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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 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 Denmark. More detailed information is available on the INSPIRE knowledge base.

Coordination

National Contact Point

Name of Public Authority: Agency for Data Supply and Efficiency

Contact Email: Click to email

National INSPIRE Website: http://inspire-danmark.dk MIG Contacts: Contact Person: Ulla Kronborg Mazzoli

Email: ukm@sdfe.dk

Contact Person: Lars Erik Storgaard

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Coordination Structure & Progress: National Contact point

Name of the public authority	Styrelsen for Dataforsyning og Infrastruktur
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Coordination Structure

The Agency for Data Supply and Infrastructure is responsible for the implementation of the INSPIRE directive assigned by the Minister for Climate, Energy and Utilities. The agency hence holds the role as National Contact Point and has the responsibility for the monitoring and reporting of the Directive.

The Minister for Climate, Energy, and Utilities has set up The Coordination Committee on Infrastructure for Geographical Information. The Committee consists of representatives from public authorities, the utility sector and other organizations with special knowledge of the spatial information infrastructure. The committee meets 3 times a year and promotes dialogue on the strategic development and coordination of the infrastructure for spatial information, hereunder that spatial data contributes to added value for society, in the private as well as in the public sector.

The committee is dealing with e.g. data quality in geo-referenced legislation, the interaction between new technologies and the spatial data infrastructure, the quality of metadata, and the use of spatial data in differentiated and automated regulation. The committee advises the Minister on initiatives promoting the infrastructure for spatial information and on the INSPIRE implementation.

Members of the Committee:

The Danish Ministry of Climate, Energy and Utilities (chair), NN, Director General

The Danish Ministry of Transport, Torben Korgaard Hansen, Head of Unit

The Danish Ministry of Environment, Lars Møller Christiansen, Vice Director General

The Geological Survey of Denmark and Greenland (GEUS), Heidi Christiansen Barlebo, Head of Department

The Danish Ministry of Taxation, Søren Rude, Head of Division

Ministry of the Church, Agency for Planning and Rural Development, Sigmund Lubanski, Director General

The Danish Ministry of Climate, Energy and Utilities, Pia Dahl Højgaard, Director General

The Danish Ministry of Food, Agency for Agriculture, Jon Simonsen, Vice Director General

Local Government Denmark, Troels Garde Rasmussen, Head of Unit

Danish Regions Bente Villumsen, Head of Division

Danish Universities by Copenhagen University, Lasse Møller Jensen, Professor

The Danish Association of Chartered Surveyors, Ejnar Wildfang Flensborg, Director

The Utility sector by DANVA (Danish Water and Wastewater Association), Lars Gadegaard, Senior Consultant

Danish Association of Geospatal information (private sector), Mads Bjørn-Møldrup, Chairman

Progress

Since 2001 common public Digital Government/digitization strategies has framed and supported the development of the national infrastructure for geospatial information. The common digitization strategies commit the central government, regions and municipalities to develop Digital Government infrastructure and solutions based on a common framework and based upon agreed international standards – hereunder the NSDI.

In March 2021, the government established a digitalization partnership for Denmark's digital future. The digitalization partnership has contributed knowledge about how Denmark can best utilize the digital transformation.

The Digitization Partnership has consisted of 27 members all top managers and experts from the Danish business community, the research world, civil society and labour market partners, KL (the national association of municipalities) and the Danish Regions.

The recommendations are now included as input to the government's ongoing and forthcoming strategies and political initiatives in the digital area, just as they can be used in the work on an overall digital strategy for Denmark.

Visioner og anbefalinger til Danmark som et digitalt foregangsland (fm.dk)

Free and open spatial data forms the backbone of Digital Government and the INSPIRE directive still plays a vital role in this regard as a standardized data sharing framework. Close cooperation between the geospatial and Digital Government domain is in focus e.g. in establishing a national data catalogue that harvest metadata from the national geoportal, bridging between the DCAT and ISO (INSPIRE) metadata standards using ISA recommendations and solutions. The INSPIRE implementation efforts has in the recent years mainly focused on the identification, description, tagging, and distribution of LOPD datasets according to the National Action Plan – a joint effort between the Agency for Data Supply and main thematic data owners.

Functioning and coordination of the infrastructure

The implementation of INSPIRE supports the realization of the common digitization strategy not the least in relation to the Basic Data Program. Furthermore INSPIRE, as a data sharing framework, has added to the continued development of the NSDI.

An example of this is GeoDanmark, a collaboration between the Danish Agency for Data Supply and Infrastructure and all municipalities in Denmark to maintain a mapping of the country that is accurate and up to date.

GeoDanmark's data such as buildings, roads, streams and lakes, is part of the National Basic Data, hence combinable, free, openly available for all to use.

GeoDanmark data is also the data foundation for the majority of the Danish INSPIRE Annex 1 data

Usage of the infrastructure for spatial information

The national distributor of INSPIRE metadata is Geodata-info.dk

Geodata-info.dk is the Danish geoportal that makes it possible for professional users as well as citizens to search for spatial data sets and spatial data services. Geodata-info.dk also includes the Danish discovery service in accordance with the INSPIRE

Directive.

Geodata-info.dk contains descriptions of spatial datasets and services, those covered by the INSPIRE Directive and for others. Data owners without pay make their metadata available on Geodata-info.dk.

More than 20 organizations, mostly public but also private, are currently using Geodata-info for their metadata.

The Dataforsyningen (the "Data Supplier") provides public authorities, citizens and businesses with free and open geodata that are not part of the national Basic Data Program – hereunder INSPIRE data, mainly regarding Annex I and II.

April 2022 to March 2023 shows that a hit rate of 5.63 billions on the Dataforsyningen distributed on 11.640 unique users. Unfortunately these numbers does not cover INSPIRE data, as the EU INSPIRE portal does not allow for the use of user-login or other registration.

Data sharing arrangements

Since 2013 a wide range of spatial data is freely available for all, e.g. all topographic data (GeoDanmark), Cadastral information, and national Elevation model/ the digital terrain model. With very few exceptions, e.g. Nautical Charting, INSPIRE data is free and openly accessible in Denmark.

Costs and benefits

The Danish Agency for Data Supply and Infrastructure (SDFI) has, together with Damvad Analytics, carried out a measurement of the value of the private sector's use of geographical data from SDFI's distribution channel for geodata.

The survey shows that companies using geodata from SDFI have had a growth in their GDP contribution from 2012-2016, which is 866 million. DKK larger than similar companies that do not use data. Smaller companies in particular have benefited from the fact that geodata was made freely available back in 2013.

In 2013, just nine percent of all data calls from business came from smaller companies with a maximum of ten employees. In 2016, which is the most recent year the analysis deals with, that figure has risen to 34 percent.

In general, there is a great demand among private companies for data on roads, buildings, addresses and maps. In 2018, more than half of the total of almost DKK 7 billion came inquiries to SDFI's distribution channel from private companies.

The private users of geodata are typically consulting companies, engineering and IT companies, which use geodata in the projects they work on.

Here it may often be necessary to visualize the project in order to be able to convey the solutions that need to be implemented, and here especially maps (topographical) in different guises are a popular product.

The analysis shows that companies use a wide range of the products found on the Map Supply, but it is especially the topographic maps that are popular.

https://sdfe.dk/media/6765/erhvervslivets-brug-af-kortforsyningen.pdf

Key facts and figures

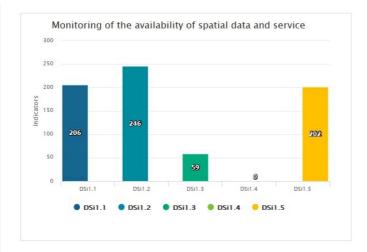


Indicators in support of Commission Decision (EU) 2019/1372 implementing Directive 2007/2/EC (INSPIRE) as regards to monitoring and reporting

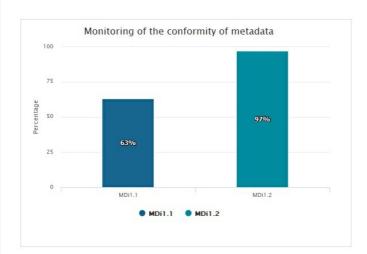
Graphs generated with data taken from: https://inspire-geoportal.ec.europa.eu/mr2022_details.html?country=dk

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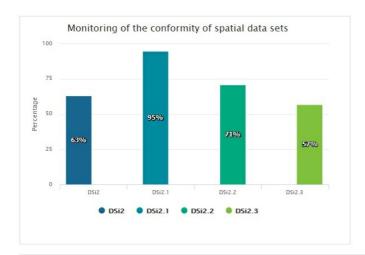
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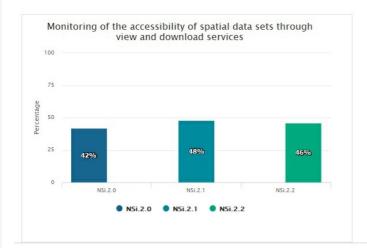
Legend		
Indicator	Definition	
DSi1.1	The number of spatial data sets for which metadata exist	
DSi1.2	The number of spatial data services for which metadata exist	
• DSi1.3	The number of spatial data sets for which the metadata contains one ormore keywords from a register provided by the Commission 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	
O 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	



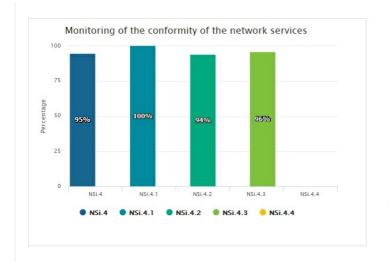
Legend		
Indicator	Definition	
• MDi1.1	Percentage of metadata for spatial data sets conformant with Commission Regulation (EC) No 1205/2008 as regards metadata	
• MDi1.2	Percentage of metadata for spatial data services conformant with Commission Regulation (EC) No 1205/2008 as regards metadata	



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 1089/2010as 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		
● 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		



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	