



## INSPIRE

### Infrastructure for Spatial Information in Europe

## INSPIRE Directive Monitoring and Reporting Guidance 2019

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<b>Title</b>	INSPIRE Directive Monitoring and Reporting Guidance 2019
<b>Creator</b>	EC & EEA INSPIRE Team
<b>Date created</b>	12-02-2019
<b>Date modified</b>	22-03-2019
<b>Subject</b>	This document gives additional background on the reporting obligations under the INSPIRE Directive and guidance for the Member States on the reporting process and tools.
<b>Publisher</b>	EC and EEA INSPIRE Team
<b>Contributor</b>	MIG MIWP 2018.1 subgroup
<b>Format</b>	MS Word (doc)
<b>Rights</b>	Reuse is authorised, provided the source is acknowledged. The reuse policy of the European Commission is implemented by a <a href="#">Decision of 12 December 2011</a> .
<b>Identifier</b>	INSP\MR\2019\1
<b>Language</b>	En
<b>Status</b>	Final

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**Disclaimer**

This document has been developed collaboratively through the INSPIRE maintenance and implementation framework, involving experts of the European Commission services, the European Environment Agency, EU Member States, the Accession and EFTA Countries. The document should be regarded as presenting an informal consensus position on best practice agreed by all partners. However, the document does not necessarily represent the official, formal position of any of the partners. To the extent that the European Commission's services provided input to this technical document, such input does not necessarily reflect the views of the European Commission and its services. This document does not bind the Commission and its services, nor can the Commission and its services be held responsible for any use which may be made of the information contained herein.

The technical document is intended to facilitate the implementation of Directive 2007/2/EC and is not legally binding. Any authoritative reading of the law should only be derived from Directive 2007/2/EC itself and other applicable legal texts or principles such as the related Reporting Decision. Only the Court of Justice of the European Union is competent to authoritatively interpret Union legislation.

# INSPIRE REPORTING GUIDANCE 2019 RELEASE V1.0

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## Introduction

### Purpose of this document

The purpose of this document is to provide guidance to EU Member States on the implementation of the monitoring and reporting requirements related to the implementation of Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community (the INSPIRE Directive). This guidance is an update of previously released guidance documents on monitoring and reporting<sup>1</sup> and addresses the transition towards the new reporting process brought forward by the new regulatory provisions for monitoring and reporting under the INSPIRE Directive.

### Structure of this document

Section 1 gives an short overview of the reporting obligations under the INSPIRE Directive and the transition roadmap towards new monitoring and reporting processes in line with the changes in the regulatory framework.

Section 2 provides guidance on the monitoring process for the INSPIRE reporters.

Section 3 provides guidance on the reporting process for the INSPIRE reporters.

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<sup>1</sup> See [INSPIRE Knowledge Base](#) & [EEA Reporting Obligation Database](#)

## Section I: Monitoring and Reporting requirements of the INSPIRE Directive

### 1.1 A changing regulatory framework

The monitoring and reporting system for Directive 2007/2/EC was based on Article 21 of the Directive and on Decision 2009/442/EC as regards monitoring and reporting. Experience from the previous reporting exercises and the conclusions of recent evaluations (REFIT evaluation of Directive 2007/2/EC<sup>2</sup>, Fitness Check on reporting and monitoring of EU environment policy<sup>3</sup>) have shown that this system left room for improvement and streamlining. Textual information, which was still quite significant in this system, was not always relevant, nor comparable, and represented a significant burden for the Member States to provide and for EU reporting actors to process. Therefore, updated information should be collected in an easier, comparable and less burdensome way for all reporting actors. Moreover, the significant number of indicators was not allowing for a clear insight into the implementation progress. There were too many indicators and not necessarily the right ones e.g.:

- the data set offering varied largely between countries and no reference base or indicators were available supporting an objective and comparable qualification of the maturity of the implementation regarding this data set offering,
- the indicator used to measure the geographical coverage of the spatial data sets was in most of the monitoring reports completely disconnected from the geographical coverage of the data sets in reality.

Changes to the articles 21 and 23 of the Directive and the Commission Decision No 2009/442/EC were essential in order to optimize the monitoring and reporting process.

#### 1.1.1 Alignment of reporting obligations – changes to the Directive

A [Proposal](#) for a Regulation on the alignment of reporting obligations in the field of environment policy was adopted on 31 May 2018. The proposal represents Action 1 based on the Fitness Check evaluation [action plan](#). This alignment proposal has been prepared on the basis of the evidence in the Fitness Check evaluation and other evaluations that were recently carried out on individual pieces of legislation. The alignment proposal's objectives are to improve the evidence base for implementing EU policy, increase transparency for the public and simplify reporting with a view to reducing administrative burden. It covers 10 pieces of environmental legislation, namely Directives 86/278/EEC, 2002/49/EC, 2004/35/EC, 2007/2/EC, 2009/147/EC and 2010/63/EU, Regulations (EC) No 166/2006 and (EU) No 995/2010, and Council Regulations (EC) No 338/97 and (EC) No 2173/2005.

For several pieces of legislation, the reference of using INSPIRE in the monitoring and reporting process has been introduced. In addition, the following changes to the INSPIRE Directive related to monitoring and reporting are proposed:

- Article 21 is amended as follows:
  - (a) in paragraph 2, the introductory sentence is replaced by the following: “2. No later than 31 March every year Member States shall update, if necessary, and publish their summary report. This report, which shall be made public by the

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<sup>2</sup> [SWD\(2016\)273](#)

<sup>3</sup> [COM\(2017\)312](#), (SWD(2017) 230)

Commission services assisted by the European Environment Agency, shall include summary descriptions of:";

(b) paragraph 3 is deleted;

- Article 23 is replaced by the following:

“The European Environment Agency shall publish and update annually the Union-wide overview on the basis of metadata and data made available by the Member States through network services in accordance with Article 21. The Union-wide overview shall include, as appropriate, indicators for outputs, results and impacts of this Directive, Union-wide overview maps and Member State overview reports.

The Commission shall, no later than 1 January 2022 and at least every five years thereafter, carry out an evaluation of this Directive, and of its implementation, and make it publicly available. The evaluation shall be based, inter alia, on the following elements:

(a) the experience gathered with the implementation of this Directive;

(b) the information collected by Member States in accordance with Article 21 and the Union-wide overviews compiled by the European Environment Agency;

(c) relevant scientific, analytical data;

(d) other information including relevant scientific, analytical data required on the basis of the Better Regulation guidelines, in particular by relying on efficient and effective information management processes.”.

*It is expected that the alignment proposal and the changes to the INSPIRE Directive will be adopted and published in the second quarter of 2019 (April / May). The adoption of the alignment proposal will replace the tri-annual implementation report by an annual update of the summary report (country fiche). This impacts the 2019 reporting. Member States will have to update section 1 “State Of Play” of their country fiche through the country fiche editor<sup>4</sup> on the INSPIRE website.*

### 1.1.2 Towards a new Reporting Decision

Based on the work of the MIG subgroup 2016.2, that carried out activities to simplify and streamline monitoring and reporting under the INSPIRE Directive, a proposal for a new INSPIRE Reporting Decision<sup>5</sup> was drafted. The proposal for a new Reporting Decision was endorsed by the MIG and received a positive opinion by the INSPIRE Committee on 27 November 2018.

The aim of the new Reporting Decision is to simplify and streamline monitoring and reporting, support better comparison of the implementation progress across Member States (e.g. based on a common data scope put forward by the list of priority data sets) and allow for National and EU-wide overviews while reducing administrative monitoring and reporting burden.

The proposed changes focus on fine-tuning existing reporting and monitoring indicators to make them more fit for the purpose of evaluating the implementation progress and impact of the INSPIRE Directive. Furthermore, the proposed changes are considering legal and technical elements. The legal aspect focuses on maximizing the reuse of other information provisions (e.g. metadata, network services) for the monitoring process. The technical element focuses on updating the monitoring provisions with the relevant technical and scientific progress implementing the "Once Only" principle and making it less burdensome for Member States to provide the necessary information also building

<sup>4</sup> <https://inspire.ec.europa.eu/countryfiche>

<sup>5</sup> [http://ec.europa.eu/transparency/regcomitology/index.cfm?do=search.documentdetail&Dos\\_ID=16928&DS\\_ID=59503&Version=2](http://ec.europa.eu/transparency/regcomitology/index.cfm?do=search.documentdetail&Dos_ID=16928&DS_ID=59503&Version=2)

on the main findings of the Fitness Check process for environmental reporting. New indicators are introduced that measure the number of spatial data sets that are being used for reporting under the environmental acquis (DSi1,3) and the distribution of spatial data sets with regional and national coverage (DSi1,4 and Dsi1,5). The first indicator allowing for measuring the availability of spatial data sets with direct relevance for the reporting processes and evaluation cycles under the environmental acquis and the latter two indicators providing an insight of the distribution of the available data sets according to their spatial scope. For these indicators, provisions were included in Articles 3 (2) and 3 (3) of the Reporting Decision that require Member States to insert specific common keywords in their data set metadata. Besides supplying evidence for the indicators, the use of these common keywords provides a simple methodology to identify and filter specific data sets with high reuse value for national and European use cases. For a cost-effective implementation, Member States are required to tag selected spatial data sets that respectively identify those spatial data sets that are being used for reporting under the environmental acquis and those that have regional or national coverage.

*It is expected that the new reporting Decision will be adopted and published after the adoption and publication of the alignment proposal in the second quarter of 2019 (April / May). The adoption of the new Reporting Decision will not impact the 2019 (reference year 2018) monitoring cycle. Member States have to use the existing EEA monitoring tool and dashboard for entering the monitoring data for 2018. The process is the same as previous years (see Section II).*

## Section II: Monitoring

### 2.1 General overview

This chapter describes the general features of the workflow that National INSPIRE reporters need to follow in order to create and submit, by 15 May 2019, the annual INSPIRE monitoring information through the European Environment Agency (EEA) to the European Commission (EC) following the Commission Decision No 2009/442 as regards monitoring and reporting.

#### 2.1.1 Introduction to the EEA monitoring workflow

As in previous years, it will be possible to submit formally the INSPIRE monitoring information through **Reportnet**<sup>6</sup>, the EEA's electronic infrastructure for data collection. Being operational since 2002, Reportnet is a suite of IT tools optimised to support the business processes of a data collection network building on a shared information infrastructure. It supports, improves and streamlines information flows which are used for reporting environmental data to the EEA, and also hosts several reporting tasks of the EC and other regional and international organisations (e.g. UNECE).

Since 2015, the INSPIRE monitoring exercise is supported by a series of tools (i.e. web forms and dashboard) which were developed in order to simplify, and automatize as much as possible, the creation of the INSPIRE monitoring file. The **web forms** are online questionnaires available in Reportnet which help National reporters to create, modify, save and upload a reporting file (typically XML files). The **INSPIRE dashboard sandbox**, available on <https://sandbox-inspire-dashboard.eea.europa.eu>, is an application which harvests the content of national catalogues on demand, validates the results and automatically creates a compliant INSPIRE monitoring file that can be then uploaded into Reportnet for its formal submission. A second dashboard, the **public INSPIRE dashboard**, available on <https://inspire-dashboard.eea.europa.eu/>, is used to display the official national monitoring information once it has been formally submitted by the national INSPIRE reporters.

Building on these tools, and depending on the capacities of the Member States, **two operational workflows can eventually be used to create the INSPIRE monitoring file:**

1) Member States can generate and edit the INSPIRE monitoring file by **directly filling in the INSPIRE web-form** available in Reportnet the information related to their INSPIRE spatial datasets and services as well as organisational information. The web-form then computes automatically the monitoring indicators based on the data entries. Once the file is completed, it can be formally submitted through the national INSPIRE envelope to Reportnet.

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<sup>6</sup> <https://www.eionet.europa.eu/reportnet>

2) Member States can generate the INSPIRE monitoring file automatically out of the content of their **INSPIRE National Discovery Service (Catalogue) harvested using the INSPIRE Dashboard sandbox**. This process can be run several times until the monitoring file provides satisfactory results. The file can be then loaded into the INSPIRE web-form available in Reportnet, which also allows the edition of the file before it is formally submitted to the EEA (**Highly recommended workflow**).

These two workflows are presented in the diagram below:

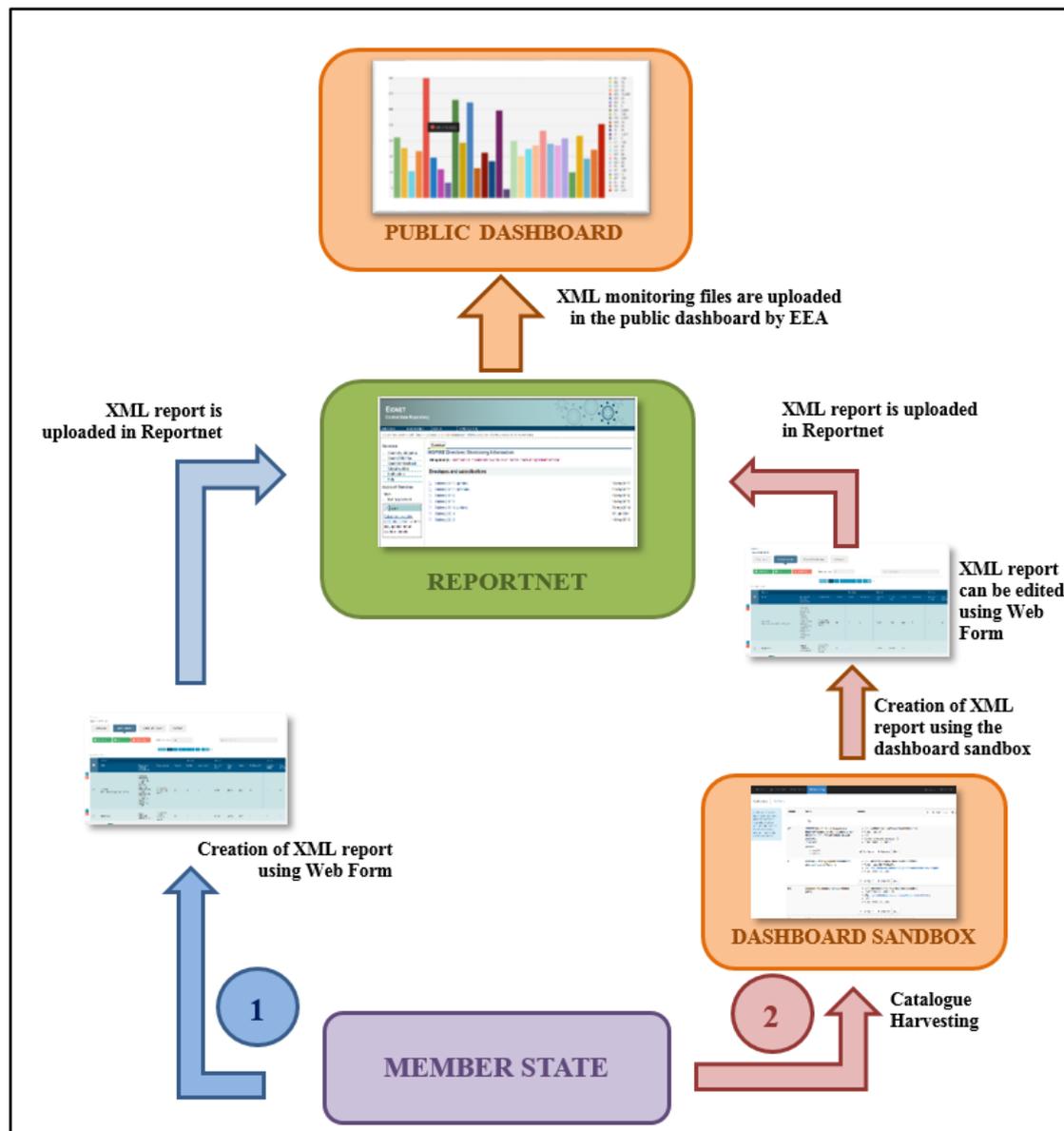


Figure 1: 2019 INSPIRE monitoring workflow

The use of the workflow number 2 is recommended as it simplifies and reduces significantly the efforts devoted to the compilation of INSPIRE datasets and services information. It also ensure

coherence with the information provided by each Member States through the INSPIRE Geoportal<sup>7</sup> -as long as the Discovery Service registered in the Geoportal is the same as the one used in the INSPIRE dashboard sandbox. More importantly, the use of the dashboard to automatize the generation of the monitoring file is encouraged as the revised Decision on Monitoring and Reporting, which will apply by next monitoring round in 2020, will enforce the calculation of indicators **solely based on the information included in the metadata** published by Member States through their national discovery services.

The following sections in the document describe how national INSPIRE reporters can use the different tools available at the EEA for the monitoring submission process in the workflows shown in Figure 1.

Section 2.2 describes **the use of web forms**, both for creating directly the INSPIRE monitoring file by filling in the necessary information or for editing the monitoring file generated using the INSPIRE dashboard sandbox.

Section 2.3 describes **the use of the INSPIRE Dashboard sandbox** to create the INSPIRE monitoring file out of the content of the national catalogues.

Section 2.4 describes how to proceed with the actual submission of the INSPIRE monitoring file to the EEA through the **Central Data Repository (CDR) of Reportnet**.

## 2.1.2 The INSPIRE monitoring schemas according to Decision 2009/442/EC as regards monitoring and reporting

Since 2015, the INSPIRE monitoring exercise is an **XML-based reporting**. The complex XML schema that describes the content of the INSPIRE monitoring file (**monitoring.xsd**) is stored in the **Data Dictionary** of Reportnet:

**Monitoring.xsd:** <http://dd.eionet.europa.eu/schema/inspire-monitoring/monitoring.xsd>

This schema in turn refers the following “child” schemas:

- **MonitoringMD.xsd** describes how to encode the information about the organisation responsible for reporting at national level, language and monitoring dates.

**MonitoringMD.xsd:** <http://dd.eionet.europa.eu/schema/inspire-monitoring/monitoringmd.xsd>

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<sup>7</sup> <http://inspire-geoportal.ec.europa.eu/>

- **Indicators.xsd** describes the indicator-related content as described in the Decision 2009/442/EC.

**Indicators.xsd**: <http://dd.eionet.europa.eu/schemas/inspire-monitoring/indicators.xsd>

- **RowData.xsd** provides the description of the information needed on spatial datasets and services to compute the indicators.

**RowData.xsd** <http://dd.eionet.europa.eu/schemas/inspire-monitoring/rowdata.xsd>

- **BasicType.xsd** provides the description of basic types used in the XML file (time, country code).

**BasicType.xsd** <http://dd.eionet.europa.eu/schemas/inspire-monitoring/basictype.xsd>

Both the **webforms** and the **INSPIRE dashboard sandbox** allows the creation (and edition) of compliant XML INSPIRE monitoring files as it is explained in Chapter 2. The web forms were also of help for Member States to transition from the Excel sheets used previously to the XML-based monitoring. The **data models** underpinning the application schemas of the INSPIRE monitoring are represented in UML notation in Annex I.

## 2.2. User guide

This chapter describes the steps that need to be taken by the INSPIRE reporters when using the EEA tools that have been developed to facilitate the creation and update of the XML monitoring file (the INSPIRE web form and the INSPIRE dashboard sandbox). It also provides some information about the access permission and user accounts to be used in the different tools. Finally, the process of formal submission of the monitoring files through Reportnet is described in the last section of this chapter.

### 2.2.1 User accounts and access permissions

Reportnet has been developed and is used by the European Environment Information and Observation Network (Eionet), which requires that any user has an **Eionet account** (user name and password). New users that require access rights to Reportnet services shall contact **Eionet Helpdesk** ([helpdesk@eionet.europa.eu](mailto:helpdesk@eionet.europa.eu)), as Eionet user accounts are maintained centrally. Tools and services in domain eionet.europa.eu can be accessed with one user account (although some of these functionalities require specific permissions). Specific permissions, only given to **officially nominated INSPIRE Reporters**, are necessary in order to officially submit the XML monitoring file.

**Please inform the EEA and the European Commission<sup>8</sup> as soon as possible about any update regarding the nominated INSPIRE reporters in your country.**

In order to use the **INSPIRE dashboard sandbox** to harvest and create monitoring files it is also necessary that users have an **Eionet account**. However, it is possible for users without specific permissions, or even an Eionet account, to access and use some Reportnet functionalities, in particular, the creation, edition and saving of XML monitoring files using the **INSPIRE web forms** (as explained in section 2.2).

The **public INSPIRE dashboard<sup>9</sup>**, showing the monitoring data reported by Member States since 2010, can be accessed without any login needed. The login available in the public dashboard is only for administration purposes.

### 2.2.2 INSPIRE Web Forms

As indicated in chapter 1, the web forms available in Reportnet help gather data for reporting obligations in the form of predefined web questionnaire.

Since the 2015 monitoring round, a web form for the INSPIRE monitoring obligation is available in Reportnet with the title “**INSPIRE Monitoring of implementation and use (Article 21)**”, under the “Web Form” section (<http://webforms.eionet.europa.eu/>). As indicated in 2.1, a web form can be created, edited and saved even without an Eionet account.

The INSPIRE web-form can also be accessed directly through the INSPIRE monitoring envelope created by the national reporter as described in section 2.4.

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<sup>8</sup> By sending an email to Jose Miguel Rubio ([jose.rubio@eea.europa.eu](mailto:jose.rubio@eea.europa.eu)) and Vlado Cetl ([Vlado.Cetl@ec.europa.eu](mailto:Vlado.Cetl@ec.europa.eu))

<sup>9</sup> <https://inspire-dashboard.eea.europa.eu/>

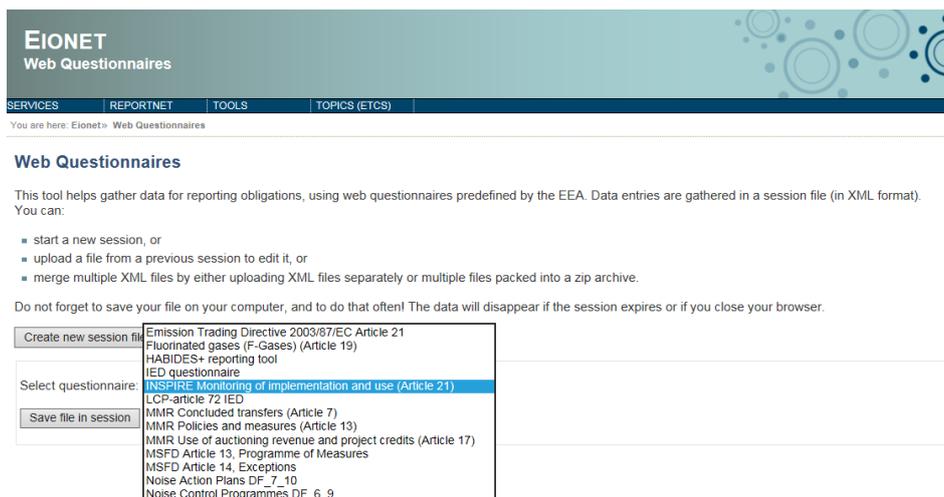


Figure 2: Accessing the INSPIRE monitoring web form

As represented in Figure 1, national reporters can use the web form in different stages of the INSPIRE annual monitoring exercise:

- To **create the INSPIRE XML monitoring file** by filling in directly the monitoring data in the corresponding sections “Contributor”, “Spatial Datasets” and “Spatial Data Services”. The “indicators” section is computed automatically based on the data filled in by the reporters.
- To **review and, edit if necessary, the INSPIRE XML monitoring file** created using the INSPIRE dashboard (**recommended**) as explained in Section 2.3.

### 2.2.2.1 Structure of the INSPIRE monitoring web form

The web-form is structured around four main sections, which mirror the content of the INSPIRE monitoring file:

#### 1) Contributor

This section contains the following (general) information:

- **Year the questionnaire refers to:** NOTE for this monitoring exercise, it will be “**2018**”
- **Member State**
- **Organisation**
- **Email**
- **Language**

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Inspire monitoring

Contributor   Spatial Datasets   Spatial Data Services   Indicators

Year the questionnaire refers to: 2016

Member state: Spain

Organization: CNIG

Email: pabad@fomento.es

Language: Español

Figure 3: "Contributor" section of the INSPIRE web form

## 2) Spatial Datasets

The section contains all the information related to the INSPIRE spatial datasets published and reported by the Member State.

Contributor   **Spatial Datasets**   Spatial Data Services   Indicators

Multiple rows   Add row   Selected rows   Filters: Row validity: Any   Type here to search...

1 2 3 4 5 6 1/6

General		Metadata			Data set			Services					
URI	Responsible authority within the MS	Data set name	Themes	Exists?	Conformant?	Relevant area	Actual area	Extent	Conformant?	Metadata access?	View service?	Download service?	View & download services?
900ff06e-bae7-11e0-9a37-00261812484_NGA	Centro de Información Territorial de Aragón, Dirección General de Ordenación del Territorio, Departamento de Política Territorial e Interior, Gobierno de Aragón.	Nomenclátor Geográfico de Aragón	1.3	✓	✓	47720	47720	100%	X	✓	X	✓	X
spainNGBE	Instituto Geográfico Nacional (IGN)	Nomenclátor Geográfico Básico de España	1.3	✓	✓	505990	505990	100%	✓	✓	✓	✓	✓
spainNomenclatorCV2015	Academia Valenciana de la Lengua	Nomenclátor Toponímico Valenciano	1.3	✓	✓	23254	23254	100%	X	✓	✓	X	X
ES.GFA.IGN.MD	Gipuzkoa Provincial Council	Geographical names of Gipuzkoa, INSPIRE	1.3	✓	✓	1980	1980	100%	✓	✓	✓	✓	✓
(98026460-38F1-4DC6-8ACA-BD54BD20FACE)_1200011.es	Instituto de Estadística y Cartografía de Andalucía, Consejería de Economía y Conocimiento, Junta de Andalucía	Nomenclátor Geográfico de Andalucía (NSA)	1.3	✓	✓	87597	87597	100%	✓	✓	X	✓	X
spainLLMD013	Instituto Geográfico Nacional (IGN)	Base de Datos de Límites Jurisdiccionales de España	1.4	✓	✓	505990	505990	100%	✓	✓	✓	✓	✓
IDE_DFA_DivAdmin	Servicio de Ordenación del Territorio y Urbanismo, Sección de Información Territorial, Diputación Foral de Álava	Divisiones Administrativas del Territorio Histórico de Álava	1.4	✓	✓	3037	3037	100%	X	✓	✓	X	X
ES.GFA.UJ.MD	Gipuzkoa Provincial Council	Administrative units of Gipuzkoa, INSPIRE	1.4	✓	✓	1980	1980	100%	✓	✓	✓	✓	✓
spain_carrociudad_addresses	Instituto Geográfico Nacional (IGN)	Direcciones de CarroCiudad	1.5	✓	✓	505990	505990	100%	✓	✓	✓	✓	✓
ES.GFA.UJ.MD	Gipuzkoa Provincial Council	Addresses of Gipuzkoa, INSPIRE	1.5	✓	✓	1980	1980	100%	✓	✓	✓	✓	✓

Figure 4: "Spatial Datasets" section of the INSPIRE web form

Per each spatial dataset, the following information needs to be added:

- Dataset **name**
- Dataset **UUID** (i.e.: metadata file identifier)
- **Responsible authority** of the dataset within the MS
- INSPIRE **themes** covered by the dataset
- **Existence of metadata.**
- **Conformity of metadata** with the implementing rules referred to by the Article 5(4) of the INSPIRE Directive.
- **Relevant area** to be covered by the dataset
- **Actual area** covered by the dataset
- **Conformity of datasets** with the implementing rules referred to by the Article 7(1) of the INSPIRE Directive.
- Accessibility of the metadata through a **discovery service** (described by its UUID)
- **View service** associated to the dataset (and corresponding UUID)
- **Download service** associated to the dataset (and corresponding UUID)

General			
Responsible authority within the MS	Instituto Geográfico Nacional (I	Themes	× 1.5 Addresses
Data set name	Direcciones de CartoCiudad	Data set uuid	spaign_cartociudad_addresses
Metadata			
Exists?	<input checked="" type="checkbox"/>	Conformant?	<input checked="" type="checkbox"/>
Data set			
Relevant area	505990	Actual area	505990
Extent	100%	Conformant?	<input checked="" type="checkbox"/>
Services			
Metadata access	<input checked="" type="checkbox"/>	Discovery service uuid	<input type="button" value="➔"/> Servicio de Catálogo Oficial de Datos y ... ×
View service	<input checked="" type="checkbox"/>	View service uuid	<input type="button" value="➔"/> WMS del Mapa Base de España [spaign... ×
Download service	<input checked="" type="checkbox"/>	Download service uuid	<input type="button" value="➔"/> WFS de Direcciones de CartoCiudad [sp... ×
<input type="button" value="Save"/>		<input type="button" value="Cancel"/>	

Figure 5: Detailed information related to a specific spatial dataset

### 3) Spatial Data Services

The section contains all the information related to the INSPIRE spatial data services published and reported by the Member State.

General		Metadata			Service		Network service					
UUID	Responsible authority within the MS	Service name	Themes	Exists?	Conformant?	Network service?	MD accessible?	Service type	Directly accessible?	Conformant?	Use	URL
spacodiscw	CNG en nombre del Consejo Superior Geográfico	Servicio de Catálogo Oficial de Datos y Servicios Inspire de España(COOSI)	I.1, I.2, I.3, I.4, I.5, I.6, I.7, I.8, I.9, I.11, II.2, II.3, II.4, II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14, II.15, II.16, II.17, II.18, III.1	✓	✓	✓	✓	Discovery service	✓	✓	-1	<a href="http://www.idee.es/csw/codsifpp/csw/REQUEST=GetCapabilities&amp;SERVICE=CSW">http://www.idee.es/csw/codsifpp/csw/REQUEST=GetCapabilities&amp;SERVICE=CSW</a>

Figure 6: “Spatial Data Services” section of the INSPIRE web form

Per each service, the following information needs to be added:

- Data service **name**
- Data service **UUID** (i.e. metadata file identifier)
- **Responsible authority** of the service within the MS
- INSPIRE **themes** covered by the service
- **Existence of metadata.**
- **Conformity of metadata** with the implementing rules referred to by the Article 5(4) of the INSPIRE Directive.
- Accessibility of the metadata through a **discovery service** (described by its UUID)
- Direct accessibility of the service
- **Only for network services:**
  - **Type** of network service (i.e. view, download, discovery, transformation, invoke)
  - **Conformity** of the network service with the implementing rules referred to by the Article 16 of the INSPIRE directive
  - **Use** of the network service (annual number of service requests)
  - **URL** of the network service (GetCapabilities request)

The screenshot displays a web-based metadata editor for a spatial data service, organized into several sections:

- General:** Includes fields for 'Responsible authority within the MS' (Instituto Geográfico Nacional (IGN)), 'Data service name' (WFS de Direcciones de CartoCiudad), and 'Data service uuid' (spainwfs\_cartociudad\_address). A 'Themes' dropdown menu is set to '1.5 Addresses' with a 'Select all' button.
- Metadata:** Contains checkboxes for 'Exists?' and 'Conformant?', both of which are checked.
- Service:** Includes checkboxes for 'Network service?' and 'MD accessible?', both checked. The 'Discovery service uuid' is set to 'Servicio de Catálogo Oficial de Datos y ...'.
- Network service:** Includes 'Service type' (Download service), 'Directly accessible?' (checked), 'Compliant?' (checked), and 'Use' (-1).
- URL (in the form of a GetCapabilities request to the service):** The URL field contains: `http://www.cartociudad.es/wfs-inspire/direcciones?service=WFS&request=GetCapabilities&version=2.0.0`

At the bottom of the form are two buttons: a blue 'Save' button and a red 'Cancel' button.

Figure 7: Detailed information related to a specific spatial data service

#### 4) Indicators

This section contains all **the general and specific indicators** as defined in the Commission Decision 2009/442/EC as regards monitoring and reporting **automatically calculated** using the data filled in under “Spatial Datasets” and “Spatial Data Services”.

		Metadata		Data Sets		Services			
		Existence	Compliance	Extend	Compliance	MD Accessibility	DS Accessibility	Use	Compliance
Indicator Name		MDI1	MDI2	DSI1	DSI2	NSI1	NSI2	NSI3	NSI4
Indicator Value		100%	100%	100%	10.03%	100%	62.36%	0	12.74%
Numerator		530	530	105819832	28	530	174	0	32
Denominator		530	530	105819832	279	530	279	251	251
<b>Spatial Data Sets</b>									
All Annexes	Subind. Name					NSI1.1			
	Subind. Value					100%			
	Numerator					279			
	Denominator					279			
Annex I	Subind. Name	MDI1.1	MDI2.1	DSI1.1	DSI2.1				
	Subind. Value	100%	100%	100%	37.5%				
	Numerator	48	48	19449173	18				
	Denominator	48	48	19449173	48				
Annex II	Subind. Name	MDI1.2	MDI2.2	DSI1.2	DSI2.2				
	Subind. Value	100%	100%	100%	22.72%				
	Numerator	22	22	8688409	5				

Figure 8: "Indicators" section of the INSPIRE web form

Per indicator (general and specific), the web form displays:

- Indicator Name (as defined in the Commission Decision 2009/442/EC)
- Indicator Value (ratio expressed in percentage)
- Numerator (of the ratio)
- Denominator (of the ratio)

For a **complete and official description of the INSPIRE monitoring indicators** corresponding to the Commission Decision 2009/442/EC, please refer to the full text of as published in EUR-Lex<sup>10</sup>.

### 2.2.2.2 Save and Preview options

The web form can be edited and saved using the "**Save WebForm**". A preview of the information can be obtained by clicking on "**Print Preview**". To exit without saving the changes, click on "**Close Webform**" and select "**Yes**".

<sup>10</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ%3AL%3A2009%3A148%3A0018%3A0026%3AEN%3APDF>

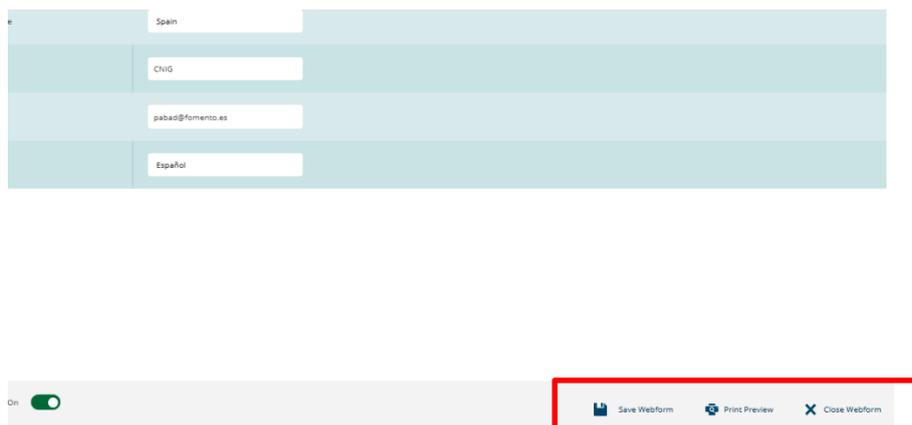


Figure 9: Save, print and close options of the INSPIRE web forms

In section 3.2, links are provided to several videos created in order to guide the reporters when using the web forms.

### 2.2.3 INSPIRE dashboard sandbox

Since the 2015 monitoring round, a tool called “INSPIRE dashboard” has been made available to the Member States to generate a monitoring XML file out of the metadata records contained in their national discovery service (catalogue). This tool is the result of the work carried out by the experts of the MIG/MIWP-16 subgroup<sup>11</sup>. Released under an open-source license, some Member States have deployed the dashboard in their infrastructure and are further developing the tool. The source code is available on <https://github.com/INSPIRE-MIF/daobs/>.

In the beginning of 2018 the INSPIRE dashboard underwent a series of changes in order to migrate to a different data visualization platform (Kibana<sup>12</sup>) since the previous one (Banana<sup>13</sup>) was no longer maintained, as well as to improve stability and incorporate new features.

The dashboard to be used by Member States to create the XML monitoring file is available on <https://sandbox-inspire-dashboard.eea.europa.eu>. As indicated in 2.1, it requires the use of the **Eionet login and password** to use all its functionalities.

The dashboard provides Member States the possibility to:

- Harvest one or several discovery service end-points (and configure some harvesting parameters).

<sup>11</sup> Final activity report available on: [https://ies-svn.jrc.ec.europa.eu/attachments/download/1420/MIG\\_MIWP-16\\_activity\\_report\\_v1.pdf](https://ies-svn.jrc.ec.europa.eu/attachments/download/1420/MIG_MIWP-16_activity_report_v1.pdf)

<sup>12</sup> <https://www.elastic.co/products/kibana>

<sup>13</sup> <https://github.com/lucidworks/banana>

- Compute the indicators based on the harvested data or a subset of them (e.g. to calculate indicators corresponding to the metadata provided by one responsible authority only).
- Display the indicators and related variables in a dashboard similar to the dashboard for monitoring data officially reported by Member States (INSPIRE public dashboard<sup>14</sup>). This provides an easy way to visualise (and analyse) the performance on the various indicators.

Finally, and as indicated earlier in the guidance, the **public INSPIRE dashboard**, which builds on the same platform as the INSPIRE dashboard sandbox, was set up to display the official INSPIRE monitoring information reported by the countries since 2010. No login is needed to access this dashboard, but it is important to note that **this instance cannot be used as a sandbox to harvest the national catalogues**.

### 2.2.3.1 Practical steps to use the INSPIRE dashboard sandbox

The technical user guide for the dashboard including screenshots of the different steps in order to launch the harvesting and generate the XML reports is available on <https://github.com/INSPIRE-MIF/daobs/blob/2.0.x/doc/USER-GUIDE.md>. This document will therefore only present **the main steps that Member States need to follow** and refers to the guide above for any technical detail in this process.

- 1) Log in using Eionet user and password on <https://sandbox-inspire-dashboard.eea.europa.eu/#>

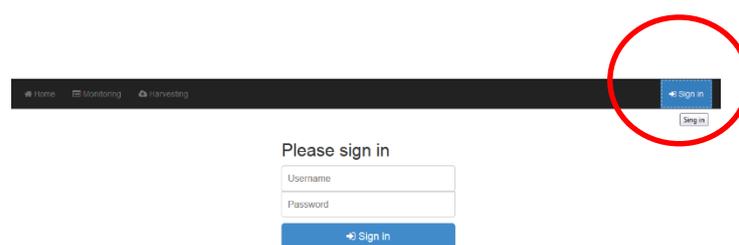
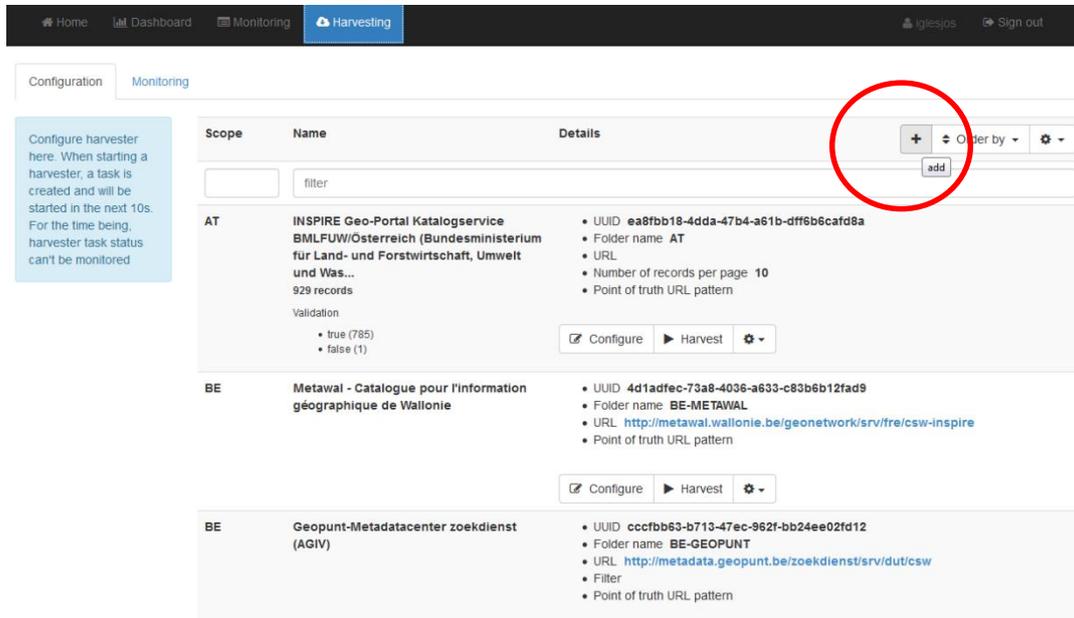


Figure 10: Login into the INSPIRE dashboard sandbox

<sup>14</sup> <https://inspire-dashboard.eea.europa.eu/>

2) Ensure the **National Discovery Service** is listed under “**Harvesting**”, “**Configuration**” tab. The list provides all national discovery services as they are listed in the INSPIRE Geoportal. In case your discovery service is not listed, it can be added by clicking on the button “+” as shown in the figure below:



Configure harvester here. When starting a harvester, a task is created and will be started in the next 10s. For the time being, harvester task status can't be monitored

Scope	Name	Details
AT	INSPIRE Geo-Portal Katalogservice BMLFUW/Osterreich (Bundesministerium für Land- und Forstwirtschaft, Umwelt und Was... 929 records Validation • true (785) • false (1)	• UUID ea8fbb18-4dda-47b4-a61b-dff6b6cfd8a • Folder name AT • URL • Number of records per page 10 • Point of truth URL pattern Configure Harvest
BE	Metawal - Catalogue pour l'information géographique de Wallonie	• UUID 4d1adfec-73a8-4036-a633-c83b6b12fad9 • Folder name BE-METAWAL • URL http://metawal.wallonie.be/geonetwork/srv/fre/csw-inspire • Point of truth URL pattern Configure Harvest
BE	Geopunt-Metadacentre zoekdienst (AGIV)	• UUID cccfbb63-b713-47ec-962f-bb24ee02fd12 • Folder name BE-GEOPUNT • URL http://metadata.geopunt.be/zoekdienst/srv/dut/csw • Filter • Point of truth URL pattern Configure Harvest

Figure 11: List of harvested catalogues and how to add a new node

To add an additional discovery service it is necessary to fill in the details shown in the following screenshot:

Details		Order by ▾	⚙️ ▾
Area	<input type="text"/>	Area is usually a simple code to group a set of records. eg. country codes, admin unit codes.	
Name	<input type="text"/>		
URL	<input type="text" value="http://catalog.organisation.net/csw"/>	URL of the CSW service URL without parameters (eg. REQUEST=GetCapabilities)	
Filter	<input type="text" value="&lt;ogc:Filter ..."/>	A valid OGC filter to retrieve a subset of records from the service	
Folder name	<input type="text"/>	Usually same value as area	
Point of truth URL pattern	<input type="text" value="http://"/>	The URL should contains a token like '{{uuid}}' to insert the metadata record identifier.	
Service metadata	<input type="text" value="Service metadata"/>	Service metadata	
Number of records per page	<input type="text" value="200"/>	If not set 200 records are retrieved per pages	
UUID	<input type="text"/>	Unique identifier	
<input type="button" value="✕ Cancel"/> <input type="button" value="💾 Save harvester"/>			

Figure 12: Details to be filled on the harvesting node

**In case a new discovery service needs to be added, or the configuration of the discovery services already listed in the dashboard sandbox requires some changes, please inform the EEA. It is essential that there is a one-to-one correspondence between the discovery service harvested by the INSPIRE Geoportal and the one harvested using the INSPIRE Dashboard.**

3) The **harvesting** of the National Discovery Service is launched when  is clicked upon. The interface shown in 2) will display the harvesting status.

Area	Name	Details	+ ▾	Order by ▾	⚙️ ▾
NL	filter				
NL	<b>Nationaal Georegister (BeheerPDOK)</b> 348 records / 349 records (in CSW)	<ul style="list-style-type: none"> <li>• UUID <b>0a8b54e3-a216-43aa-a132-096eb72197cc</b></li> <li>• Folder name <b>NL</b></li> <li>• URL <a href="http://www.nationaalgeoregister.nl/geonetwork/srv/dut/Inspire">http://www.nationaalgeoregister.nl/geonetwork/srv/dut/Inspire</a></li> <li>• Point of truth URL pattern</li> </ul>			
	Validation				
	<ul style="list-style-type: none"> <li>• true (15)</li> <li>• false (14)</li> <li>• missing (319)</li> </ul>				
	ETF Validation				
	<ul style="list-style-type: none"> <li>• missing (348)</li> </ul>				
		<input type="button" value="📄 Configure"/> <input type="button" value="▶ Harvest"/> <input type="button" value="⚙️ ▾"/>			

Figure 13: Harvesting status

**It is important to ensure that the harvesting has proceeded without problems and that it has been successfully completed. In case a Member State finds problems when harvesting their catalogues please contact the EEA.**

4) After harvesting, the dashboard analyses the links between datasets and services and then runs some checks (referred to in the Dashboard as “INSPIRE validation<sup>15</sup>” for historical reasons) using the **INSPIRE Geoportal Harvesting Checker<sup>1617</sup>**. A record is marked as valid if the completeness indicator returned by the Harvesting Checker is **above 75%<sup>18</sup>**.

In case only a subset of records are validated, users can click the **“INSPIRE Validation (non-validated record)”** to retry the validation.

5) Once the harvesting process has been completed, the XML monitoring file can be generated under **“Monitoring”, “Create Monitoring”** tab.

eg. to select only dataset use '+resourceType:dataset', to select based on point of contact use '+OrgForResource:RIVM'.

This field allows to define a custom report identifiers which will be used as the scope once indicator are loaded. This is useful to make distinction between reports made with custom filters (eg. computing indicators for a specific organization).

Preview Download Compute & save

Figure 14: Creation of the monitoring file

In order to do so, users should follow the steps below:

<sup>15</sup> Not to be considered a full INSPIRE compliance test – see footnote 14.

<sup>16</sup> <http://inspire-geoportal.ec.europa.eu/validator2/>

<sup>17</sup> By the time the dashboard was developed there was no commonly agreed validator for metadata (currently available through the INSPIRE Reference Validator), so the MIG/MIWP-16 subgroup agreed to use instead the geoportal validator, currently referred to as “Geoportal Harvesting Checker”. Due to the current development of a new platform for INSPIRE monitoring, built on top of the INSPIRE Geoportal and to be available for the 2020 monitoring round, it was decided not to migrate the current dashboard to the Reference Validator.

<sup>18</sup> As agreed by the experts of the MIG/MIWP-16 subgroup. This (informal) threshold will not remain applicable from 2020 onwards.

5.1 Choose **type of report** to be generated (“inspire” or “inspire-first-theme-only”)<sup>19</sup>

5.2 Choose **scope** (i.e. the country the monitoring refers to)

5.3 Optionally define **user facets** or **query filter** to subset records in the catalogue, as well as reporting date and identifier.

5.4 **Preview** how the indicators will be computed in the report

The screenshot shows a web interface for configuring an INSPIRE report. On the left, there are three sections: 'Choose monitoring' with a dropdown set to 'inspire-first-theme-only' and a 'View report rules' button; 'Choose reporting area' with a dropdown set to 'NL'; and 'Query filter' with an empty text box and a search icon. Below these is a blue box stating '348 record(s) matching current filter.' and two buttons: 'Preview' and 'Download'. On the right, there is a 'Contact details' section with fields for 'Language', 'Organization', and 'Email'. A note below these fields states: 'Contact informations are required when generating INSPIRE reporting to indicate report contact.'

### Report on **Monitoring Indicators** generated for **NL** based on **348 record(s)**

The table below shows the list of variables and indicators computed for the selected area. It may also reports any errors encountered during computation.

Name		Value
<input type="checkbox"/>	<input type="checkbox"/> Indicator with errors only <input checked="" type="checkbox"/> Indicator with non null value	
DSI2	%age of conformant spatial data sets with conformant metadata for all Annexes	.21
DSI21	%age of conformant spatial data sets with conformant metadata for Annex I	.36
DSI22	%age of conformant spatial data sets with conformant metadata for Annex II	.30
DSI23	%age of conformant spatial data sets with conformant metadata for Annex III	.12

Figure 15: Preview of the indicators calculated after the harvesting

5.5 Download the XML monitoring file. There are several options that are proposed<sup>20</sup>, as shown in the figure below:

<sup>19</sup> As explained in the Final Activity Report of the MIG/MIWP-16 –see above-, the creation of the monitoring file via the INSPIRE dashboard provides two scenarios: i) computing indicators based only on the first INSPIRE themes only (“inspire-first-theme-only” report) and ii) compute indicators based on all INSPIRE themes, in which case the dataset or service containing more than one INSPIRE theme will be take into account for each theme (“inspire” report)

<sup>20</sup> Ibid.

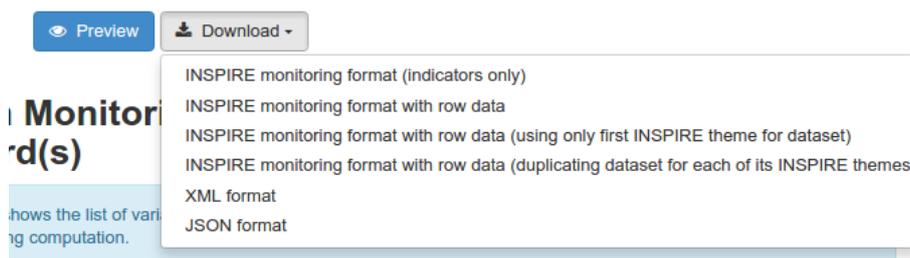


Figure 16: Downloading the XML monitoring file

It is important to **add contact details** as indicated in Figure 17, as this is required in the XML monitoring file and cannot be added automatically from the harvested service<sup>21</sup>.

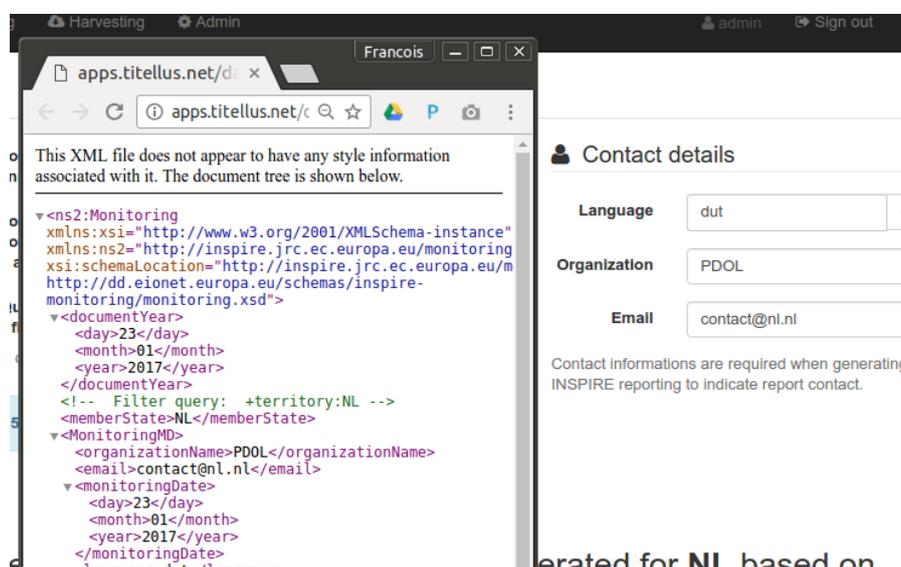


Figure 17: Filling in contact details

The XML monitoring file can then be displayed in Reportnet using the INSPIRE web form, as described in Section 2.2 before it is formally submitted to the EEA as described in the following section. Since the information related to the **geographical coverage** and **use of the services** cannot be harvested from the national catalogues, the web form can also be used to edit the XML file and include this information.

In section 3.2, links are provided to several videos created in order to guide the reporters when using the dashboard sandbox.

<sup>21</sup> Users can always add this information using the web forms as explained in 2.2 or by editing directly the XML file.

### 2.2.3.2 Use of the INSPIRE dashboard sandbox to display national monitoring information

Member States can also use the dashboard sandbox to analyse the content of their catalogues as well as to display the data included in the XML monitoring file they have just generated.

The tool provide default dashboards to present information about the catalogue and the monitoring indicators. The list of available dashboards is displayed on the home page (see Figure 18).

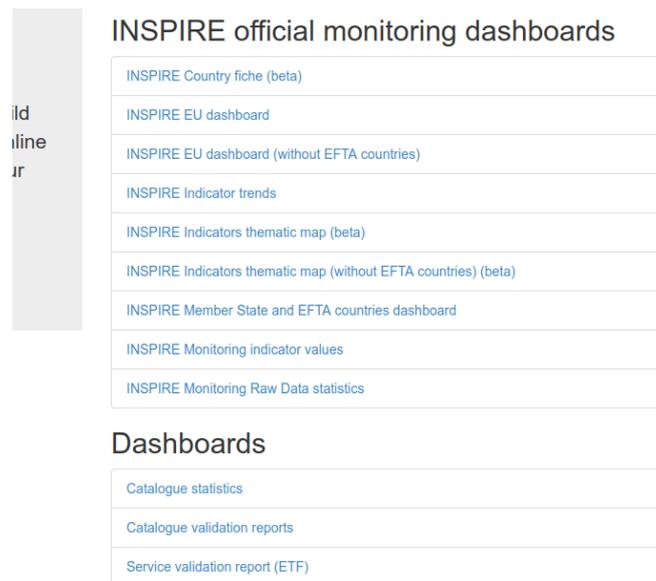


Figure 18: Dashboards to monitor indicators and catalogue statistics

To review the content of the catalogue, the dashboard “**catalogue statistics**” provides an overview of the content of the catalogue (e.g. records per INSPIRE themes, per service type, per spatial type) as shown in Figure 19:

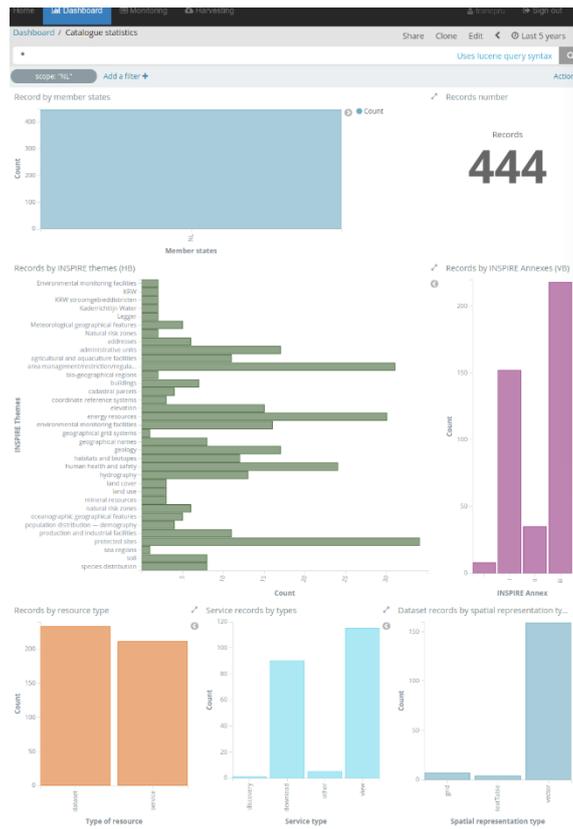


Figure 19: Dashboard “catalogue statistics”

All these dashboards can be customized and improved using the functionalities of the web interface of the dashboard application (based on Kibana).

In order to display the information related to the monitoring indicators computed in 2.3.1, users will need to select under “Monitoring” the “Submit Monitoring” tab. Thereafter, upload the XML monitoring file created and click on “Submit Monitoring”. The import will be finished when the application shows the message “Monitoring\_file\_name.xml imported as shown below.

Monitoring summary    Create monitoring    **Submit monitoring**

Upload here monitoring to later use them in dashboards.

**Choose or drop here monitoring files**

**Choose Files** 2 files

- LI\_inspire-monitoring-instance.xml (text/xml)
- SK\_MR\_indicators\_SK\_2014\_ref\_2013\_modif.xls.xml (text/xml)

Only INSPIRE monitoring XML format is currently supported.

**Submit monitoring** ✕

Monitoring LI\_inspire-monitoring-instance.xml imported.

Monitoring SK\_MR\_indicators\_SK\_2014\_ref\_2013\_modif.xls.xml imported.

*Figure 20: Import XML monitoring data into the dashboard*

More information about the use of dashboards to analyse the content of a catalogue and to display information is provided in the User Guide <https://github.com/INSPIRE-MIF/daobs/blob/2.0.x/doc/USER-GUIDE.md>, as this is out of the main scope of this document.

## 2.2.4 Formal submission of the INSPIRE monitoring file in Reportnet

Created either using only the web-form or after harvesting the national catalogue with the INSPIRE dashboard sandbox, the XML monitoring file needs to be formally submitted by the National INSPIRE reporter in Reportnet. This section describes this process.

### 2.2.4.1 The Central Data Repository (CDR) and the national INSPIRE folder

In order to formally submit the INSPIRE monitoring file, national reporters need to access the **INSPIRE folder of their respective country folders in the EEA's Central Data Repository (CDR)**. The CDR is part of the Reportnet architecture, and it is like a bookshelf containing the reports on the environment submitted by EEA Member Countries, other countries and international organisations.

The table below provides the links to each country's INSPIRE folders in CDR:

Table 1: National INSPIRE folders in the CDR

Country	URL to INSPIRE folder in EEA Central Data Repository (CDR)
Austria	<a href="http://cdr.eionet.europa.eu/at/eu/inspire">http://cdr.eionet.europa.eu/at/eu/inspire</a>
Belgium	<a href="http://cdr.eionet.europa.eu/be/eu/inspire">http://cdr.eionet.europa.eu/be/eu/inspire</a>
Bulgaria	<a href="http://cdr.eionet.europa.eu/bg/eu/inspire">http://cdr.eionet.europa.eu/bg/eu/inspire</a>
Croatia	<a href="http://cdr.eionet.europa.eu/hr/eu/inspire">http://cdr.eionet.europa.eu/hr/eu/inspire</a>
Cyprus	<a href="http://cdr.eionet.europa.eu/cy/eu/inspire">http://cdr.eionet.europa.eu/cy/eu/inspire</a>
Czech Republic	<a href="http://cdr.eionet.europa.eu/cz/eu/inspire">http://cdr.eionet.europa.eu/cz/eu/inspire</a>
Denmark	<a href="http://cdr.eionet.europa.eu/dk/eu/inspire">http://cdr.eionet.europa.eu/dk/eu/inspire</a>
Estonia	<a href="http://cdr.eionet.europa.eu/ee/eu/inspire">http://cdr.eionet.europa.eu/ee/eu/inspire</a>
Finland	<a href="http://cdr.eionet.europa.eu/fi/eu/inspire">http://cdr.eionet.europa.eu/fi/eu/inspire</a>
France	<a href="http://cdr.eionet.europa.eu/fr/eu/inspire">http://cdr.eionet.europa.eu/fr/eu/inspire</a>
Germany	<a href="http://cdr.eionet.europa.eu/de/eu/inspire">http://cdr.eionet.europa.eu/de/eu/inspire</a>

Greece	<a href="http://cdr.eionet.europa.eu/gr/eu/inspire">http://cdr.eionet.europa.eu/gr/eu/inspire</a>
Hungary	<a href="http://cdr.eionet.europa.eu/hu/eu/inspire">http://cdr.eionet.europa.eu/hu/eu/inspire</a>
Iceland	<a href="http://cdr.eionet.europa.eu/is/eu/inspire">http://cdr.eionet.europa.eu/is/eu/inspire</a>
Ireland	<a href="http://cdr.eionet.europa.eu/ie/eu/inspire">http://cdr.eionet.europa.eu/ie/eu/inspire</a>
Italy	<a href="http://cdr.eionet.europa.eu/it/eu/inspire">http://cdr.eionet.europa.eu/it/eu/inspire</a>
Latvia	<a href="http://cdr.eionet.europa.eu/lv/eu/inspire">http://cdr.eionet.europa.eu/lv/eu/inspire</a>
Liechtenstein	<a href="http://cdr.eionet.europa.eu/li/eu/inspire">http://cdr.eionet.europa.eu/li/eu/inspire</a>
Lithuania	<a href="http://cdr.eionet.europa.eu/lt/eu/inspire">http://cdr.eionet.europa.eu/lt/eu/inspire</a>
Luxembourg	<a href="http://cdr.eionet.europa.eu/lu/eu/inspire">http://cdr.eionet.europa.eu/lu/eu/inspire</a>
Malta	<a href="http://cdr.eionet.europa.eu/mt/eu/inspire">http://cdr.eionet.europa.eu/mt/eu/inspire</a>
Netherlands	<a href="http://cdr.eionet.europa.eu/nl/eu/inspire">http://cdr.eionet.europa.eu/nl/eu/inspire</a>
Norway	<a href="http://cdr.eionet.europa.eu/no/eu/inspire">http://cdr.eionet.europa.eu/no/eu/inspire</a>
Poland	<a href="http://cdr.eionet.europa.eu/pl/eu/inspire">http://cdr.eionet.europa.eu/pl/eu/inspire</a>
Portugal	<a href="http://cdr.eionet.europa.eu/pt/eu/inspire">http://cdr.eionet.europa.eu/pt/eu/inspire</a>
Romania	<a href="http://cdr.eionet.europa.eu/ro/eu/inspire">http://cdr.eionet.europa.eu/ro/eu/inspire</a>
Slovakia	<a href="http://cdr.eionet.europa.eu/sk/eu/inspire">http://cdr.eionet.europa.eu/sk/eu/inspire</a>
Slovenia	<a href="http://cdr.eionet.europa.eu/si/eu/inspire">http://cdr.eionet.europa.eu/si/eu/inspire</a>
Spain	<a href="http://cdr.eionet.europa.eu/es/eu/inspire">http://cdr.eionet.europa.eu/es/eu/inspire</a>
Sweden	<a href="http://cdr.eionet.europa.eu/se/eu/inspire">http://cdr.eionet.europa.eu/se/eu/inspire</a>
Switzerland	<a href="http://cdr.eionet.europa.eu/ch/eu/inspire">http://cdr.eionet.europa.eu/ch/eu/inspire</a>
United Kingdom	<a href="http://cdr.eionet.europa.eu/gb/eu/inspire">http://cdr.eionet.europa.eu/gb/eu/inspire</a>

As the art. 21 of the INSPIRE Directive<sup>22</sup>, and accordingly the Commission Decision No 2009/442/EC, foresees two obligations, a yearly monitoring and a three-yearly reporting exercise, each national INSPIRE folder contains therefore two subfolders (“INSPIRE Directive: Monitoring Information” and “INSPIRE Directive: Country Reports”), each linked to one of the mentioned obligation. In 2019 Member States will still be able to submit their annual monitoring files through the folder “**INSPIRE Directive: Monitoring Information**”. Please note that the updates of the Country Reports (or country fiches) will not be managed through Reportnet.

<sup>22</sup> Currently under revision in the context of the proposal for a regulation on the alignment of reporting obligations in the field of environment policy (COM/2018/381 final).

The folder “**INSPIRE Directive: Monitoring Information**” is linked to the INSPIRE Directive 2007/2/EC monitoring obligation in the EEA reporting obligations database (ROD)<sup>23</sup>. The ROD is also part of Reportnet and contains the environmental reporting obligations that countries have towards international organisations.

#### 2.2.4.2 Creation of envelopes and submission of the monitoring file

In order to **upload the XML monitoring file** into the “INSPIRE Directive: Monitoring Information” folder for the specific country, these are the steps that national reporters shall follow:

1) **Log in** using the reporter’s Eionet user name and password as shown in the example below.



Figure 21: Login in the national INSPIRE folder in CDR

2) **Create a new envelope** to host the data to be submitted. It is recommended to add a meaningful title for the envelope, including the year in which the data has to be submitted, e.g. “Delivery 2013”, “Delivery 2014”, etc. Please also include the year covered by the dataset (in this case, it will refer to the previous year, 2018). Envelope “description” and “coverage note” fields are optional.

**New envelope**

3) **Open the new envelope** by clicking on its title.

4) **Activate the task**, by clicking on the related button. Activating means that the national reporter has reserved the envelope to work on. Other users will not be able to modify it. The new envelope is now in **Draft** status and files can be added.

**Activate task**

5) There are **different options** to upload the XML INSPIRE monitoring file:

- **Upload** directly the XML monitoring file that follows the most up-to-date schema, for your country from your own system

**Add file**

Add and edit a [inspire monitoring](#) questionnaire

<sup>23</sup> <http://rod.eionet.europa.eu/obligations/692>

using the “**Add file**” option.

- You can alternatively add and edit the INSPIRE web form (“**Inspire monitoring questionnaire**”). The process of how to fill in the web form is explained in section 2.2.

- If the monitoring sheet or XML file is available from a national web site, reporters can upload a link to its exact location (“**Add hyperlink**”)

Add hyperlink

6) Once the reporter has uploaded the correct and complete monitoring information, the delivery shall be completed by **releasing the envelope**. The purpose of release is to signal that

Release envelope

**the data have been delivered** and Reportnet will issue and save an **automated official confirmation letter from the EEA**. Once the envelope has been released, the national INSPIRE monitoring information is typically made publicly available in the Reportnet Central Data Repository (CDR).

### 2.2.4.3 Redeliveries and finish

The envelope is currently released and the EEA may have uploaded some feedback thereafter. The Member State can then update the delivery as a reaction to the feedback (e.g. upload a new file or remove a wrong one). In order to do so, the reporter shall click on “**Back to drafting**” to revoke the release and brings the reporter to section 2.4.2. The reporter will have to activate the task (as before), add or remove files and eventually release the envelope again.

If there is no need to revoke the release and the report is final, then click on “**Finish**”.

The screenshot shows the EIONET Central Data Repository interface. The main content area displays details for a delivery named "Delivery 2013". The status section indicates that the task is waiting to be assigned and provides a link to "Activate task: Redeliver or Finish". A red arrow points to this link. The interface also includes a navigation menu on the left and a breadcrumb trail at the top.

Figure 22: Redeliver of finish

## 2.3. References

This chapter provides legal references underpinning the annual INSPIRE monitoring obligation and additional material in order to support INSPIRE national reporters in the 2019 monitoring and reporting round.

### 2.3.1 Legal references

The legal references to the annual INSPIRE monitoring are the **art. 21 of the INSPIRE Directive (2007/2/EC)**<sup>24</sup> and, still for this 2019 monitoring round, the **Commission Decision No 2009/442 as regards monitoring and reporting**<sup>25</sup>, which are the rules for the implementation of the art. 21.

### 2.3.2 Tutorials

The webpage <http://published-files.eea.europa.eu/> contains some short screencasts (without sound) on how to use the INSPIRE dashboard sandbox and the INSPIRE web forms available in Reportnet. Please note that these were created for a previous monitoring exercise, but the information provided is still valid for this year:

- [http://published-files.eea.europa.eu/webcast/monitoring\\_indicator\\_auto\\_generation.mp4](http://published-files.eea.europa.eu/webcast/monitoring_indicator_auto_generation.mp4) shows how to preview the content of the monitoring file using the dashboard sandbox (after harvesting).
- [http://published-files.eea.europa.eu/webcast/monitoring\\_indicator\\_auto\\_generation\\_editing\\_webform.mp4](http://published-files.eea.europa.eu/webcast/monitoring_indicator_auto_generation_editing_webform.mp4) shows how to generate the monitoring file and how it can then be edited using the web forms available in Reportnet.

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<sup>24</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:108:0001:0014:en:PDF>

<sup>25</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009D0442&from=EN>

- [http://published-files.eea.europa.eu/webcast/monitoring\\_indicator\\_auto\\_generation\\_filtering.mp4](http://published-files.eea.europa.eu/webcast/monitoring_indicator_auto_generation_filtering.mp4) indicates how to create filters in the dashboard.
- [http://published-files.eea.europa.eu/webcast/webform\\_contributor.mp4](http://published-files.eea.europa.eu/webcast/webform_contributor.mp4) explains how to fill in the “Contributor tab” of the web-form.
- [http://published-files.eea.europa.eu/webcast/webform\\_dataset\\_service\\_single.mp4](http://published-files.eea.europa.eu/webcast/webform_dataset_service_single.mp4) provides an example of how to fill in the information related to a spatial dataset and a spatial data service in the web form and how to associate a dataset to a specific network service.
- [http://published-files.eea.europa.eu/webcast/webform\\_printing.mp4](http://published-files.eea.europa.eu/webcast/webform_printing.mp4) indicates shows how to print a preview of the form in PDF format.
- [http://published-files.eea.europa.eu/webcast/webform\\_xls\\_xml.mp4](http://published-files.eea.europa.eu/webcast/webform_xls_xml.mp4) aims at helping those countries still using Excel monitoring sheets (XLS) to collect monitoring information to convert it to a XML file using the webform.

### 2.3.3 Additional references

This section presents other important reference material relevant to the INSPIRE monitoring process:

INSPIRE knowledge base – section on Monitoring and Reporting:

<https://inspire.ec.europa.eu/monitoring-and-reporting/69>

Final Activity Report of the MIG/MIWP-16 (subgroup on monitoring):

[https://ies-svn.jrc.ec.europa.eu/attachments/download/1420/MIG\\_MIWP-16\\_activity\\_report\\_v1.pdf](https://ies-svn.jrc.ec.europa.eu/attachments/download/1420/MIG_MIWP-16_activity_report_v1.pdf)

Fitness Check on Reporting and Monitoring:

[http://ec.europa.eu/environment/legal/reporting/fc\\_overview\\_en.htm](http://ec.europa.eu/environment/legal/reporting/fc_overview_en.htm)

About Reportnet and Eionet:

About Reportnet: <http://www.eionet.europa.eu/reportnet>

CDR on-line help – including also the latest version of this document:

<http://cdr.eionet.europa.eu/help>

About Eionet: <http://www.eionet.europa.eu/about>

Eionet Helpdesk: [helpdesk@eionet.europa.eu](mailto:helpdesk@eionet.europa.eu).

About the INSPIRE dashboard:

User Guide: <https://github.com/INSPIRE-MIF/daobs/blob/2.0.x/doc/USER-GUIDE.md>

Maintainer Guide: <https://github.com/INSPIRE-MIF/daobs/blob/2.0.x/doc/MAINTAINER-GUIDE.md>

Contributor Guide: <https://github.com/INSPIRE-MIF/daobs/blob/2.0.x/doc/CONTRIBUTOR-GUIDE.md>

## Section III: Reporting

### 3.1 Introduction

As agreed during 9<sup>th</sup> MIG meeting<sup>26</sup> on 26 – 27 November 2018 in Brussels, 2019 will be a transitional year for monitoring and reporting. Preparations for the monitoring and reporting exercise have to be currently based on the existing legal provisions but the new rules may enter into effect just before the 15 May 2019. Also it is in the Commission's interest to pass on any reduction of administrative burden to the Member States as quickly as possible whilst at the same time providing clarity and certainty for all reporters. Hence, the following practical arrangements were proposed:

- The Commission services (JRC) will aim at installing a new reporting infrastructure and process that maximally reuse already existing INSPIRE components (discovery service, metadata, support, validation tools ...) as quickly as possible.
- At the same time, the current monitoring system at the EEA will remain operational until the transition has been completed by all Member States.
- The Commission services and the EEA will support Member States during the transition to make sure that they can meet their legal obligations. Any issues arising during the transition will be handled in a pragmatic and solution-oriented way.
- Whilst the Commission cannot alter the monitoring and reporting obligations only for this year of transition, Member States are invited to inform the Commission before the 15 May if there are any likely issues or delays as a result of the transition. Should such issue arise, they will be dealt with on a case-by-case basis bilaterally.

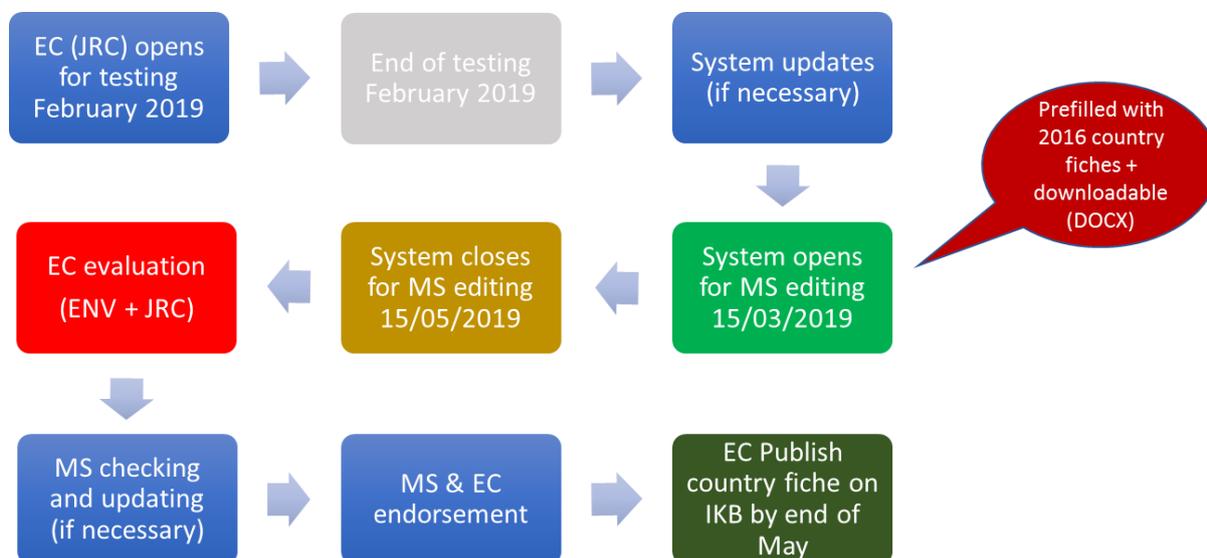
This guideline aims to help national INSPIRE reporters to update the "State of Play" of the country fiches by using the new country fiche tool developed by JRC. The tool currently supports only editing of the textual part of the country fiche (i.e. Part 1. State of Play). The future development will aim to have an integrated country fiche system including also indicators in accordance with the new Commission Implementing Decision replacing Commission Decision No 2009/442/EC of 5 June 2009 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards monitoring and reporting.

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<sup>26</sup> <https://webgate.ec.europa.eu/fpfis/wikis/display/InspireMIG/MIG+meetings>

## 3.2 Country fiche tool – overview

The country fiche tool is based on the overall requirements and inputs from 2018.1 subgroup on monitoring and reporting 201927. Figure shows the general overview of workflow for updating the “State of Play” reports in 2019.



**Figure 23. Workflow for updating the “State of Play” of the country fiches**

The tool is developed by using web forms in Drupal 7. Web forms allow content administrators to create forms to be filled out by users, in this case national reporters. The current version is supporting only editing of the textual part of the country fiche (Part 1. State of Play).

Editing process includes several steps:

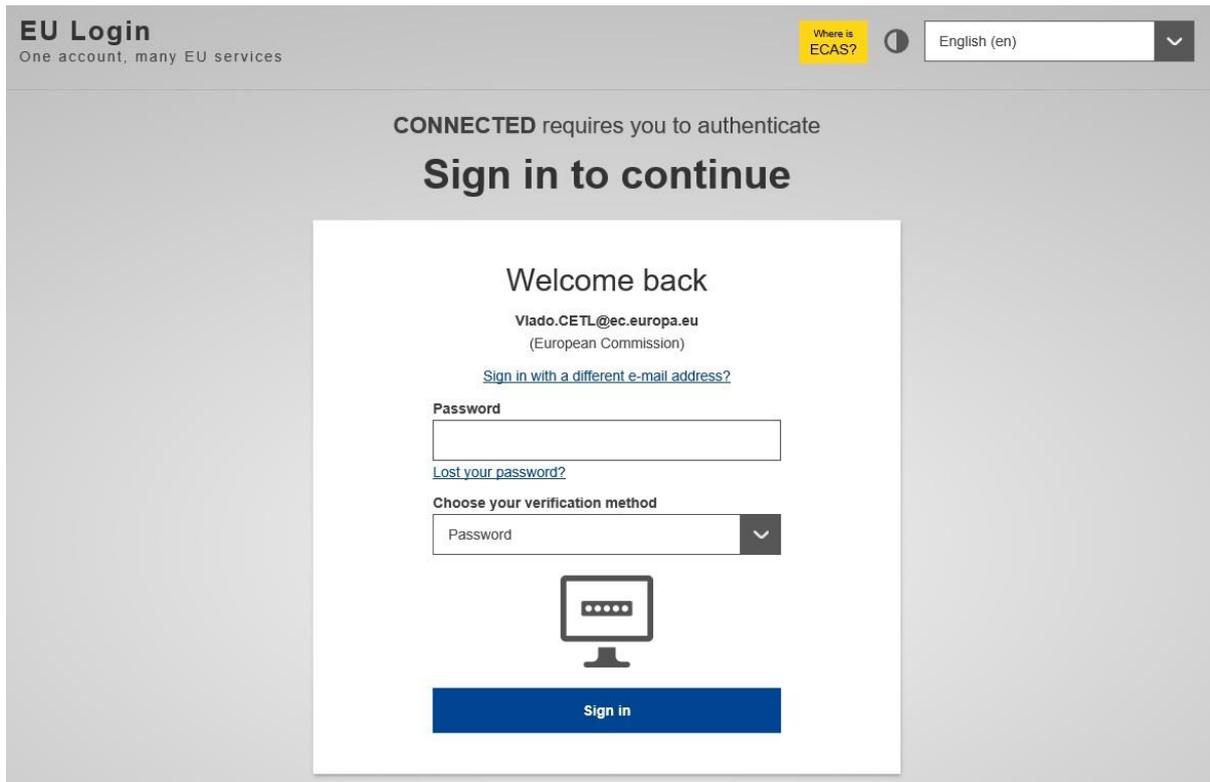
- MS national reporters are officially invited to start update the “State of Play” of the country fiches.
- The country fiche system is prefilled with the content from 2016 country fiches. Also the link to country fiches 2016 in DOCX format is provided for all MS.
- MS reporters use ECAS authentication to access the system. Once logged in it is possible to do editing and update the country fiche. After updating, the MS informs EC that the update is done.
- Upon the MS notification, EC checks the content, do evaluation and provide feedback to MS.
- After receiving EC feedback, the MS can still do some last edits to the country fiche and declare it “ready for publishing” or ask for “re-evaluation”.
- The EC publishes country fiche in the INSPIRE knowledge base (INSPIRE in your Country) as a PDF document.

### 3.2.1 Updating the “State of Play” chapter

MS national reporters are officially invited to start update the “State of Play” of the country fiches with e-mail. The URL to the authorization page is: <https://inspire.ec.europa.eu/ecas>

<sup>27</sup> <https://webgate.ec.europa.eu/fpfs/wikis/display/InspireMIG/MIWP+2016-2020>

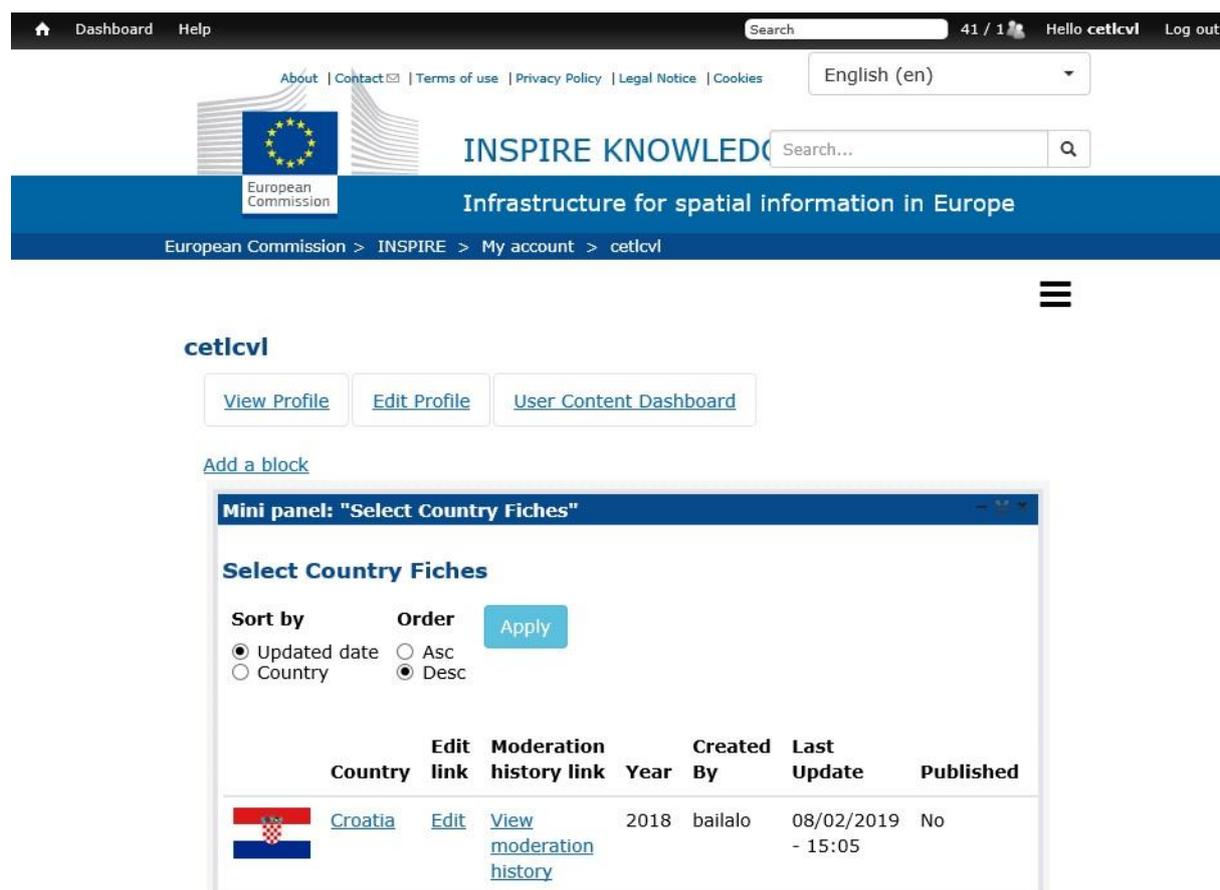
Authorization is done by using EU login (ECAS) (Figure 4).



The screenshot displays the EU Login interface. At the top left, it says "EU Login" with the tagline "One account, many EU services". On the top right, there is a yellow button labeled "Where is ECAS?" and a language selector set to "English (en)". The main heading reads "CONNECTED requires you to authenticate" followed by "Sign in to continue". The central white box contains a "Welcome back" message for "Vlado.CETL@ec.europa.eu (European Commission)". Below this is a link to "Sign in with a different e-mail address?". A "Password" field is present, along with a "Lost your password?" link. Underneath is a "Choose your verification method" dropdown menu currently set to "Password". A computer monitor icon with a password field is shown below the dropdown. At the bottom of the white box is a blue "Sign in" button.

**Figure 24. EU login**

After the first login **reporter won't be able to do anything** because IKB account is not activated yet. JRC first need to connect account with country fiche. Once account is activated and assigned with the correct country fiche reporter will get an e-mail notification. After that, reporter must login again and will be redirected to <https://inspire.ec.europa.eu/countryfiche> to see the User content dashboard (associated with your country e.g. Croatia (Figure 25)). If not reporter will have to visit manually the country fiche page: <https://inspire.ec.europa.eu/countryfiche>. (Please note that this URL is only accessible once logged in the IKB).

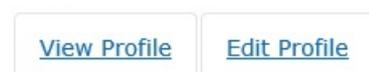


The screenshot shows the user content dashboard for 'cetlcvl'. At the top, there are navigation links: Dashboard, Help, Search, 41 / 1, Hello cetlcvl, and Log out. Below this is a header with 'INSPIRE KNOWLEDGE' and 'Infrastructure for spatial information in Europe'. The user's name 'cetlcvl' is displayed, along with buttons for 'View Profile', 'Edit Profile', and 'User Content Dashboard'. A mini panel titled 'Select Country Fiches' is shown, which includes sorting options (Updated date, Country, Asc, Desc) and an 'Apply' button. Below the sorting options is a table with the following data:

Country	Edit link	Moderation history link	Year	Created By	Last Update	Published
 <a href="#">Croatia</a>	<a href="#">Edit</a>	<a href="#">View moderation history</a>	2018	bailalo	08/02/2019 - 15:05	No

**Figure 25. User Content Dashboard**

User content dashboard is the main page of the country fiche tool. It provides several options for viewing and editing and also some general information about country fiche (year, created by, last update and published status). Above the dashboard, it is possible to view user profile and also edit it if needed.



Dashboard provides following options (links):

- [Croatia](#) by clicking on the name of the country the user gets country fiche as a web page (html) (Figure ).
- [Edit](#) by clicking on edit, user enters edit draft mode (Figure )
- [View moderation history](#) by clicking on view moderation history it is possible to access and view history of all revisions of country fiche (Figure ).

It is always possible to go back to the main user content dashboard page (Figure ) by clicking on **Dashboard** link provided on the top-left.

## Croatia - Country Fiche

[View draft](#)
[Edit draft](#)
[Moderate](#)

[Print Page](#)
[Save as Pdf](#)

## 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 Croatia 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

## State of Play

new test

## Coordination

## National Contact Point

**Name of Public Authority:** State Geodetic Administration

**Contact Email:** [Click to email](#)

**Website:** <http://www.nipp.hr/?id=30>

**MIG P Contact: Contact Person:** Tomislav Ciceli

**Email:** Tomislav.Ciceli@dgu.hr

**Contact Person:** Maric Ljerka

**Email:** ljerka.maric@dgu.hr

**MIG T Contact: Contact Person:** Tomislav Ciceli

**Email:** Tomislav.Ciceli@dgu.hr

[Functioning and coordination of the infrastructure](#)

**Figure 26. Country fiche overview as a web page (html)**

From the HTML overview it is possible to print the fiche [Print Page](#) or save it in PDF format [Save as Pdf](#). It is also possible to enter into edit draft mode [Edit draft](#) (Figure ) or into the revision history [Moderate](#) (Figure ).

Dashboard Help

Home » Croatia » Country Fiche

Edit Country Fiche Croatia – Country Fiche

VIEW DRAFT EDIT DRAFT MODERATE

Year Selection  
2015

COUNTRY SELECTION  
To be added / edited by the Member State

TITLE	STATUS	OPERATIONS
Croatia	Published	

Title \*

Croatia

WEBSITE

+ http://www.nipp.hr/?id=30

+

Contact Person

Organisation

State Geodetic Administration

Contact Email

ljerka.maric@dgu.hr

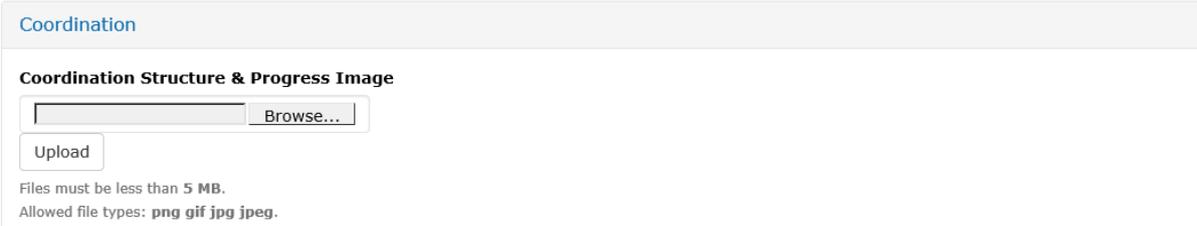
**Figure 27. Country fiche edit draft mode**

The edit mode serves for main editing of the country fiche. Users can edit “State of Play” chapter and country data. Editing fields are prefilled with the content of 2016 country fiches in English. If not needed this content can be deleted. **The updates can be done either in English or in national**

**language.** Updates can be always saved by clicking on the  button, which saves the draft. If the updating is not finished the user can always come back and open in editing mode.

The content of country fiches 2016 was tagged with Better regulation tags (Effectiveness, Efficiency, Relevance, Coherence and EU-added value). **For the country fiches 2019 these tags are not used.**

In the coordination structure section, it is possible to upload related figure presenting coordination structure in the country (Figure ).



**Figure 28. Coordination structure image**

Once when updating is finished the process can move to the next step (Figure ).



Set the moderation state for this content.

**Figure 29. Change of moderation state from Draft to Needs EC Evaluation**

The user has to change the moderation state from Draft (Current) to Needs EC Evaluation and Save. At this moment the content of the fiche is not anymore editable for MS. The system is sending an automatic notification to the EC by e-mail, informing about the change of the moderation state. At this point EC is in charge of the fiche and can start with evaluation. Evaluation is done and afterwards provided only in English language.

If the content (updates) provided by MS is in the national language, the EC will do translation to English.

Once evaluation is done by EC, MS will get automatic notification by email saying that country fiche needs MS check and updating. At this stage MS will see the results of EC evaluation (Outlook and summary on how the country is doing). Also MS is able now to do some final checks and small updates (in edit mode). If there are any comments, that should be entered in the "revision log" field.

After the final checks and edits, the MS has to change the moderation state. It is possible to choose between Re-evaluation and Endorsement (Figure ). If Re-evaluation is selected, the EC will be notified and asked to do new evaluation. If Endorsed is selected, the MS is fine with the content of country fiche and is declaring it as ready for publishing.

**Revision log message**

Edited by cetlcvl.

Provide an explanation of the changes you are making. This will help other authors understand your motivations.

**Moderation state**

Endorsed  
Needs MS check and updating (Current)

Set the moderation state for this content.

**Figure 30. Change of moderation state from Needs EC Evaluation (Current) to Endorsed**

After changing moderation state to Endorsed, the EC is getting automatic notification that MS have endorsed country fiche and that is ready for publishing.

Home » Croatia – Country Fiche  
History of Croatia – Country Fiche

VIEW DRAFT EDIT DRAFT MODERATE

Revisions Compare revisions

Currently there is no published revision of this node.

REVISION	TITLE	DATE	REVISION ACTIONS	MODERATION ACTIONS
62798	Croatia – Country Fiche Edited by rballoj. Revised by rballoj	2019-02-08 15:05	View   Edit draft	This is the current revision. The current state is <b>Draft</b> . Set moderation state: Needs EC Evaluation • From Needs EC Evaluation --> Draft on 2019-02-08 15:05 by rballoj
62775	Croatia – Country Fiche Edited by rballoj. Revised by rballoj	2019-02-01 09:59	View   Revert	• From Draft --> Needs EC Evaluation on 2019-02-01 09:59 by rballoj • From Published --> Draft on 2019-02-01 09:59 by rballoj • From Endorsed --> Published on 2019-02-01 09:47 by rballoj
62774	Croatia – Country Fiche Edited by #002h0dp. Title by MS, me that is Revised by #002h0dp	2019-02-01 09:43	View   Revert	• From Needs MS check and updating --> Endorsed on 2019-02-01 09:43 by #002h0dp
62773	Croatia – Country Fiche Edited by rballoj.ok by CT team Revised by rballoj	2019-02-01 09:32	View   Revert	• From Needs EC Evaluation --> Needs MS check and updating on 2019-02-01 09:32 by rballoj

**Figure 31. Country fiche's revisions**

By entering the moderation mode, it is possible to view all the revisions of the country fiche. It allows view and revert to an older revision but also compare of revisions. The moderate status of last revision can be also changed in this view.

It is also possible to compare between revisions. **Yellow colour** signifies old content not present in the newer revision. **Green colour** signifies new content not present in the older revision. Actual textual changes are shown in **red colour**.

### 3.2.1.1 Country contact information update

While preparing the fiche, if the need arises, it is also possible to update the following contact information for a particular country:

- Country Website
- Contact Person
- Organisation
- Contact Email
- National Geoportal Website
- Mailing Address
- Telephone Number

- Telefax Number
- MIG P Contact Name
- MIG P Contact Email
- MIG P Contact Organisation
- MIG P Contact Telephone Number
- MIG T Contact
- MIG T Contact Name
- MIG T Contact Email
- MIG T Contact Organisation
- MIG T Contact Telephone Number

In order to access the editing properties of country data the user has to click the edit button under the “operations” label of the “COUNTRY DATA” section (Figure )



**Figure 32. Country Data Edit Button**

It allows editing of country contact information (Figure ).

**COUNTRY DATA**  
To be added / edited by the Member State

COUNTRY: Hungary

**Title \***  
Hungary

**WEBSITE**

**Contact Person**

**Organisation**

**Contact Email**

**National Geoportal Website**

**Mailing Address**

**Telephone Number**

**Telefax Number**

**MIG P CONTACT**

TITLE	STATUS	OPERATIONS
+	Published	Edit
+	Published	Edit

You have added 2 out of 5 allowed nodes.

**MIG T CONTACT**

TITLE	STATUS	OPERATIONS
+	Published	Edit
+	Published	Edit

You have added 2 out of 5 allowed nodes.

Update node Cancel

**Figure 33. Editing country contact information**

In the country data it is possible to edit contacts, add national INSPIRE web site (if exists), add postal mail address etc.

When the MS user has finished updating the country data, the next step is to click on the “update node” button (Figure ). The country contact data will be saved and it can go on with normal country fiche editing. **The change in contact data will be automatically reflected on the INSPIRE Knowledge Base in INSPIRE in your country.**

### 3.2.2 Publishing of the country fiche

In the final step the EC is publishing country fiche in the INSPIRE Knowledge Base as a PDF document. The MS is getting automatic notification by e-mail that the fiche has been published.

Once when country fiche is published it is not possible for MS to enter the edit mode (Figure ). The MS can only view published fiche. Only EC can moderate and revert back to the edit mode.

Country	Edit link	Moderation history link	Year	Created By	Last Update	Published	Status
 Croatia			2018	bailalo	18/02/2019 - 15:18	Yes	Published

**Figure 34. User dashboard view after the country fiche has been published**

### 3.2.3 JRC Helpdesk

During the reporting process, please use the following e-mail address for any questions or you may have: [EC-INSPIRE-INFO@ec.europa.eu](mailto:EC-INSPIRE-INFO@ec.europa.eu)