

7th Eastern European e|Gov Days: eGovernment & eBusiness Ecosystem & eJustice  
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# Spatial Planning

## Example of European Integration of Public Data

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 **HSRS HELP SERVICE REMOTE SENSING**



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# Objectives

- Spatial planning
- Projects Humboldt and Plan4all
- Data flow in spatial planning
- Data harmonization
- Conclusion – the goals of cooperation



# Spatial planning

- Spatial planning represents the methods used mainly by **public sector** to influence the development and use of land.
- Globalisation supports **cross-border** projects.
- Spatial planning has connections with a **large number of human activities and branches of science.**
- **Spatial planning influences the daily life of each of us.**

# Humboldt & Plan4all

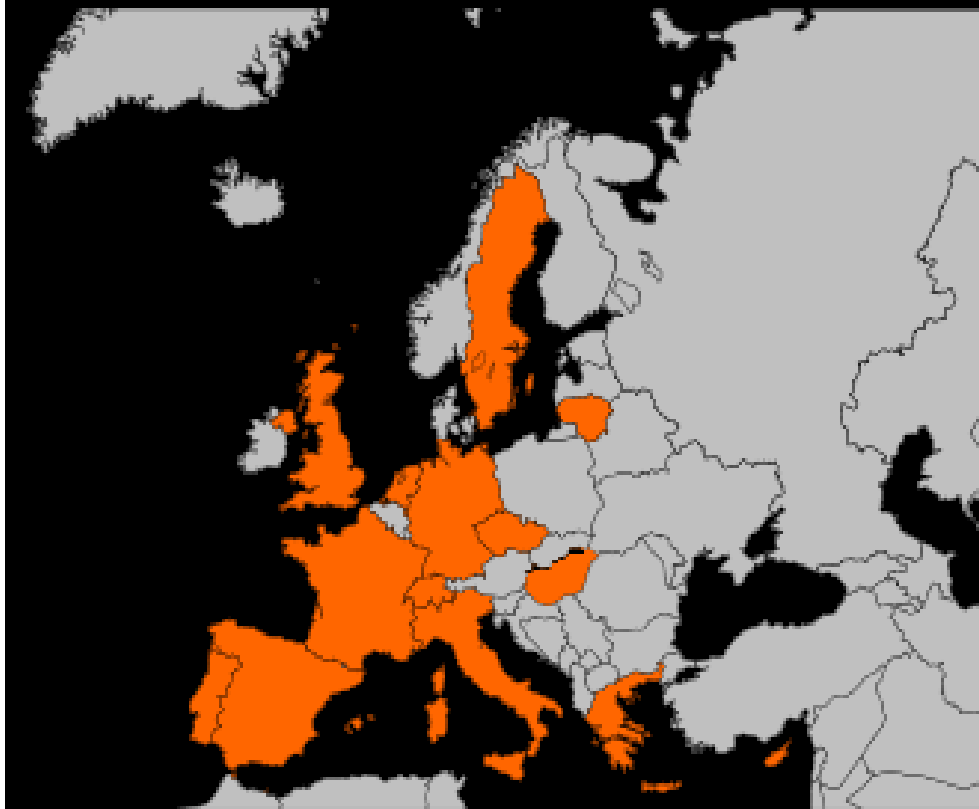
## Data for spatial planning

Project HUMBOLDT is contributing to the implementation of an ESDI that integrates all the diversity of spatial data available from the multitude of European organizations, it is the aim of this project to manage and advance the implementation process of this ESDI

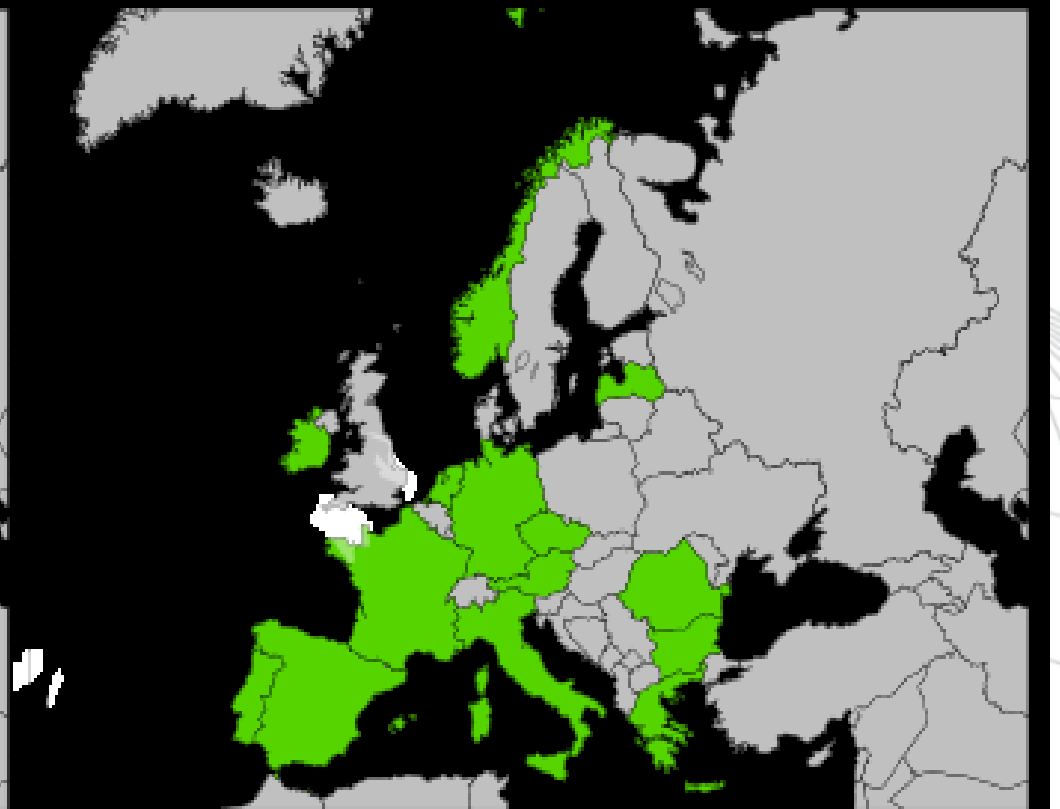
The Plan4all is focused on implementation of INSPIRE directive into spatial planning processes, with focus on built spatial planning data model for selected themes and implemented recommendation of drafting teams for metadata and networking.

# Project countries

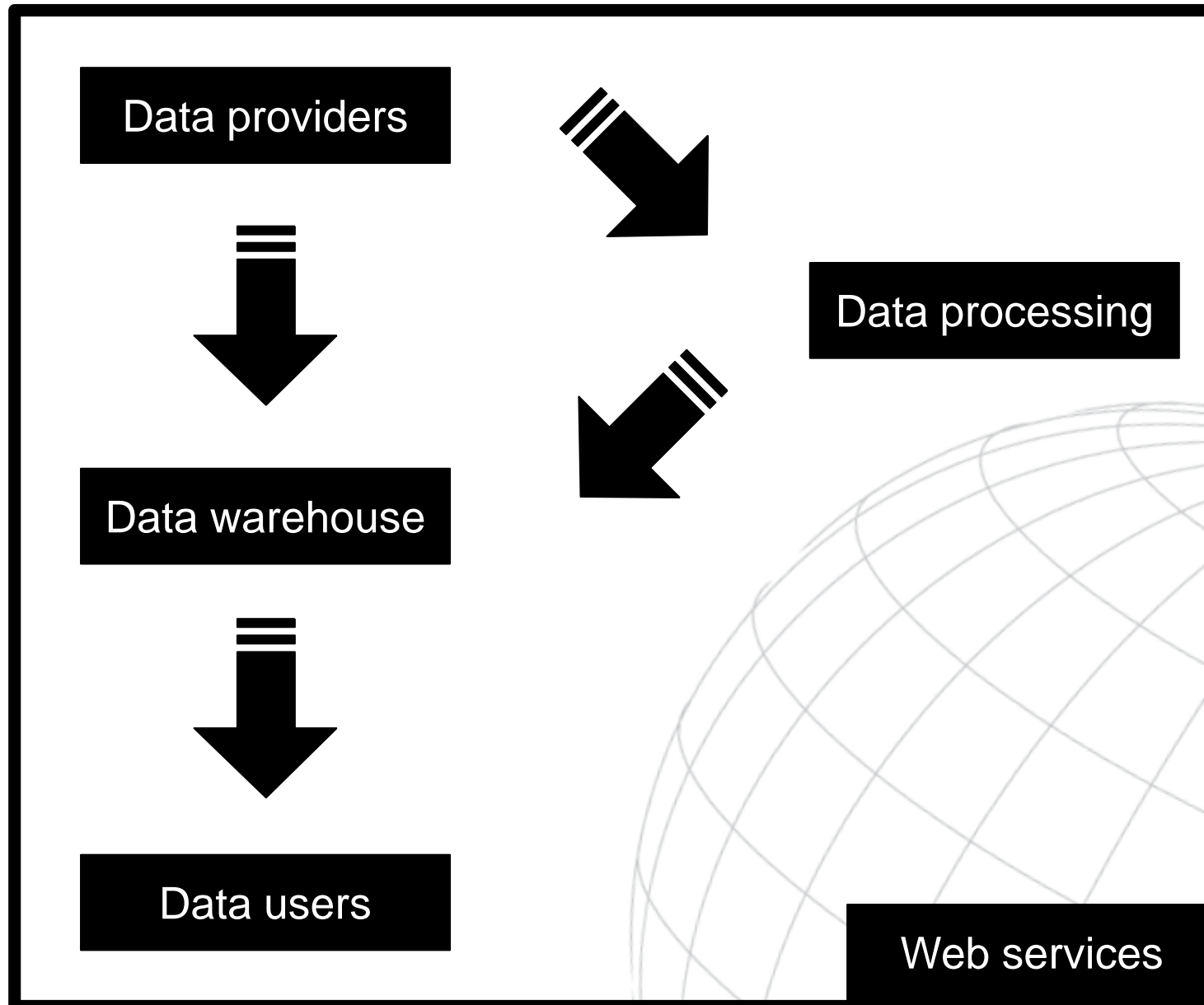
Humboldt



Plan4all

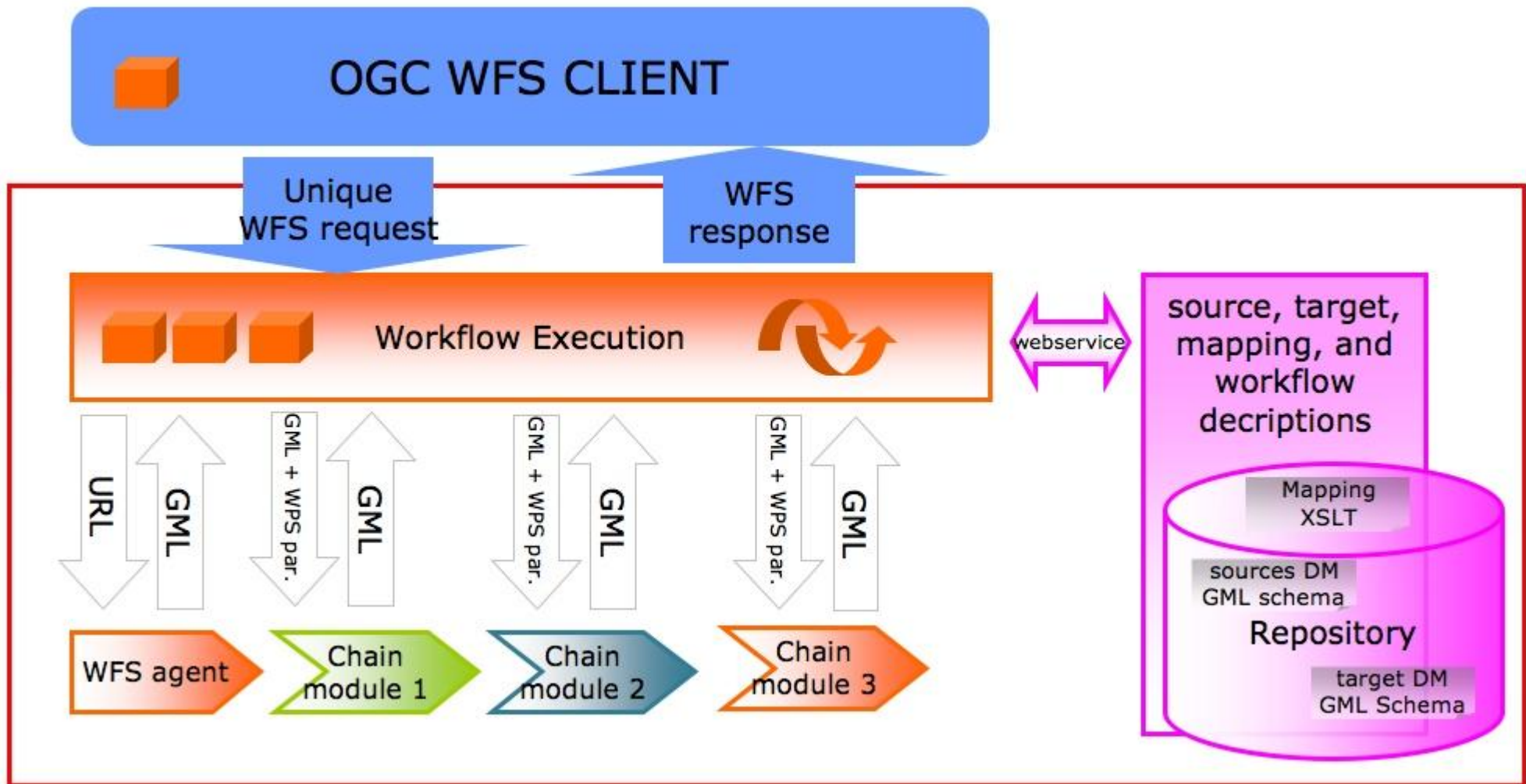


# Data flow in spatial planning



# Data flow in spatial planning

Framework Test Implementation

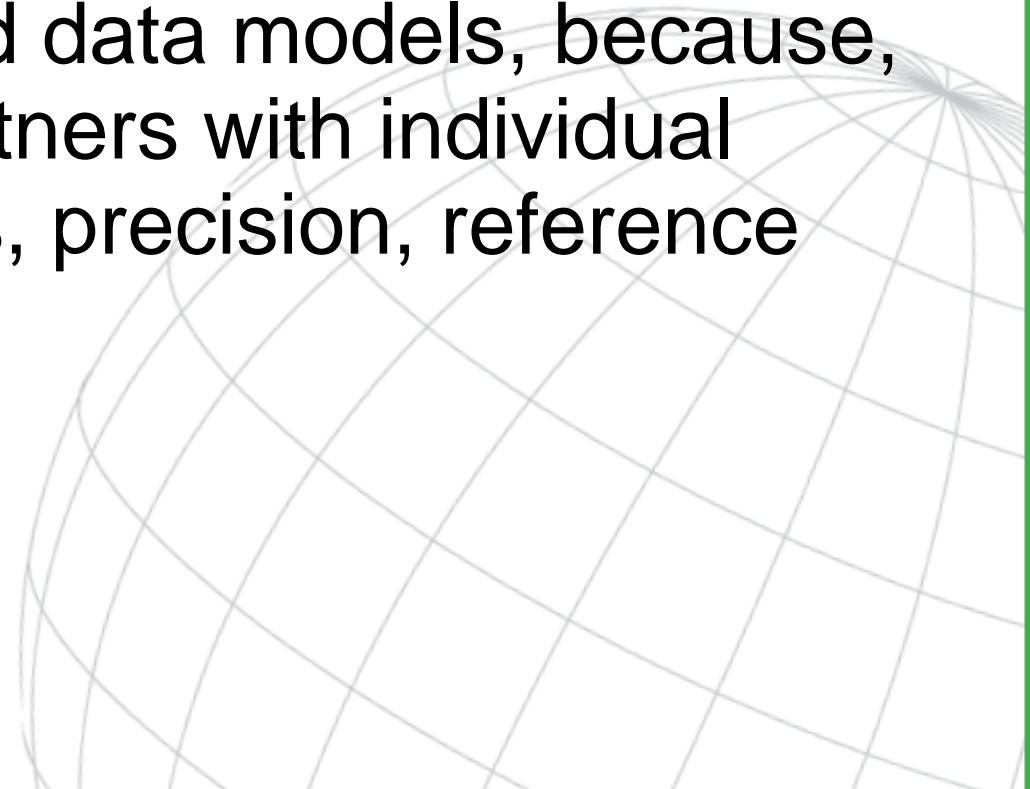


# Data heterogeneity...

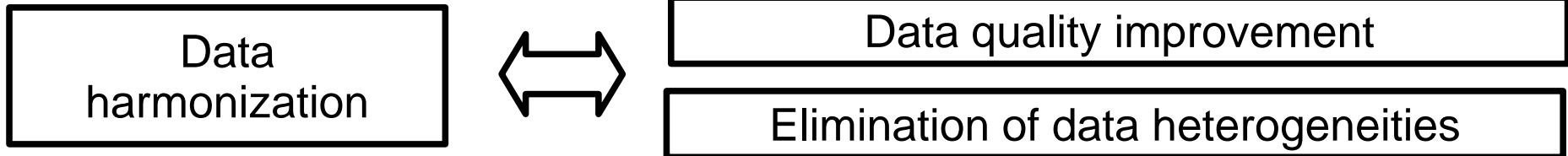
- ...the fundamental problem of spatial planning
- Poor rules for data sharing
- Redundant data sets (problems with updating)
- Poor data description – metadata, ontologies, data models, terminologies, etc.
- Limited implementation of international standards

# Data heterogeneity...

- The elimination of the some factors of heterogeneity **cannot be** based on a creation of some uniform rules and data models, because, there are too many partners with individual requirements – formats, precision, reference systems, terminology...



# Data harmonization



Reasons of data heterogeneity

(A) INSPIRE Principles	(B) Terminology	(C) Reference model
(D) Rules for application Schemas and feature catalogues	(E) Spatial and temporal aspects	(F) Multi-lingual text and cultural adaptability
(G) Coordinate referencing and units model	(H) Object referencing modelling	(I) Data translation model/guidelines
(J) Portrayal model	(K) Identifier Management	(L) Registers and registries
(M) Metadata	(N) Maintenance	(O) Quality
(P) Data Transformation	(Q) Consistency between data	(R) Multiple representations
(S) Data capturing	(T) Conformance	

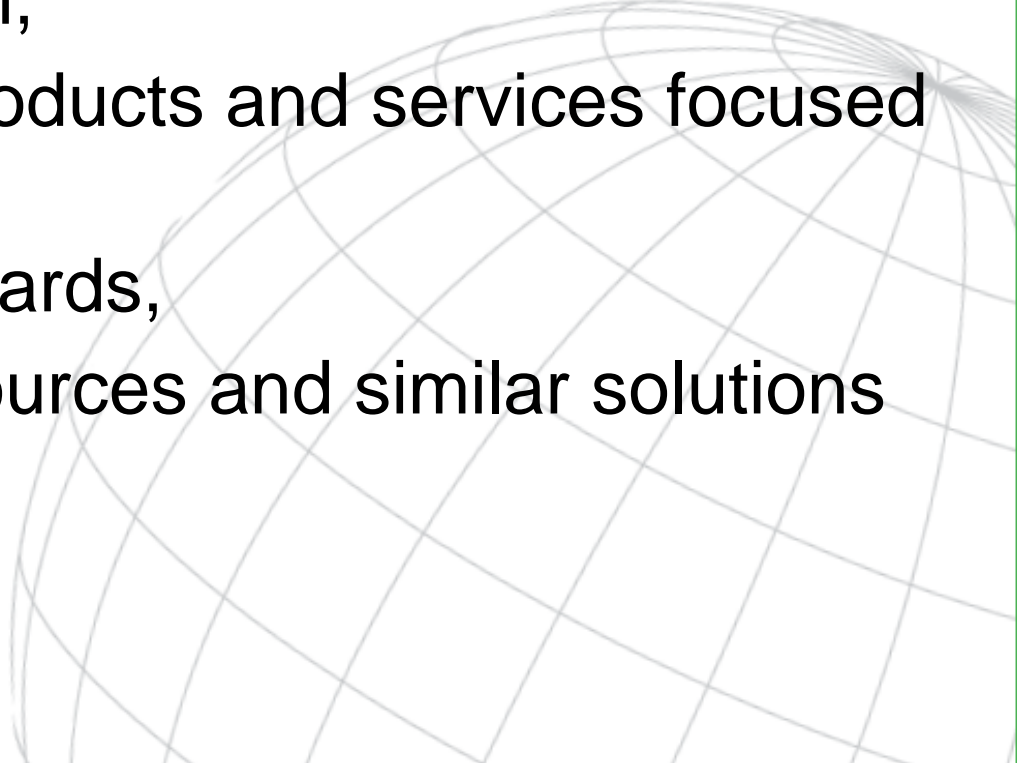
Components of data harmonization

# Harmonization steps

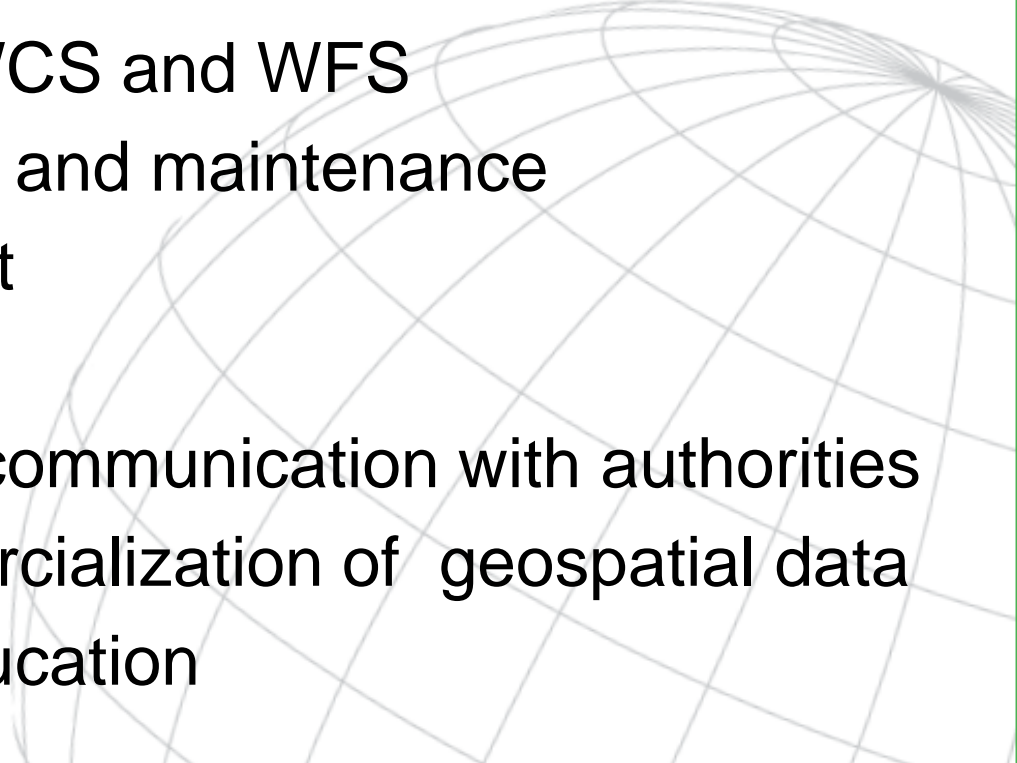
- Data formats conversion (to GML)
- Classifications schemes and systems, codelists, terminology and vocabulary (selection of corresponding items)
- Types of geometric primitives
- Metadata profile
- Coordinate system
- Geometry improvement
- Generalisation, multi-linguality...



# Conclusion

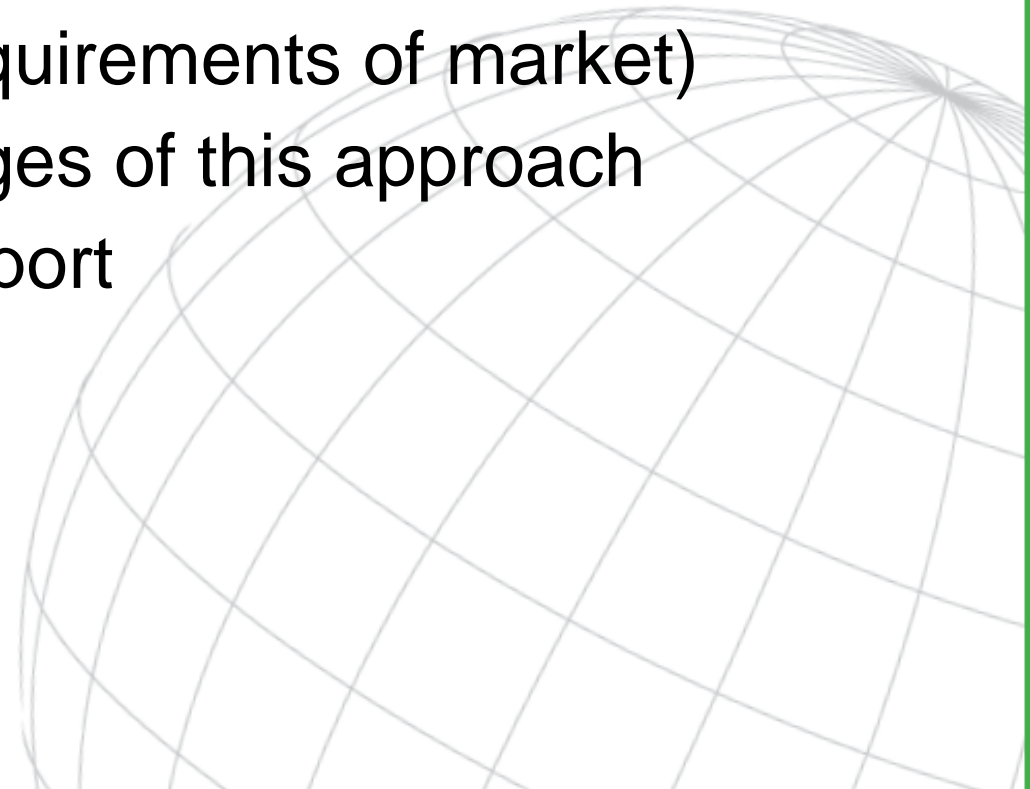
- Our approach is based on
    - networking, partnership and cooperation,
    - detailed data description,
    - using and creating of products and services focused on semantics,
    - implementation of standards,
    - using of existing data sources and similar solutions
- 

# Conclusion

- Any duplicities in data
  - Clear origin and assurance of quality of the data
  - Data structure standardisation
  - Data purity, security and structure uniformity
  - Better data manipulation
  - Data accessing per WMS, WCS and WFS
  - Fall of cost for data updating and maintenance
  - Easier software development
  - Better source exploitation
  - Improvement of chances in communication with authorities
  - Better utilization and commercialization of geospatial data
  - Increasing activities, e.g. education
- 
- A faint, light gray wireframe globe is visible in the background on the right side of the slide, partially overlapping the text.

# Conclusion

- Factors to push to the integration in spatial planning:
  - Legislative rules and their control
  - Business strategies (requirements of market)
  - Explanation of advantages of this approach
  - Quality of technical support



Thank you  
for your attention

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