## **Development of INSPIRE Data Specifications**

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## Abstract:

INSPIRE (INfrastructure for SPatial Information in the European Community) aims to create a European Union spatial data infrastructure which will be based upon spatial data infrastructures of the Member States. The key step in the process of data harmonization is to achieve interoperability at the conceptual level. Interoperability within European Spatial Data Infrastructure (ESDI) means that each Member State shall maintain its own national infrastructure, and will customize the framework that will allow the connection of existing data sets through an interface for transforming data into a single model. The focus of the proposal for data harmonization within INSPIRE is to achieve interoperability customizing existing data by mapping instead of demanding re-collection according to specific rules. For that to be possible to achieve, that the infrastructure of the member states of the EU were compatible and usable, INSPIRE defines the harmonization framework based on common implementing rules for the key components - Metadata, Data Specifications, Network Services, Data and Service Sharing and Spatial Data Services. Implementing Rules are legally formed documents that the legal service of the European Commission adopts on the basis of technical documents prepared by specially formed working groups for particular themes areas. Implementing rules consequently become legal documents of the European Commission which become part of the national legislative of the member states. Defining a unique standardization framework is a complex and long lasting process based on consensus. On July 16, 2012 were published a draft guidance documents for the Themes covered in INSPIRE Annex II and III. The invitation to participate in testing and consultation were sent to all Legally Mandated Organisation - LMO and Spatial Data Interest Communities – SDIC. The whole process of developing Data Specifications of Annex II and III resulted in adoption of several new framework documents respectively modifying existing ones. The framework documents are intended to establish a standardization framework for the development of data specifications that allows horizontal and vertical alignment of data models of all INSPIRE Themes. The presentation will provide an overview of the framework for the development of data specifications of the INSPIRE Annex Themes, as well as the approach used for conceptual data modeling of specific topics of Annex II and III.

Keywords: INSPIRE data specifications, standardization framework, harmonization