



<http://www.mdweb-project.org/>

How to fill out an INSPIRE metadata record with MDweb

Scope :

This document describes how to create an MDweb record compliant with the INSPIRE directive. It intend to provide the minimal informations needed to understand and capture INSPIRE metadata.

Document reference :

Requirements and recommendations give in this document are based on the following document :

- EN ISO 19115
- INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119 (MD_IR_and_ISO_20090218)
- COMMISSION REGULATION (EC) No 1205/2008 of 3 December 2008 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards metadata

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Metadata Record Structure

Fields having to be filled are hierarchically structured following the ISO 19115 standard. These fields could be divided in four parts :

- The first fields are about the metadata on metadata. They allow to qualify the record but not the resource described by the record.

The three other parts describe the resource :

- The second group of fields describes information characterizing the resource.
- The third group gives information about the distribution of the resource.
- The fourth contains information about the quality of the resource.

Metadata record fields order

Description for the metadata record

Party responsible for metadata record

Resource Identification

General description of the resource

Point of contact for the resource

Category keywords for resource

Constraints on resource

Spatial resolution of resource

Spatio-temporal extent

Resource distribution

Resource data quality

How to read this document

Order of the sections follows the order of MDweb fields structured as described on the upper section.

This document provides only needed informations and examples to fill out a compliant INSPIRE record.

MDweb appearance

If a field is mandatory, it appears in red on MDweb, on the elementary view.

version 3.0, GML, version 3.2.1

169 car.

If a fields is conditional, it appears in green on MDweb, on the extended view.

If a fields is optional, it appears in blank on MDweb, on the complete view.

D2.8.1.9 Data Specification on Protected sites - Guidelines

341 car.

Document 's frame signification

Grey frame means the element is automatically captured by MDweb

Blue frame shows an example of possible values.

INSPIRE Dataset Metadata

1.1 Description for the metadata record

This part contains information on the metadata record, not on the described resource (dataset, series or service).

Metadata record file identifier

When you open a new record this field is empty. Value is automatically captured when you save a new record.

Metadata record language

Language used for documenting metadata.

Identifier of parent record (URI)

Unique Resource Identifier of the parent series.

This element is not an INSPIRE element , but it permits to do the link between a series and his children (datasets of the series).

Hierarchical Level Documented

Scope to which metadata applies

This field is automatically captured following the chosen profile.

Date of metadata record creation

This field is automatically captured.

Date of creation of the metadata record.

Name of Metadata standard

This field is captured automatically. MDweb needs this field during the importation process.

Version of Metadata standard

This field is captured automatically. MDweb needs this field during the importation process.

1.1.1 Party responsible for metadata record

Information about party responsible for the metadata information

Name for responsible organization

Function performed by responsible party

The only value allowed by INSPIRE is PointOf Contact. Value is set to PointOfContact in MDweb.

Street address (point of delivery)

City

Postal Code

Country

Email

World Wide Web site URL

Value must be an URL

Party responsible for metadata record

- Name for responsible organization : [IRD](#)
- Function performed by responsible party : [pointOfContact](#)
- Contact information for responsible party

- Contact address

- Street Address (point of delivery) : [Maison de la teledetection 500 Rue](#)

[Jean-François Breton](#)

- City : [Montpellier](#)

- Postal Code : [34000](#)

- Country : [France](#)

- Email : ginane@teldec.fr

- Online contact point :

- World Wide Web link (URL) : <http://www.espace.ird.fr/>

1.2 Resource Identification

These fields contain information about the described resource (series, dataset or service).

1.2.1 General description of the resource

Summary of resource

Brief narrative summary of the content of the resource.

Resource language

If the resource does not contains textual information, value can be defaulted to the metadata record language.

Topic category for resource

Main theme of the dataset. The value depends the INSPIRE Annexe referred by the dataset.

INSPIRE implementing rules for metadata "Quotation"

TOPIC CATEGORIES IN ACCORDANCE WITH EN ISO 19115

2.1. Farming (**farming**)

Rearing of animals and/or cultivation of plants.

This category applies to Directive 2007/2/EC spatial data theme **Annex III(9) Agricultural and aquaculture facilities.**

2.2. Biota (**biota**)

Flora and/or fauna in natural environment.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex III(17) Bio-geographical regions, Annex III(18) Habitats and biotopes, Annex III(19) Species distribution.**

2.3. Boundaries (**boundaries**)

Legal land descriptions.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex I(4) Administrative units, Annex III(1) Statistical units.**

2.4. Climatology / Meteorology / Atmosphere (**climatologyMeteorologyAtmosphere**)

Processes and phenomena of the atmosphere.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex III(13) Atmospheric conditions, Annex III(14) Meteorological geographical features.**

2.5. Economy (**economy**)

Economic activities, conditions and employment.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex III(20) Energy resources, Annex III(21) Mineral resources.**

2.6. Elevation (**elevation**)

Height above or below sea level.

This category applies to the following Directive 2007/2/EC spatial data theme: **Annex II(1) Elevation.**

2.7. Environment (**environment**)

Environmental resources, protection and conservation.

This category applies to the following Directive 2007/2/EC spatial data theme: **Annex I(9) Protected sites.**

2.8. Geoscientific Information (**geoscientificInformation**)

Information pertaining to earth sciences.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex III(3) Soil , Annex II(4) Geology, Annex III(12) Natural risk zones.**

2.9. Health (**health**)

Health, health services, human ecology, and safety.

This category applies to the following Directive 2007/2/EC spatial data theme: **Annex III(5) Human health and safety.**

2.10. Imagery / Base Maps / Earth Cover (**imageryBaseMapsEarthCover**)

Base maps.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex II(3) Orthoimagery, Annex II(2) Land cover.**

2.11. Intelligence / Military (**intelligenceMilitary**)

Military bases, structures, activities.

This category does not apply specifically to any Directive 2007/2/EC spatial data themes.

2.12. Inland Waters (**inlandWaters**)

Inland water features, drainage systems and their characteristics.

This category applies to the following Directive 2007/2/EC spatial data theme: **Annex I(8) Hydrography.**

2.13. Location (**location**)

Positional information and services.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex I(3) Geographical names, Annex I(5) Addresses.**

2.14. Oceans (**oceans**)

Features and characteristics of salt water bodies (excluding inland waters).

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex III(16) Sea**

regions, Annex III(15) Oceanographic geographical features.

2.15. Planning / Cadastre (**planningCadastre**)

Information used for appropriate actions for future use of the land.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex I(6) Cadastral parcels, Annex III(4) Land use, Annex III(11) Area management/restriction/regulation zones & reporting units.**

2.16. Society (**society**)

Characteristics of society and cultures.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex III(10) Population distribution – demography.**

2.17. Structure (**structure**)

Man-made construction.

This category applies to the following Directive 2007/2/EC spatial data themes: **Annex III(2) Buildings, Annex III(8) Production and industrial facilities, Annex III(7) Environmental monitoring facilities.**

2.18. Transportation (**transportation**)

Means and aids for conveying persons and/or goods.

This category applies to the following Directive 2007/2/EC spatial data theme: **Annex I(7) Transport networks.**

2.19. Utilities / Communication (**utilitiesCommunication**)

Energy, water and waste systems and communications infrastructure and services.

This category applies to the following Directive 2007/2/EC spatial data theme: **Annex III(6) Utility and governmental services.**

Title of cited resource

Name by which the cited resource is known.

Reference date for cited resource

Date of publication, creation or revision of the resource. Format must be YYYY-MM-DD.

Identifier for cited resource

Value uniquely identifying an object within a namespace. Combination of Namespace authority and code must identifies uniquely a dataset.

Namespace authority

Namespace Name

Identifier code

Alphanumeric value identifying an instance in the namespace

Resource identification

- Summary of resource : [Habitat map of Strandja NPD based on the classification of a LANDSAT satellite image from 2000 with a lot of ground truth data from 2005](#). The resource is created in the framework of a diploma thesis by students from the University of Muenster in Germany.
- Resource language : [English](#)
- Topic category for resource : [biota](#)
- Resource Citation
 - Title of cited resource : [Habitat_Sat_Class_Strandja](#)
 - Reference date for cited resource
 - Reference date for the cite resource : [2010-04-26](#)
 - Event type of reference date : [publication](#)
 - Identifier for cited resource
 - Namespace authority : <http://www.ign.fr/>
 - Identifier code : [9876543210](#)

1.2.2 Point of contact for resource

Role

Function performed by the responsible party

Quotation : 'INSPIRE implementing rules for metadata'

6. RESPONSIBLE PARTY ROLE

6.1. Resource Provider (resourceProvider)

Party that supplies the resource.

6.2. Custodian (custodian)

Party that accepts accountability and responsibility for the data and ensures appropriate care and maintenance of the resource.

6.3. Owner (owner)

Party that owns the resource.

6.4. User (user)

Party who uses the resource.

6.5. Distributor (distributor)

Party who distributes the resource.

6.6. Originator (originator)

Party who created the resource

6.7. Point of Contact (pointOfContact)

Party who can be contacted for acquiring knowledge about or acquisition of the resource.

6.8. Principal Investigator (principalInvestigator)

Key party responsible for gathering information and conducting research.

6.9. Processor (processor)

Party who has processed the data in a manner such that the resource has been modified.

6.10. Publisher (publisher)

Party who published the resource.

6.11. Author (author)

Party who authored the resource.

Street address (delivery point)

City

Postal Code

Country

Email

World Wide Web site URL

Value must be an URL

1.2.3 Category keywords for resource (first instance)

At the very least for spatial dataset, one instance of keyword must be the title of the relevant INSPIRE Spatial Data Theme. The titles and definitions have been added to GEMET Thesaurus.

Keyword (first instance)

Title of the relevant INSPIRE Spatial Data Theme

Title

Title is predefined to "**GEMET - INSPIRE themes, version 1.0**"

Reference date

Reference date is predefined to "**2008-06-01**"

Event used for reference date

Event used for reference date is predefined to "**publication**"

1.2.4 Keywords (others instances)

A keyword instance is composed by a keyword value and an originating controlled vocabulary instance, if the keyword used originates from a known thesaurus.

Keyword

Commonly used word(s) or formalized word(s) or phrase(s) used to describe the subject

Originating controlled vocabulary

Name of the formally registered thesaurus or similar authoritative source of keywords

To be compliant with ISO 19115 if a new instance of originating controlled vocabulary is implemented, the three following fields must be filled.

Title

Reference date for the cite resource

Event type of reference date

Resource identification

- Category keywords for resource
 - Keyword : [Protected sites](#)
 - Originating controlled vocabulary
 - Title of cited resource : [GEMET - INSPIRE themes, version 1.0](#)
 - Reference date for cited resource
 - Reference date for the cite resource : [2008-06-01](#)
 - Event type of reference date : [publication](#)
- Category keywords for resource
 - Keyword : [natural area](#)
 - Keyword : [national park](#)
 - Originating controlled vocabulary
 - Title of cited resource : [GEMET - concepts, version 2.4](#)
 - Reference date for cited resource
 - Reference date for the cite resource : [2010-01-13](#)
 - Event type of reference date : [publication](#)

1.2.5 Constrains on resource (first instance and second instance)

The default values instantiated in MDweb signify there are no restriction applying on the resource. You have to change this value if constraints apply to the resource.

Limitations on fitness for use

Restrictions on the access and use of a resource or metadata

Descriptions of terms and conditions, including where applicable, the corresponding fees shall be provided through this element or a link (URL) where these terms and conditions are described.

Access constraints

Access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the resource.

Condition : The value of accessConstraints is otherRestrictions, if and only if there are instances of otherConstraints expressing limitations on public access

Other restrictions or legal prerequisites

Other restrictions and legal prerequisites for accessing and using the resource or metadata.

Condition : The value of accessConstraints is otherRestrictions, if and only if there are instances of otherConstraints expressing limitations on public access

Security classification

Resource identification <ul style="list-style-type: none">- Constrains on resource<ul style="list-style-type: none">- Limitations on fitness for use : Name the data origin. The use of the data is allowed for scientific and planning purposes, not for any commercial purpose, and not for financial profit or gain. No modification of the data is allowed.- Access constraints : copyright- Other restrictions or legal prerequisites :- Constrains on resource<ul style="list-style-type: none">- Security classification : unclassified

1.2.6 Spatial resolution of resource

Conditional : Mandatory if an equivalent scale or a resolution distance can be specified.

Distance between elements (grid profile)

Ground sample distance (A distance is a Number expressing the distance value and a unit of measure of the distance value).

Allowed values : Integer

MDweb assumes that distance will be expressed in meters. You must only indicate the number of meters ("3 meters" become 3).

Scale denominator (vector profile)

Level of detail expressed as the scale denominator of a comparable hardcopy map or chart.

Allowed values : Integer

Example : 50000 for 1:50000 scale map

1.2.7 Spatio-temporal extent

Geographic Extent

Geographic bounding box

Mandatory for spatial dataset, and series,
Conditional for spatial service, (mandatory for services with an explicit geographic extent)

Bounding box must be as small as possible.

Values must be written as do the MDweb bounding box writer (coordinates expressed in decimal degree with a precision of at least 2 decimals).

Longitude on western most extent

Longitude on eastern most extent

Longitude on southern most extent

Longitude on northern most extent

Resource identification

- Resource extent

- Geographic extent

- Longitude on western most extent : -68.40

- Longitude on eastern most extent : 57.086

- Longitude on southern most extent : -15.429

- Longitude on northern most extent : 31.886

Temporal Extent

Time period covered by the content of the dataset

Each instance of the temporal extent may be an interval of dates or an individual date. The overall time period covered by the content of the resource may be composed of one or many instances.

Start time

Format must be YYYY-MM-DD.

End time

Format must be YYYY-MM-DD.

Resource identification

- Resource extent

- Temporal extent

- Date and time extent

- Start time

- Timestamp
 - value : 2010-06-01
- End time
 - Timestamp
 - value : 2010-06-06

1.3 Resource distribution

World Wide Web site URL

Location (address) for on-line access using a Uniform Resource Locator or similar addressing scheme

Allowed value : URL

This field is mandatory if :

- for spatial datasets, a link providing more information on the resource and/or access is available.
- for service, a linkage to the service is available. The link might be one of the following :
 - a link to the service capabilities document,
 - a link to the service WSDL document,
 - a link to a web page with further instructions,
 - a link to a client application that directly accesses the service.

1.4 Resource data quality

The degree of conformity shall be evaluated for each specification applying to the dataset or service.

Structure of MDweb instances assures coherence between degree and specification element.

Scope of data quality assessment

This element is provided to be compliant with ISO 19115. Its value is defaulted to "dataset" for dataset profile" and "service" for service profile.

1.4.1 Data quality report

Conformance of resource with specification

Indication of the conformance result

Allowed value : True, the resource is fully conformant with the cited specification
 false, the resource does not conform with the cited specification
 null, Conformance has not been evaluated

Specification used for data quality evaluation

Citation of the product specification or user requirement against which data is being evaluated.

Title of cited resource

Reference date for the cite resource

Event type of reference date

Specification Format allowed values :

Title of cited resource	Reference date	Event use for reference date
INSPIRE dataset / series Profile		
INSPIRE Data Specification on Administrative Units - Guidelines	2010-05-03	publication
INSPIRE Data Specification on Cadastral Parcels - Guidelines	2010-05-03	publication
INSPIRE Data Specification on Geographical Names - Guidelines	2010-05-03	publication
INSPIRE Data Specification on Geographical Names - Guidelines	2010-05-03	publication
INSPIRE Data Specification on Hydrography - Guidelines	2010-05-03	publication
INSPIRE Data Specification on Protected Sites - Guidelines	2010-05-03	publication
INSPIRE Data Specification on Transport Networks- Guidelines	2010-05-03	publication
INSPIRE Data Specifications on Addresses - Guidelines	2010-05-03	publication
INSPIRE Specification on Coordinate Reference Systems - Guidelines	2010-05-03	publication
INSPIRE Specification on Geographical Grid Systems - Guidelines	2010-05-03	publication
INSPIRE Service Profile		
INSPIRE View Service Technical Guidance (Version 2.0)	2009-07-28	publication
Technical Guidance for INSPIRE Discovery Services	2009-07-23	publication

1.4.2 Resource lineage

Knowledge of resource lineage

General explanation of the data producer's knowledge about the lineage of a dataset.

In addition to general explanation of the data producer's knowledge about the

lineage of a dataset **it is possible to include data quality statements here.**

INSPIRE Service Profile

Differences between dataset profile and service profile are :

2.2 Delated elements

- 1.2.1 Resource language
- 1.2.1 Topic Category
- 1.2.1 Identifier for the cited resource
- 1.2.6 Spatial resolution of resource
- 1.4.2 Resource lineage

2.2 Additional elements

Dataset on which the service operates

Provides information about the dataset that service operates on.

Conditional (not applicable to dataset)

This field is mandatory if linkage to dataset on which the service operates are available.

The resources available trough the described service, must be targeted by their unique resource identifier. The Unique Resource Identifier value within the dataset metadata must be the same value that coupled resource value within the service metadata.

For example if for a dataset metadata, the unique resource identifier value is :

<http://www.ign.fr/9876543210>,

the coupled resource within the service metadata must be :

<http://www.ign.fr/9876543210>

Service type

A service type name from a registry of service (type name)

Example of possible matching :

discovery :	OGC:CSW
view :	OGC:WMS
download :	OGC:WFS, OGC:WCS
transformation :	OGC : WCTS
invoke :	OGC:WPS
other service :	Any non registered value

2.2 Modified Conditionality

- ***1.2.7 Geographic extent***
- ***1.3 Resource distribution***

INSPIRE Series Profile

Differences between dataset profile and series profile are :

3.1 Deleted elements

1.1 Identifier of parent record (URI)

3.2 Modified elements

1.2.6 Spatial resolution of resource

Distance between elements (in meters) and scale denominator could be present both.

Contacts

1. Mailing list and forum

<http://mdweb-project.869954.n3.nabble.com/>

2. Company

IRD

jean-christophe.desconnets@ird.fr

dorian.ginane@ird.fr

Geomatys

vincent.heurteaux@geomatys.fr

3. Website

MDweb

<http://www.mdweb-project.org>

IRD

<http://www.espace.ird.fr>

GEOMATYS

<http://www.geomatys.com>