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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 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>

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Coordination Structure & Progress:

National Contact point

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Coordination Structure

The Agency for Data Supply and Efficiency 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 3-4 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), Kristian Møller, Director General

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

The Ministry of Environment and Food of Denmark, 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 Industry, Business and Financial Affairs, Marie Kirkebæk, Head of Division

Local Government Denmark, Laila Kildesgaard, Director General

Danish Regions Birgit Blaabjerg Bisgaard, Director

Danish Universities by Aalborg University, Esben Munk Sørensen, 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 Geospatial information (private sector), Nils Bo Wille-Jørgensen, Chairman

Progress

Since 2001 common public eGovernment/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 eGovernment infrastructure and solutions based on a common framework and based upon agreed international standards.

In the current strategy 2016-2020 data and data infrastructure plays a significant role. Several initiatives carrying the strategy through deals with better and more efficient use and sharing of public data in society. Building on the Basic Data Program and the vast amount of free and open public data that are digitally available in Denmark efforts are set in motion to improve the quality of existing Basic Data as well as launching new basic data via the common Data Distributor. A permanent governance structure has been established, in order to secure the continued work with providing free and open, reliable and coherent basic data of high quality to all.

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 eGovernment 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.

The association GeoDanmark is a collaboration between the Agency for Data Supply and Efficiency (state) and the municipalities on mapping and establishing a "Common Public Geographical Administration Foundation". The goal is to reduce costs by avoiding redundant double mapping, to provide common, standardized basic geodata that are frequently updated and distributed as free and open data. GeoDanmark is also the data foundation for the majority of the Danish INSPIRE Annex 1 data.

The Association of GeoDanmark's supreme authority is the Board of Representatives, where all the country's 98 municipalities and the Agency for Data Supply and Efficiency (SDFE) are represented. A board consisting of three municipal representatives and three representatives from SDFE heads GeoDanmark. On a daily basis, the operation of GeoDanmark is handled by a joint secretariat, which is divided between Local Government Denmark (KL) and SDFE. All the 98 Danish municipalities are members of GeoDanmark

Usage of the infrastructure for spatial information

Basic Data is distributed via the shared distribution platform; the Common Data Distributor launched in 2018, from where data can safely and easily be used – with respect for personal and sensitive information.

Another main distributor of geodata is the National Map Supply owned and managed by SDFE. The National Map Supply provides public authorities, citizens and businesses with free and open geodata that do not fall under the Basic Data Program. The National Map Supply also distributes a range of INSPIRE data. Statistics from February 2020 shows that on an average workday the Map Supply serves 36 – 27 mill. Web service requests and appr. 10 000 down load request. The total number of registered user exceeded 60 000 in the same period.

The national geoportal Geodata-info.dk contains metadata for all datasets and services falling under the INSPIRE directive as well as other geodata. The portal is free for all to use as a metadata management system and as a discovery service. The portal is owned and maintained by SDFE.

Data sharing arrangements

As part of Denmark's eGOVERNMENT strategy 2011-2015, individuals, public authorities and private businesses have free access to retrieve and use all Basic Data. Local government and state has agreed to expand the agreement and 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

INSPIRE has been an important facilitator for the establishment of the Danish Basic Data program and the ongoing development of the national Spatial Data Infrastructure. A Business Case estimates that free and open Basic Data will provide a total annual societal gain of 800 mill DKR of this 500mil DKR within the private sector. Prior to opening up Danish geodata in 2012 the value of geodata was estimated to 1.6 billion DKK. In 2016 an impact analysis showed that the socio-economic value of open geodata has risen to DKK 3,5 billion due to free and open geodata.

Since the Danish Agency for Data Supply and Efficiency (SDFE) data was made freely available on 1 January 2013, there has been a strong growth in the use of data on the Map Supply, especially among private companies. SDFE has compiled an

analysis (January 2020) which shows that it has resulted in significant social value creation in the private sector. The analysis shows that companies using SDFE's data had a GDP contribution of \$ 1 billion. DKK in the last financial year, compared with similar companies that do not use SDFE's data. In addition, the analysis shows that since the release of data, the accumulated GDP gain is just under DKK 3 billion. High-growth companies that use SDFE's data are typically consulting engineering or IT companies. The analysis was made by comparing the GDP contribution of companies using geodata with a control group composed of similar companies that do not use geodata for the period 2010-2017. The companies that use SDFE's data are identified in the Map Supply's user information, which has been linked to accounting data from Statistics Denmark.

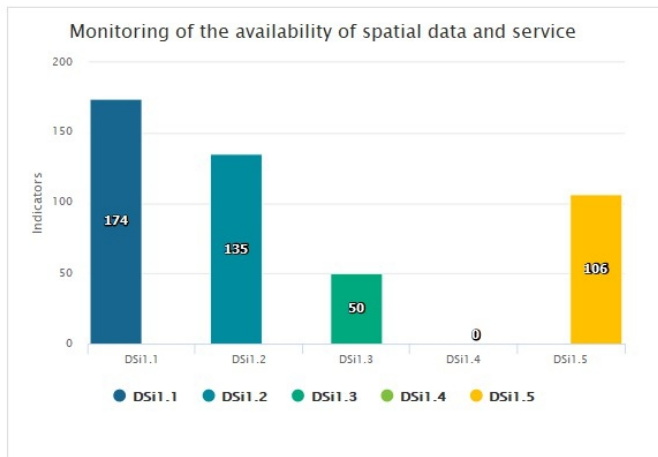
Key facts and figures

Denmark

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

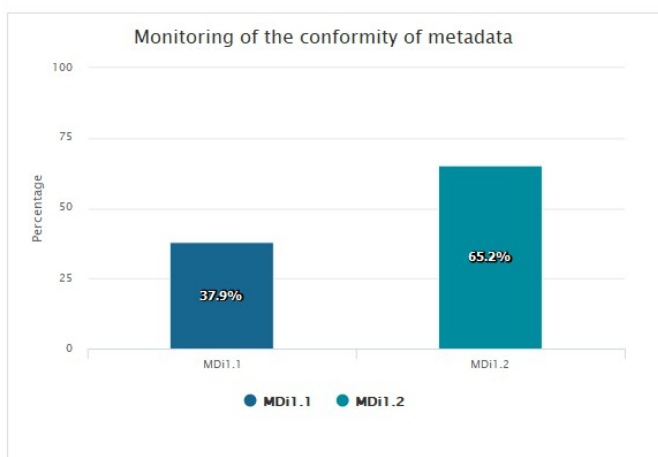
Graphs generated with data taken from: https://inspire-geoportal.ec.europa.eu/mr2019_details.html?country=dk

The date of harvest metadata: 16/12/2019



Legend

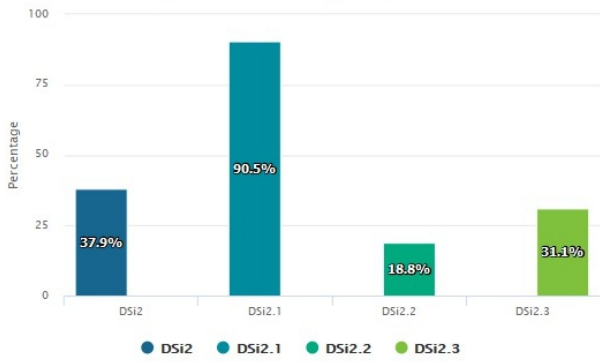
Indicator	Definition
DSi1.1	The number of spatial data sets for which metadata exist
DSi1.2	The number of spatial data services for which metadata exist
DSi1.3	The number of spatial data sets for which the metadata contains one or more keywords from a register provided by the Commission indicating that 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

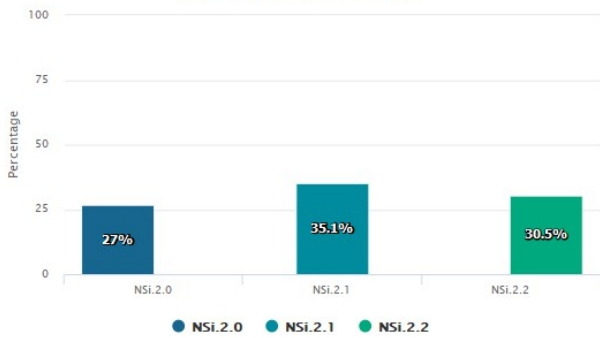
Monitoring of the conformity of spatial data sets



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

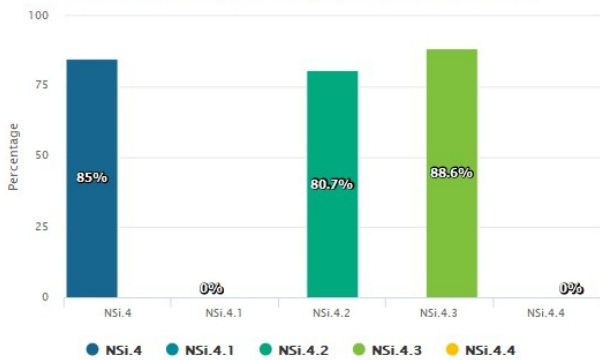
Monitoring of the accessibility of spatial data sets through view and download services



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