



# Návrh datových specifikací pro INSPIRE v kontextu projektu Plan4all

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Spolufinancovaný  
komunitárním programem  
eContentplus



# Obsah



- Plan4all v kostce
- ~~INSPIRE~~
- Hlavní cíle a pracovní plán
- Plnění plánu a dosavadní výsledky

Plan4all je *eContentplus* projekt.

Typ: Best Practice Network

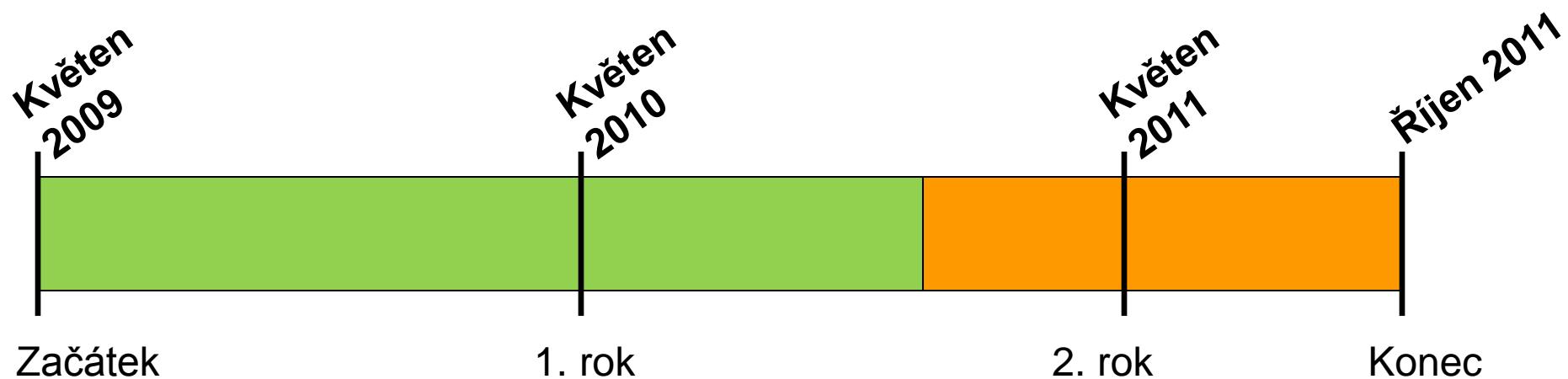
Celkový rozpočet: 4.1 mil. Euro



Komunitární program pro lepší přístup a využití digitální informace v Evropě.

# Časová osa

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## **Harmonizaci dat územního plánování s ohledem na Směrnici INSPIRE.**

Projekt je založen na existujících “best practices” v regionech a obcích Evropské unie a zhodnocení výsledků současných výzkumných projektů řešených v této oblasti.

# Plan4all konsorcium



Koordinátor: Západočeská univerzita v Plzni

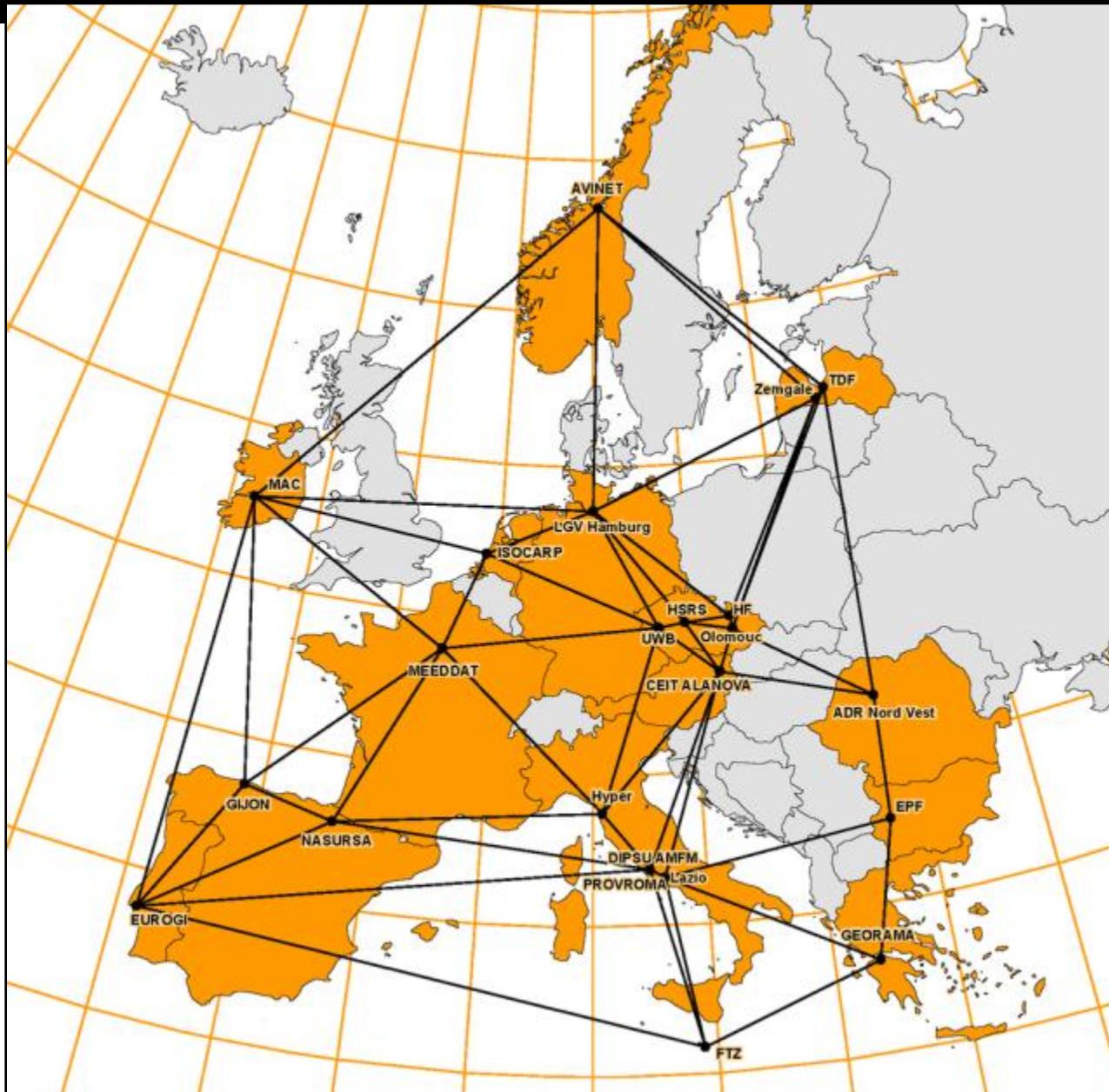
	ISOCARP
	Statutarni mesto Olomouc
	Technology Development Forum
	Help service remote sensing s.r.o.
	LGV Hamburg
	Stichting EUROGI
	Zemgale Planning Region
	Provincia di Roma
	Fondazzjoni Temi Zammit
	GEORAMA
	Navarra de Suelo Residencial S.A.
	Hyperborea s.c.
	AYUNTAMIENTO DE GIJON
	The National Microelectronics Applications Centre Ltd

	CEIT ALANOVA
	Asplan Viak Internet as
	Università degli Studi di Roma Tre
	Euro Perspectives Foundation
	ADR Nord-Vest
	Regione Lazio
	Help forest s.r.o.
	AMFM GIS ITALIA
	Ministry of Ecology, Energy, Sustainable Development and Town and Country Planning

**24 partnerů**  
**14 členských států EU +**  
**Norsko**

# Plan4all konsorcium

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# Prostorová datová téma INSPIRE

## Annex I

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

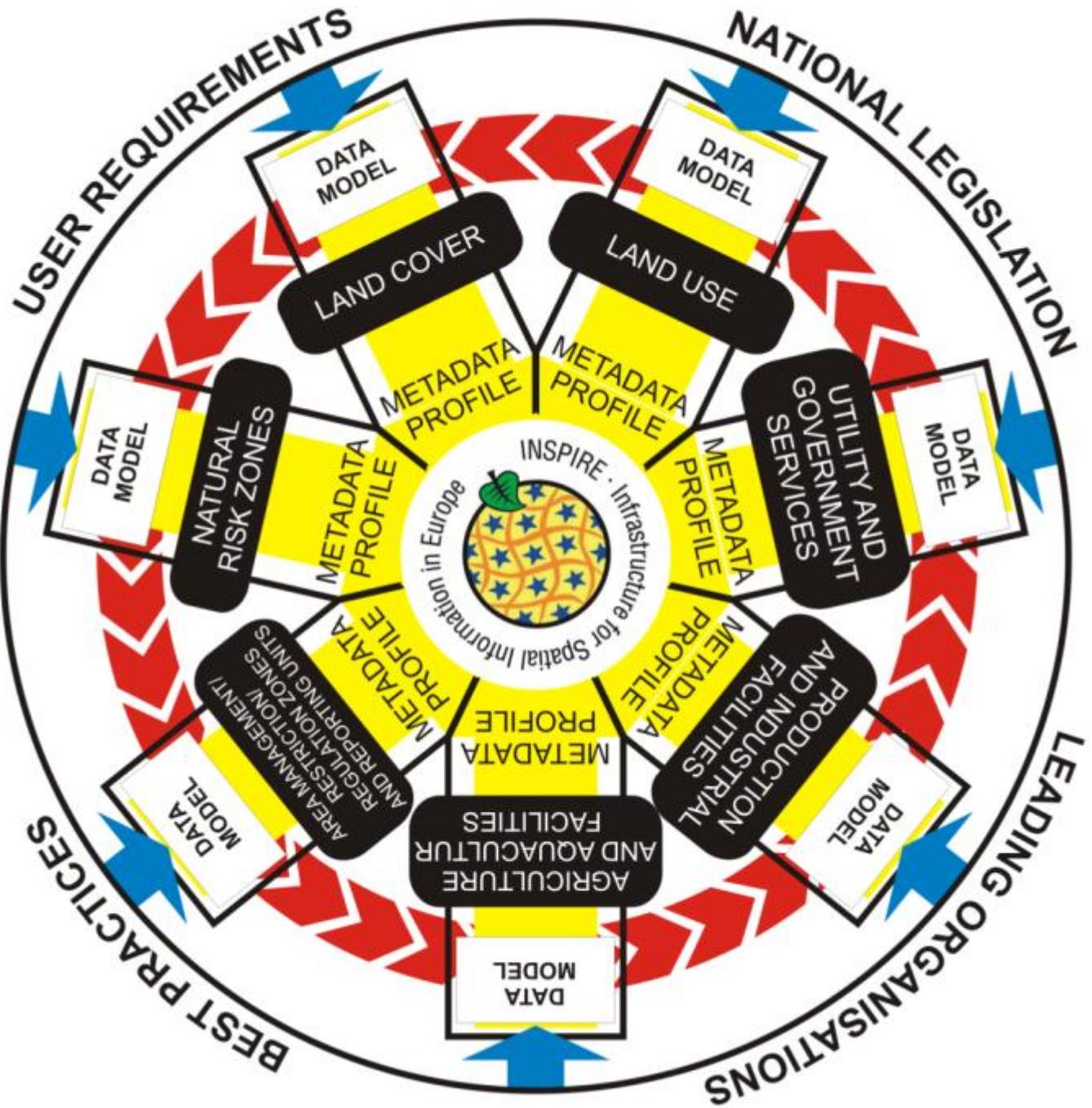
## Annex II

- Elevation
- Land cover
- Orthoimagery
- Geology

## Annex III

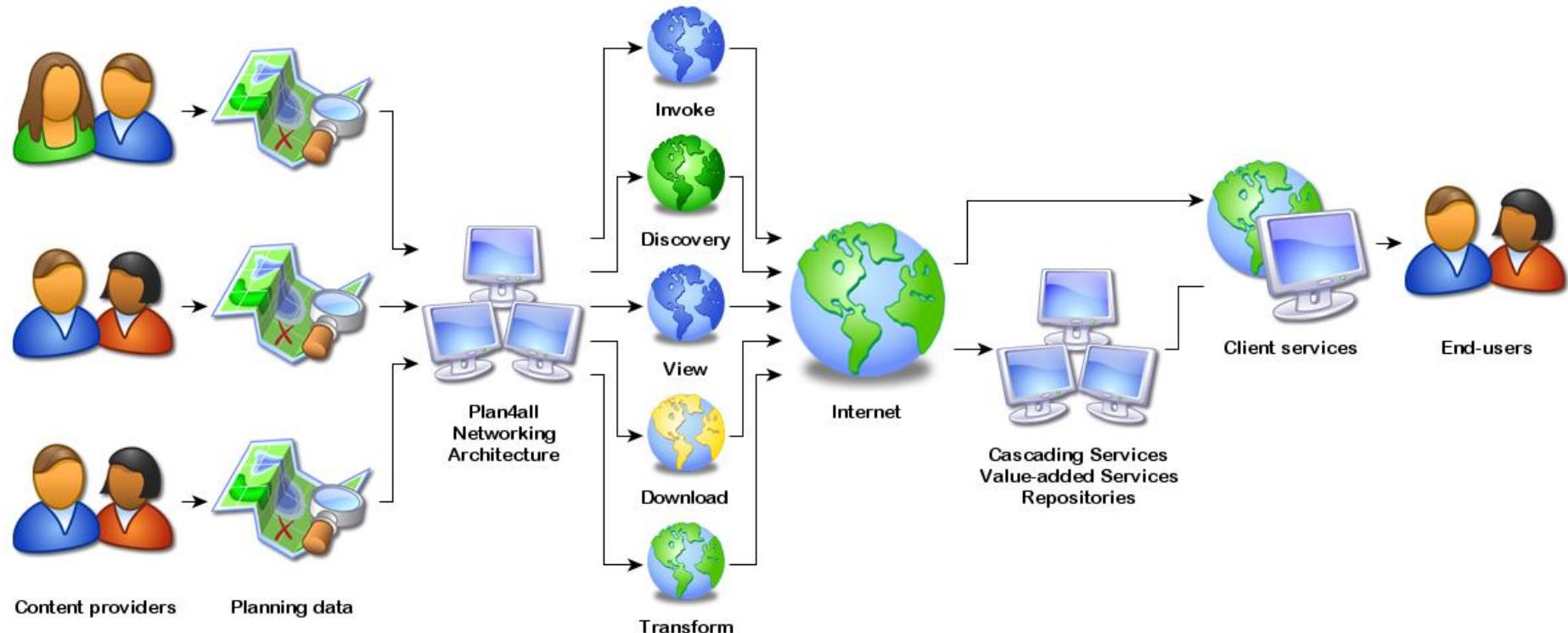
- Statistical units
- Buildings
- Soil
- Land use
- Human health and safety
- Utility and Government services
- Environmental monitoring facilities
- Production and industrial facilities
- Agricultural and aquaculture facilities
- Population distribution – demography
- Area management/restriction/regulation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





# Networking

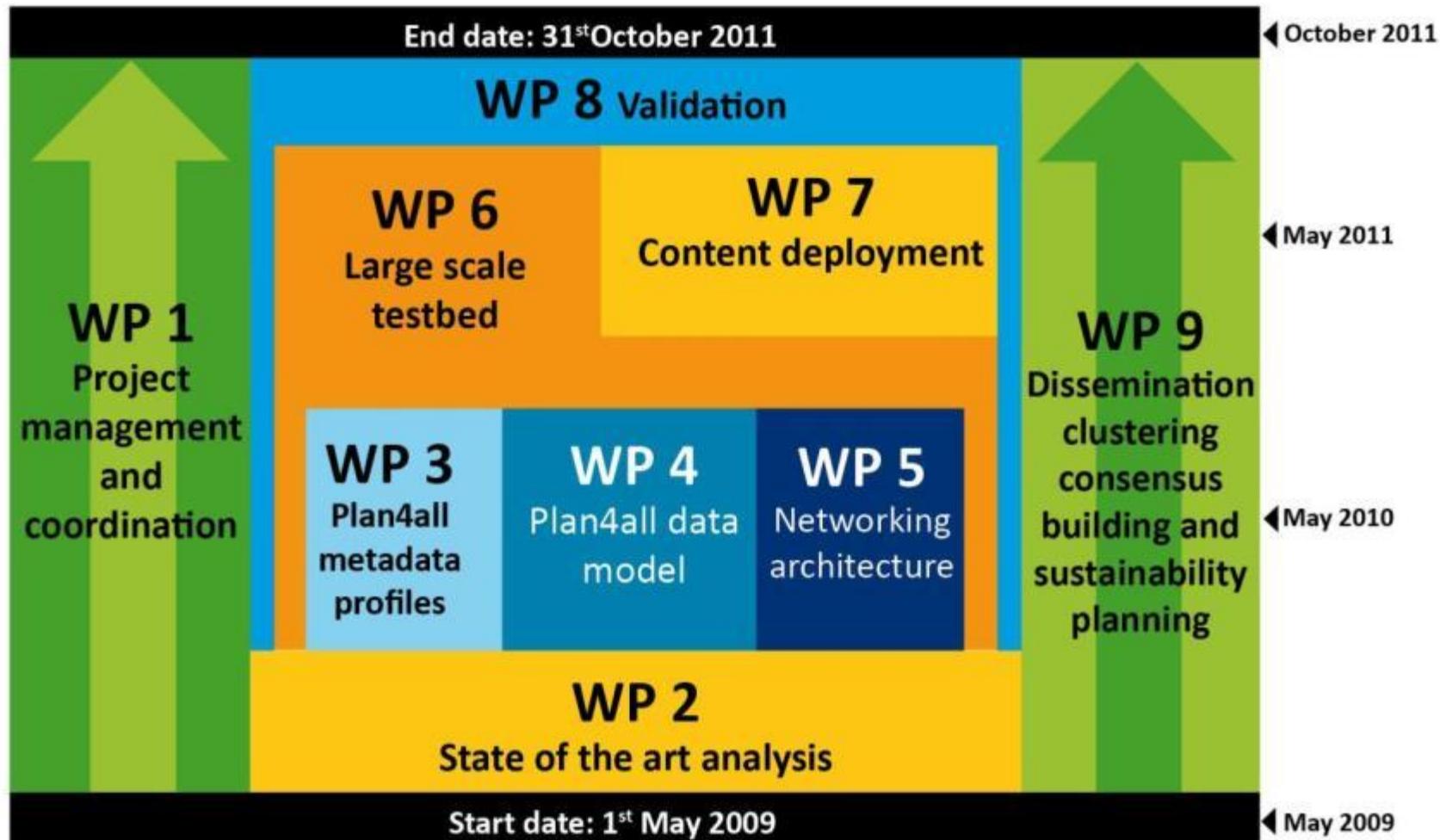
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# Postup práce

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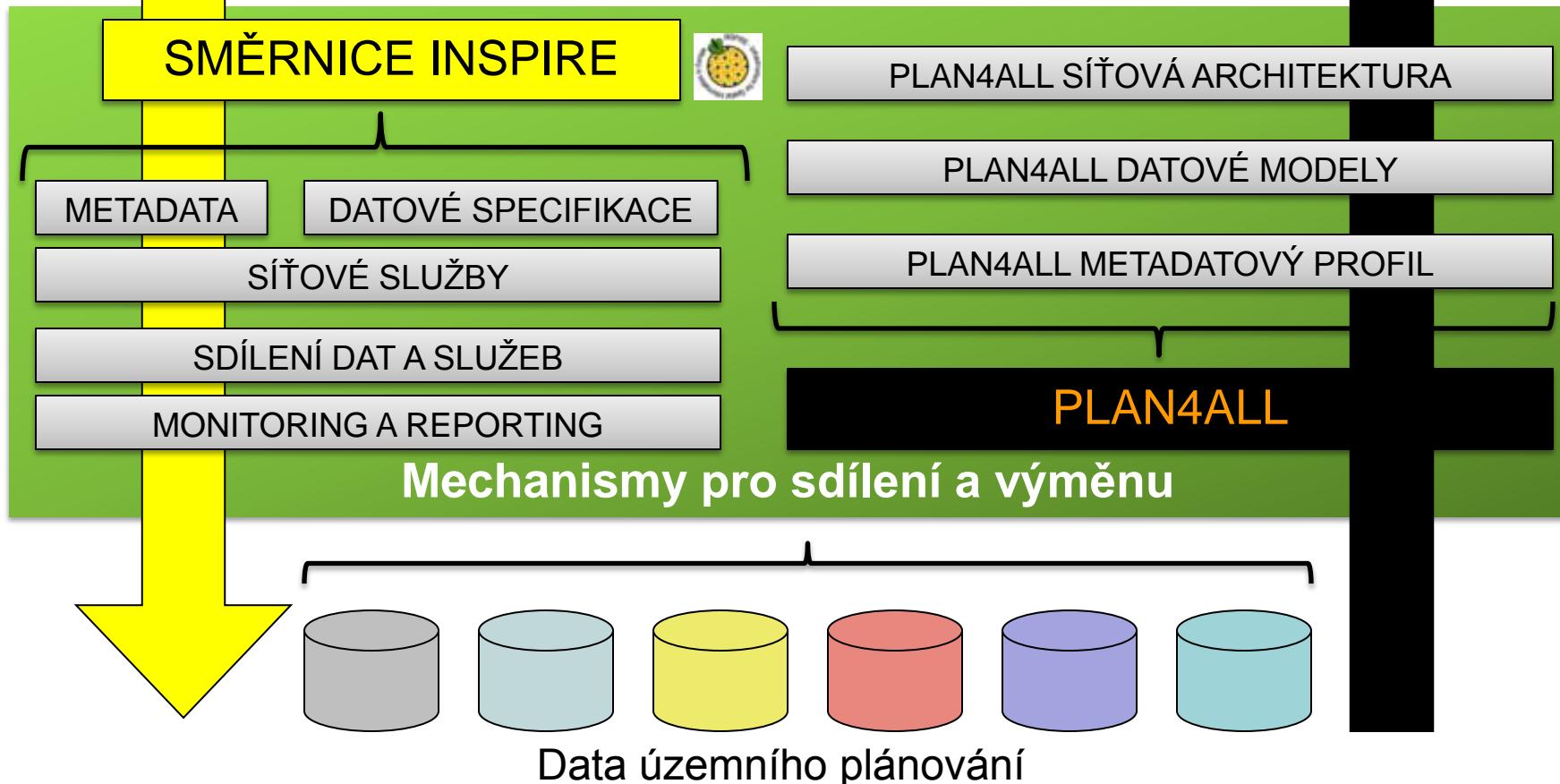
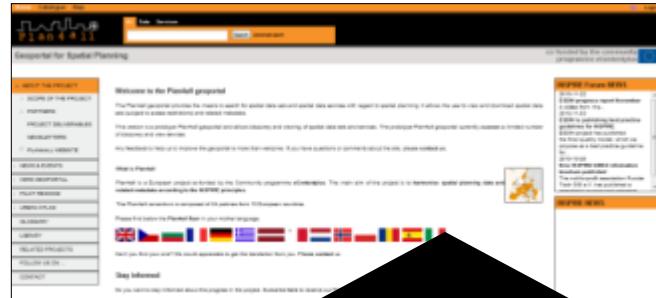
Veřejně dostupné výsledky jsou na našich webových stránkách <http://www.plan4all.eu/>



# Case study for INSPIRE



Bezešvý přístup  
k datům



# Plan4all & INSPIRE

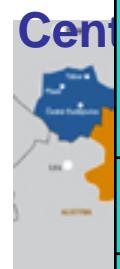


- Thematic Working Groups - 6 expertů z Plan4all týmu
- přímá spolupráce s vedoucími témat

Thematic Working Group:	Expert Name:	Organisation:
Area Management/Restriction, Regulation Zones and Reporting Units	<b>Stein Runar Bergheim</b>	Asplan Viak Internet as
	<b>Tor Gunnar Overli</b>	Asplan Viak AS
Land Use	<b>Salgé François</b>	Direction générale de l'aménagement, du logement et de la nature (DGALN)
	<b>Kai-Uwe Krause</b>	Free and Hanseatic City of Hamburg, Ministry of Urban Development and Environment, Agency for Geo-Information and Surveying of the (LGV)
Utility and Governmental Services	<b>Frank Haugan</b>	Asplan Viak Internet
Natural Risk Zones	<b>Otakar Čerba</b>	The University of West Bohemia in Pilsen, Czech Republic / Czech Center for Science and Society

# Best Practices

## ➤ 40 Best Practices

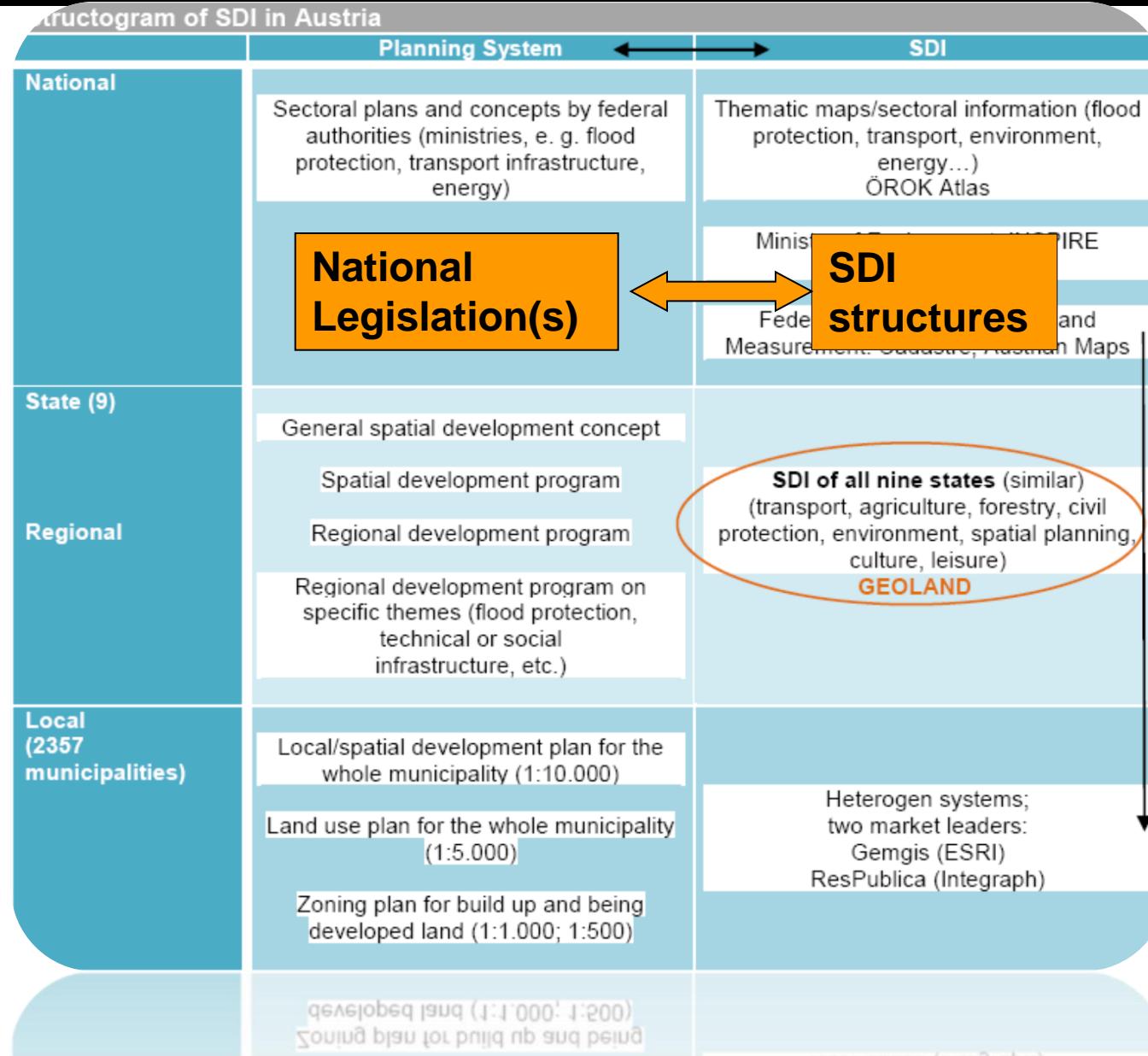


Best Practice #3	
Name	CentropeMAP
Type	Public project
Dimension	International (cross-border)
Start	2003
End	Open end
URL	<a href="http://www.centropemap.org">http://www.centropemap.org</a>
Leader, partners	PGO, Ceit Alanova, administrative authorities of the regions of the Centrope region, local governments, statistical offices, cross-border statistic client
Description	CentropeMAP brings one dataset from the four countries of the Centrope region (Germany, Poland, Austria, Czech Republic, Hungary and Slovak Republic) together in one map client. ....
Used technology	UMN Mapserver, Geoserver, Mapbender, PostgreSQL, PostGIS
Strengths/chances	Datasets from different servers are displayed in one map client. The main goal is the harmonisation of data layout and classification so that datasets become comparable; all interfaces are based on open source software
Weaknesses/risks	Slow progress due to lack of time and financial resources of the involved state administrations
Accessibility	All project data are freely accessible on the Internet; all datasets are available as WMS
User interface/software	Web mapping client (web browser interface): Mapbender 2.4.2., WMS: UMN Map Server 4.8
Challenges	SLD integration, future web mapping standards (xml/gml/WCS)

# Planning Systems



## Spatial Planning Systems & Leading Administrations in SDI



# Technology

## Framework for analysing relevant technology

Productname/Version	Mapbender 2.5.2	
Manufacturer	OSGeo	
Developed from/to		
Contact	see <a href="http://www.mapbender.org/Partners">http://www.mapbender.org/Partners</a>	
Short Description	Mapbender is the software and portal for geodata management of OGC OWS	
Type	<ul style="list-style-type: none"> <li>• Open Source</li> </ul>	
Approach	<ul style="list-style-type: none"> <li>• Web Mapping</li> </ul>	
Interactivity	<ul style="list-style-type: none"> <li>• Fully interactive</li> </ul>	
Technology	Server side	<ul style="list-style-type: none"> <li>• PHP</li> <li>• Database Access</li> </ul>
	Client side	<ul style="list-style-type: none"> <li>• Scripts</li> <li>• HTML</li> </ul>
	Used Services/Protocols	<ul style="list-style-type: none"> <li>• WMS (OGC conform)</li> <li>• WFS (OGC conform)</li> <li>• WFS-T (OGC conform)</li> <li>• SLD/... (OGC conform)</li> </ul>
Operating System	Server side	every
	Client side	every
Webtechnology	Webserver	every
	Browsers	every
Projections	Which	depends on queried map servers
	Where	<ul style="list-style-type: none"> <li>• Server side</li> </ul>
Metadata management	none	
Known usage in planning	CentropeMAP	
Challenges		
Collected by	Clemens Beyer, CEIT ALANOVA	
Additions by		
Remarks		
Manufacturers remarks		

# USER Requirements



## Analyses on User Requirements

### Case Studies

- Olomouc
- ProvRoma
- Lazio
- EPF
- NWRDA
- LGW Hamburg
- Georama
- Nasursa
- MEDDAT
- Gijon
- Avinet
- ZPR/TDF

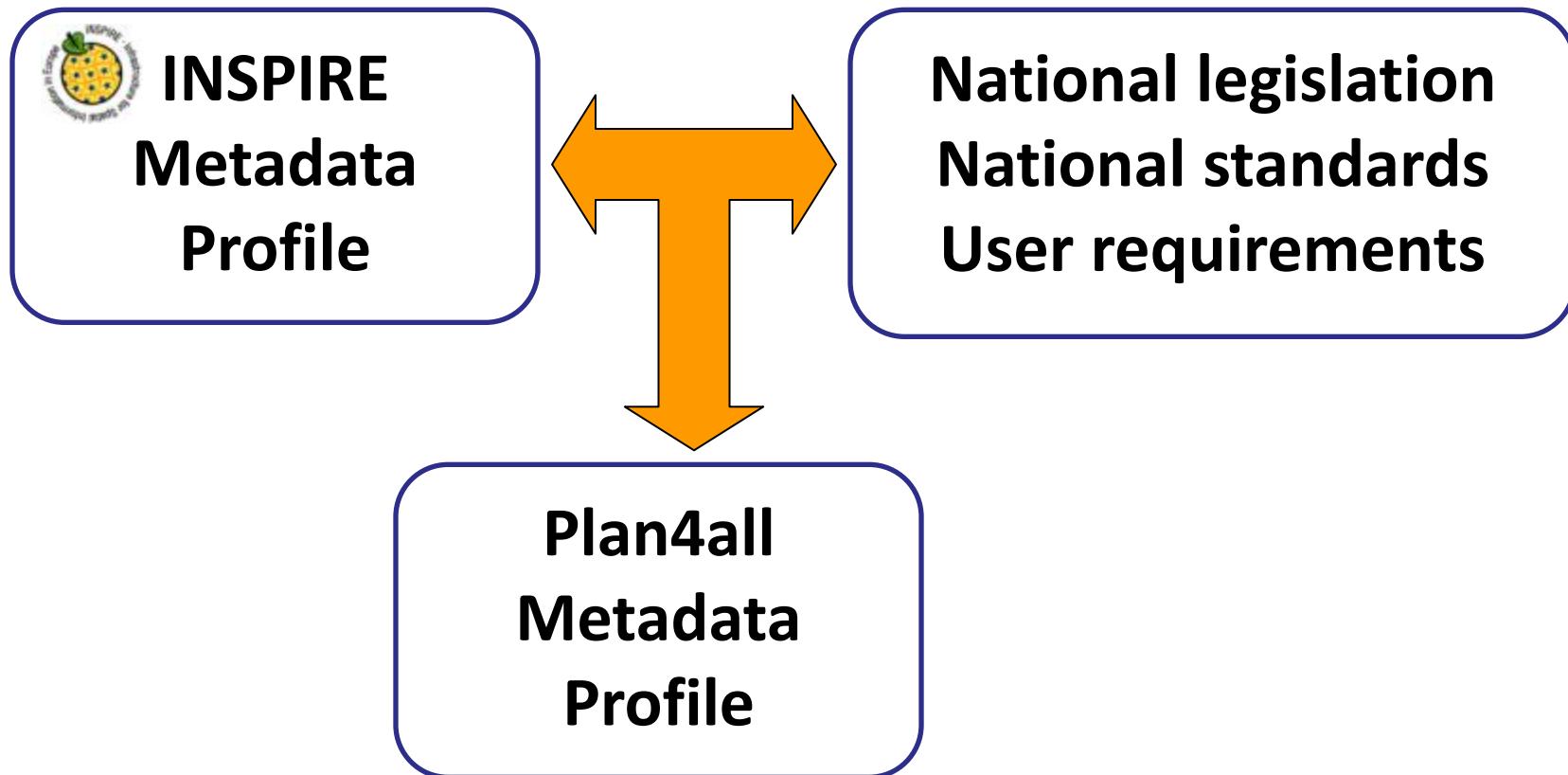
### State of Art

- Procedures and Processes in Spatial Planning
- Characteristics of spatial planning data
- Data standards and models
- SW facilities
- Technological processes
- Metadata and INSPIRE
- User groups specification
- Digital Right Management

### Results

#### Requirements & Challenges

# Plan4all metadatový profil



**Půdní kryt**

*Land cover*

**Využití půdy**

*Land use*

**Veřejné služby a služby veřejné správy**

*Utility and Government services for better governance*

**Výrobní a průmyslová zařízení**

*Production and industrial facilities*

**Zemědělská a vodohospodářská zařízení**

*Agricultural and aquaculture facilities*

**Správní oblasti/chráněná pásmá/regulovaná území a jednotky podávající hlášení**

*Area management/restriction/regulation zones and reporting units*

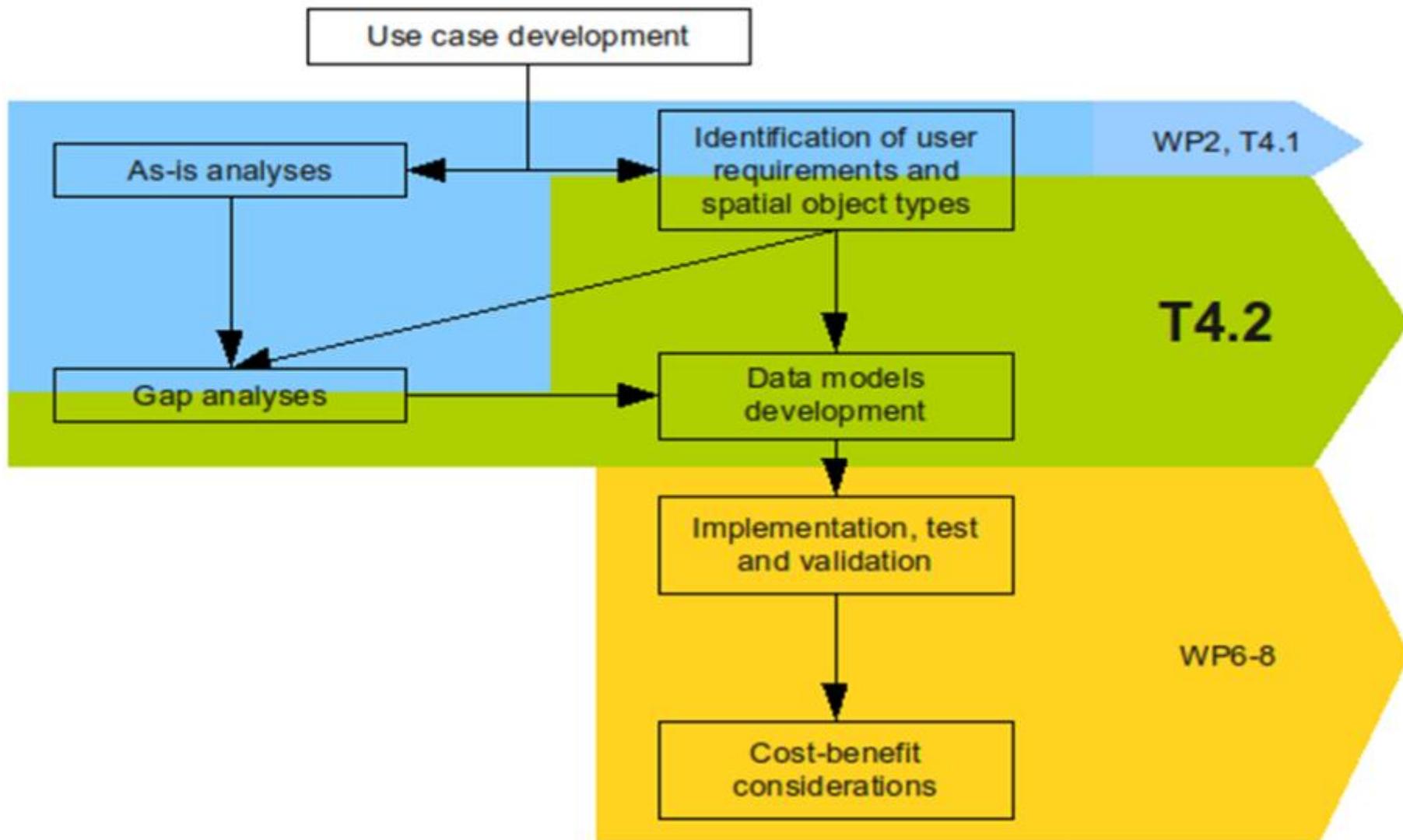
**Oblasti ohrožené přírodními riziky**

*Natural risk zones*

# Datové modely

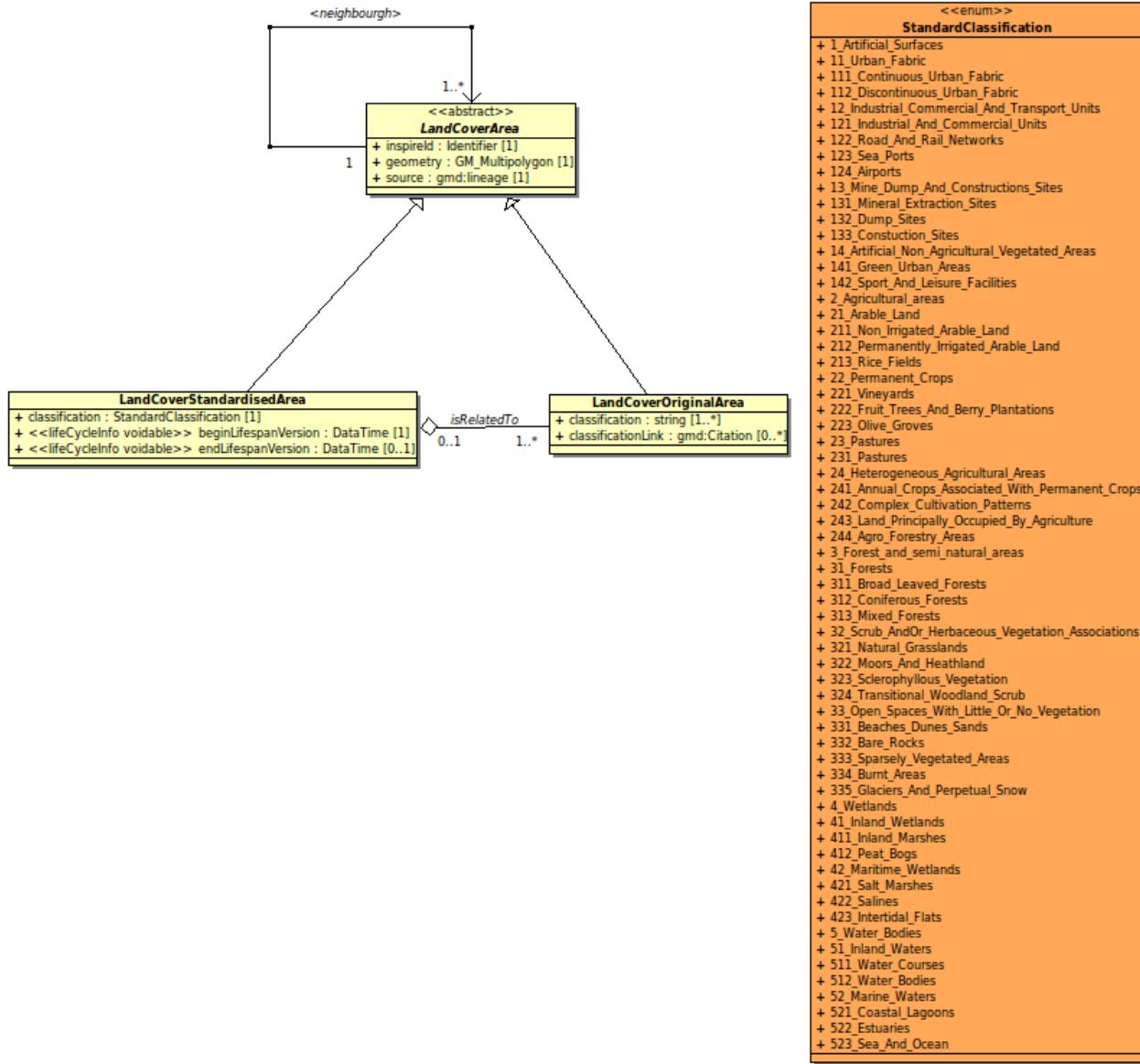
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The process of developing INSPIRE data specifications & Plan4all conceptual data models



# Datové modely

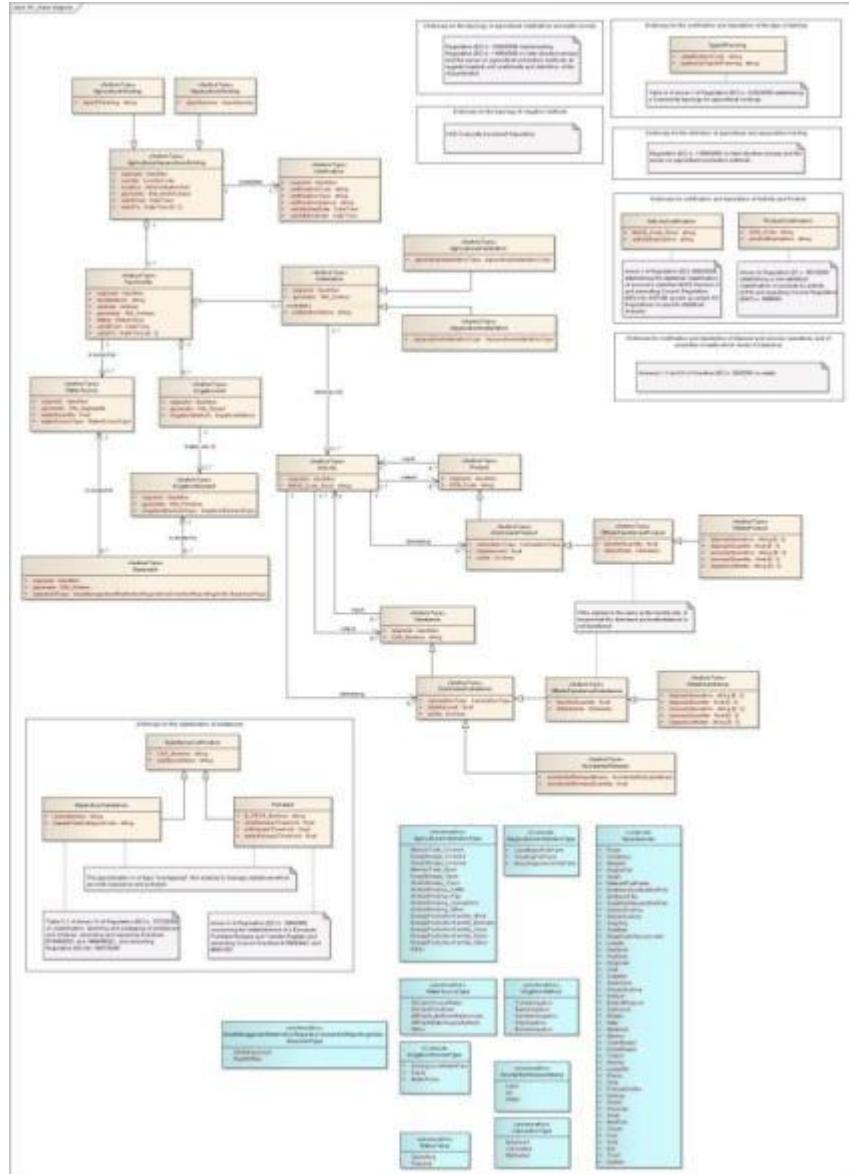
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Půdní kryt

# Datové modely

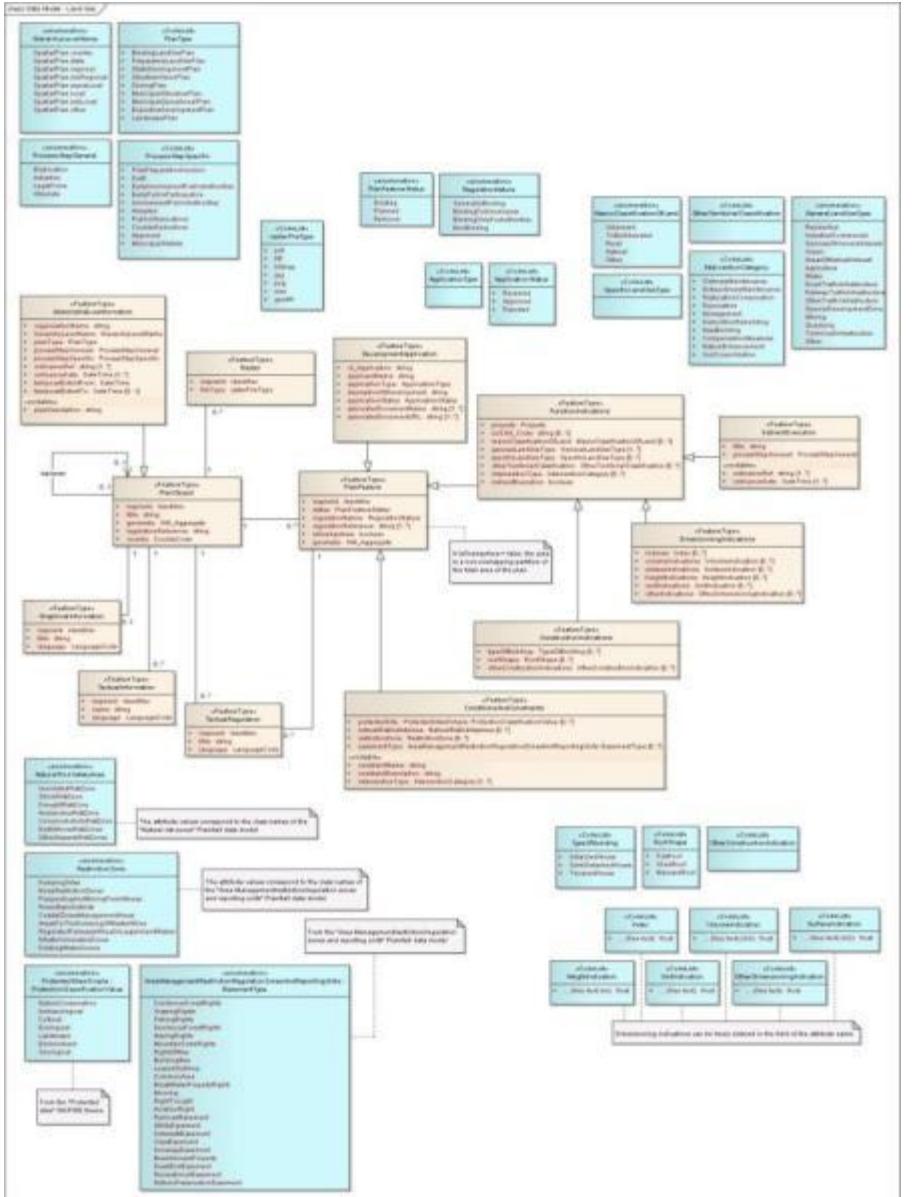
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## Zemědělská a vodohospodářská zařízení

# Datové modely

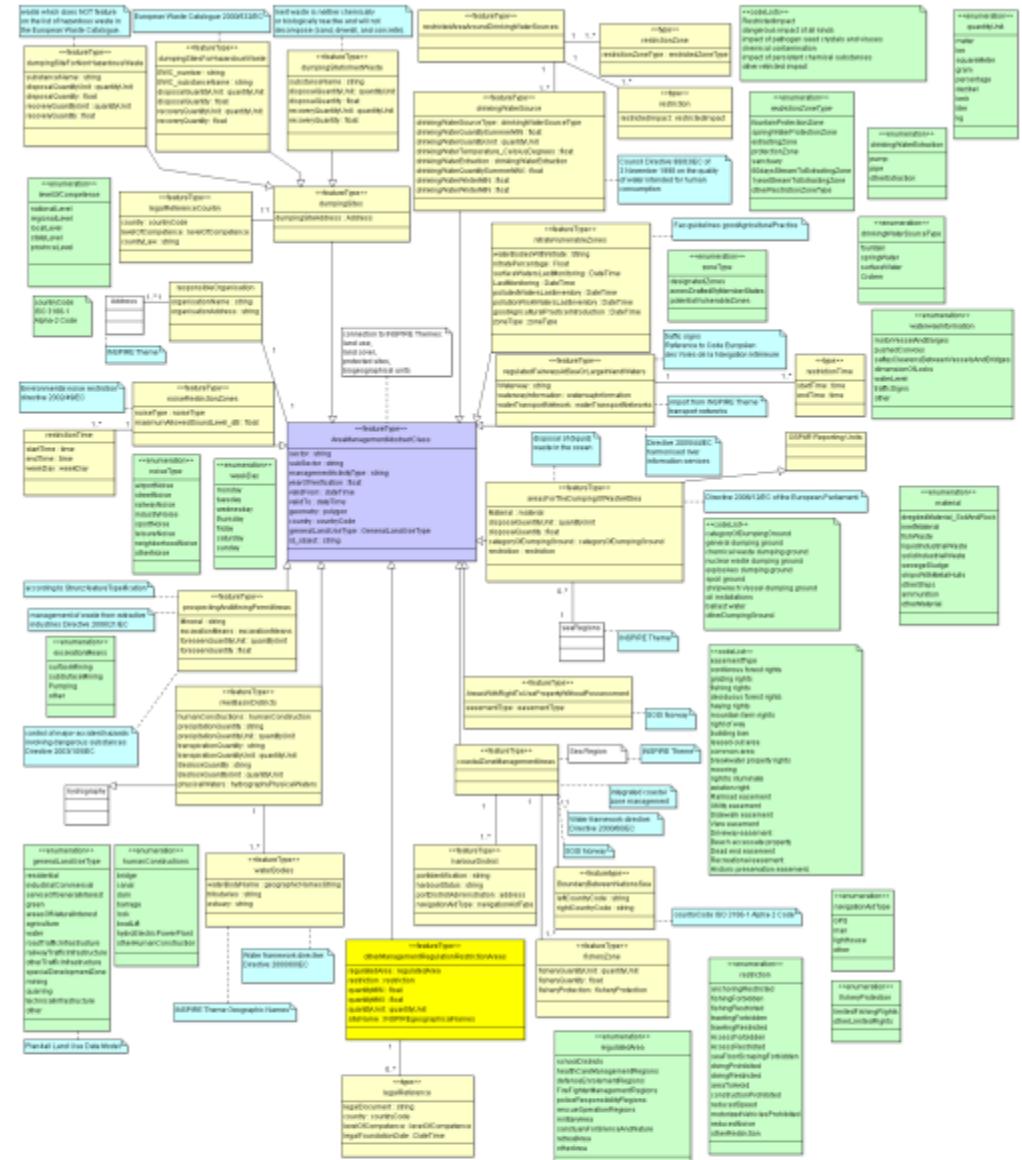
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## Využití půdy

# Datové modely

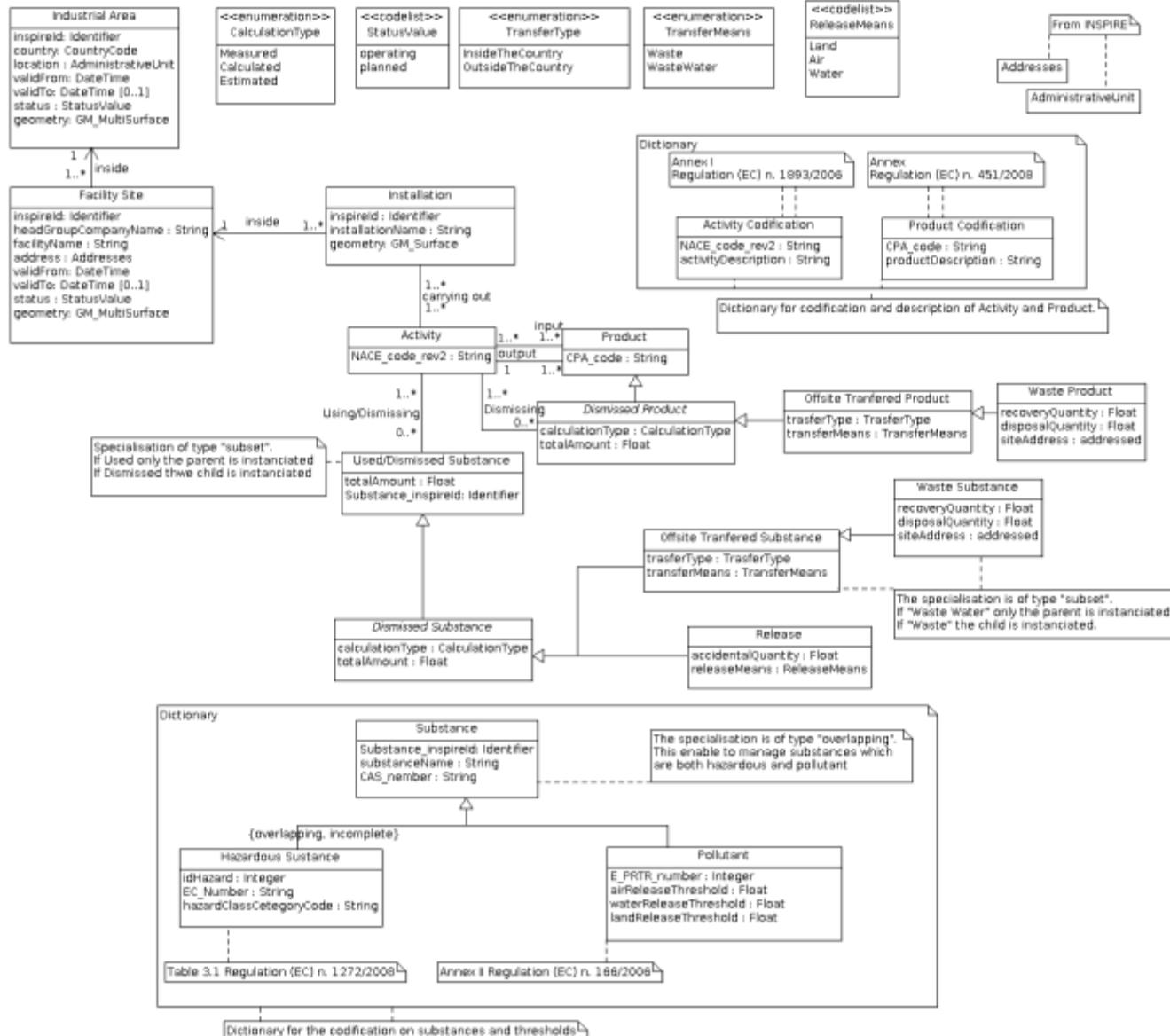
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Správní oblasti/chráněná pásmá/regulovaná území a jednotky podávající hlášení

# Datové modely

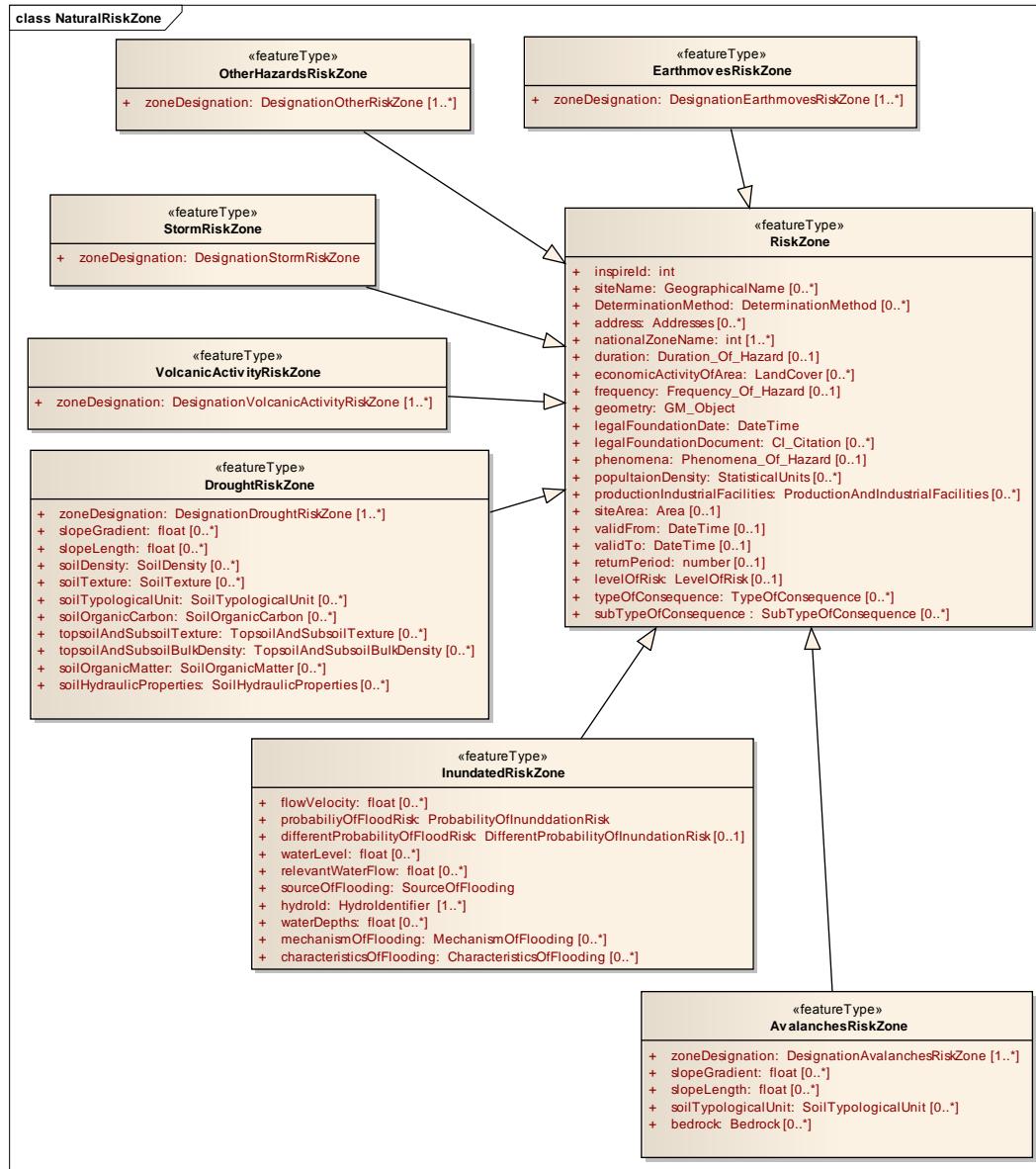
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## Výrobní a průmyslová zařízení

# Datové modely

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Oblasti  
ohrožené  
přírodními  
riziky

## Reference Model of Open Distributed Processing (RM-ODP)

<b>Viewpoint Name</b>	<b>Definition of RM-ODP Viewpoint</b>
Enterprise	Focuses on the purpose, scope and policies for that system.
Information	Focuses on the semantics of information and information processing.
Computational	Captures component and interface details without regard to distribution.
Engineering	Focuses on the mechanisms and functions required to support distributed interaction among objects in the system.
Technology	Focuses on the choice of technology.



<http://www.plan4all.eu>

# Děkuji za pozornost



ISOCARP



NasurSA  
NAVARRA DE SUELO RESIDENCIAL, S.A.



PROVINCIA  
DI ROMA



Geoinformation  
Vermessung

mac

CEIT  
CENTRAL EUROPEAN  
INSTITUTE OF TECHNOLOGY

CEIT ALANOVA  
Institute of Urbanism,  
Transport, Environment  
and Information Society

GEORAMA  
NON GOVERNMENTAL - NON PROFIT - ORGANIZATION  
ΜΗ ΚΥΒΕΡΝΗΤΙΚΕΣ - ΜΗ ΚΕΡΔΟΣΚΟΠΙΚΕΣ ΟΡΓΑΝΩΣΕΙΣ



Ayuntamiento  
de Gijón



REGIONE  
LAZIO

Direzione Regionale  
Territorio e Urbanistica



Hyperborea



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