

Status of implementation of the INSPIRE Directive - 2016 Country Fiches

COUNTRY FICHE Malta



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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 DECISION regarding INSPIRE monitoring and reporting on the 5th of June 2009.

This country fiche highlights the progress of Malta 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

1. State of Play

A high-level view on the governance, use and impact of the INSPIRE Directive in Malta. More detailed information is available on the INSPIRE knowledge base.

The content of the chapter is tagged according to 5 criteria of better regulation:

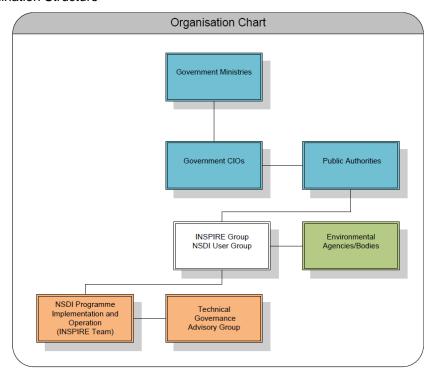
- **[Effectiveness]** How successful has the INSPIRE implementation been in achieving, progressing towards its objectives; progress made, gaps, what factors have influenced or why it has not yet been achieved regarding availability of services, data interoperability, sharing, data policy obstacles
- [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

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Coordination Structure



Progress

- o MITA co-ordinates the implementation of the SDI programme. Through the Technical Governance Advisory group, it provides advisory services to the INSPIRE Team. The INSPIRE Team, which falls within in MITA, is a multi-disciplinary team that provides the resources for the programme. The INSPIRE Team also has the main co-ordination function that brings together the members of the INSPIRE Group. The INSPIRE Group is a multidisciplinary group which is made up of representatives from various entities including public authorities (data owners and data providers) and data consumers.
- MITA, being one of the largest ICT agencies in Malta, has established a very good relationship
 with the private sector. Apart from this, MITA has a strong relation with other organisations as it
 is actively engage to contribute in the implementation of EC directives, such as the re-use of
 Public Service Information Directive, and national strategies. [Effectiveness]

1.2 Functioning and coordination of the infrastructure

- The Malta Spatial Data Infrastructure (MSDI), found at https://msdi.data.gov.mt, is a portal that offers web services to the general public, public service and public sector organisations.
- A drastic improvement was achieved in data sharing with the introduction of the MSDI, when
 compared to the previous situation where there was no spatial data infrastructure. The MSDI
 also acts as a common infrastructure that provides facilities for public authorities that do not
 have the infrastructure to share spatial data. [Effectiveness]
- The MSDI makes use of the eGovernment's eForms platform workflow to process requests for downloads of datasets, metadata and view urls. [Relevance]
- Data sharing awareness was also performed through information sessions to public authorities and presentations to senior management within the Government of Malta.
- To promote the use of spatial dataset, the INSPIRE team participated in the MITA mobile apps start-up initiative.
- Connection to the MSDI has been ensured with the EC INSPIRE geoportal and access to the infrastructure, datasets and metadata is available through the EC geoportal. [EU-added value]

1.3 Usage of the infrastructure for spatial information

The use of the INSPIRE infrastructure and its corresponding datasets, enabled Malta to obtain a clear picture of its available spatial data and identify gaps to ensure a complete

spatial infrastructure. It has also brought together a network of data providers with the aim of streamlining spatial requirements in the creation of new data. [Relevance]

1.4 Data Sharing Arrangements

- In order to have a common approach to data sharing agreements, MITA has established a set
 of data sharing guidelines to all government entities which serves as a common guide when
 creating agreements for data sharing. The guidelines are based on "INSPIRE Guidelines on
 the Regulation on access", "INSPIRE Good practice in data and service sharing".
 [Coherence]
- All of the current downloadable and viewable datasets within the Malta INSPIRE Geoportal (MSDI) are available at no cost.

1.5 Costs and Benefits

- The estimated costs, covers the period January 2013-December 2015 and are divided on IT infrastructure costs € 13,800 and effort costs € 152,950. The effort cost includes an aggregation of the efforts used related to Metadata, Network service, Monitoring and reporting and Coordination and horizontal measures.
- The are many benefits identified from the implementation of the INSPIRE Directive that have been identified [Efficiency]

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.

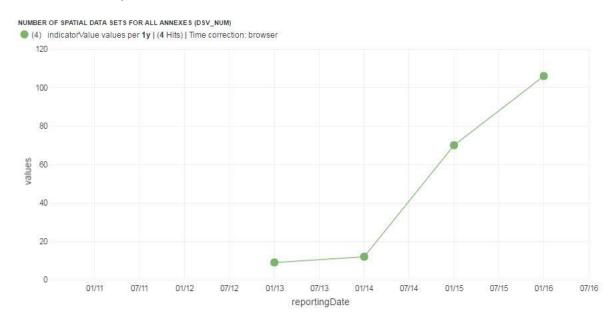
The key facts and figures presented in this country fiche are based on the information provided by Malta on the <u>INSPIRE dashboard</u>. **The provided statistics** is not reflecting the data available on <u>INSPIRE geoportal</u>. The INSPIRE geoportal is updated on a regular and ongoing basis, whilst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

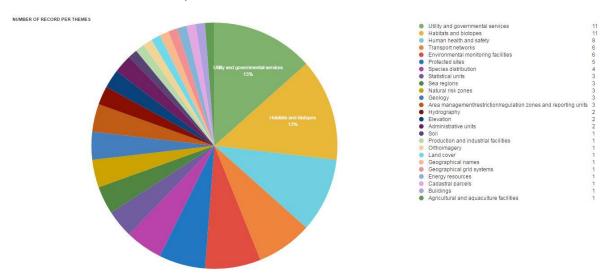
2.1. Identification of spatial data with relevance to the environment (step 1)

a. Evolution of the data offering

DSv_Num: number of spatial data sets for all Annexes

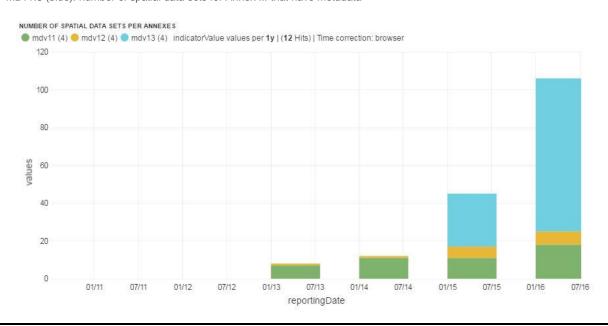


b. Data sets made available per INSPIRE theme in 2015



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

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

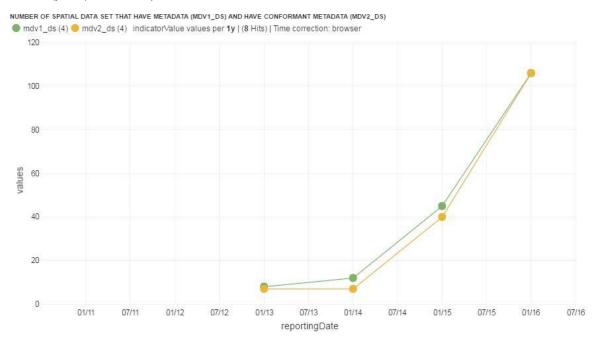
Malta has identified a total of 106 spatial data sets with relation to the themes listed in the INSPIRE annexes.

Additional spatial data sets have been identified in 2015, mainly under Annex III data themes. A lot of relevant spatial data sets have already been identified for the different data themes. Malta 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)

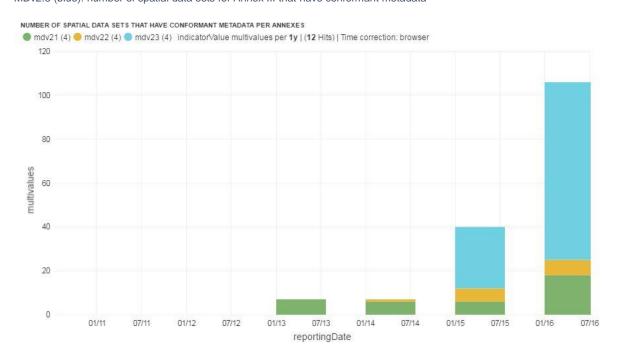
a. Evolution of documented data and conformity of the documentation

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

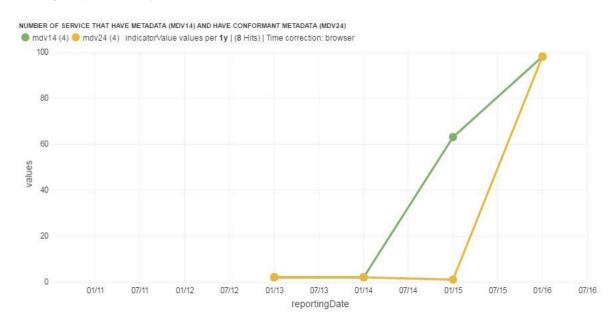
MDv2.1 (green): number of spatial data sets for Annex I that have conformant metadata MDv2.2 (yellow): number of spatial data sets for Annex II that have conformant metadata MDv2.3 (blue): number of spatial data sets for Annex III that have conformant metadata



c. Evolution of documented services and conformity of the documentation

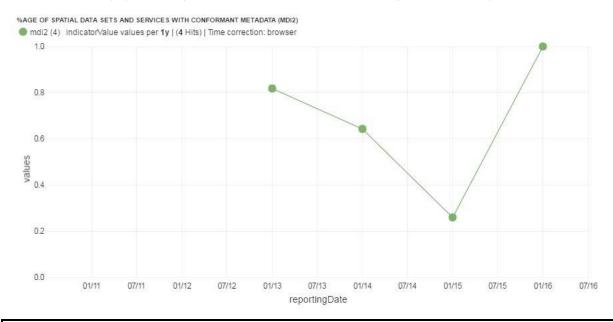
MDv1.4 (green): number of spatial data services that have metadata

MDv2.4 (yellow): 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:

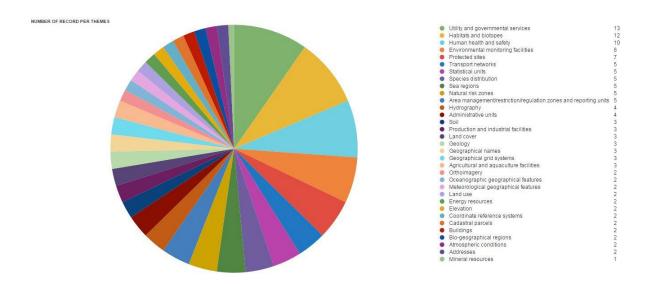
Malta has documented and published metadata through a digital discovery service for 100% (106) of the identified spatial data sets and 100% (98) of the digital services. Overall, 100% of the metadata conforms to the INSPIRE metadata specifications.

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.



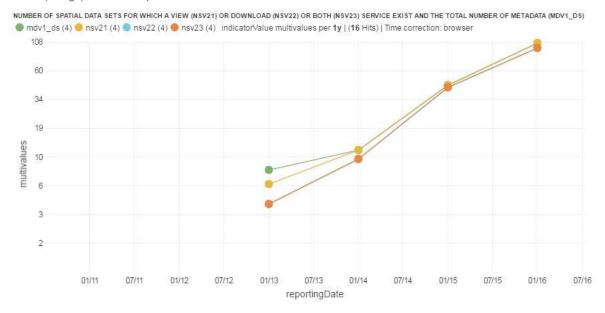
b. Evolution of spatial data made accessible through digital services

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

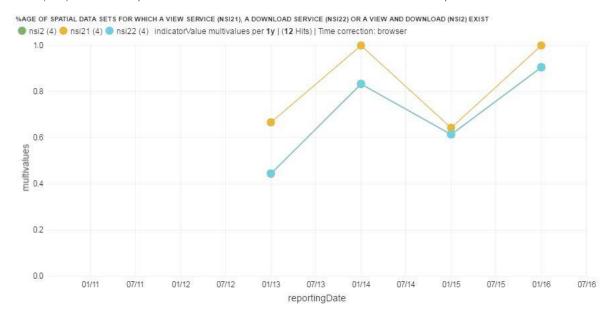
NSv2.2 (blue): number of spatial data sets for which a download service exists

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

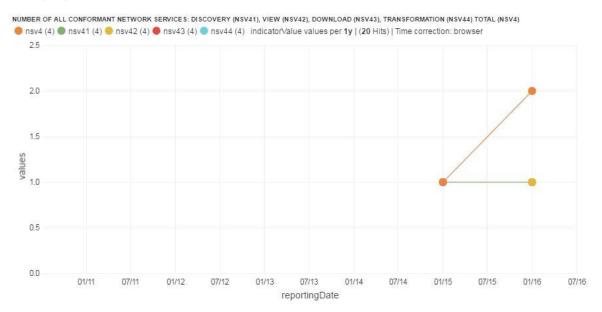
NSv4 (orange): number of all conformant network services

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

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

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

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



Evaluation of progress for step 3:

Malta has:

- 100% of its data sets accessible for viewing through a view service;
- 90,56% of its data sets accessible for download through a download service.

Only 2,04% of available digital services are conform to the INSPIRE network service specifications.

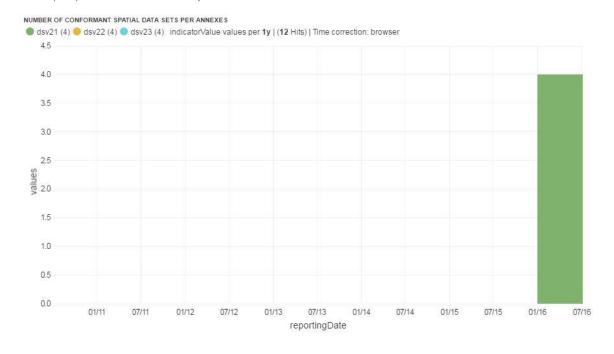
Malta shows that it has built the necessary capacity and competences to make data accessible through digital INSPIRE network services. The technical conformity of the available services with the INSPIRE network service specifications is very poor and should be improved.

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



Evaluation of progress for step 4:

Malta has reported 4 data sets to be conform to the INSPIRE interoperability specifications in 2015.

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

3. Outlook

Malta has critically reviewed their INSPIRE implementation and provided an <u>action plan</u> in 2016 to remediate existing implementation issues and further improve the overall conformity of the implementation. The following actions are set up to directly address previously identified issues:

a. Coordination (1.1; 1.2)

- **Information Meetings** with all Public Authorities on how to adopt the guidelines to facilitate data sharing.
- Continuous awareness about the INSPIRE implementation, regulations and methods to reduce obstacles to sharing of spatial data.

b. Data sharing and exchange (1.4)

- **Identification of obstacles** that reduce the sharing of spatial datasets within Public Authorities.
- Identification of actions and establishment of a plan to rectify any obstacles.

c. Metadata (2.2)

- **Continuous process** on new datasets that will be uploaded on the Malta INSPIRE Geoportal and reflected automatically through the harvesting process on the EC INSPIRE Geoportal
- Continuous effort to collaborate and work further with the EC Joint Research Centre to solve technical issues related to data access.

d. Network services (2.3)

• **Continuous effort** to collaborate and work further with the EC Joint Research Centre to solve technical issues related to data access.

e. Data Interoperability (2.4)

- Continuation of the data harmonisation process, thus ensuring that data is interoperable and therefore easier to share information local and across borders.
- The planned date for Annex 1 datasets to be INSPIRE compliant is Quarter 3 2016.
- Specific datasets from Annex 2 and Annex 3 (around ten datasets) will be harmonised by Quarter 3 2016. Additionally, Malta is working to establish a framework that will facilitate the data compliance exercise of the remaining datasets on the Malta INSPIRE Geoportal.

4. Summary - How is Country doing?

INSPIRE key obligation	Overall implementation status and trend	Outlook	<u>Dashboard Legend</u> Implementation Status:
Ensure effective coordination	⊕7	0	implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily.
Data sharing without obstacles	97	0	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	⊕7	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.	⊕→	0	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.

Malta 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. In general spatial data is made available to public administrations and the public at no cost. However there are some exceptions where a fee is charged, such as for the Malta base map. Malta has no common license model; data—sharing is promoted and coordinated through national data-sharing guidelines.

Assessments of monitoring reports issued by Malta and the spatial information that Malta 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. 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.

Suggested action

- Critically review the effectiveness of Malta's data policies and amend them, taking good practices into consideration.
- 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.