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INSPIRE - Summary Work programme Transposition Phase 2007 - 2009



INSPIRE

Infrastructure for Spatial Information in Europe

INSPIRE

Summary Work Programme

Transposition Phase (2007 – 2009)

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Abbreviations

CEN	European Committee for Standardization
CSW	Catalog Services for the Web
CT	Consolidation Team
DG	Directorate General
DS	Data Specifications
DSS	Data and service sharing
DT	Drafting Team
EC	European Commission
EEA	European Environment Agency
EIONET	European Environment Information and Observation Network
EP	European Parliament
ESDI	European Spatial Data Infrastructure
EU	European Union
GCM	Generic Conceptual Model
GMES	Global Monitoring for Environment and Security
INSPIRE	Infrastructure for Spatial Information in Europe
IR	Implementing Rule
ISC	Inter-service consultation
ISO	International Organisation for Standardization
IT	Information Technology
JRC	Joint Research Centre
LMO	Legally Mandated Organisations
MD	Metadata
MR	Monitoring and Reporting
MS	Member State
NS	Network Services
OASIS	Organization for the Advancement of Structured Information Standards
OGC	Open Geospatial Consortium
OMG	Object Management Group
RP	Regulatory process without scrutiny
RPS	Regulatory process with scrutiny
SDI	Spatial Data Infrastructure
SDIC	Spatial Data Interest Community
W3C	World Wide Web Consortium
WP	Work Programme
WS-I	Web Services Interoperability Organisation

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Introduction

Following 3 years of intensive collaboration with Member States experts and stakeholder consultation, the Commission adopted on the 23rd of July 2004 a *proposal for a Directive of the European Parliament and of the Council establishing an infrastructure for spatial information in the Community (INSPIRE)*¹.

On 21 November 2006, the European Parliament and the Council reached agreement in conciliation on the final text of the Directive. The Directive has been formally approved by the Council and by the European Parliament on 29 January and 12 February 2007, respectively. INSPIRE was published as *Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007* in the Official Journal of the European Union on 25 April 2007, and entered into force on 15 May 2007.

INSPIRE lays down general rules for the establishment of an infrastructure for spatial information in Europe, for the purposes of environmental policies and policies or activities which may have a direct or indirect impact on the environment.

INSPIRE should be based on the infrastructures for spatial information that are created by the Member States and that are made compatible with common Implementing Rules and are supplemented with measures at Community level. These measures should ensure that the infrastructures for spatial information created by the Member States are compatible and usable in a Community and transboundary context.

The development and implementation of INSPIRE follows a programme of work consisting of three phases. These are the Preparatory (2005-2006), the Transposition (2007-2009) and the Implementation (2009-2019) phases.

In close collaboration with stakeholders in the Member States and in parallel with the co-decision process of the Directive, the Commission started the drafting of the Implementing Rules in the Preparatory Phase (2005-2006). This is being done in so-called Drafting Teams, which are composed of experts from stakeholder organisations. A number of deliverables have already been produced by the Drafting Teams. This work is done on a voluntary basis, and the Commission wishes to express its appreciation for the efforts that organisations and individuals have put into the process.

This document provides a summary of the work programme of the Commission services, in collaboration with the stakeholders, for the Transposition Phase (2007-2009). The complete work programme can be downloaded from the INSPIRE website (<http://www.ec-gis.org/inspire/>).

¹ COM(2004) 516 final

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1 Transposition Phase (2007-2009)

The Transposition Phase is the two-year time period following the entry into force of the INSPIRE Directive. By the end of this period, Member States must have transposed the INSPIRE Directive into their national legislative systems.

At the beginning of this phase, the Commission will put in place the organisation necessary to assure coordination at Community level. For that purpose the Commission shall be assisted by relevant organisations, in particular by the European Environment Agency, while appropriate structures and mechanisms will be installed by the Member States, including the points of contact with the Commission. These points of contact shall be responsible for the communication between the Member States and Commission concerning operational implementation issues.

At the same time Member States are encouraged to draw up, for themselves and in the interests of the Community, their own tables illustrating, as far as possible, the correlation between the INSPIRE Directive and the transposition measures, and to make them public (INSPIRE Directive, Recital paragraph 30). This is important for the process as this information may point to early adoption and best practices in setting-up national infrastructures.

One of the key activities in the Transposition Phase regards the adoption of Implementing Rules following a timetable set by INSPIRE. INSPIRE requires the formal adoption of those Implementing Rules by the Commission following the "Comitology Procedure"². The regulatory nature of the Implementing Rules requires the Commission to present them to a Regulatory Committee of Member States representatives, referred to as the INSPIRE Committee, which will officially start its activities at the beginning of the Transposition Phase. This INSPIRE Committee plays a central role in the regulatory process.

The adopted Implementing Rules shall be implemented by the Member States.

2 Requirements of the INSPIRE Directive

The second chapter in the Work Programme summarizes the requirements for Implementing Rules based on the final text of the Directive. It provides the reference framework for the development of Implementing Rules and accompanying activities to be planned for the Transposition Phase and beyond. The requirements for metadata, network services, data specifications, data and service sharing, and monitoring and reporting are summarised in the roadmap below, providing also association to the development and implementation of the Implementing Rules. An online planning table will be available on a permanent basis via the INSPIRE website. The table below provides the roadmap for the development and implementation of the Implementing Rules. The first column gives the date of the milestone. The second column indicates the article of the INSPIRE Directive that is relevant for the milestone.

² Council Decision (1999/468/EC) Official Journal L 184/23, 17.7.1999, "laying down the procedures for the exercise of implementing powers conferred on the Commission".

Milestone date	Relevant article	Description
2007-05-15		Entry into force of INSPIRE Directive
2007-08-15	22§2	Establishment of the INSPIRE Committee
2008-05-15	5§4	Adoption of IR for the creation and updating of metadata
2008-05-15	21(4)	Adoption of IR for monitoring and reporting
2008-05-15*	16	Adoption of IR for discovery and view services
2008-11-15*	16	Adoption of IR for download services
2008-11-15*		Adoption of IR for data exchange
2008-11-15*	16(a)	Adoption of IR for Coordinates Transformation Service
2009-05-15*	17(8)	Adoption of IR governing the access rights of use to spatial data sets and services for Community institutions and bodies
2009-05-15	9(a)	Adoption of IRs for the interoperability and harmonisation of spatial data sets and services for Annex I spatial data themes
2009-05-15	24§1	Provisions of Directive are brought into force in MS (transposition date)
2010-05-15	21§1	Implementation of provisions for monitoring
2010-05-15	6(a)	Metadata available for spatial data corresponding to Annex I and Annex II spatial data themes
2010-05-15*	16	Discovery and view network services operational
2010-05-15	15	The EC establishes and runs a geo-portal and Community level
2010-05-15	21§2	Member States' first report to the Commission. From then onwards Member States have to present reports every 3 years
2010-11-15*	16	Download services operational
2010-11-15*	16(a)	Coordinates Transformation Services operational
2010-11-15*	16	Adoption of IR for invoke "spatial data service" Network Service
2011-05-15	7§3, 9(a)	Newly collected and extensively restructured spatial data sets available in accordance with the IRs for interoperability and harmonisation of spatial data sets and services for Annex I spatial data themes
2012-05-15	9(b)	Adoption of the IR s for the interoperability and harmonisation of spatial data sets and services for Annex II and III spatial data themes
2012-11-15*	16	Invoke "spatial data service" service operational
2013-05-15	21§2	Member States' second report to the Commission
2013-05-15	6(b)	Metadata available for spatial data corresponding to Annex III spatial data themes
2014-05-15	23	Commission's report to the EP and the Council. From then onwards the Commission has to present reports every 6 years.
2014-05-15	7§3, 9(b)	Newly collected and extensively restructured spatial data sets available in accordance with IRs for interoperability and harmonisation of spatial data sets and services for Annex II and III spatial data themes
2016-05-15	7§3, 9(a)	Other spatial data sets available in accordance with IR s for interoperability and harmonisation of spatial data sets and services for Annex I spatial data themes
2019-05-15	7§3, 9(b)	Other spatial data sets available in accordance with IR s for interoperability and harmonisation of spatial data sets and services for Annex II and III spatial data themes
2020-05-15	23	Commission's second report to the EP and the Council.

* = date proposed by Commission

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3 Overview of the process

The development of the Implementing Rules is the responsibility of the Commission. The Implementing Rules will be adopted as Commission Decisions according to the INSPIRE Roadmap above.

However, this is preceded by an extended bottom-up preparatory process which involves participation of the stakeholders at many levels and according to a structure which was set up in the Preparatory Phase. The Work Programme provides in depth detail on the development process and the adoption procedure for the INSPIRE Implementing Rules, whereas this summary is limited to listing the various steps in the process:

1. The drafting of the Implementing Rules

It is the final responsibility of the European Commission to produce draft Implementing Rules. However, the preparation of a draft Implementing Rule is based on extensive stakeholder involvement, and is being done by each of the 5 INSPIRE Drafting Teams. Experts in the Drafting Teams have been selected via a call for expression of interest, and do not belong to either a Spatial Data Interest Community (SDIC), either a Legally Mandated Organisation (LMO)

2. The testing of draft Implementing Rules

It may occur during the Implementing Rules development process that testing the proposed draft measures is considered necessary in order to check feasibility, performance etc. This will then be done via pilots, projects or studies.

3. The consultation with stakeholders

All draft Implementing Rules will be subject to an internet consultation. The target group of the consultation may vary according to the technical complexity, but will at least include the stakeholders registered at the INSPIRE website, and may include the public in some instances.

4. The Commission inter-service consultation

Draft Implementing Rules (those revised based on the consultations with stakeholders) are subject to an Inter-Service Consultation (ISC). In this process the Services of the European Commission are able to provide their opinion on the Implementing Rules.

5. The regulatory processes with and without scrutiny, which will lead to the adoption of an Implementing Rule as a Commission Decision

Two types of procedures are applicable to the INSPIRE Implementing Rules. These are the Regulatory Process with Scrutiny (RPS, also referred to as "Art. 5a" of Council Decision 2006/512/EC), and the Regulatory Process without scrutiny (RP, "Art. 5"). Implementing Rules for metadata and those for monitoring and reporting follow article 5, whereas Implementing Rules for network services, for harmonized data specifications and for data and service sharing between Member States and EU institutions and bodies are subject to article 5a.

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4 Action plan 2007-2009

This section summarises chapter 5 of the Work Programme, which describes the work of the five INSPIRE Drafting Teams (metadata, harmonized data specifications, network services, data and service sharing, and monitoring and reporting) and of the Services of the European Commission for the period 2007-2009.

4.1 Metadata

INSPIRE addresses two kinds of metadata: metadata for spatial data and metadata for services. The objective of this activity is to draft the Implementing Rules that describe the content and the structure of Metadata for spatial data and services corresponding to the themes in Annexes I, II, and III of the Directive, and to have them approved by the regulatory committee within 1 year from the entry in force of the Directive, i.e. 15 May 2008.

4.2 Interoperability of spatial data sets and services

The process for developing harmonised data specifications is designed to maximize the re-use of existing requirements and specifications, in order to minimize the burden for Member States' organisations at the time of implementation.

The development of INSPIRE Implementing Rules for harmonised spatial data follow a two-step approach:

1. Development of conceptual framework and specification methodology. This work started in the Preparatory Phase and will be concluded early in the Transposition Phase, and will lead to deliverables DS-D 2.5 *Generic Conceptual Model (GCM)*, and DS-D 2.6 *Methodology for Specification Development*.
2. Development of data specifications for each data theme listed in the annexes of the Directive. This work will be carried out based on the conceptual framework and specification methodology, based on the INSPIRE roadmap.

Most of the work regarding step 1 was carried out in the Preparatory Phase, and will be completed in 2007. Step 2 comprises the data specification development of the data themes, which will last altogether about five years. The work foreseen in the Transposition Phase puts the emphasis on the Annex I data themes.

Developing coherent specifications for the 34 INSPIRE data themes is challenging both from organisational and content point of view. It requires broad participation of the stakeholders, detailed planning of resources, and a continuous overview of the process in order to achieve timely output with coherent content.

Basically 3 scenarios are foreseen, depending on the status of the existing specifications:

1. Scenario 1 deals with existing and relevant standards in the domain of the data theme, which will be taken into account and reviewed.
2. Scenario 2 deals with multiple existing specifications but lack of a single commonly agreed specification for a theme. In this scenario, streamlining between existing specs is the core challenge.
3. Scenario 3 deals with the situation whereby insufficient specifications or none at all are available, in which case specifications have to be developed.

Important to notice is the extension of the feedback mechanisms from the Preparatory Phase with the review via EIONET.

As dealing with and coordinating between 34 data themes is likely to be a big challenge, the collaboration with the stakeholders implies a need for a transparent and easy-to follow process enabling the interested parties to access the results already achieved, identify the ongoing actions and the forthcoming steps. In order to make the parallel data specification development, theme grouping,

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and the integrated tests traceable and transparent an easy accessible tool is needed. It is planned that the status of data specification in a detailed (per theme) breakdown will be available via the INSPIRE web-site.

4.3 Network services

The objectives of this task are to draft the Implementing Rules for Network Services, such as discovery, view, download, transformation and middleware services. Such services should support Member States in ensuring the technical possibility, for public authorities, to link their spatial data sets and services. Existing and emerging open IT and geospatial standards from W3C, WS-I, OMG, OGC, ISO, OASIS, and CEN will have an important input to the IR development process. Furthermore, the development of the prototype of the INSPIRE geo-portal is an important component in terms of integration and linkage of the various services towards an ESDI.

4.4 Data Sharing

The main objective for the Data and Service Sharing Drafting Team is to develop a draft Implementing Rule governing access and rights of use to spatial data sets and services for Community institutions and bodies available for adoption by 2009 according to the roadmap.

Secondary objectives are to develop guidance and recommendations accompanying the draft data and service sharing Implementing Rule and to develop recommendations for cross border data and service sharing.

4.5 Monitoring and Reporting

The objective is to draft Implementing Rules for monitoring and reporting by 2008. This activity focuses on the development of the mechanisms, methodology and indicators by which:

- a continuous monitoring of the implementation progress and of the usage of the SDI components is measurable with respect to the targets set out by the INSPIRE directive;
- a three-yearly report to the Commission is provided to describe the approach applied by the Member States to translate the requirements set out by INSPIRE into concrete measures and describe the developments of its SDI;
- collected indicators are validated and transferred to the Commission, as well as being made accessible to the public through appropriate information channels.

The monitoring indicators should be derivable as much as possible from the applications and services that are set up, in order to facilitate a continuous monitoring process with marginal overhead.

4.6 INSPIRE technical architecture and geo-portal development

The relations between IRs and in particular the relationship between the technical components, including additional elements such as Registers, will be documented in an overview of the INSPIRE technical architecture, planned for availability in 2007. It will describe the required elements within the infrastructure, their relationships and the responsible party for drafting the relevant specification. It will also describe the role of the INSPIRE geo-portal in the technical architecture.

The developments of the INSPIRE geo-portal are primarily targeted towards alignment with the INSPIRE Directive and follow the development of the INSPIRE draft Implementing Rules. Current focus is on an INSPIRE compliant metadata editor (based on the current status of the IR and including some preliminary tests on multi-linguality), on search criteria compliant with the INSPIRE Directive and draft IR and on the development of OGC CSW INSPIRE Application profile.

The INSPIRE geo-portal is also used to test candidate specifications planned for use in the draft Implementing Rules and to provide support to the INSPIRE Implementing Rules Drafting Teams with reference material (feature catalogues, glossary etc).