



INSPIRE
Infrastructure for Spatial Information in Europe

Member State Report: SLOVENIA

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Table of Contents

INSPIRE	1
Infrastructure for Spatial Information in Europe.....	1
Member State Report: SLOVENIA	1
Table of Contents	2
1 INSPIRE Reporting – Overview of requirements	3
2 How to use this template	3
3 Executive summary	5
4 Abbreviations and Acronyms	5
5 Introduction.....	5
6 Co-ordination and quality assurance (Art. 12)	6
6.1 Coordination (Art. 12.1.).....	6
6.1.1 Member State contact point.....	6
6.1.2 The coordination structure	6
6.1.3 Comments on the monitoring and reporting process.....	9
6.2 Quality Assurance (Art. 12.2.).....	9
6.2.1 Quality assurance procedures	9
6.2.2 Analysis of quality assurance problems	9
6.2.3 Measures taken to improve the quality assurance	10
6.2.4 Quality certification mechanisms	10
7 Functioning and coordination of the infrastructure (Art. 13).....	11
7.1 General overview description of the SDI.....	11
7.2 INSPIRE Stakeholders.....	13
7.3 Role of the various stakeholders.....	13
7.4 Measures taken to facilitate sharing	14
7.5 Stakeholder cooperation	15
7.6 Access to services through the INSPIRE Geoportal.....	15
8 Usage of the infrastructure for spatial information (Art.14)	17
8.1 Use of spatial data services in the SDI	17
8.2 Use of the spatial datasets.....	17
8.3 Use of the SDI by the general public	20
8.4 Cross-border usage	20
8.5 Use of transformation services	20
9 Data sharing arrangements (Art.15).....	21
9.1 Data sharing arrangements between public authorities.....	21
9.2 Data sharing arrangements between public authorities and Community institutions and bodies.....	21
9.3 Barriers to the sharing and the actions taken to overcome them	21
10 Cost / Benefit aspects (Art.16).....	22
10.1 Costs resulting from implementing INSPIRE Directive	22
10.2 Benefits observed.....	22
11 Conclusions	24
12 Annexes.....	25
12.1 List of organisations – names and contact details Annexes	25
12.2 List of references for the compilation of the report.....	26

1 INSPIRE Reporting – Overview of requirements

There are five topics addressed in the Reporting chapter of the IR:

1. Organisation, co-ordination and quality assurance

The first part of this section is concerned with the way in which the contact point and co-ordinating structure for the infrastructure for spatial information are organised – the body responsible, its associated co-ordinating structure and some information about how this works. The second part offers the MS the opportunity to report on quality assurance processes within the infrastructure for spatial information (as required by Art 21 of the Directive).

2. Contribution to the functioning and coordination of the infrastructure

The second section asks for information about the stakeholders involved in the infrastructure for spatial information – including a description of their roles, how they co-operate, how they share data/services and how access is made to services via the INSPIRE geo-portal.

3. Usage of the infrastructure for spatial information

Having some or all of the various components of the infrastructure for spatial information in place is important, but equally important is if, or how much, the infrastructure is being used. This part of the report is intended to give MS the opportunity to comment and explain the results of the indicators on the usage of the different services, and to describe how spatial data and services are being used by public bodies and if possible (because it is recognised that this is difficult to observe) how they are being used by members of the general public. Because of the environmental emphasis of the Directive MS are particularly encouraged to find and describe examples of use within the field of environmental policy. The report should also describe examples of cross-border usage, efforts to improve cross-border consistency and examples of the use of transformation services.

4. Data sharing arrangements

Chapter 5 of the INSPIRE Directive is concerned with data sharing. It has not been possible to derive adequate indicators to monitor data sharing – the subject does not lend itself to quantitative methods in a way that would provide meaningful output. It is a major part of the Directive however and so this Chapter is dealt with, in terms of monitoring and reporting, by asking MS to describe data sharing arrangements in their 3 yearly reports. MS are required to provide an “overview” of data sharing arrangements i.e. not all such agreements have to be listed and described (which would be very difficult and extremely onerous) – but MS are encouraged to provide sufficient description to enable readers to understand the main type or types of agreement that are used – both for sharing of data between public bodies in the MS and between those public bodies and the institutions of the EU. An important section also required is a description of known barriers that may be inhibiting the sharing of spatial data and services, and what steps the MS are taking to overcome those barriers.

5. Cost and benefit aspects

Finally, the Directive requires MS to quantify the costs and benefits involved in the establishment and maintenance of the infrastructure for spatial information *that are directly attributable to the implementation of the Directive*. The report should attempt to estimate the costs and to provide examples of benefits as described in the IR. As with other aspects of the report MS are responsible for deciding the depth/level of reporting that they find appropriate to satisfy the IR and to provide a suitable level of information for stakeholders.

2 How to use this template

This template provides a structure Member States can use to collect and transmit the reporting information to the EC.

This template mainly reflects the list of elements required by the Commission Decision 2009/442/EC on monitoring and reporting. These are the mandatory elements. For every chapter the relevant article of the implementing rules on monitoring and reporting will be reported.

Also some optional features, not strictly required by the relevant legislation, are included. These features can either contain a suggestion on what elements can be grouped under a certain topic foreseen by the legislation or they can contain additional elements that enhance the readability of the document. These features are optional.

You have full rights to deliver this report in your own language, we will then translate it internally. Of course if the report will be already in English, or accompanied by its English translation, that will be welcome.

Disclaimer: This document will be publicly available as a 'non-paper', as it does not represent an official position of the Commission, and as such can not be invoked in the context of legal procedures.

3 Executive summary

4 Abbreviations and Acronyms

INSPIRE Directive	Directive 2007/2/EC
MS	Member State
SDI	Spatial Data Infrastructure
ISI	Infrastructure for Spatial Informations
MESP	Ministry of the Environment and Spatial Planning
GURS	Surveying and Mapping Authority of the Republic of Slovenia
ARSO	Environmental Agency of the Republic of Slovenia
MAFF	Ministry of Agriculture, Forestry and Food
MH	Ministry of Health
Mol	Ministry of the Interior
MoE	Ministry of the Economy

5 Introduction

- **Background**

In this document are collected data about current situations in Slovenia regarding national spatial data infrastructure. In this report you could find details about Slovenian contact point and coordinating structure supporting the contact point, description of the relationship with third parties and an overview of the working practices and procedures of the coordinating body. There are also some information about quality assurance procedures, including the maintenance of the infrastructure for spatial information and analysis of quality assurance problems related to the development of the infrastructure for spatial information.

Directive 2007/2/EC requires Member States to monitor the implementation and use of their infrastructures for spatial information and to report on the implementation of that Directive. In order to ensure a coherent approach to such monitoring and reporting, Slovenia was established a list of the spatial data sets and spatial data services corresponding to the themes listed in Annexes I, II and III to Directive 2007/2/EC, grouped by theme and Annex, and the network services referred to in Article 11(1) of Directive 2007/2/EC, grouped by service type.

- **Method used** to compile the report

Work method was a questionnaire and interviews with mayor stakeholders in Slovenia.

6 Co-ordination and quality assurance (Art. 12)

6.1 Coordination (Art. 12.1.)

6.1.1 Member State contact point

Art. 12.1. (a) the name, contact information, role and responsibilities of the Member State contact point;

The Infrastructure for Spatial Information Act (Official Gazette of RS, No. 8/2010, hereinafter, the ISI Act), which transposed the Directive 2007/2/EC of the European Parliament and of the Council establishing an Infrastructure for Spatial Information in the European Community (INSPIRE), determines a national contact point for contacting the European Commission regarding the INSPIRE Directive and for efficient implementation of the infrastructure for spatial information.

In addition, the ISI Act specifies that the tasks of the national contact point shall be implemented by the ministry responsible for land survey, which in this case means the Ministry of the Environment and Spatial Planning and the Surveying and Mapping Authority of the Republic of Slovenia as the body affiliated to the Ministry.

Name and contact information

Member State Contact Point	
Name of the public authority	Ministry of the Environment and Spatial Planning, Surveying and Mapping Authority of the Republic of Slovenia
Contact information:	
Mailing address	Zemljemerska ulica 12, LJUBLJANA
Telephone number	+386 1 478 48 00
Telefax number	+386 1 478 4909
Email address	Pisarna.gu@gov.si
Organisation's website URL	http://www.gu.gov.si/
Contact person (if available)	Tomaž Petek
Telephone number	+1 478 4903
Email address	Tomaz.petek@gov.si
Contact person - substitute (if available)	Mag. Irena Ažman
Telephone number	+386 478 4804
Email address	Irena.azman@gov.si

6.1.2 The coordination structure

Art. 12.1.

- (b) the name, contact information, role and responsibilities, organisation chart of the coordinating structure supporting the contact point of the Member State
- (c) a description of the relationship with third parties;
- (d) an overview of the working practices and procedures of the coordinating body;
- (e) comments on the monitoring and reporting process.

The tasks of the national contact point are determined by the Infrastructure for Spatial Information Act (Official Gazette of RS, No. 08/2010), which specifies in Article 18 that the national contact point shall perform the following tasks:

- managing and maintaining the list of spatial data sets;
- managing the detailed descriptions of the spatial data themes;
- managing the spatial information geo-portal;
- managing and maintaining the metadata information system;
- providing the interoperability of the spatial data sets and the services related thereto;
- preparing the proposals of operational programmes of the Government under Article 20 of this Act;
- executing the implementing rules of the INSPIRE Directive in Slovenia;
- preparing and supplementing the infrastructure for spatial information strategy;
- preparing the programme of activities and measures to meet the requirements for establishing the infrastructure for spatial information;
- preparing the reports on providing the infrastructure for spatial information for the European Commission.

Name and contact information

Coordinating structure supporting the MSCP	
Name of the coordination structure	
Contact information:	
Mailing address	
Telephone number	
Telefax number	
Email address	
Organisation's website URL	
Contact person (if available)	
Telephone number	
Email address	
Contact person - substitute (if available)	
Telephone number	
Email address	
Date and period of mandate	

The coordination group has not been yet appointed.

Role and responsibilities

The coordination group responsible for cooperation of all managers of spatial data sets and services and the users thereof has not been yet appointed in Slovenia. Since the participation of public authorities outside the Ministry of the Environment and Spatial Planning will have to be provided in implementing the tasks, the Slovenian Government will establish an appropriate coordination structure in Slovenia by establishing **an intersectoral coordination group** (or the programme council for geoinformatics) as a strategic body for directing the measures for sharing the spatial data sets and the services related thereto, as well as for implementing the INSPIRE Directive in practice. Such a coordination group will advise and offer help to individual public authorities in preparing the legal acts in the field of regulating and managing spatial data sets and their usage. In addition to the Ministry of the Environment and Spatial Planning, the following ministries will participate as well:

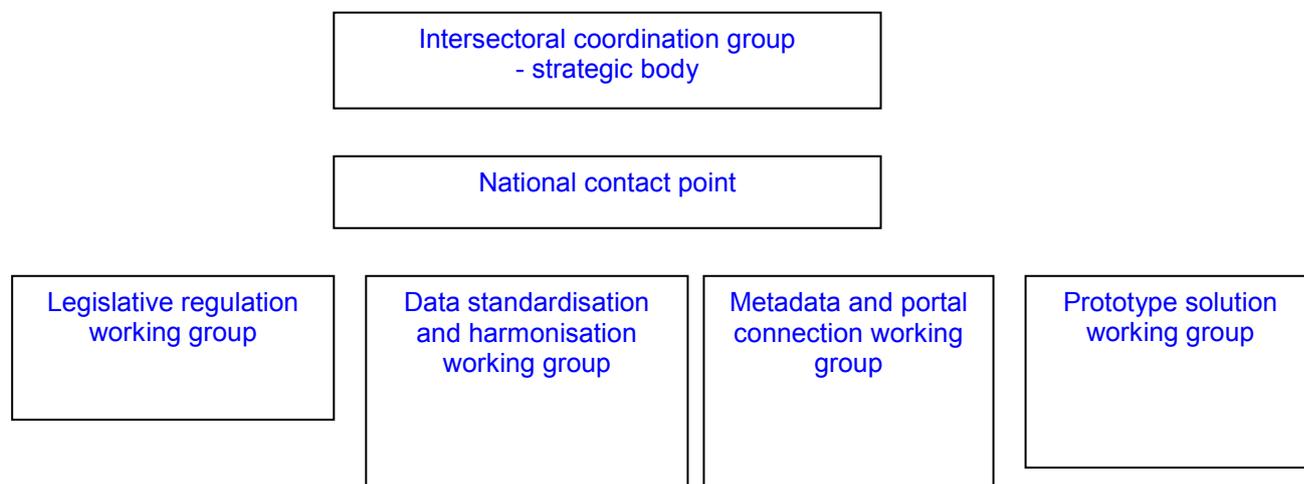
- Ministry of Transport,
- Ministry of Defence – ACPDR,
- Ministry of Agriculture, Forestry and Food,

- Ministry of Public Administration,
- Ministry of Health,
- Statistical Office of the Republic of Slovenia,
- Ministry of Culture,
- Ministry of Higher Education, Science and Technology,
- Ministry of the Interior,
- Ministry of the Economy,
- Ministry of Education and Sport.

If needed, the group will also invite the representatives of other ministries, whose field of work will be related to the discussed theme, to participate in its activities. The administrative support for the activities of the coordination group will be provided by the national contact point.

After being appointed, the coordination group will perform the tasks of the strategic body responsible for directing the measures for sharing the spatial data sets and the services related thereto, as well as for implementing the INSPIRE Directive in practice. Such a coordination group will advise and offer help to individual public authorities managing the spatial data sets and the services related thereto, so that the data and services will comply with the provisions of the ISI Act and the INSPIRE Directive. It will direct their work in the preparation of the legal acts in the field of regulating and managing spatial data sets and their usage.

Organisation chart



Relation with third parties

At the time of preparing the report, there are no practical examples of operation of the coordination group because it has not been yet appointed.

Overview of working practices and procedures

Strategically important long-term directions and goals of the Slovenian Ministry of the Environment and Spatial Planning concerning environmental protection are aimed at preventing or mitigating adverse impacts presenting a threat to sustainable development. The Resolution on the National Environmental Protection Programme in Slovenia emphasises the following four key areas: climate change, nature and biodiversity, quality of life, and waste and industrial pollution. Slovenia may already boast with quite a few successful actions in the regional field of environmental protection. Establishing the cooperation in the Sava River Basin should be pointed out while taking into consideration the integrated use of water resources, in particular the use of water for hydroelectric energy and improving the navigability of the Sava River. The vision of joint management of groundwater of the Dinaric-Mediterranean region and the vision of joint management of the Adriatic subregion should also be mentioned.

The management of all mentioned key areas will be of even higher quality, as well as the decision-making related thereto, when the appropriate information and data infrastructure will be fully established. This field is regulated by the Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) and the ISI Act (Official Gazette of RS, No. 08/2010).

6.1.3 Comments on the monitoring and reporting process

Slovenia does not have any comments on the established monitoring and reporting system.

6.2 Quality Assurance (Art. 12.2.)

6.2.1 Quality assurance procedures

Art. 12.2. (a) a description of quality assurance procedures, including the maintenance of the infrastructure for spatial information

At the time of preparing this report, it was determined that particular managers of spatial data sets provide quality assurance in accordance with the internal rules and instructions established in the past years. The Environmental Agency of the Republic of Slovenia has the most specified spatial data quality assurance, which determined detailed procedures for every spatial data set and its every maintenance. The Surveying and Mapping Authority of the Republic of Slovenia also determined the quality assurance procedures for its registers based on the internal instructions. Few years ago, it also implemented the control of positional accuracy of GPS measurements used in maintaining the data of the land and property register and in creating the orthoimagery. Additional quality control is provided by using and exchanging the data and the interconnection of data in various registers, when a number of discrepancies are determined which have to be harmonised and eliminated.

6.2.2 Analysis of quality assurance problems

Art. 12.2. (b) an analysis of quality assurance problems related to the development of the infrastructure for spatial information, taking into account the general and specific indicators.

The most common problem in spatial information quality assurance is precisely the diversity of norms and procedures established for this purpose by particular managers. Therefore, the quality between particular spatial data sets is sometimes difficult to compare. At the time of preparing this report, no other problems with quality assurance in establishing the infrastructure for spatial information, encountered by the spatial data managers, were identified.

6.2.3 Measures taken to improve the quality assurance

Art. 12.2. (c) a description of the measures taken to improve the quality assurance of the infrastructure.

At the time of preparing this report, no measures for improving quality assurance adopted by the spatial data set managers were identified.

6.2.4 Quality certification mechanisms

Art. 12.2. (d) where a certification mechanism has been established, a description of that mechanism.

At the time of preparing this report, only one certification mechanism for quality assurance of spatial data sets was identified, namely, at the Environmental Agency of the Republic of Slovenia, which has implemented ISO 9001 certificate for its operating activities.

7 Functioning and coordination of the infrastructure (Art.13)

7.1 General overview description of the SDI

- Vision / policy / strategy (where applicable, reference could be given to existing documents, as well as a short summary within the report)

The Slovenian Government submitted the text of the ISI Act to the National Assembly at the end of November 2009. The National Assembly adopted the Act on 26 January 2010. The Act determines the tasks related to the establishment and operation of the metadata system, service network for accessing and using the data, and the coordination of establishing the infrastructure for spatial information (ISI) and its usage. It also determines the tasks of particular public entities responsible for establishing, managing and using the spatial data and services, which have to be provided as an integral part of the Slovenian and, thus, European infrastructure for spatial information.

Until the adoption of the mentioned Act, the infrastructure for spatial information, as it is known in some other European states, was not yet established operationally in Slovenia. Nevertheless, some elements of the infrastructure for spatial information already existed in Slovenia, namely, the metadata, the spatial data sets and the services related thereto, which have been available in digital form for over 10 years, there are also particular network services and technologies, and the individual users have been concluding agreements on data sharing, accessing and using. It can be determined that a number of elements of this infrastructure already exist in Slovenia. Namely, the legal regulation promoted the exchange and rational use of spatial information because this field has been mentioned in many regulations and documents such as, for example:

- Act on the Access to Information of Public Character,
- Electronic Commerce and Electronic Signature Act,
- Copyright and Related Rights Act,
- Spatial Planning Act,
- real estate legislation.

The field of infrastructure for spatial information is also limited and outlined in some national strategic documents such as, for example:

- Slovenia's Development Strategy (www.svrez.gov.si),
- e-commerce strategy in the public administration bodies and the action plan for e-commerce in the public administration (www.mju.gov.si),
- e-Government Strategy of the Republic of Slovenia (www.mju.gov.si).

The Surveying and Mapping Authority established a uniform metadata system available to the users on the Prostor portal: <http://prostor.gov.si>. It contains description of over 100 data sets, and particularly the metadata descriptions of geodetic data are regularly updated. Three description levels and search by criteria (spatial extent, time frame, data set managers, etc.) are available to the users. The

metadata are managed by the Environmental Agency of the Republic of Slovenia and some other data set managers. The metadata portal <http://gis.arso.gov.si/mpportal/> of the Environmental Agency of the Republic of Slovenia contains a little less than 100 data sets. It enables searching by key words, the root, or browsing by content. Two description levels and the connection for accessing or downloading the data are available. In addition to the mentioned institutions, there are many other data set managers in Slovenia with established metadata descriptions for their spatial information sets, as well as publicly available software solutions which enable searching by metadata and accessing the spatial data. They were developed at the Statistical Office of the RS, the Ministry of Agriculture, Forestry and Food, the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, the Geological Survey of Slovenia, the Institute of the Republic of Slovenia for Nature Conservation, and some other public authorities.

The Surveying and Mapping Authority of the Republic of Slovenia provides to the users the following options of accessing the data:

- Map Viewer, which enables searching and displaying the location based on an address or geographical name (<http://prostor.gov.si/iokno/iokno.jsp>),
- public access to real estate data (<http://prostor.gov.si/emoneta/index.jsp>),
- Central Evidence of Spatial Data (http://prostor.gov.si/cepp_ang/index.jsp),
- personal access to one's own data for real estate owners,
- public access to the Real Estate Market Register,
- access to geodetic data for registered users, which also enables access to personal data.

The Environmental Agency enables the users to access, browse and download environmental data (noise chart, measuring network, fields of nature, water, climate change, air, environment and seismology):

- access to environmental data via the Environmental Atlas and the Weather Portal
 - o Environmental Atlas (<http://gis.arso.gov.si/atlasokolja/>)
 - o Weather Portal (<http://meteo.arso.gov.si/>)
- public access to the issued water permits, archived hydrological data, and download of environmental data
- data from the national monitoring station network of
 - o hydrology: (<http://www.arso.gov.si/vode/podatki/>)
 - o meteorology: (<http://www.arso.gov.si/vreme/napovedi%20in%20podatki/>)
 - o seismology: (<http://www.arso.gov.si/potresi/obvestila%20o%20potresih/>)
 - o metadata portal (<http://gis.arso.gov.si/mpportal/>)
 - o data sources on the environment (<http://kpv.arso.gov.si/>)

The data download services have been in development for several years now. This way, the Environmental Agency of the Republic of Slovenia and the Surveying and Mapping Authority of the Republic of Slovenia provide access to data to their users. Particularly the web feature services are being developed, which enable downloading the spatial data sets and their parts to the users in a standardised manner. WFSs are used by many public authorities for accessing the data of the Land Cadastre, Buildings Cadastre, Register of Spatial Units, the Aggregate Economic Cadastre of Public Infrastructure, and others. With the adoption of the Infrastructure for Spatial

Information Act all formal conditions were provided for implementing the task and the operational establishment of the infrastructure for spatial information in practice.

The access service is also provided by the private sector. Geopedia and Bioportal are one of the largest. In addition, there are also systems for accessing the spatial data for the needs of the municipalities. Among the largest systems providing such service to municipalities are the Spatial Information System of Municipalities (PISO) and the Internet system – iObčina. Larger municipalities, such as Ljubljana, Maribor and Koper, developed their own systems.

7.2 INSPIRE Stakeholders

Art. 13 (a) an overview of the various stakeholders contributing to the implementation of the infrastructure for spatial information according to the following typology: users, data producers, service providers, coordinating bodies

Stakeholders contributing to the implementation of the SDI could be classified according to the following typology: users, data producers, service providers, coordinating bodies)

Currently, over 55 spatial data sets are included in the list of data sets.

The key providers are in particular the following public authorities:

- Ministry of the Environment and Spatial Planning (www.mop.gov.si) and the bodies affiliated to the Ministry:
 - Surveying and Mapping Authority of the Republic of Slovenia (www.gu.gov.si),
 - Environmental Agency of the Republic of Slovenia (www.arso.gov.si),
- Ministry of Public Administration (www.mju.gov.si),
- Ministry of Transport (www.mzp.gov.si),
- Ministry of Agriculture, Forestry and Food (www.mkgp.gov.si),
- Ministry of Defence (www.mors.si) and the body affiliated to the Ministry:
 - Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (www.sos112.si),
- Ministry of Culture (www.mk.gov.si),
- Ministry of the Economy (www.mg.gov.si),
- Ministry of Health (www.mz.gov.si),
- Ministry of the Interior (www.mnz.gov.si),
- Slovenia Forest Service (www.zgs.si),
- Geological Survey of Slovenia (www.geo-zs.si),
- Land Survey Institute of Slovenia (www.geo-zs.si),
- Biotechnical Faculty (www.bf.uni-lj.si),
- Fisheries Research Institute of Slovenia (www.zzrs.si),
- and other ministries and local communities.

7.3 Role of the various stakeholders

Art. 13 (b) a description of the role of the various stakeholders in the development and maintenance of the infrastructure for spatial information, including their role in the coordination of tasks, in the provision of data and metadata, and in the management, development and hosting of services

Currently, for the most part, the managers of spatial data sets and services are included in establishing the joint infrastructure based on spatial data. The users of this infrastructure are a little less organised, which has to be improved in the future

by implementing an appropriate coordination form as a platform for exchanging opinions and needs between all stakeholders.

7.4 Measures taken to facilitate sharing

Art. 13 (c) a general description of the main measures taken to facilitate the sharing of spatial data sets and services between public authorities and a description of how sharing has improved as a result

Thus far, appropriate support was provided for including the ISI among the priorities of the Slovenian public administration and including the ISI in the e-commerce strategy in state administration, the e-government strategy, and other national strategic development documents.

The limited access to the spatial data has to be regulated and re-examined and, thus, the opening of the market itself and providing free access to information of public character defined. In addition to the public authorities, the access to the products must be provided to other users who require them as well, which can be achieved as soon as possible by establishing the market for spatial data and products. The logic of such a business model must be followed because the public administration provides basic data, while the private sector is the provider of added value of these data. Of course, this cannot be achieved unless the sources of long-term and stable financing are provided. First, participation of the public administration is foreseen, and later a stronger private support.

For an appropriate coordination of work, a clear organisational structure of all participants must be established. The appointment of a national contact point is foreseen, which is defined in the ISI Act. Operational work requires establishing an ISI project group and suitable administrative support. In addition, the implementation and organisation of promotional activities and including a wider circle of participants in the organisation of joint projects are planned. In order to find answers to a particular more complex technological question, individual working groups are formed. All listed tasks are already being implemented with the participation and engagement of the national land surveying service. Based on the experience abroad, the national land surveying service is most often responsible for organisational and technical aspect of establishing the ISI and supporting the processes in the field of data and services, while the private sector, to the fullest extent possible, participates in the processes of standardisation and harmonisation of data during the capture and maintenance, as well as in providing the added-value services, which can be achieved in our country, too.

In addition to other elements, the metadata, which have to be prepared by the end of 2010, must also include the key words relating to a data set or service. We believe that one of these key words must come from the GEMET environmental vocabulary. It is essential that this vocabulary be updated and all terms relating to the data sets and services entered into it. The vocabulary, such as it is, is limited in use or even useless for land surveying. It contains no land surveying terms such as, for example, parcel. It is essential that the detailed criteria and conditions for determining the fee for data and service sharing by public authorities of other countries or the European Community institutions and bodies be established, and the bill of costs for using the network services and the bill of costs for data and service sharing by the public authorities of other countries or the European Community institutions and bodies prepared.

7.5 Stakeholder cooperation

Art.13 (d) a description of how stakeholders cooperate

This could for example include the description of:

- Written framework for cooperation
- Working groups (list of active working groups)
- News letters, other publications (references)
- Description of the National geoportal (including URL), and where relevant regional or thematic portals

Even though a formal coordination structure has not yet been established in Slovenia in the form of an intersectoral working body, cooperation between the managers of spatial data sets has been established for many years; however, mutual cooperation has to be improved. Individual public authorities were obliged to exchange the spatial data sets and provide access to a particular data set which they manage, for executing their administrative tasks already based on the existing legal regulation. These obligations are also imposed by the Decree on administrative operations and the General Administrative Procedure Act.

Nevertheless, it still occurs that the data of particular ministries are not connected and are managed in different ways with different software tools. The result is poor interconnectivity of spatial data. Therefore, for providing interoperability, a more formal coordination of data providers and cooperation of all interested parties have to be provided for.

The ISI Act specifies the tasks of the national contact point, which is, inter alia, responsible also for efficient implementation, operation and use of the infrastructure for spatial information. The national contact point also manages the Slovenian geoportal for spatial information, manages and maintains the metadata information system, prepares the infrastructure for spatial information strategy and the programme of activities and measures for its implementation, and prepares the reports on establishing and using the infrastructure for spatial information for the European Commission. In addition, the national contact point also provides the interoperability of spatial data sets and the services related thereto, namely by participating in the harmonisation of regulations in establishing a new data set or upgrading the existing data set. Without doubt, the implementation of the Directive will affect the operations of all public authorities managing and maintaining the data listed in the three Annexes to the Directive.

7.6 Access to services through the INSPIRE Geoportal

Art.13 (e) a description of the access to the services through the Inspire geo-portal, as referred to in Article 15(2) of Directive 2007/2/EC

Currently, the national Geoportal as foreseen by the Infrastructure for Spatial Information Act has not been yet established in Slovenia. It is planned to be established in the second half of this year. The existing spatial data sets and particular web services are already available to the users via various web portals and access points of public authorities. The users may find the data and services on the following websites:

- Geographic information system of the Environmental Agency of the RS (www.gis.arso.gov.si/atlasokolja/) and Weather Portal (<http://meteo.arso.gov.si/>)
 - Metadata system
 - Access to the data – Environmental Atlas and Meteo Portal
 - Data access
- Prostor portal: (www.prostor.si)
 - Metadata system
 - Map Viewer
 - Electronic data access
 - Requesting of data
 - SIGNAL – GNSS network of permanent stations
 - Data on the real estate value and market (Real Estate Market Register)
- *The following private sector portals are also used, such as:*
 - www.geabios.com,
 - www.geoprostor.net,
 - www.geopedia.si,
 - and many others.

8 Usage of the infrastructure for spatial information (Art.14)

8.1 Use of spatial data services in the SDI

Art.14 (a) the use of the spatial data services of the infrastructure for spatial information, taking into account the general and specific indicators

This could include an explanation of how this information was collected, and how it should be interpreted/understood.

At this time, there is no formal systemic use of infrastructure for spatial information in Slovenia, since it has not been yet established as such in practice. Regardless, it can be determined that already today particular elements of the infrastructure for spatial data are available to the users. Primarily, it concerns a joint fast communications network of public authorities (HKOM) established by the Ministry of Public Administration, which has been connecting all public authorities and some other public institutions for many years. In 2006, the Electronic Commerce and Electronic Signature Act enabled the electronic signature, thus, expanding the electronic data exchange even more. On the basis of the Act on the Access to Information of Public Character, every public authority must publish on its website the 'Catalogue of Public Information', which enables the users a more transparent access to the information managed and maintained by a particular public authority. Among these data, spatial information occupies an important position.

By taking into consideration the general and specific indicators, it can be determined that, with regard to the use of services relating to the spatial data of the infrastructure for spatial information, today there are already a number of search and review services in Slovenia, which are not yet in full compliance with the requirements of the INSPIRE Directive.

8.2 Use of the spatial datasets

Art.14 (b) the use of spatial data sets corresponding to the themes listed in Annexes I, II and III to Directive 2007/2/EC by public authorities, with particular attention to good examples in the field of environmental policy

In Slovenia, the majority of spatial data sets corresponding to the themes listed in Annexes I, II and III to the Directive 2007/2/EC were identified by particular managers of the spatial data sets. The attached table contains the list of the data sets, including the managers of the data sets.

No	THEME	DATA SET	MANAGER
GROUP I			
1	1. Coordinate reference systems	Geodetic points	GURS

2	2. Geographical grid system	Grid	Not yet determined
3	3. Geographical names	Register of Geographical Names	GURS
4	4. Spatial units	Register of Spatial Units	GURS
5	5. Addresses	Register of Spatial Units	GURS
6	6. Cadastral parcels	Land Cadastre	GURS
7	7. Transport network	Register of Public Roads	Slovenian Roads Agency and municipalities
7		Aggregate Economic Cadastre of Public Infrastructure	GURS
7		Topographical data	GURS
8	8. Hydrography	Water Cadastre	ARSO
8		Water bodies	ARSO
8		Digital base of watersheds	ARSO
8		System for groundwater data storing and processing	ARSO
8		Topographical data	GURS
8		Water systems, Underground water	Geological survey
9	9. Protected sites	Register of areas of ecological importance	ARSO
9		Register of special protection areas	ARSO
9		Register of natural values	ARSO
9		Register of protected areas	ARSO
GROUP II			
1	1. Digital elevation model	DMV 12.5	GURS
2	2. Land cover	CORINE land cover	ARSO
3	3. Orthoimagery	Orthoimagery	GURS
4	4. Geology	Lithological and Tectonical Chart	Geological Survey
4		Hidrogeological and Geothermal Chart	Geological Survey
GROUP III			
1	1. Statistical units	Register of Spatial Units	GURS
2	2. Buildings	Buildings Cadastre	GURS
2		Register of Spatial Units	GURS
3	3. Soil	Pedological map	MAFF
		Pedological data (1 : 25,000, 1 : 250,000, point layer)	Biotechnical Faculty
4	4. Actual and planned land use	Less-favoured areas	MAFF
2		Land Use Database	MAFF

		Water, built-up and infertile land use database	MESP
4		Land identification system	MAFF
4		Wine-growing units	MAFF
4		Reparcelling register	MAFF
4		Forestry registers and databases	MAFF
4		Cadastre of bee pastures	MAFF
4		National spatial planning documents	MESP – Spatial Planning Directorate
4		Municipal spatial planning documents	Municipalities
5	5. Human health and safety	N/A	MH
5		Air pollution areas	ARSO
5		Noise charts	ARSO
6	6. Utility and governmental services	Consolidatet Cadastre of Public Infrastructure	GURS
6		Small combustion installations	MESP
7	7. Environmental monitoring facilities	Automatic station database	ARSO
		Sampling measuring site for determining water quality	ARSO
8	8. Production and industrial facilities	Water permits	ARSO
9	9. Agricultural and aquaculture facilities	Record of irrigation and drainage systems and equipment	MAFF
9		Fishery cadastre	Fisheries Research Institute
10	10. Population distribution - demography	Central Population Register	Mol
11	11. Area management/restriction/regulation zones and reporting units	Hydrography,	ARSO
11		Aggregate Consolidatet Cadastre of Public Infrastructure	GURS
12	12. Natural risk zones	Earthquakes, seismic risk	ARSO
12		Landslides database and	Geological Survey

12		Gravels database	Geological Survey
13	13. Atmosphere	N/A	ARSO
14	14. Meteorological features	Climate chart about rain, wind, snow, sun and temperature	ARSO
15	15. Oceanographic features	Data about altitude and temperature of the sea	ARSO
16	16. Sea regions	N/A	
17	17. Bio-geographical regions	Bio-geographical regions	ARSO
18	18. Habitats and biotopes	Plant and animal species databases	MESP
19	19. Species distribution	Plant and animal species databases	MESP
20	20. Energy resources	N/A	MoE
21	21. Mineral resources	Locations of mineral resources	Geological Survey

8.3 Use of the SDI by the general public

Art.14 (c) if available, evidence showing the use of the infrastructure for spatial information by the general public

The general public in Slovenia already uses the existing elements of the infrastructure for spatial information under the conditions defined by the Act on the Access to Information of Public Character (Official Gazette of RS, No. 51/2006 - UPB-2) and the Personal Data Protection Act (Official Gazette of RS, No. 94/2007 – UPB-1). Thus, particularly the services of data searching, accessing and downloading are available to the users.

8.4 Cross-border usage

Art.14 (d) examples of cross-border use and efforts made to improve cross-border consistency of spatial data sets corresponding to the themes listed in Annexes I, II and III to Directive 2007/2/EC

Currently, there are no concrete examples of cross-border use of the infrastructure for spatial information recorded. Concluded agreements on data exchange between the networks of permanent GNSS stations are the examples of cross-border use today. The Surveying and Mapping Authority of the Republic of Slovenia, as the manager of the system of permanent GNSS stations called SIGNAL, concluded the agreements on data exchange with all neighbouring countries.

8.5 Use of transformation services

Art.14 (e) how transformation services are used to achieve data interoperability

Currently, there are no examples of using transformation services to achieve data interoperability in Slovenia recorded.

9 Data sharing arrangements (Art.15)

9.1 Data sharing arrangements between public authorities

Art.15 (a) an overview of data sharing arrangements that have been, or are being, created between public authorities

According to the data gathered thus far, the Surveying and Mapping Authority of the Republic of Slovenia has concluded the most data sharing agreements, namely 15. The agreements concern the cooperation in the exchange and use of topographical data and on inter-exchange of data or cooperation in the field of using the geodesic data and requesting geodesic data for the needs of municipalities.

9.2 Data sharing arrangements between public authorities and Community institutions and bodies

Art.15 (b) an overview of data sharing arrangements that have been, or are being, created between public authorities and Community institutions and bodies, including examples of data sharing arrangements for a particular spatial data set

Currently, there are no concrete examples of already concluded data sharing agreements between public authorities and Community bodies in Slovenia recorded.

9.3 Barriers to the sharing and the actions taken to overcome them

Art.15 (c) a list of barriers to the sharing of spatial data sets and services between public authorities and between public authorities and the Community institutions and bodies, as well as a description of the actions which are taken to overcome those barriers

The established infrastructure for spatial information will represent one of the preconditions for sustainable management of natural and constructed sources. To ensure an appropriate sharing of spatial data sets, it is necessary to provide for an efficient cooperation of all participants which, in our opinion, will be one of the hardest tasks. Thus, during the creation of the Directive, the Ministry of the Environment and Spatial Planning actively monitored the process of creating the initiative and establishing and adopting the Directive. Namely, we are aware that the recent global progress in switching from paper data and information to digital data and information has been revealing, for quite some time, thus far unknown possibilities for a change in data accessing, information forwarding and decision-making based on received information at all levels of the society .

Particular spatial data sets are still of unsatisfactory or undefined quality, they are based on privately-owned geographic information systems and unavailable to the public or other users at local, regional, national and international levels. Therefore, the projects, which combine the data from various sources in order to provide the data and tools appropriate for the policy, are often excessively long and expensive.

10 Cost / Benefit aspects (Art.16)

10.1 Costs resulting from implementing INSPIRE Directive

Art.16 (a) an estimate of the costs resulting from the implementation of Directive 2007/2/EC

These costs could be subdivided as follows:

- *metadata*
- *data harmonisation*
- *network services*
- *monitoring and reporting*
- *coordination and horizontal measures*

The Infrastructure for Spatial Information Act determines the legal framework for establishing and functioning of the spatial data infrastructure in Slovenia as an integral part of the European infrastructure. With the Infrastructure for Spatial Information Act, the Ministry of the Environment and Spatial Planning received new obligations connected to the functioning of the spatial data infrastructure, because the Act determines the tasks of the national contact point, as well as the obligations connected to establishing and managing the geo-portal and the metadata information system.

Already during the process of adopting the Act, the proposer of the Act wrote in the explanation to the financial consequences that the required funds for establishing the information system were not yet provided for. Since the transposition of the Directive is an urgent task, the Ministry of the Environment and Spatial Planning will try to implement the tasks at least in the minimum extent, and fully as soon as the planned funds will be provided for. The Government submitted the Act to the parliamentary procedure substantiating that the funds for implementing the tasks determined by the Act will be provided for with the reallocation in accordance with Article 41 of the Public Finance Act, which states that if, after the budget was adopted, new financial obligations arise due to adopting an act or ordinance, the Government shall provide the funds with reallocation. For establishing the metadata information system and the spatial information geo-portal, we estimate that EUR 350,000.00 annually will be required in the years 2010 and 2011. In addition, individual spatial data managers will have to provide for the preparation of the metadata descriptions.

Along with the discussion of the ISI Act, on 9 December 2009 the National Assembly of the Republic of Slovenia adopted an additional decision proposing that the Government examine the initiative that the Operational Programme 'Strengthening Regional Development Potentials' for the period 2007-2013 be amended, so that the construction of the infrastructure for spatial information would be co-financed by the European funds, in addition to the operation of establishing the economic public infrastructure.

10.2 Benefits observed

Art.16 (b) examples of the benefits observed, including examples of the positive effects on policy preparation, implementation, evaluation, examples of improved services to the citizen as well as examples of cross-border cooperation.

Since the field of monitoring the advantages and benefits is not systematically regulated in Slovenia at this time, the advantages and benefits can only be assessed on the basis of experience to date from our country and abroad. Due to a coordinated updating of the data sets and implementing the interoperability, the information solutions will be more rational and the duplication of data and information solutions will be eliminated. The enforcement of the Act in the long-term will reduce the amount of financial resources required for providing spatial data and the related information. Due to the unification of the data sets and the related services, the future management of all data sets will be more rational.

The estimate of the savings relating to finances and personnel will be possible during the preparation of operational programmes adopted by the Slovenian Government on the basis of the Act. The enforcement of the Act will not have any financial consequences for other public financial resources.

11 Conclusions

A great task of completing the establishment of the spatial data infrastructure and determining the coordination method in this field lies ahead of us. In accordance with the detailed specifications brought by the INSPIRE Directive and the ISI Act adopted on the basis thereof, technical details of spatial data sharing have to be defined, while unifying the rules of accessing the spatial data managed by the public authorities in Slovenia and the pricing policy rules related to these data. The Ministry of the Environment and Spatial Planning and the bodies affiliated to the Ministry, the Surveying and Mapping Authority of the Republic of Slovenia and the Environmental Agency of the Republic of Slovenia, have continuously supported the harmonisation of the spatial data, as well as the promotion of sharing and accessibility thereof to as many users as possible. Slovenia already meets most of the guidelines and requirements determined by the INSPIRE Directive. Today, there are enough fundamental spatial data available in Slovenia that are easily available to the users and fairly regularly maintained. The metadata system may be positively assessed, too, which simplifies the search for the users and provides information on the existence of particular data sets, their quality and access terms and conditions as well as the pricing policy. Dividing the pricing policy to commercial and non-commercial methods of using the spatial data and the financing method of the first establishment of data sets in Slovenia was resolved in the similar manner as foreseen in the proposal for the Directive. Based on all this, we have a good starting position for establishing a quality spatial data infrastructure in Slovenia. A lot of hard work and harmonisation lie ahead of us, as well as the opportunities to open new fields of operation of the Slovenian public administration. Of course, the precondition thereof is providing the appropriate coordination structure and financial resources for implementing the obligations.

12 Annexes

12.1 List of organisations – names and contact details Annexes

MOP - Ministrstvo za okolje in prostor, (Ministry of Environment and Spatial Planning), Dunajska cesta 48, LJUBLJANA, (www.mop.gov.si), (e-pošta: gp.mop@gov.si)
GURS – Ministrstvo za okolje in prostor – Geodetska uprava Republike Slovenije, (Ministry of Environment and Spatial Planning - Surveying and Mapping Authority of the Republic of Slovenia) Zemlčjemerska ulica 12, LJUBLJANA (www.gu.gov.si), (e-pošta: pisarna.gu@gov.si)
ARSO – Ministrstvo za okolje in prostor, Agencija RS za okolje, (Ministry of Environment and Spatial Planning – Slovenian Environmental Agency), Vojkova cesta 1b, LJUBLJANA, (www.arso.gov.si), (e-pošta: gp.arso@gov.si)
Ministrstvo za kmetijstvo gozdarstvo in prehrano, (Ministry of Agriculture, Forestry and Food), Dunajska 22, LJUBLJANA, (www.mkgp.gov.si) , (e-pošta: gp.mkgp@gov.si)
MzP – Ministrstvo za promet, (Ministry of Transport), Langusova 4, LJUBLJANA, (www.mzp.gov.si), (e-pošta: gp.mzp@gov.si)
DRSC - Ministrstvo za promet, (Ministry of Transport – Slovenian Roads Agency) Direkcija Republike Slovenije za državne ceste, Tržaška cesta 19, LJUBLJANA, (www.dc.gov.si), (e-pošta: gp.drsc@gov.si)
MZ - Ministrstvo za zdravje, (Ministry of Health), Štefanova 5, LJUBLJANA, (www.mz.gov.si), (e-pošta: gp.mz@gov.si)
MNZ - Ministrstvo za notranje zadeve, (Ministry of Internal Affairs), Štefanova 2, LJUBLJANA, (www.mnz.gov.si), (e-pošta: gp.mnz@gov.si)
MG - Ministrstvo za gospodarstvo, (Ministry of Economy), Kotnikova 5, LJUBLJANA, (www.mg.gov.si), (e-pošta: gp.mg@gov.si)
MJU – Ministrstvo za javno upravo, (Ministry of Public Administration), Tržaška cesta 21, LJUBLJANA (www.mju.gov.si) (e-pošta: gp.mju@gov.si)
URSZR – Ministrstvo za obrambo, (Ministry of Defence), Uprava RS za zaščito in reševanje, Vojkova 61, LJUBLJANA, (www.sos112.si), (e-pošta: urszr@urszr.si)
Ministrstvo za kulturo, (Ministry of Culture), Maistrova 10, LJUBLJANA, (www.mk.gov.si), (e-pošta: gp.mk@gov.si)
Statistični urad Republike Slovenije, (Statistical Office of Slovenia), Vožarski pot 1, LJUBLJANA, (www.stat.si), (e-pošta: gp.surs@gov.si)
Zavod za gozdove Slovenije, (Slovenia Forest Service), Večna pot 2, LJUBLJANA, (www.zgs.gov.si), (e-pošta: zgs.tajnistvo@zgs.gov.si)
Geološki zavod Slovenije, (Geological Survey of Slovenia), Dimičeva ulica 14, LJUBLJANA, (www.geo-zs.si), (e-pošta: www@geo-zs.si)
Geodetski inštitut Slovenije, (Geodetic Institute of Slovenia), Jamova cesta 2, LJUBLJANA, (www.geod-is.si), (e-pošta: info@gis.si)
Biotehnična fakulteta, (Biotechnical Faculty), Jamnikarjeva 101, LJUBLJANA, (www.bf.uni-lj.si), (e-pošta: info@bf.uni-lj.si)
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12.2 List of references for the compilation of the report

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