

# SWIM and Horizon 2020 Support Mechanism

Working for a Sustainable Mediterranean, Caring for our Future



INSPIRE

## Background and Principles

Presented by:  
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**SWIM and Horizon 2020 SM REG-5: Regulatory and organizational issues of decentralized water management**

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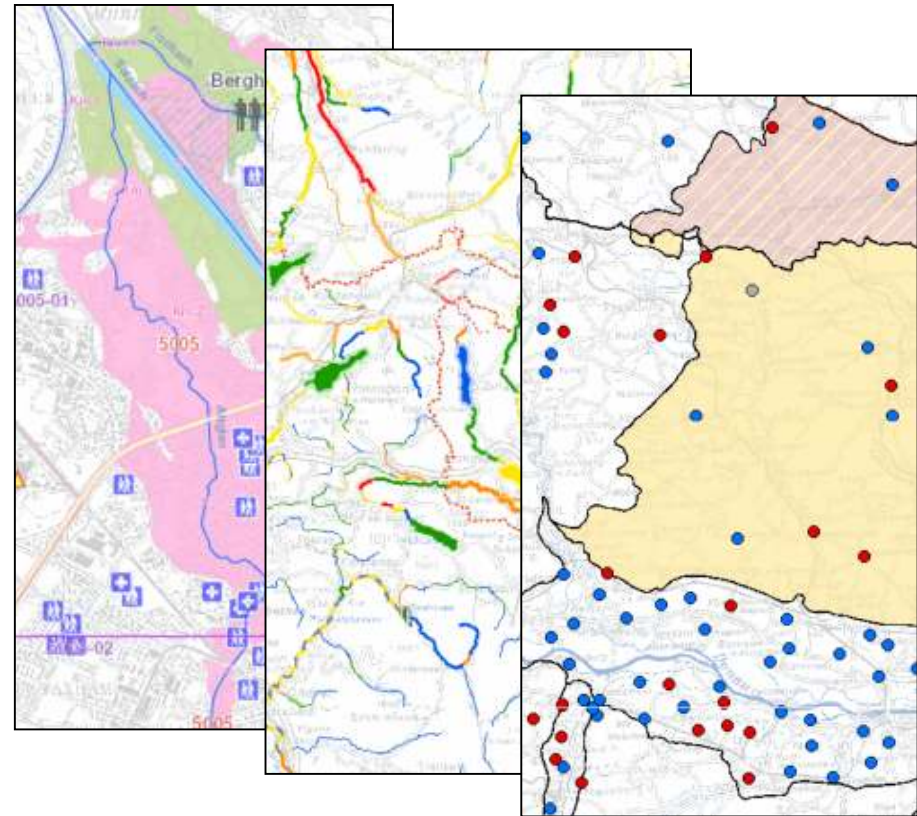
# Spatial data infrastructure for EU environmental Policies and Activities

- ❖ Enable the sharing of environmental spatial information among public sector organisations
- ❖ Facilitate public access to spatial information across Europe
- ❖ Assist in policy-making across boundaries



# Most environmental data is of spatial nature

- ❖ Monitoring sites
- ❖ Environmental quality data
- ❖ Observations
- ❖ Pressures on the environment
- ❖ Protected sites
- ❖ Hazard zones & risk areas
- ❖ ... and many more ...



# Obstacles preventing the widespread use of spatial data needed

- ❖ Gaps still remain (data missing or incomplete)
- ❖ The description of available data is often incomplete
- ❖ A large variety of formats exist
- ❖ Data are not interoperable
- ❖ Many data sources are not consistent
- ❖ Scales are not compatible
- ❖ Reference Systems are not harmonised
- ❖ Costs and access restrictions

# Needs for INSPIRE

## Environmental Needs

- ❖ Better information needed to support policies
- ❖ Improvement of existing information flows
- ❖ Diversity across regions to be considered
- ❖ Revision of approach to reporting and monitoring >> moving to concept of sharing of information

## Situation in Europe

- ❖ Data policy restrictions
- ❖ Lack of co-ordination across borders and levels of government
- ❖ Lack of standards incompatible information and information systems
- ❖ Existing data not re-useable fragmentation of information, redundancy, inability to integrate



# INSPIRE Vision & Principles

- ❖ Data should be collected only once and maintained at the level where this can be done most effectively
- ❖ It should be possible to combine seamless spatial information from different sources across Europe and share it with many users and applications
- ❖ It should be possible for spatial data collected at one level of government to be shared between all levels of government
- ❖ Spatial data needed for good governance at all levels should be readily and transparently available
- ❖ Easy to find what spatial data is available, evaluate its fitness for purpose and to know which conditions apply for its use

# INSPIRE Scope

- ❖ Lays down general rules to establish an infrastructure for spatial information
- ❖ Based on the infrastructure established and operated by Member States
- ❖ Does not require the collection of new spatial data
- ❖ Does not affect existing intellectual Property Rights



# INSPIRE Components

- ❖ Metadata
- ❖ Harmonisation and interoperability of spatial data sets and services
- ❖ Network services (discovery, view, download, transform, middleware)
- ❖ Data and Service sharing (policy)
- ❖ Coordination and measures for Monitoring & Reporting

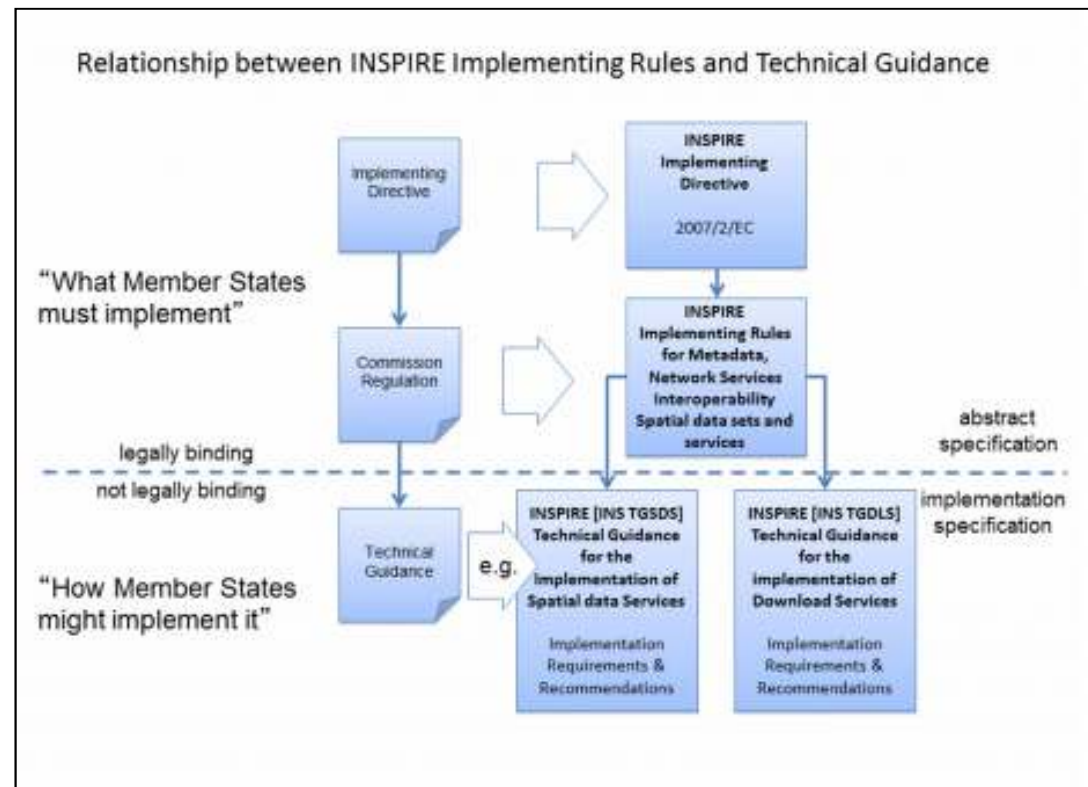




# Implementing Rules & Technical Guidance

## Implementing Rules

- ❖ Metadata
- ❖ Data specifications
- ❖ Network Services
- ❖ Data and Service Sharing
- ❖ Spatial Data Services
- ❖ Monitoring & Reporting



# INSPIRE addresses 34 Spatial Data Themes

**INSPIRE Data Themes**

Explore all Member State data according to the INSPIRE Annex themes.

**Annex I**

- Addresses
- Administrative units
- Cadastral parcels
- Geographical grid systems
- Geographical names
- Hydrography
- Protected areas
- Coordinate reference systems
- Transport networks

**Annex III**

- Atmospheric conditions
- Agricultural and aquaculture facilities
- Area management/restriction/regulation zones and reporting units
- Bio-geographical regions
- Buildings
- Environmental monitoring facilities
- Energy resources
- Habitats and biotopes
- Human health and safety
- Land use
- Meteorological geographical features
- Mineral resources
- Natural risk zones
- Oceanographic geographical features
- Population distribution — demography
- Production and industrial facilities
- Species distribution
- Soil
- Sea regions
- Statistical units
- Utility and governmental services

**Annex II**

- Elevation
- Geology
- Land cover
- Orthorectification

**Datasets - Hydrography of Europe**



Default: Download View

**INSPIRE Geospatial Dataset Statistics**

1552 Metadata Records	95 Downloadable Datasets
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**INSPIRE Monitoring & Reporting 2018 (status 2018)**

1698 metadata records

[Download Report](#)

**Datasets - Protected sites of Europe**



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**INSPIRE Geospatial Dataset Statistics**

1697 Metadata Records	224 Downloadable Datasets
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**INSPIRE Monitoring & Reporting 2018 (status 2018)**

2093 metadata records

[Download Report](#)

# <https://inspire.ec.europa.eu/>

INSPIRE KNOWLEDGE BASE  
Infrastructure for spatial information in Europe

European Commission > INSPIRE

Home Learn Implement Participate Use Toolkit

INSPIRE Video

The INSPIRE Directive: a brief description

INSPIRE Conference

**INSPIRE CONFERENCE 2018**

#INSPIRE\_EU2018  
**Antwerp**  
**18-21 September**

Quick Links

- INSPIRE LIBRARY
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<http://inspire-geoportal.ec.europa.eu/thematicviewer/Home.action>



INSPIRE  
Geoportals Thematic Viewer

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## Priority Datasets

Explore Member States' priority datasets for eReporting related to the following domains:



### Air & Noise

Covers ambient air quality and cleaner air for Europe, industrial emissions ...



### Industry

Covers industrial emissions and industrial accidents.



### Waste

Landfill of waste, waste from extractive industries, soil, banning of exports of metallic mercury ...



### Nature & Biodiversity

Covers conservation of natural habitats and wild fauna and flora, wild birds.



### Water

Water Framework Directives, Urban waste water, bathing water, ...



### Marine

Covers marine environmental policy.

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Thank you for your attention.

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