

Relevance of the Tisza River Development Program to the European Commission

The Community Environmental Policy Context

European Commission
Directorate-General Environment
Research, Science and Innovation Unit

Rue de la Loi, 200
1049 Brussels BELGIUM
Hugo.De-Groof@ec.europa.eu.



TPD Environmental Perspective

- **Environmental and flood protection system**
 - building on a unified and harmonized River Basin management
 - the development of a cohesive environmental monitoring system
 - respond to special local requirements
 - prevention role, providing timely warnings and action plans.



Impacts of Flooding

- In the period 1998-2002 floods comprised 43% of all disaster events in Europe
 - 100 major floods
 - 700 dead
 - Half a million displaced people
 - 25 billion Euros uninsured economic loss
- Along the Rhine, 10 m people live in areas liable to extreme flooding, potential damage estimated at 165 bn. Euros



How to address

- Comprehensive set of policies covering surface and ground water quality, flood assessment, marine and coastal areas, soil, etc.
- Right geographical scale i.e. river basin for water quality and floods
- Sound knowledge based on timely, accurate, easily accessed geospatial and environmental information, shared across European, national, and local jurisdictions.



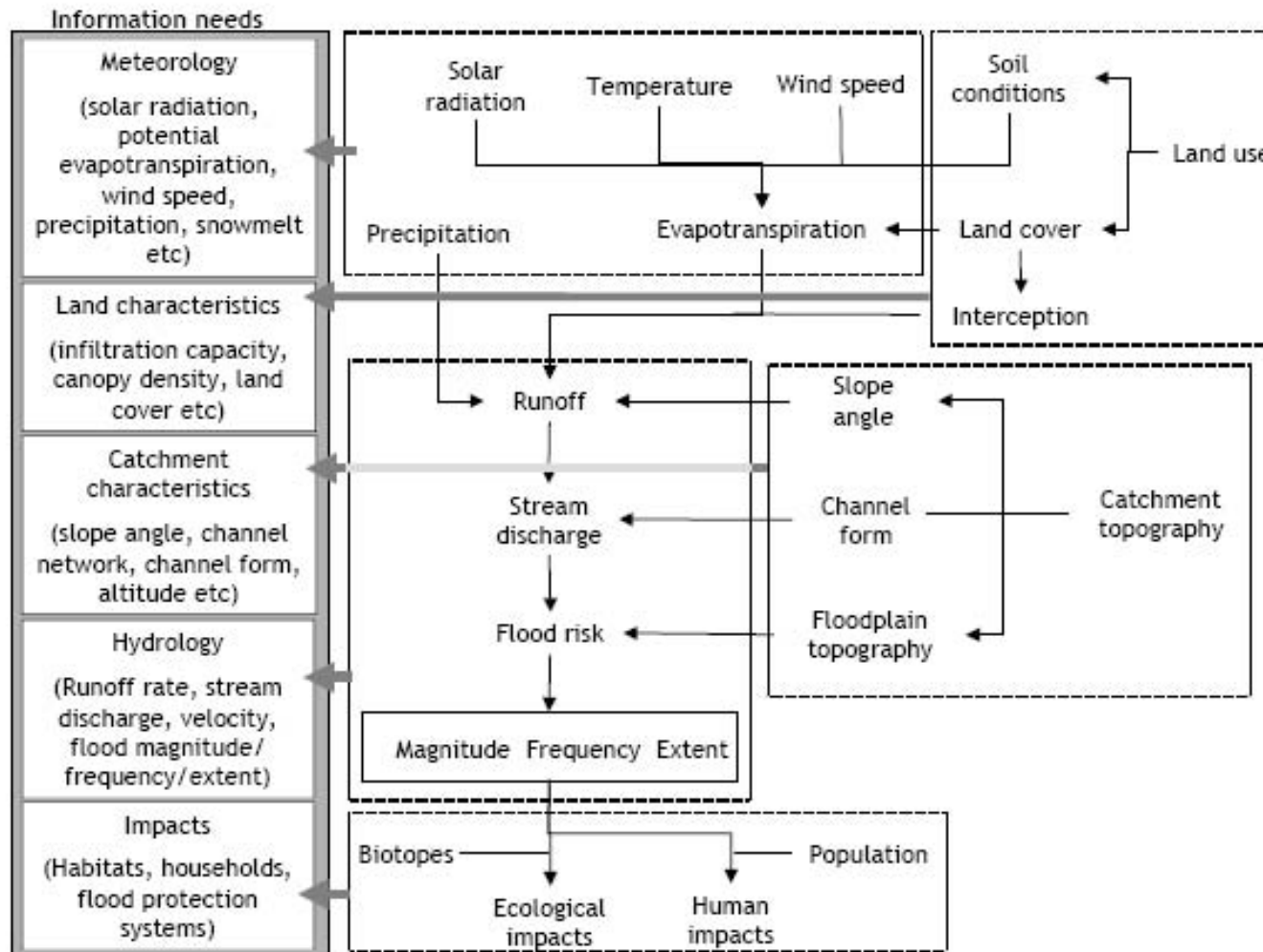
Directive on the Assessment and Management of Floods

Requirements:

- A preliminary flood risk assessment
 - Including art.4 a-f
 - (e) Likelihood of future floods and projected impact of climate change and land use trends
- Prepare flood risk maps by 2013 – with 6 yearly updates
- Flood risk management plans by 2015



Floods Assessment and Management Data & Information Requirements



Source: GMES BICEPS Report



Proposal for a Pesticides Directive

establishing a framework for Community action to achieve sustainable use of pesticides and amending Directive 2006/42/EC

- Specific measures to protect the aquatic environment
 - Buffer zones – defined as a function of the risk of pollution (soil, climate, etc.)
 - Measures to limit aerial drift (hedge rows etc.)
- Reduction of pesticide use in sensitive areas
 - Identify and list sensitive areas
 - Non-agricultural areas with high run-off risk or leaching.
- Reporting – info exchange
 - Through to be defined RISK INDICATORS



Proposal for a Soils Directive

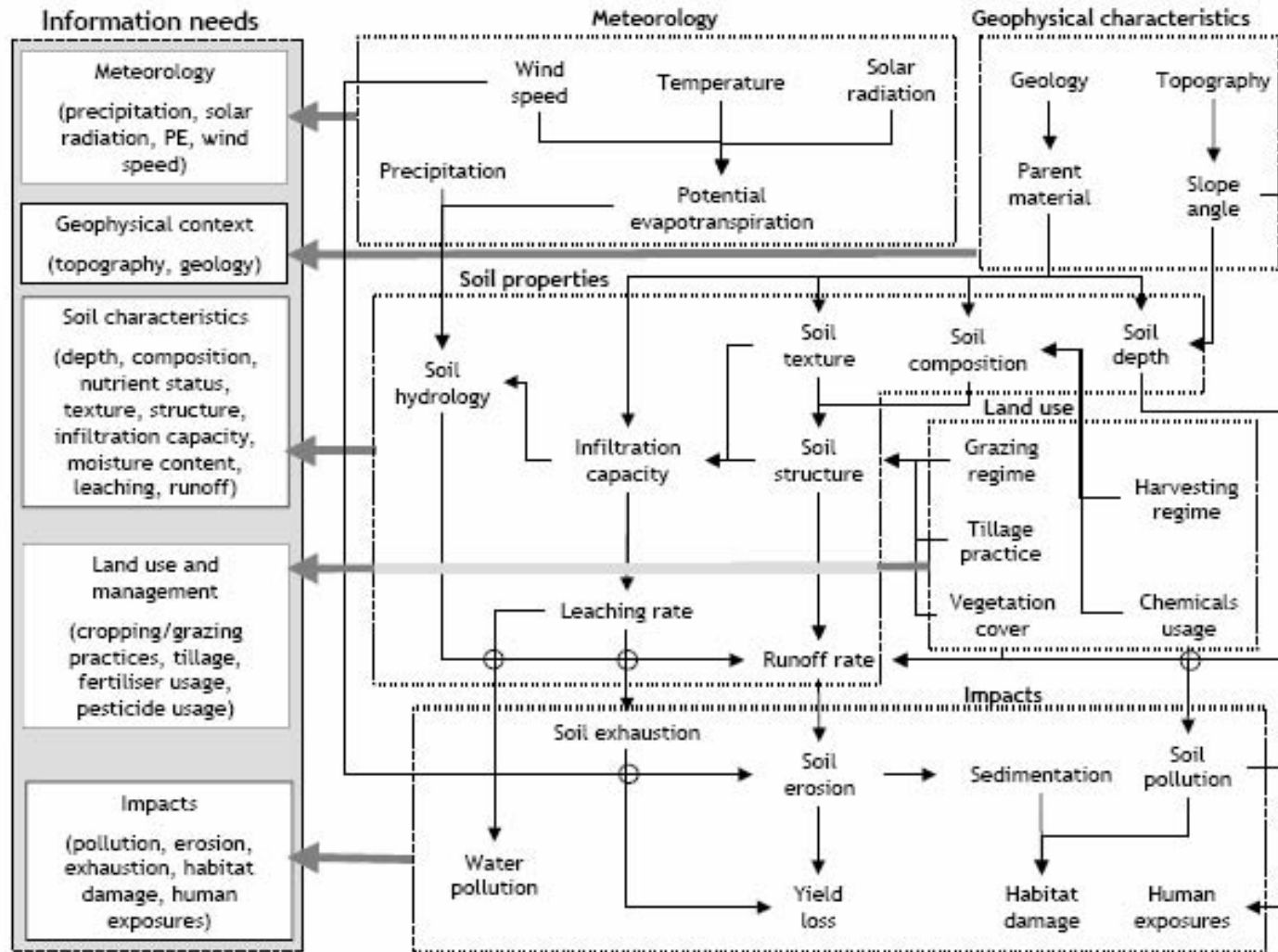
establishing a framework for the protection of soil and amending and
amending Directive 2006/42/EC

Adopted by EC in September 2006, now in co-decision

- Risk prevention, mitigation and restoration
 - Identify risk areas for soil degradation
 - Erosion
 - Organic matter decline
 - Compaction and decrease of porosity
 - Salinisation
 - Landslides
- Soil contamination
 - Identify contaminated sites – posing a risk to human health or environment



Soils Directive Data & Information Requirements



Source: GMES BICEPS Report



Clean Air for Europe – CAFE

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
on ambient air quality and cleaner air for Europe - COM(2005) 447 final

- Revise substantially and merge five separate elements of the existing acquis on ambient air quality into a single directive.
 - Simplify and streamline existing provisions particularly in respect of monitoring and reporting - moving towards a shared information system and electronic reporting.
- Will require additional monitoring requirements in the short to medium term:
 - a greater scientific understanding of certain air pollution problems
 - a greater use of modelling to assess air quality rather than more expensive monitoring.
 - cost savings in monitoring activities can be expected in the longer term.

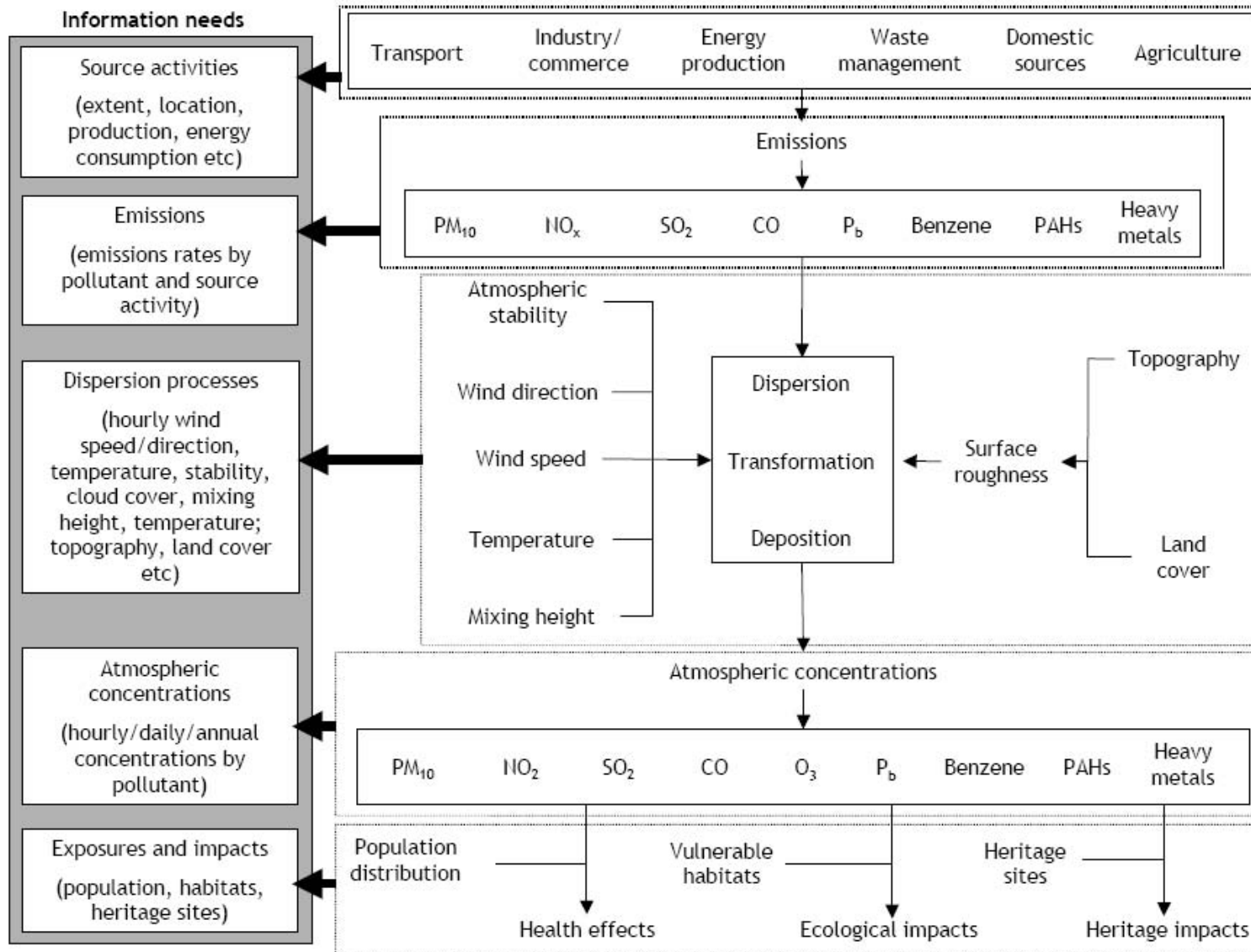


CAFE Directive – assessment principles

- A common approach to the assessment of air quality should be followed according to common assessment criteria.
 - account should be taken of the size of populations and ecosystems exposed to air pollution.
 - classify the territory of each Member State into zones or agglomerations reflecting the population density.
- Information collected should be representative and comparable across the Community
 - standardised measurement techniques
 - common criteria for the number and location of measuring stations.
 - Techniques other than measurements can be used to assess ambient air quality (modelling)
 - necessary to define criteria for the use and required accuracy of such techniques.



Information Requirements Relating to Air Quality



Source: GMES BICEPS Report



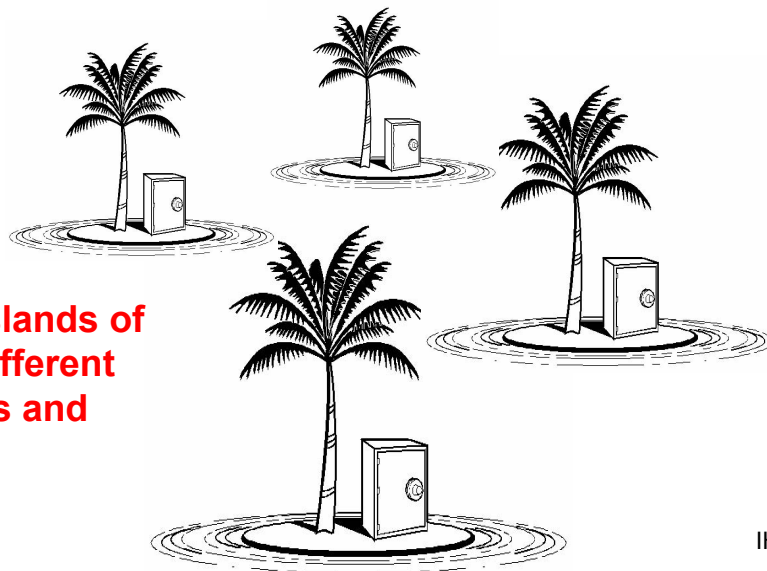
Dealing with the issues

Needs

- Better information needed to support policies
- Improvement of existing information flows
- Differentiation 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
 - pricing, copyright, access rights, licensing policy
- Lack of co-ordination
 - across borders and between levels of government
- Lack of standards
 - incompatible information and information systems
- Existing data not re-usable
 - fragmentation of information, redundancy, inability to integrate



EU has islands of data of different standards and quality...



July 2004 - EC Proposal COM(2004) 516 for a Directive establishing an infrastructure for spatial information in the Community – INSPIRE
Political Agreement 21 November 2006
Entry into Force 15 May 2007



Dealing with the Issues

A Spatial Data Infrastructure



Like a road infrastructure makes it possible to connect different sites, a spatial data infrastructure makes it possible to connect data located at different sources



Data easily discoverable and accessible to users



Easier development of new applications and services

Components

Institutional framework	Technical standards
Fundamental data sets	Data Services



INSPIRE Directive

General Provisions

- INSPIRE lays down **general rules** to establish an infrastructure for spatial information in Europe for the purposes of Community environmental policies and policies or activities which may have an impact on the environment.
 - This infrastructure shall build upon infrastructures for spatial information established and operated by the Member States.
- INSPIRE does not require collection of new spatial data – electronic format
- INSPIRE does not affect Intellectual Property Rights



From Commission proposal to Community Directive implementation

- Preparatory phase (2004-2006)
 - *Co-decision procedure*
 - **Preparation of Implementing Rules 2005 – 2008 ...**
- Transposition phase (2007-2008)
 - Directive enters into force
 - Transposition into national legislation
 - INSPIRE Committee starts its activities
 - Adoption of Implementation Rules by Committology
- Implementation phase (2009-2013)
 - implementation and monitoring of measures



What and Whose Spatial Data ?

- Who ? - Spatial data held by or on behalf of a public authority operating down to the lowest level of government when laws or regulations require their collection or dissemination
- What ? - INSPIRE covers 34 Spatial Data Themes laid down in 3 Annexes – (*required to successfully build environmental information systems*)



INSPIRE Data Scope (1)

Annex I

1. Coordinate reference systems
2. Geographical grid systems
3. Geographical names
4. Administrative units
5. Addresses
6. Cadastral parcels
7. Transport networks
8. Hydrography
9. Protected sites

Annex II

1. Elevation
2. Land cover
3. Ortho-imagery
4. Geology



INSPIRE Data Scope (2)

Annex III

1. Statistical units
2. Buildings
3. Soil
4. Land use
5. Human health and safety
6. Utility and governmental services
7. Environmental monitoring facilities
8. Production and industrial facilities
9. Agricultural and aquaculture facilities
10. Population distribution – demography
11. Area management/restriction /regulation zones & reporting units
12. Natural risk zones
13. Atmospheric conditions
14. Meteorological geographical features
15. Oceanographic geographical features
16. Sea regions
17. Bio-geographical regions
18. Habitats and biotopes
19. Species distribution
20. Energy Resources
21. Mineral resources



INSPIRE Components

I. **Metadata**

Member States shall create metadata and keep them up to date

II. **Interoperability of spatial data sets and services**

Implementing Rules shall be adopted for interoperability and where practical for harmonisation of spatial data sets and services

III. **Network services (discovery, view, download, transform, invoke)**

Member States shall operate a network of the following services available to the public for data sets and services for which metadata has been created

IV. **Data and Service sharing (policy)**

Member States shall adopt measures for the sharing of data and services between public authorities for public tasks relating to the environment without restrictions occurring at the point of use

V. **Coordination and measures for Monitoring & Reporting**

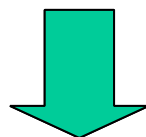
INSPIRE is a Framework Directive

Detailed technical provisions for the issues above will be laid down in Implementing Rules (IR)



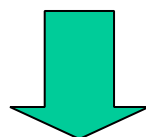
Implementing INSPIRE

- The implementation of INSPIRE needs to consider the broader context of existing initiatives which could contribute



- The INSPIRE Work Programme should interface with those partnerships and initiatives where relevant and establish synergy*

**e.g. GEOSS, GMES, GALILEO, GSDI,...*

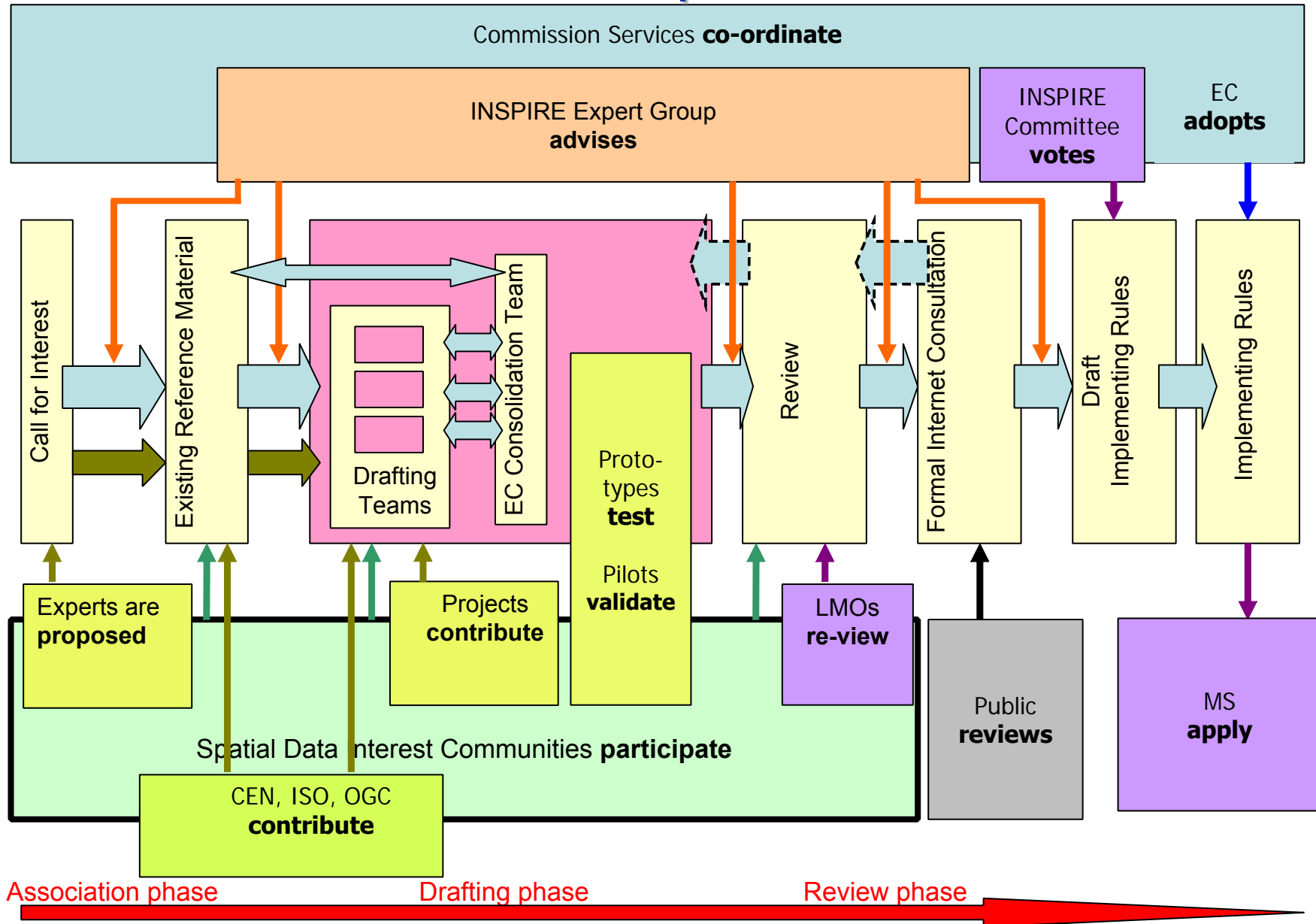


concept of Spatial Data Interest Communities (SDIC)

- SDIC bundle the human expertise of **users**, **producers** and **transformers** of spatial information, technical competence, financial resources and policies. Many SDIC exist today, generally organised by region, thematic issue or sector (industry).



INSPIRE process





Conclusions

- INSPIRE is a fundamental step towards more integrated policy development, implementation and monitoring
- INSPIRE is a framework Directive with implementing rules to be defined in the coming years
- Highest involvement of key stakeholders through the “Spatial Data Interest Community” concept is needed for development
- Openness and transparency in drafting implementing measures a must
- Pilots and Projects fundamental to define and validate the implementing rules
- Links and interfaces with regional and international initiatives essential for implementing a Local to Global Spatial Data Infrastructure