPIRE directive in Estonia. In accordance with the Spatial Data Act, passed on 28 February 2011, the contact point was also appointed to be the Estonian Land Board.
- The national implementation of the INSPIRE Directive is coordinated by **Estonian Land Board** with maintaining national SDI portals like Estonian Geoportal and Estonian Land Board geoportal. Also providing support and guidance for national data owners. Estonian Land Board is responsible for data harmonizing and providing Estonian catalog service and most of the INSPIRE valid spatial data services with collaboration Information Technology Centre of the Ministry of the Environment. As INSPIRE coordinator Estonian Land Board has representatives in MIG-T and MIG.
- In most cases, the Ministries are the data owners by law, but their subdivisions are responsible authorities for the data. Ministries have representatives in different committees of European Commission to support understanding political and technical needs of other committees for INSPIRE data. Ministries subdivisions work on a daily basis with Estonian Land Board technical personnel to support data harmonization to INSPIRE valid data.

Functioning and coordination of the infrastructure

- The INSPIRE Directive (2007/2/EC) was transposed in Estonia in 2011 by the Spatial Data Act (RT I, 28.02.2011). The development plan of the Ministry of the Environment defines the development directions of spatial data and environmental activities until 2030. It is using the objectives arising from the INSPIRE Directive.
- Estonia has connected their national discovery service to the EU geoportal allowing for the publication of metadata for available spatial data sets and services on the EU geoportal.
- Estonian Land Board is responsible for maintaining [Estonian Geoportal](#) (INSPIRE geoportal) and [Estonian Land Board geoportal](#) (National SDI that represents through INSPIRE services also INSPIRE data).
- The metadata of all the databases and spatial data services introduced to the Estonian National Geoportal can also be found through the relevant user interface <https://metadata.geoportaal.ee>.
- More information about Estonian Geoportal can be obtained at <https://geoportaal.ee/eng>

• Progress

- In 2020 Estonia went over to new technical SDI strategy using open-source software (GeoServer and GeoNetwork) for implementing INSPIRE. Estonian Land Board coordinated the change to go over to an open-source software with the help of Information Technology Centre of the Ministry of the Environment. In 2022, the Estonian identification system [TARA](#) was integrated with GeoNetwork together with a user management system for more user-friendly secure login of metadata editors.
- To support the data owners and the editors of metadata, the new Estonian Geoportal was released in April 2022 with the help of the Information Technology Center of the Ministry of the Environment. With the creation of the new Estonian Geoportal, new metadata management rules and, if necessary, new agreements with data owners were created.
- In cooperation with the Ministry of Economic Affairs and Communications, the Estonian Land Board implemented automatic metadata sharing with the national open data portal ([Estonian Open Data](#)). This makes it possible to describe INSPIRE and all other public sector spatial data metadata in one portal and one format, but to share it automatically with users in two portals and formats.
- INSPIRE map application that is in the national technical platform X-GIS, was updated with new INSPIRE data layers.
- Estonia have covered most of INSPIRE Directive annex III themes with view and download services. In 2021, one of the priorities was the implementation of INSPIRE Annexes I and II services on the new technical platform. This

priority continued in 2022 as well, and from September 2022 all our services can be found under the inspire.geoportal.ee domain. The Estonian Land Board participated also in the Geo3E project, which resulted in the creation of the first OGC API Features services on the INSPIRE data model in 2022.

- INSPIRE coordinating and technical workgroup was established in 2019 inside Estonian Land Board. It is still fluently working and supporting INSPIRE spatial data owners.

Usage of the infrastructure for spatial information

- The usage of INSPIRE spatial information has been stabilized in couple of years. There are also no significant changes on comparing Estonian INSPIRE view or download services. One of the main reason could be that the Estonian Land Board published in 1 July 2018 most of its spatial data as open data. As most of the Estonian INSPIRE services in 2018 and 2019 were INSPIRE I and II annexes themes and Estonian Land Board was mostly these themes data owner. New annex III services are also mostly open data and did not make a big new open data releasing effect. Local public sector preferred to use other possibilities than INSPIRE to collect data.

Data sharing arrangements

- From 2018 the spatial data of the Estonian Land Board is available for free download to everyone. As a result, there is no need to ask spatial data from Estonian Land Board in a query format. INSPIRE data and services were also directly affected by this decision and are mostly free of charge. For the conditions of use Estonian Land Board has made their own [Land Board Open Data License](#).
- Environmental spatial data is also mostly free of charge but is not so easily usable for people. To represent spatial location and basic attributes The Estonian Environment Information Centre has published simple environmental spatial data view and download services. More detailed information is exchanged with government institutions.
- For data exchange between government institutions there is an overall agreement that data exchange is free from charge.

Costs and benefits

- Compared to 2021 the costs of 2022 have no significant changes. Implementation of the INSPIRE Directive vary between actors and are difficult to estimate precisely. Most of the workers in the responsible authorities of INSPIRE data are doing it as part of their daily job responsibilities and do not get extra benefit for it.
 - Coordination costs have been the salary costs of two employees in the Estonian Land Board, who coordinate the entire implementation of the INSPIRE Directive in Estonia. The workload of these two people on INSPIRE topics corresponds to 0.5 per full-time workload for the whole reporting period. In addition, the Land Board has 3 people dealing with different INSPIRE topics: communication with information holders, technical advice, participation in workgroups, metadata filling, monitoring and management, reporting, planning of Estonian geoportal development, etc. The workload of these people is estimated to be a full-time workload of 2.5 persons for the whole reporting period.
 - Information Technology Centre of the Ministry of the Environment has made the salary costs and technical costs in a value of EUR 90 000. They have 3 workers assigned on INSPIRE whom workload corresponds to 2.5 per full-time workload for the whole reporting period.
- Benefits of 2022 implementing the INSPIRE Directive vary between actors. The monetary value information of the total benefits is currently unavailable. According to Estonian Land Board INSPIRE workgroup experiences, the key benefits can be summed up as:
 - organizing and re-developing databases has made data (especially environment data) more accessible and clearer to all users;
 - the cooperation between actors have increased (interinstitutional cooperation);
 - opportunities to use and implement new technical solutions nationally;
 - overall data discoverability and availability increase.

Key facts and figures

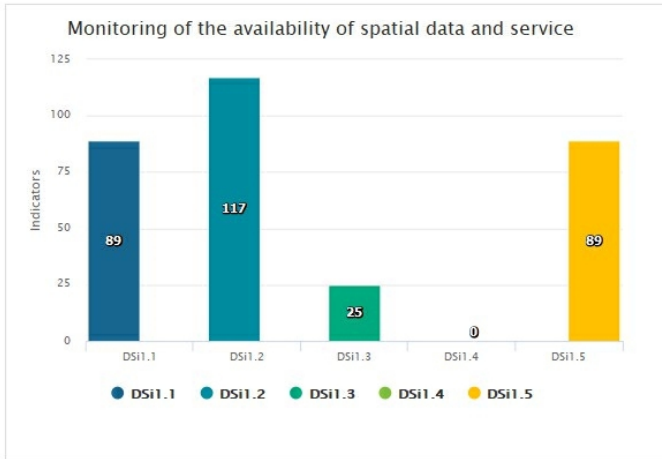
Estonia

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/mr2022_details.html?country=ee

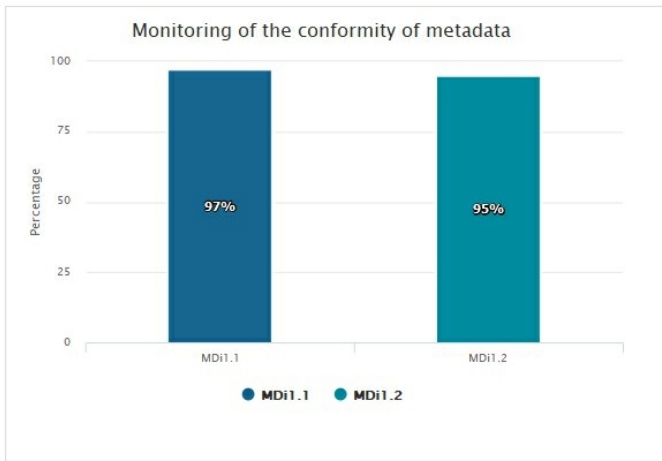
The date of harvest metadata: 2022-12-16, 18:48:14

Endpoint: 02c2748f-82ca-4ceb-92de-70e1d620d496



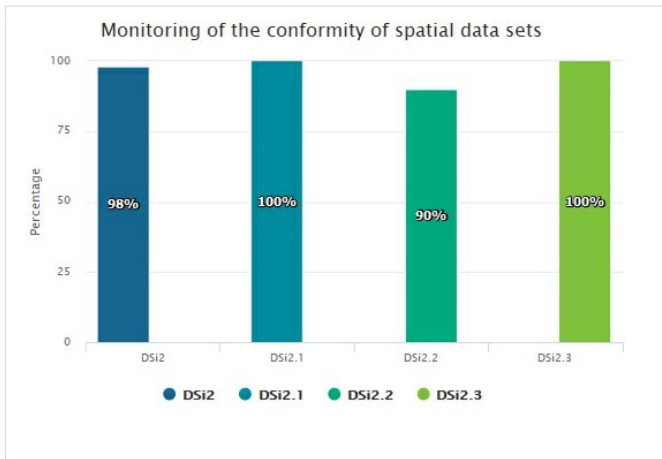
Legend

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
DSi1.5	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

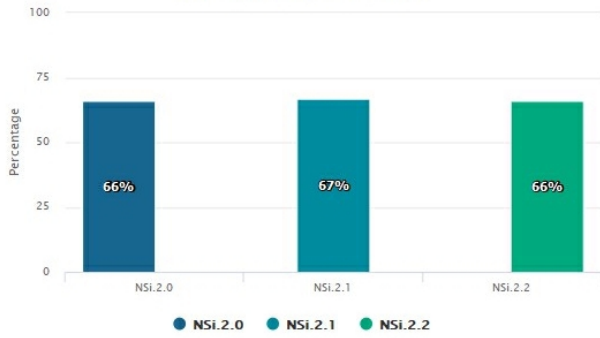
Indicator	Definition
MDi1.1	Percentage of metadata for spatial data sets conformant with Commission Regulation (EC) No 1205/2008 as regards metadata
MDi1.2	Percentage of metadata for spatial data services conformant with Commission Regulation (EC) No 1205/2008 as regards metadata



Legend

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

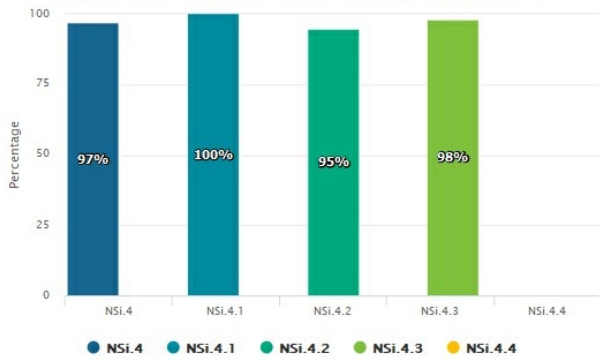
Monitoring of the accessibility of spatial data sets through view and download services



Legend

Indicator	Definition
● NSi.2.0	The Percentage of spatial data sets that are accessible through view and the download services
● NSi.2.1	The Percentage of spatial data sets that are accessible through view services
● NSi.2.2	The Percentage of spatial data sets that are accessible through download services

Monitoring of the conformity of the network services



Legend

Indicator	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