CentropeMAP
CentropeSTATISTICS

Cross-Border Geodata Infrastructure with User-Defined Thematic Maps

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Vienna, Austria
www.planungsgemeinschaft-ost.at

on behalf of the **Planungsgemeinschaft Ost (PGO)**
(Eastern Austrian Planning Association)
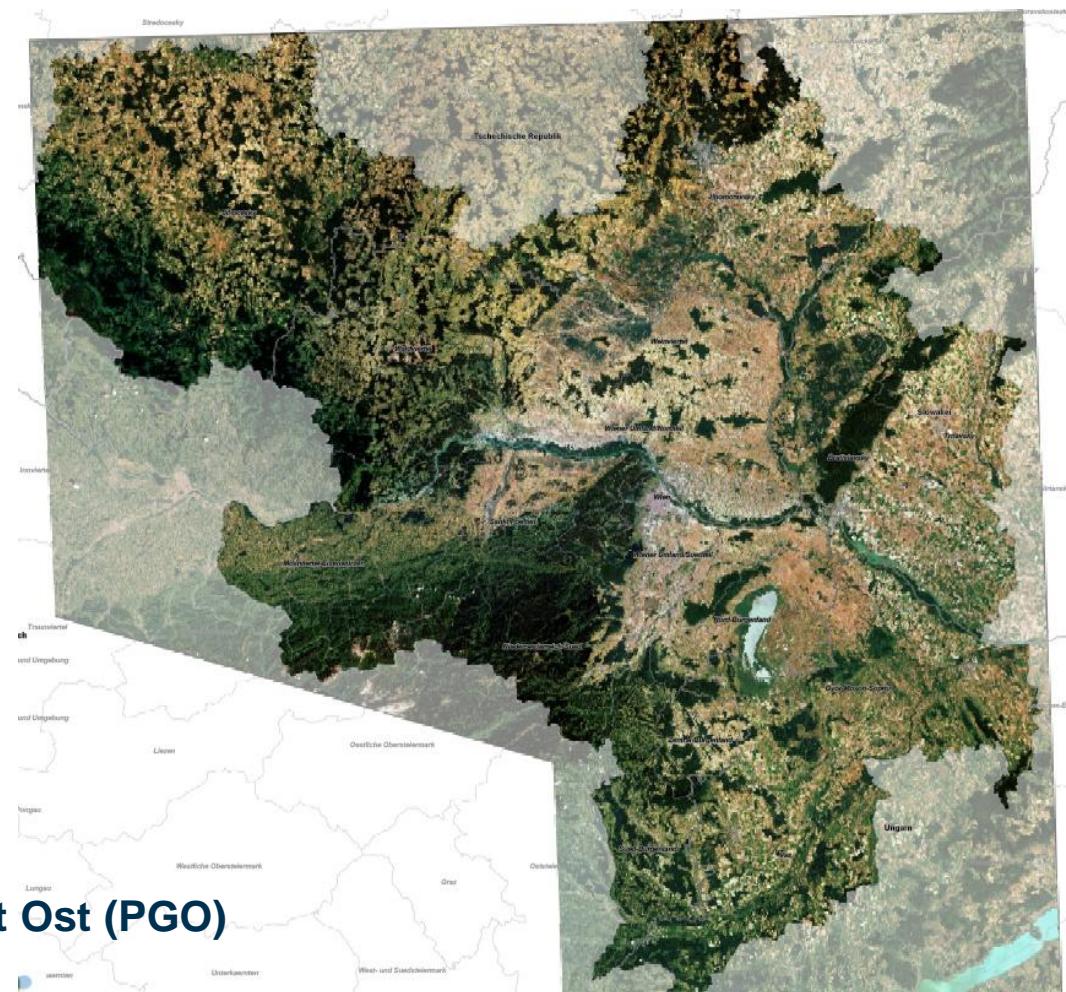
Contents

▶ The Centrope Region

• CentropeMAP

• CentropeSTATISTICS

• Technical Implementation

• Perspectives

CENTROPE Partner Regions

- Czech Republic
  - Region: South Moravia
  - City: Brno
  - *Interested: Olomouc*

- Slovak Republic
  - Region: Bratislava, Trnava
  - Cities: Bratislava, Trnava

- Hungary
  - Region (county): Györ-Moson-Sopron
  - Cities: Györ, Sopron

- Austria
  - Region (federal states): Burgenland, Lower Austria, Vienna
  - Cities: Eisenstadt, St. Pölten, Vienna
  - *Interested: Wiener Neustadt*

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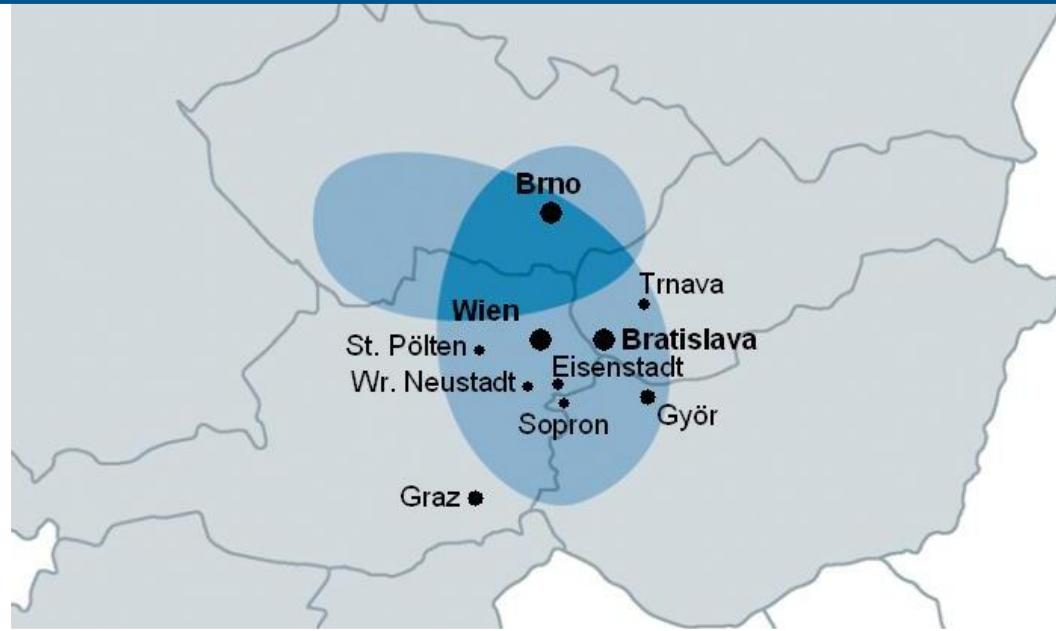
CENTROPE Region

Population

6 million
of which 3 million
in cities

Economy

3.8 million employed
55-65 % in service sector

unemployment rate between
4 and 14 %

GDP growth between
0.8 % and 3.6 %
since 2003

Infrastructure

3 international airports
(Brno, Bratislava, Vienna)

2 Danube river ports
(Vienna, Bratislava)

Pan-European corridors

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Challenges

Centrope MAP Challenges

- Legal planning responsibilities on different levels

- Data responsibilities on different levels

- Administrative boundaries = data boundaries

- No "common data infrastructure" available,
  only "isolated applications"

Input to Centrope Map

Geodata

Land use
(Corine Land Cover 2000, Level 3, all layers separately)

about 32 categories

Administrative borders
NUTS 2, NUTS 3, LAU 2

Infrastructure (linear):
road network
railway network
conductions, pipes

Infrastructure (punctiform):
transportation (stops, P+R)
education
health/social
administration
leisure/recreation
culture
supply and disposal
other

Anmerkungen:
WEBmap Service: dh.
Verknüpfung mit anderen
Servern (Geoland, SK, CZ, HU)
Karten durch user online
generierbar und als Bild (PDF
hochauflösend) downloadbar.

Planning:
builiding land
protection areas
Natura 2000
world heritage
ground water protection
flood protection
mining

Statistical data

Visualisation
of the data based on administrative borders (maps, diagrams)

Remarks:
Phase 1:
downloadable print-ready maps (PDF)
Phase 2:
online interactive maps

Database
NUTS 2, NUTS 3, LAU 2 (up to availability and meaning)

Area:
cadastral area, area of durable settlement, forest, water bodies, ...

Population:
Development, migration balance, balance of births
prognoses, age groups, nationalities
educational qualification
household size, secondary residences
employed, unemployed
strucutre of income, purchasing power
settlement structure

Occupation and Economy:
places of work, business structure
branch structure, value added
jobs, commuter structure
agriculture, forestry, tourism

Infrastructure:
(Data linked with punctiform infrastructure data)
administration, education, social, leisure, recreation, tourism, culture, ...

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CentropeMAP Web Application

- datasets come directly from project partners
  → no redundancy, always up-to-date

- functions: Zoom, Pan, Query, Search, Tell-A-Friend, Measurement

- hundreds of layers for the whole region and sub-regions

- background maps from simplified views to high-resolution satellite images and aerial views (ortho-photos)

- map generation on the fly

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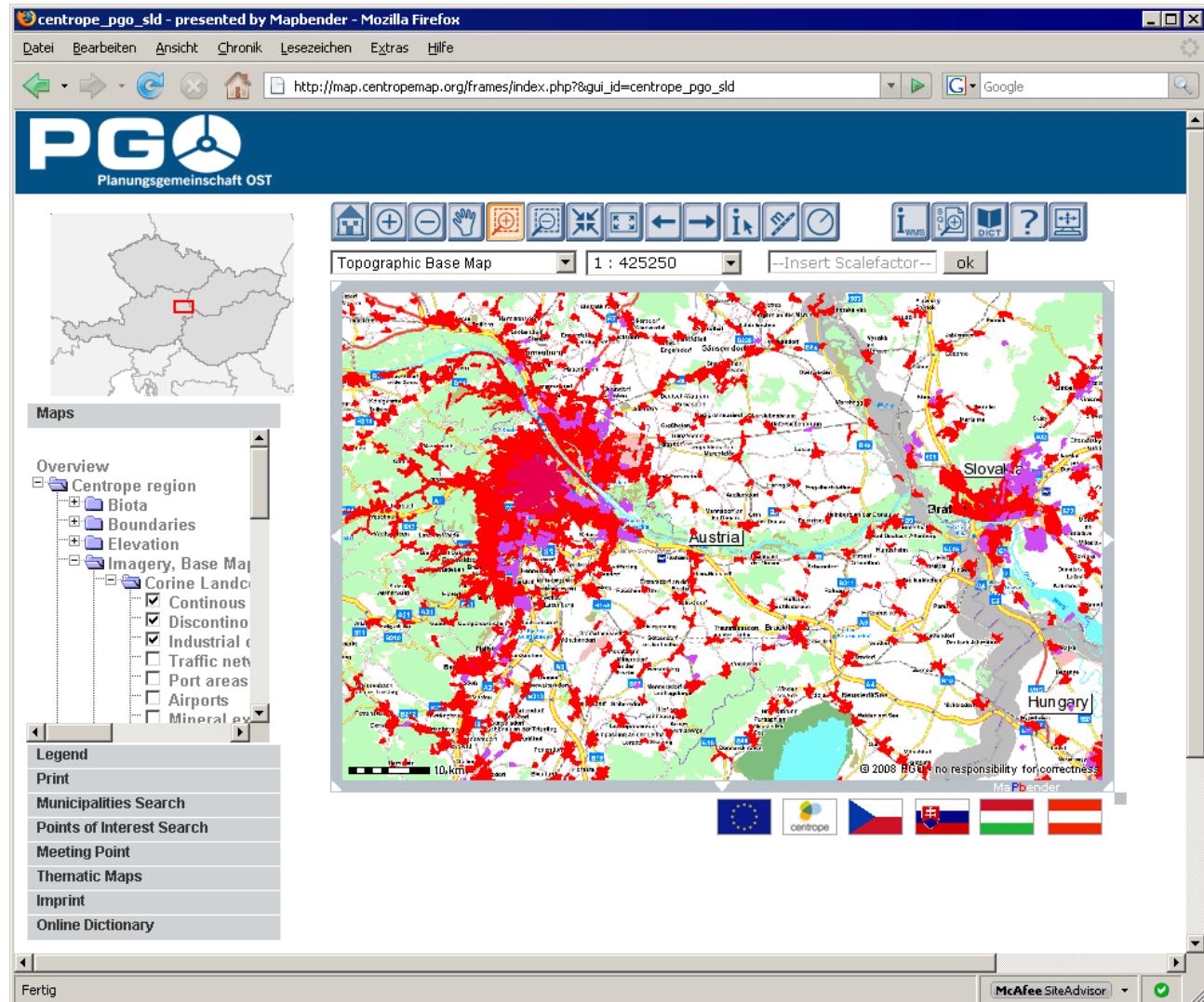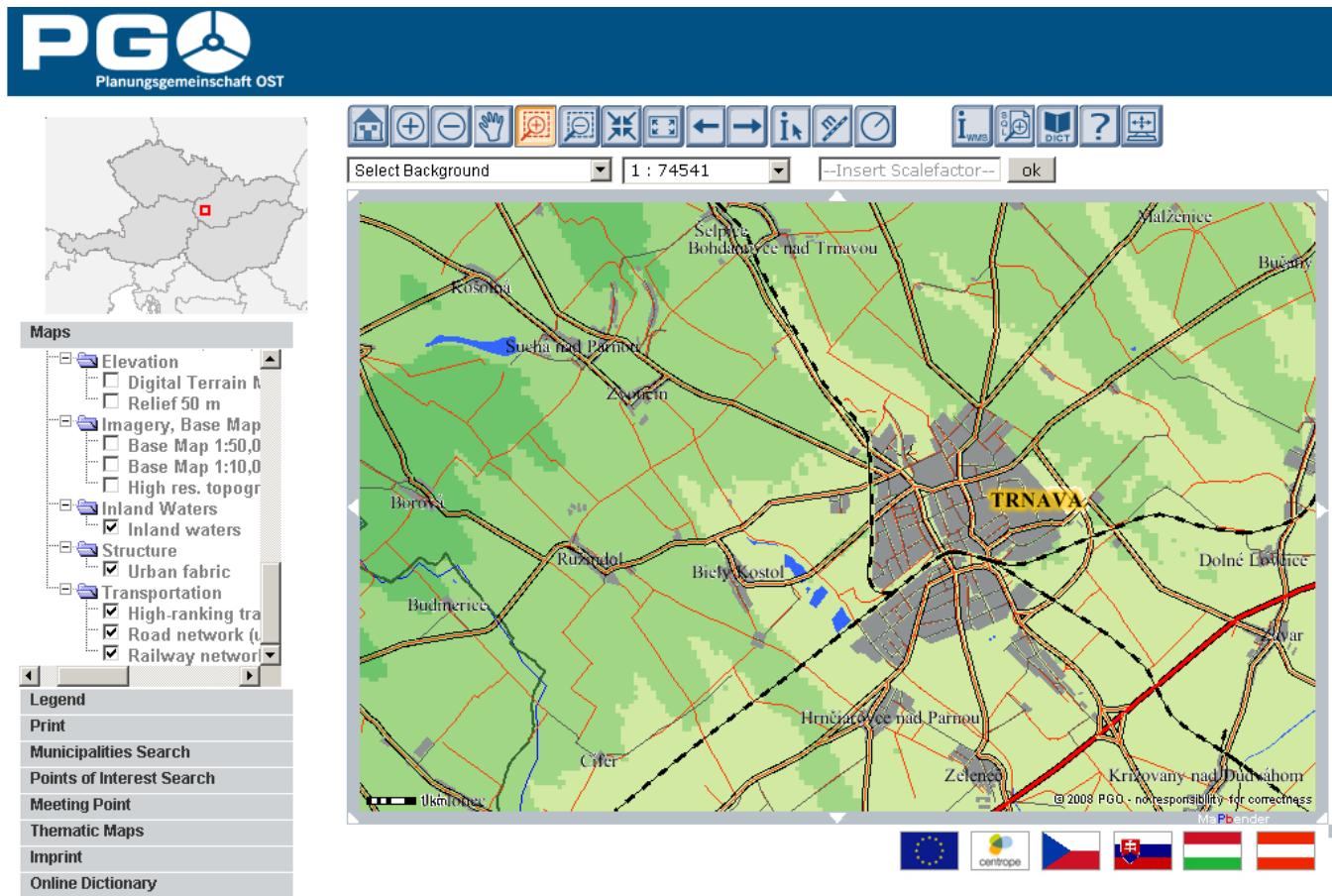
Data Examples

elevation, road network, railway network, urban fabric, inland waters

Data Examples
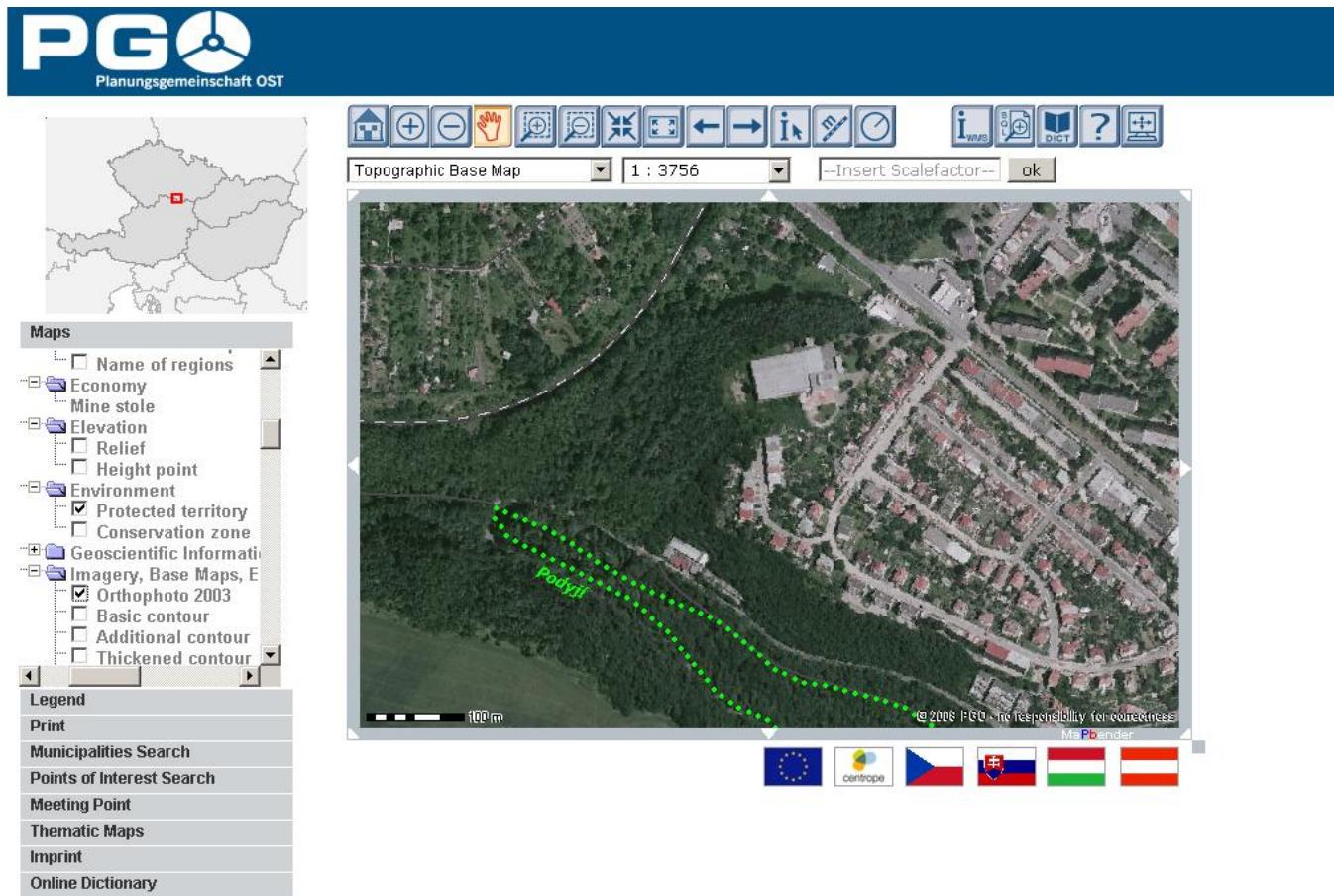
high resolution orthophoto, environmental protected territory (Znojmo, CZ)

Data Examples
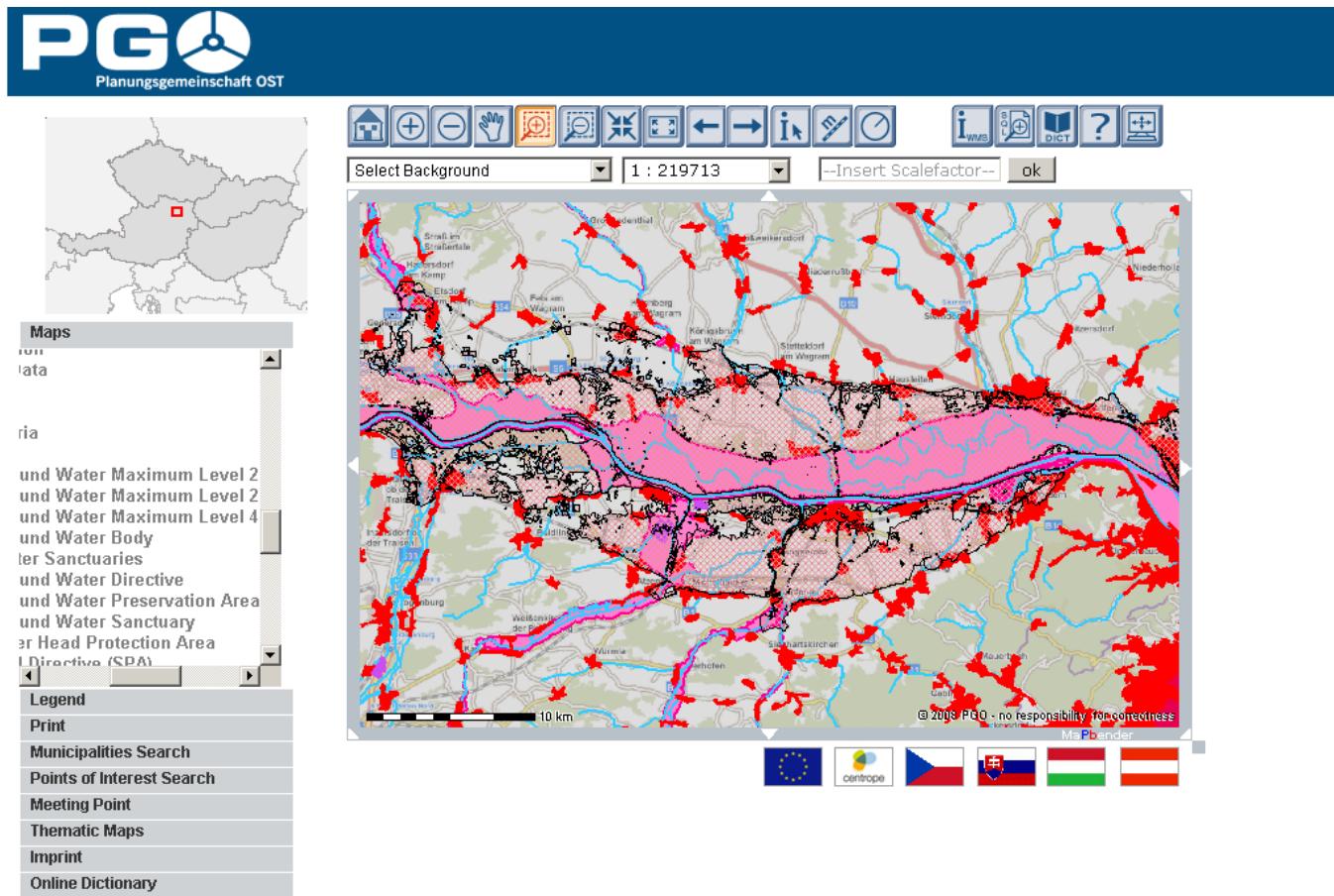
urban fabric, rivers, inundation risk areas, high ground water level (<2m)
(Danube, Lower Austria)

Data Examples
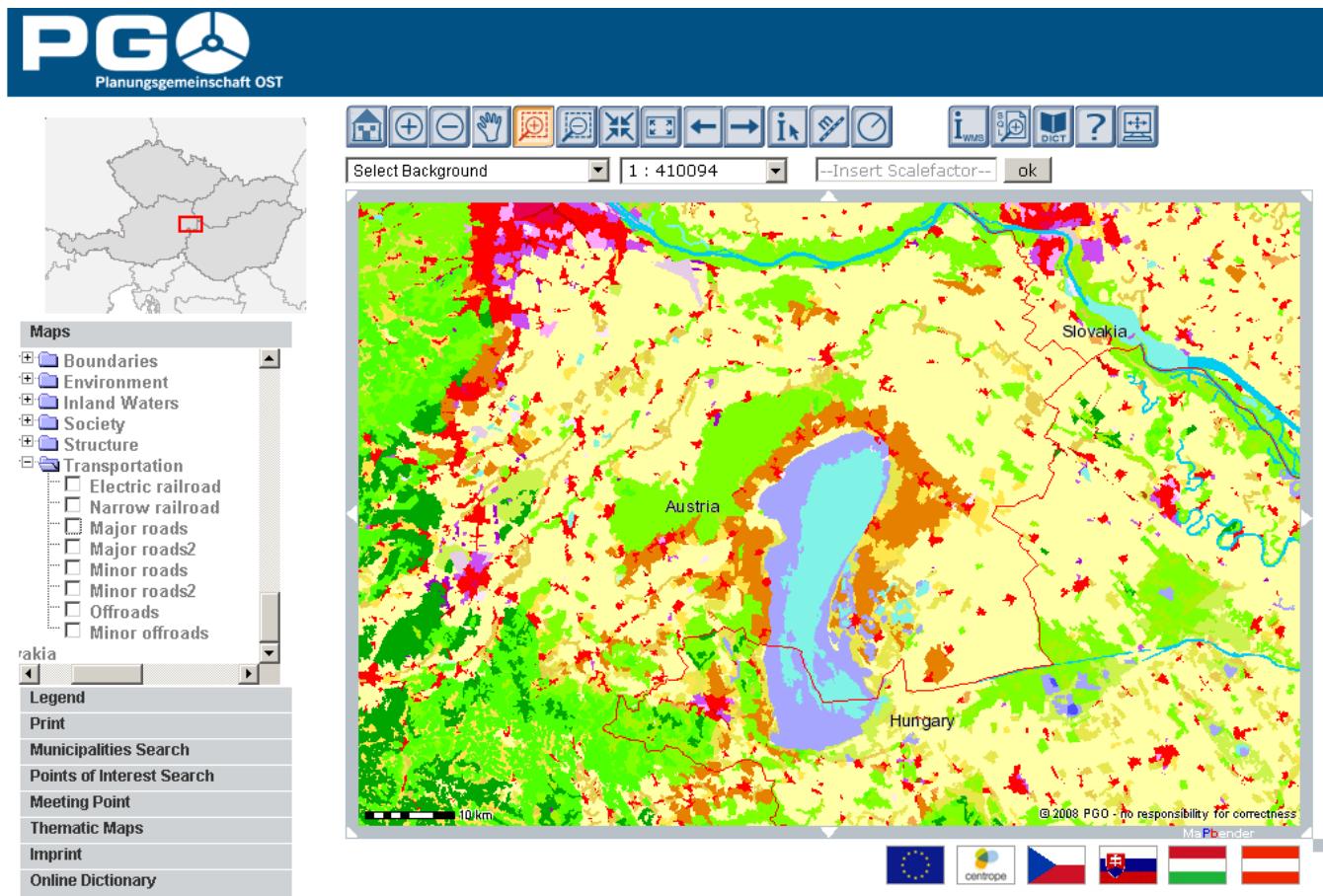

Corine Land Cover Level 2 (Lake Neusiedl Region)

Data Examples

European Urban Atlas
(Twin City Region Vienna-Bratislava)
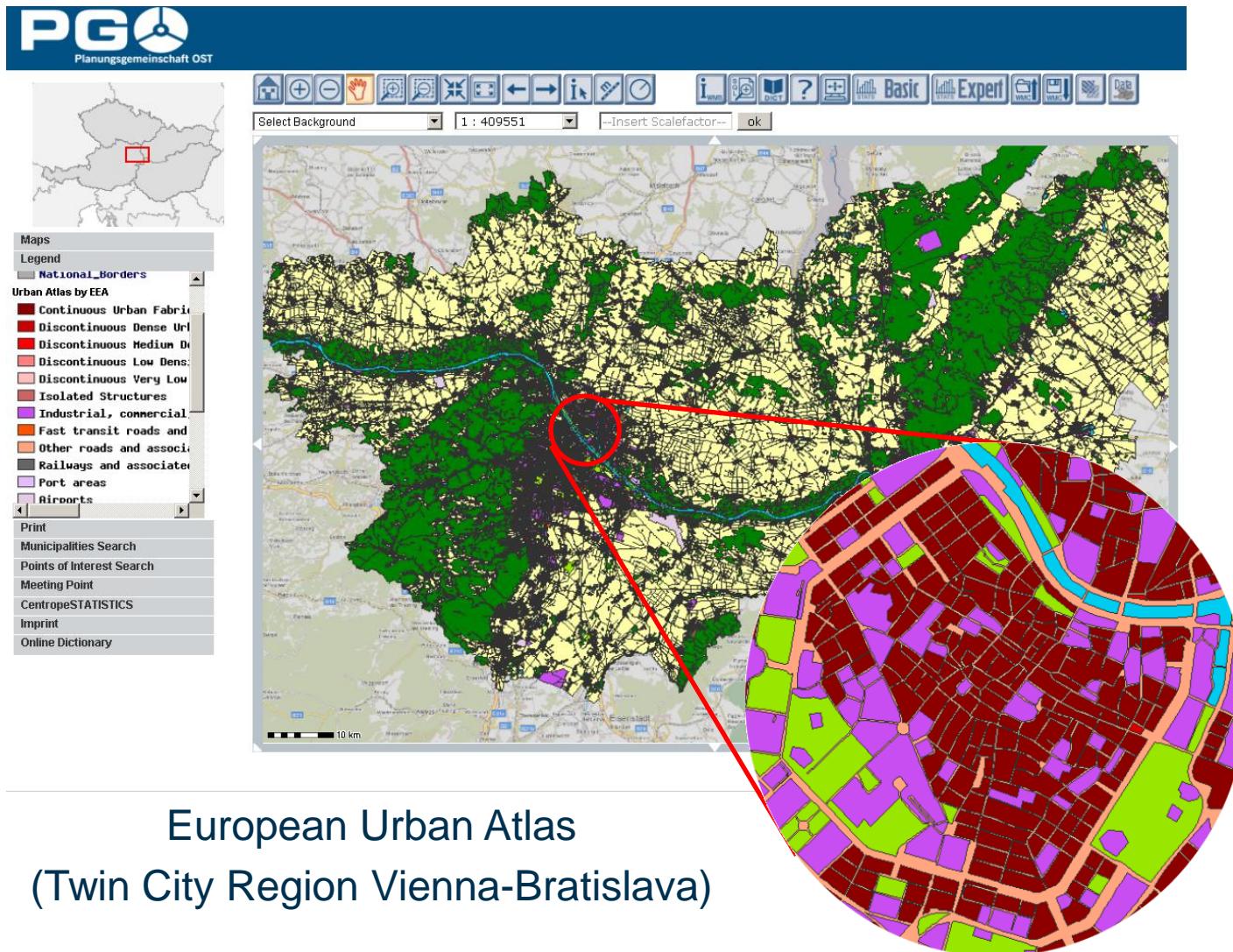
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Data Examples
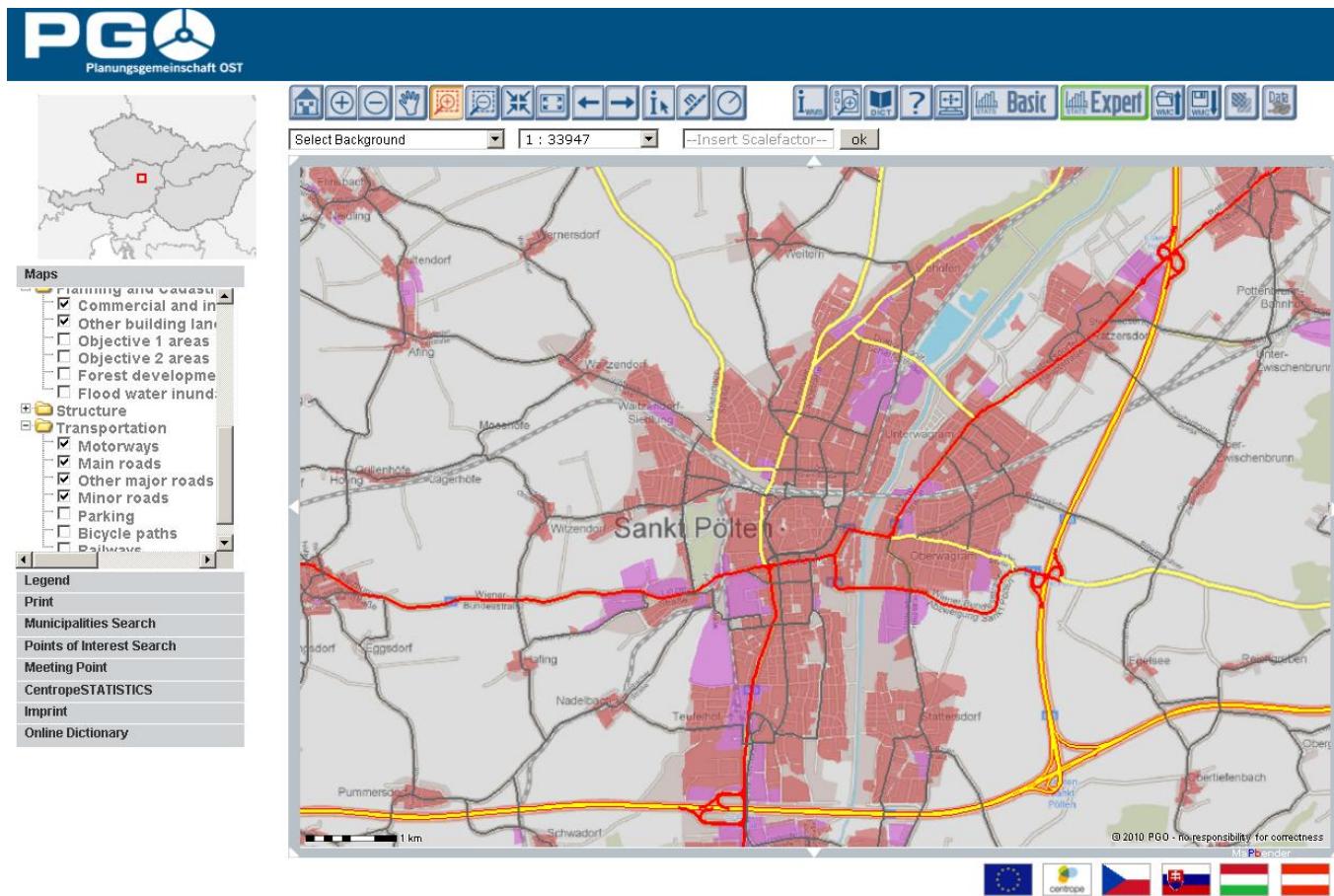
Building Land (Residential/Commercial), Road Network
(St. Pölten, Lower Austria)

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Project Partners

CentropeSTATISTICS is a cross-border database project of these co-operating statistics offices/departments in the Centrope Region
(on behalf of PGO - Planungsgemeinschaft Ost/Eastern Austrian Planning Association, and technically led by CEIT ALANOVA gemeinnützige GmbH)

- **Czech Republic:** CZSO - Czech Statistical Office – Český statistický úřad (ČSÚ)

- **Slovak Republic:** Statistical Office of the SR – Štatistický úrad Slovenskej republiky

- **Hungary:** HCSO - Hungarian Central Statistical Office – KSH - Központi Statisztikai Hivatal

- **Austria:** Statistics Departments of the three Austrian federal states Burgenland, Lower Austria and Vienna

Workshops:
September 2008 in Schwechat,
March 2009 in Schwechat,
September 2009 in Brno,
2010 t. b.a.

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CentropeSTATISTICS User Interface

- Functions:

  Show – Export – Query – Sort

- All available indicators are displayed

- Multiple choice allowed

- Results are shown as table

- Dynamic Database Live Query

→ *On the fly Map Generation*

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CentropeSTATISTICS User Interface
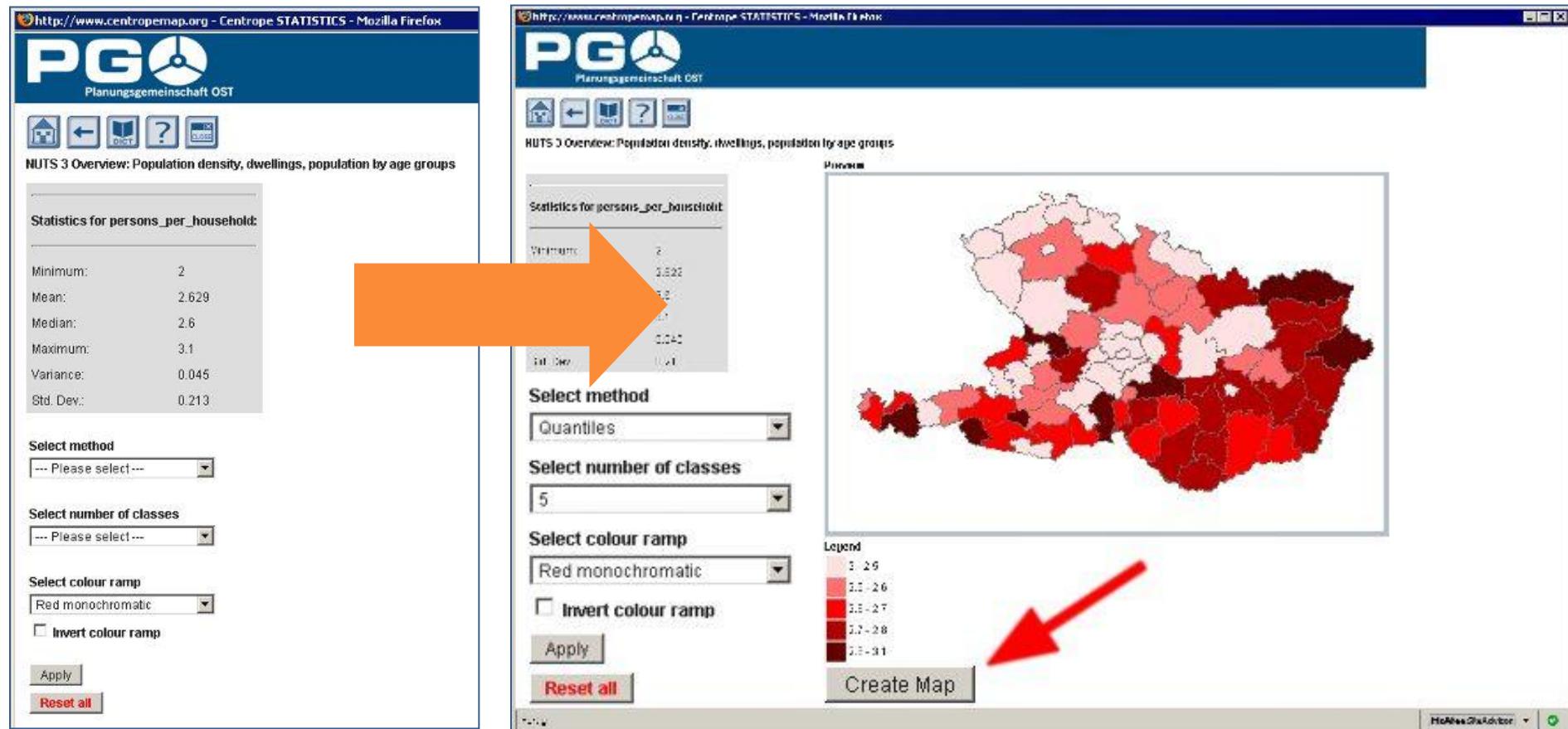
→ *On the fly Map Generation*

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System Architecture
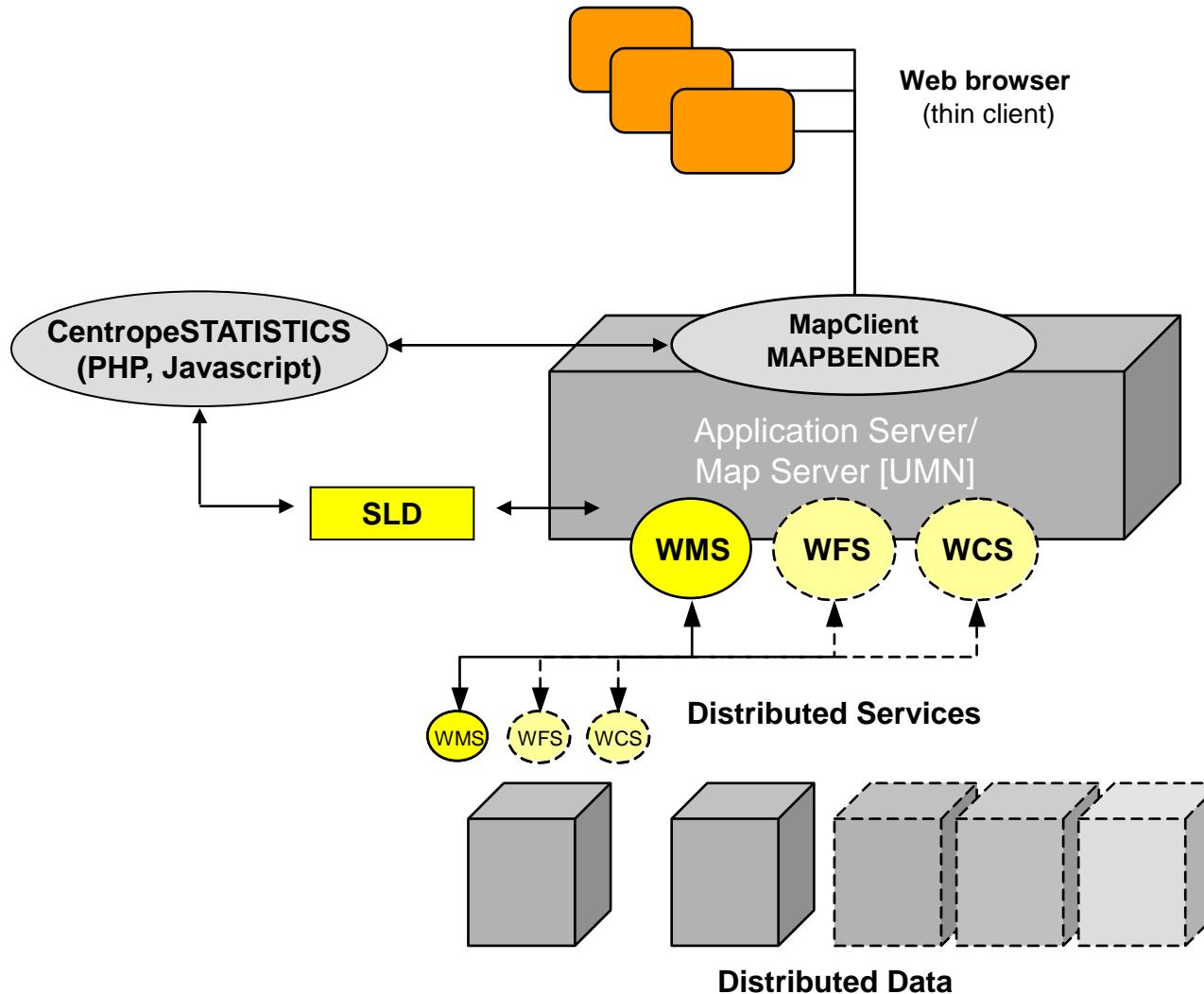
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Geodata Infrastructures are a Pan-European Matter

- **INSPIRE** – Infrastructure for Spatial Information
  in the European Community

  The INSPIRE directive aims to create a European Union spatial data infrastructure. This will enable the sharing of environmental spatial information among public sector organisations and better facilitate public access to spatial information across Europe.

- **Example Project**
  Data harmonisation and access to planning related data in Europe
  http://www.plan4all.eu/

  (**European Network of Best Practises for Interoperability of Spatial Planning Information**)

- User-generated content,
  OPEN SOURCE DATA
  (Open Street Map, …)

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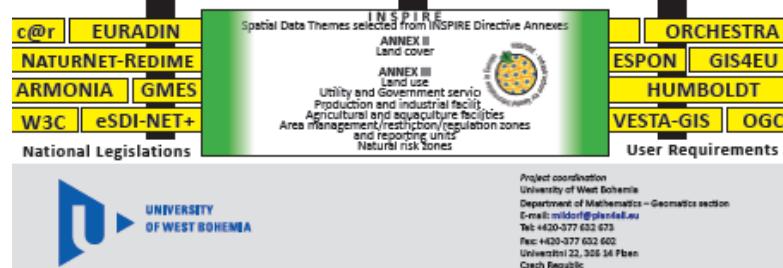
Example Project

Harmonisation of spatial planning data according to the INSPIRE directive based on the existing best practises in EU regions and municipalities and the results of current research projects

www.plan4all.eu
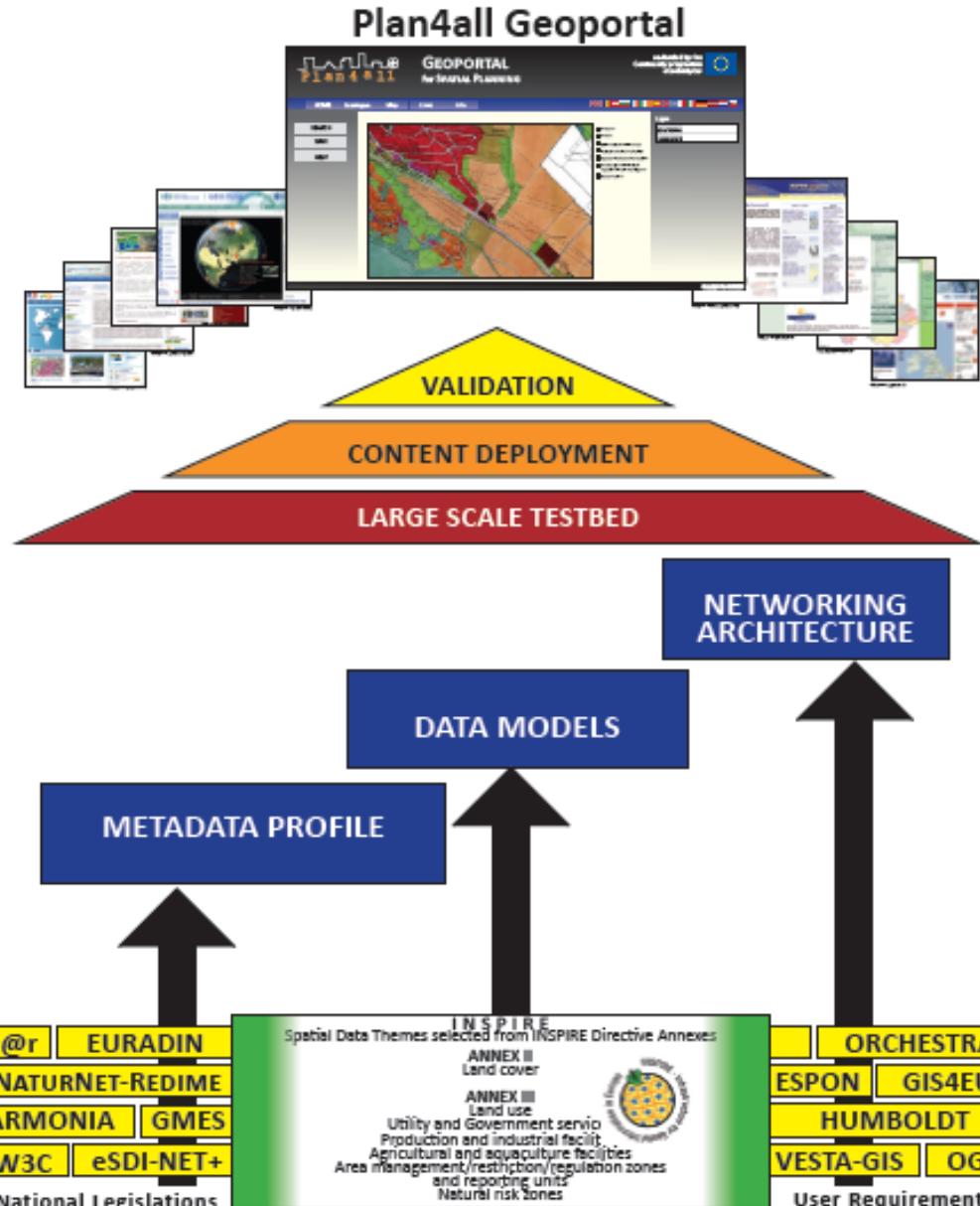
Example Project

Harmonisation of Land Use and Land Cover Databases for the creation of value added services

www.hlandata.eu

Common Data Sharing Infrastructure

Common Web services allowing to visualise, overlay information from different sources

PILOT 1
LU/LC data analysis system

PILOT 2
national land information system

PILOT 3
Waste dumps stratification

European Environment Agency

European Environment Agency (EEA)
provides sound, independent
information on the environment

Air pollution

Biodiversity

Climate change

Land use

Water

cross-border & accessible

http://www.eea.europa.eu

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THANK YOU
for your attention!

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