

The Importance of Spatial Data for Sustainable Spatial Management

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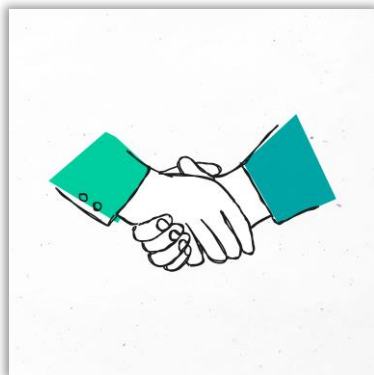
Agenda

- Harmonisation of data for cross-border spatial management using INSPIRE model (HARMO-DATA)
- Territorial Attractiveness planning process/concept (ATTRACTIVE DANUBE)
- Archeological assets as driver for territorial and local development (ISTER)
- Inclusive design for improving accessible tourism for persons with disabilities (PWD) in rural border regions in Central Europe (CE-Spaces4All)
- Building land Register – an important step towards effective space management

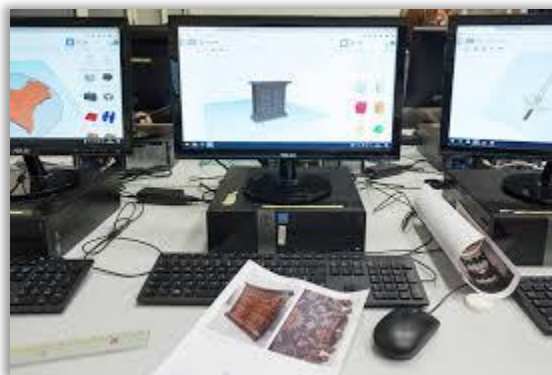
Harmonisation of data for cross-border spatial management using INSPIRE model (HARMO-DATA)

- INSPIRE data harmonization for efficient spatial management and sustainable territorial and development planning at SI-IT cross border area

I. **Strengthening** cross-border **cooperation** => **Protocol** for spatial data harmonization



II. **Improvement** of cross-border spatial **management** => **Common** spatial data **platform**

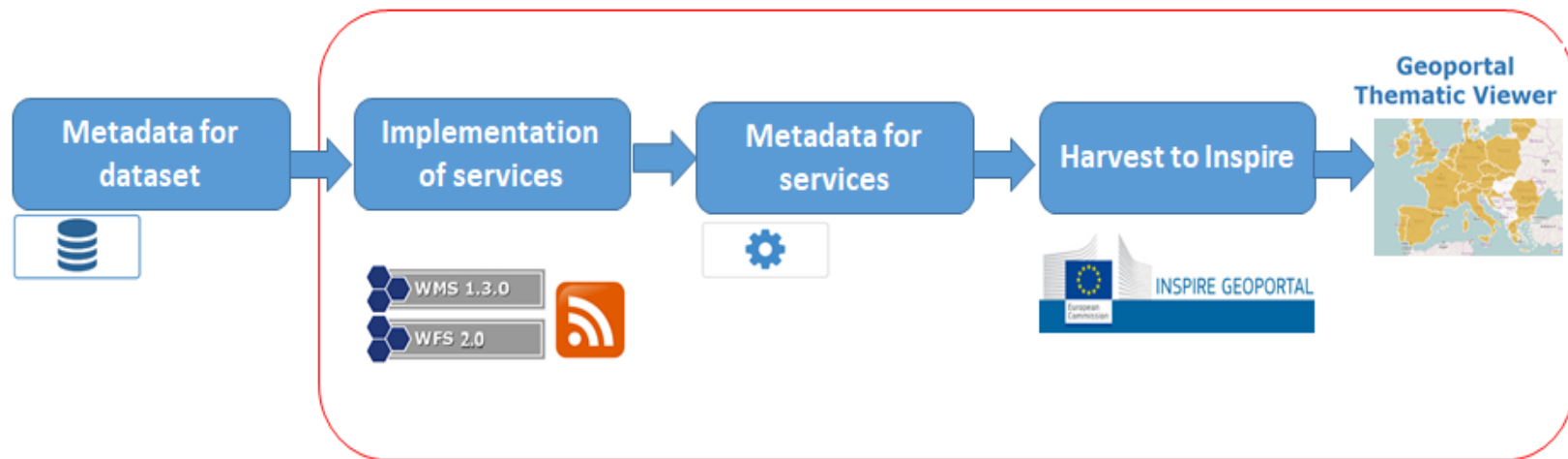
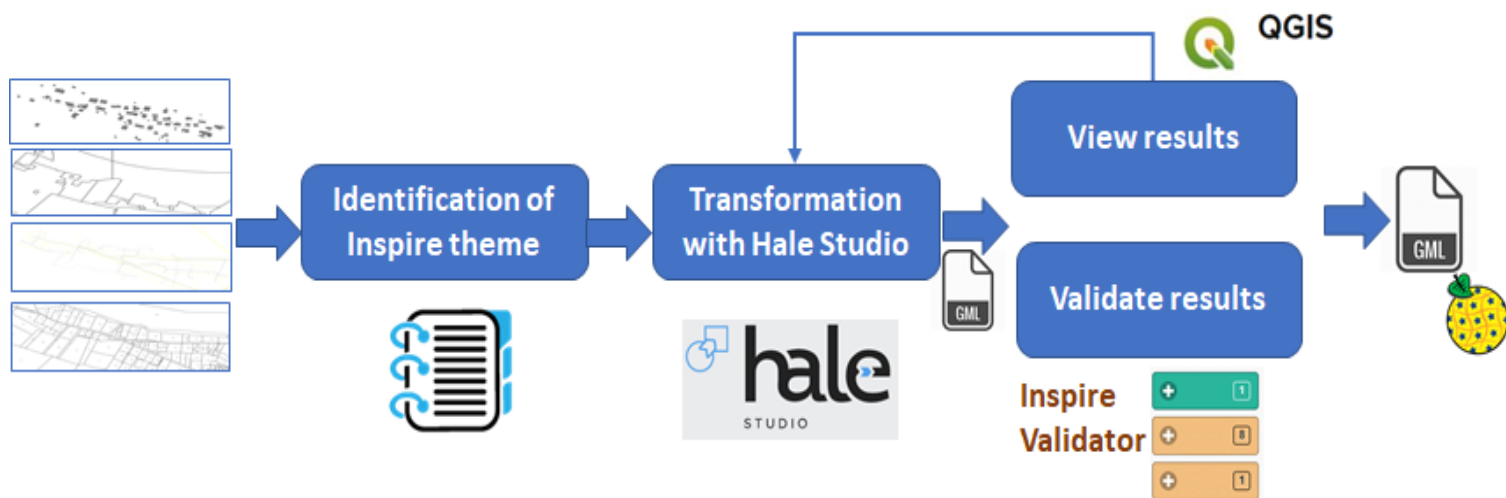


III. Harmonization of **educational** programs => **Participants** at common educational program of spatial management



Joined Common Spatial Data Platform

From harmonized data ... to spatial data platform



HARMO-DATA GEOPORTAL: Cross-border Data Usage

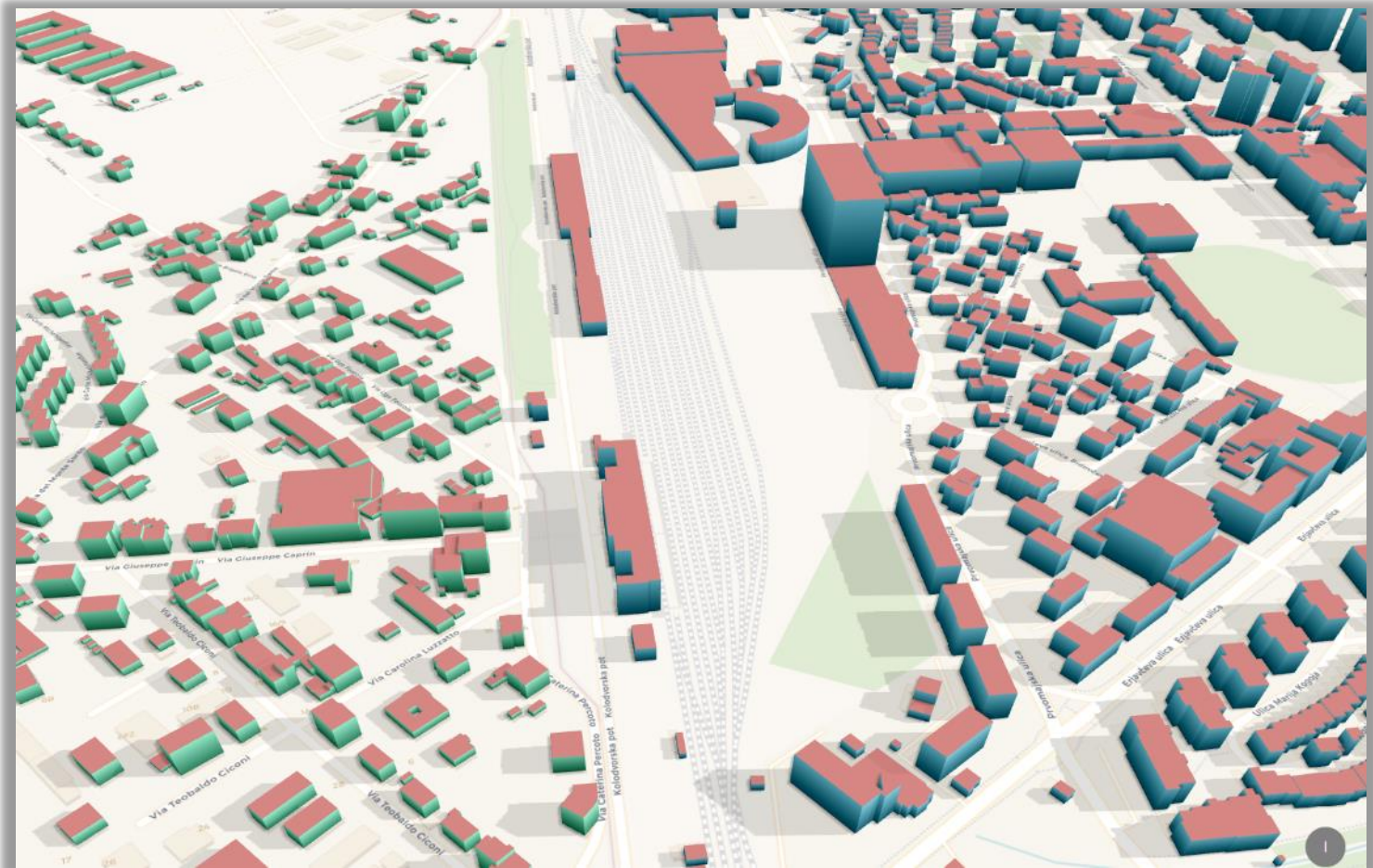
HARMO-DATA-geoportal.eu

Data usage scenarios:

1. [Search & Download](#)
2. Search & [View](#) & Download
3. Search & Download & Harmonized
4. Search & View & Download & Harmonized

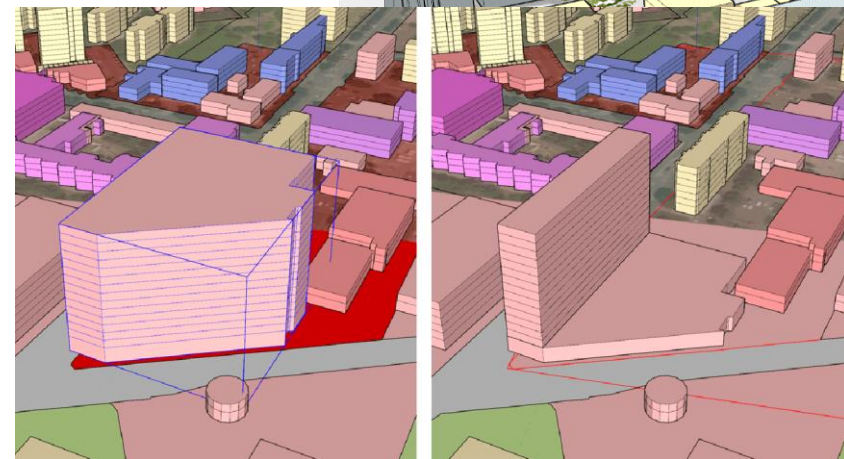
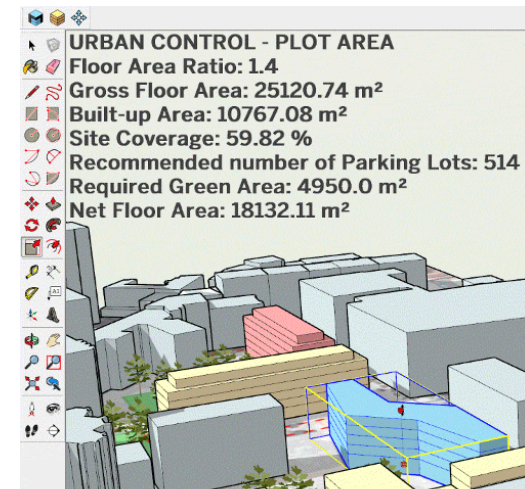
The screenshot displays the HARMO-DATA GEOPORTAL website. At the top left, there are logos for Interreg ITALIA-SLOVENIJA and the European Union. The main header is dark blue with the text 'HARMO-DATA GEOPORTAL' and language options 'ENG | ITA | SLO'. On the left side, there is a 'FILTER BY' section with a search box and a list of categories: SHOW ALL, METADATA, RSS ATOM, DOWNLOAD, MAPS, SHOW ALL, ADMINISTRATIVE UNITS, GEOGRAPHICAL NAMES, BUILDINGS, PROTECTED SITES, PLANNED LAND USE, LAND COVER, and SENTINEL. The main content area features a grid of 12 map thumbnails, each with a title and a brief description of the data source. The thumbnails include: Administrative units map (Created from INSPIRE gml), Natura 2000 map (Created from INSPIRE gml), PLU map Gorizia & Nova Gorica (Created from INSPIRE gml - Gorizia & Nova Gorica), 2.5D buildings map (Created from INSPIRE gml - Gorizia & Nova Gorica), Corine Land Cover 2012 in mun. Mira (Detailed CLC2012 in Mira created from Veneto INSPIRE gml and CLC2012 from EEA), Ecosystem services map (Planned land use and weighted E5 total - mun. Mira), Venice lagune high tide map (Venice lagune tide change from Sentinel), Lake Cerknica map (Lake Cerknica changing from Sentinel 2), Piave river map (Piave river flooding map from Sentinel 2), and Monitoring of the Gulf of Trieste during a storm (Monitoring of the Gulf of Trieste during a storm from Sentinel 1).

Case Study: 2.5D building map created from INSPIRE GML, Gorizia & Nova Gorica



Case Study: Urban 3D Modelling – Interactive 3D Zoning

- Automatic placement and checking of the basic dimensions of new buildings according to urban indicators
- Modelur: **urban design software tool**
- Calculation of key urban control parameters **on the fly** (e.g. FAR or required number of parking lots)
- Many benefits for cities:
 - *2,4x faster => more design alternatives*
 - *4,5x more accurate => better informed design*
 - *3,5x less prone to errors => less mistakes*
- Data source:
 - **Building Cadastre**, Inspire [bu-core2d](#) schema
 - **Planned Land Use**, Inspire [plu](#) schema



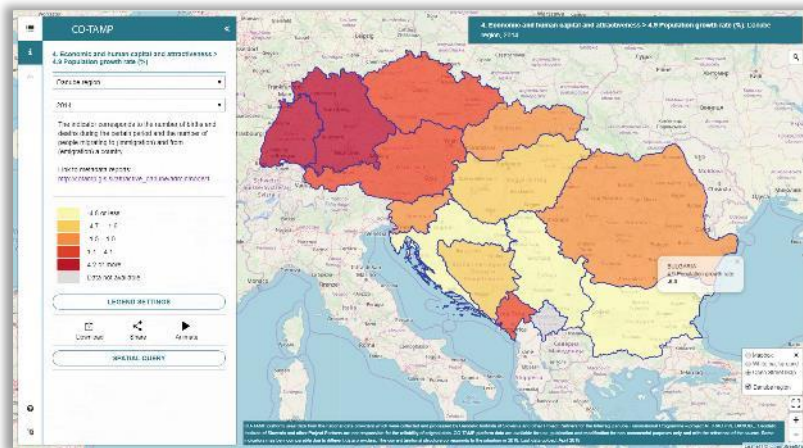
Territorial Attractiveness planning concept (ATTRACTIVE DANUBE)

Territorial attractiveness is defined as capacity of certain **territory's Territorial Capitals and Assets** to attract and retain **target groups** (tourists, residents, migrants and companies/investments) by already existing or developed advantages, imposed by relevant policies and their goals.

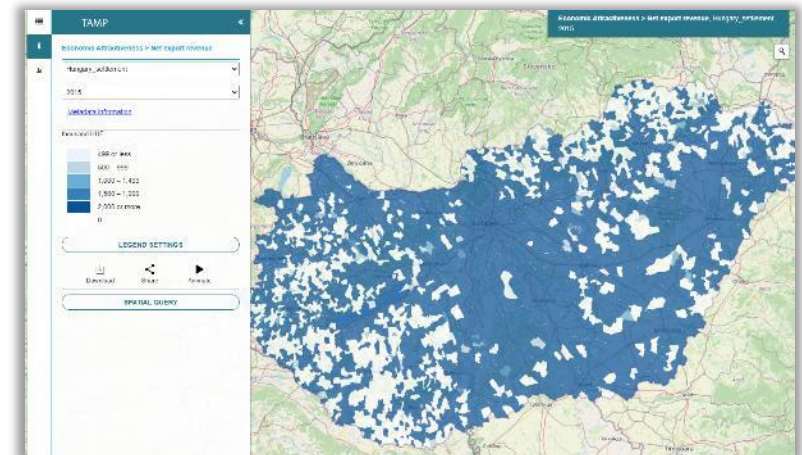


Territorial Attractiveness planning concept (ATTRACTIVE DANUBE)

- The evidence-based approach in ATTRACTIVE DANUBE Project relied on territorial data: a set of transnational, common **territorial attractiveness indicators**, and sets of national indicators, both of which are collected from official sources on **long term (2008-2021)** and which are used to bridge the gap between traditional practice of public policymaking and formal research
- Presentation of indicators on web-based information platform to be used for better territorial planning and decision making



Source: http://tamp.gis.si/attractive_danube



Source: <http://tamp.gis.si/hungary/>

Archeological assets as driver for territorial and local development (ISTER)

- ISTER - Connecting hiSTorical Danube rEgions Roman routes – focused on rediscovering and revitalizing the **ancient Roman Roads Network along the DR** as a key driver in promoting territorial development based on sustainable use of cultural and natural heritage (specifically, Roman routes)
- Enhancing (physical and non-physical) accessibility to Roman routes & settlements where archeological assets represents a **driver for territorial and local development**
- Developing relevant **policy instruments** for further preserving and valorizing Roman Cultural Heritage at DR



ISTER GIS Atlas and Interactive app

- GIS Atlas and Interactive app of roman routes in DR as an evidence-based supporting and awareness raising tool for the integration of Roman heritage into wider tourist routes and within local productive sectors
- support addressing Roman heritage (both Routes and settlements) as a driver for sustainable development, increased accessibility and visibility
- support policy planners in recognizing and understanding constraints and potentials in a given territory



Inclusive design for improving accessible tourism for persons with disabilities (PWD) in rural border regions in Central Europe (CE-Spaces4All)

**IMRPOVE GOVERNANCE
AWARENESS-RAISING
CAPACITY BUILDING ON ACCESSIBILITY FOR PWD
CHANGE OF BEHAVIOUR**

**Developing a joint tool for evidence-based territorial planning
Developing tools and services for independent tourism travel of PWD
Mainstreaming and policy uptake**

Inclusive approach – accessible places for all

- Adopting the principles of **inclusive design** from the beginning ensures **that spaces and products are accessible to the widest range of individuals** and that the **persons with disabilities are involved** in the process (eg. Planning, data collecting, writing of methodology)- a more inclusive and equal society
- It benefits one target groups and does not harm others (eg.TWSI, audible pedestrian semaphore, slopes, etc.)
- Data in Slovenia were collected for **all 3 vulnerable groups**
- **Identified categories that are key to the improve accessibility and development of tourism products:**



completely accessible areas



accessible with assistance



not accessible



CE-Spaces4All

1. **Mapping barriers** for evidence-based territorial planning for accessible tourism that are relevant to persons with:

- Mobility impairments | Visual impairments | Hearing impairment

2. Developing **tools and services** for independent tourism travel of persons with disabilities

3. Capacity building, policy uptake and mainstreaming events



Building land Register – an important step towards effective space management

- There is no adequate register of building land and its properties in Slovenia, missing basis for the implementation of land policy instruments
- Spatial planning is not in line with the principles of sustainability as defined in the Slovenian spatial planning legislation
- Lack of data is reflected in the reckless direction of settlement and placement of investments
- There are pressures to expand building land onto agricultural land, while building land within settlements remains vacant and undeveloped
- Need for creating a systematically regulated spatial data record, called the Building land register

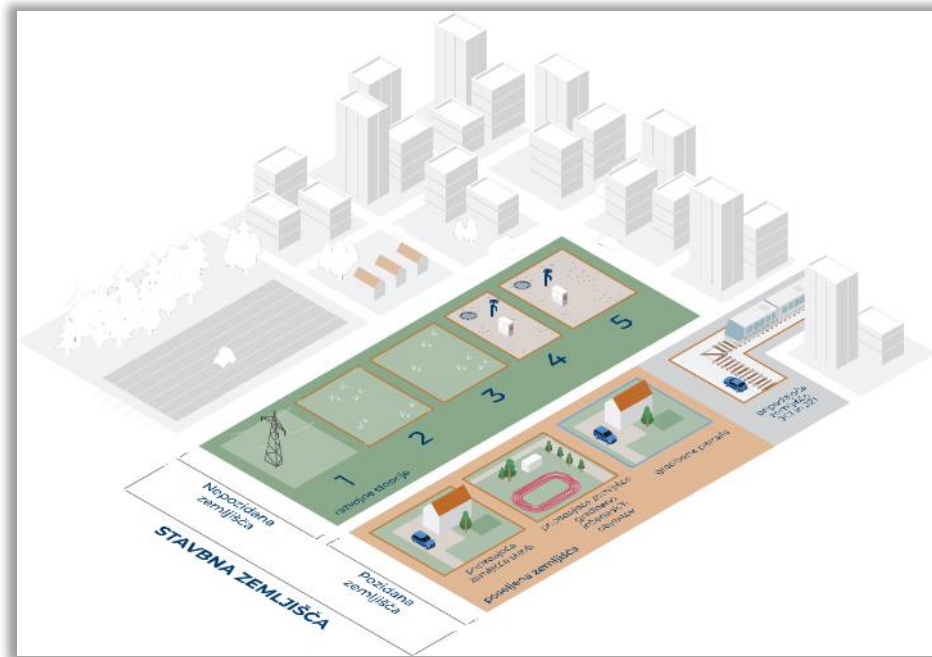


Building land Register – an important step towards effective space management

The Building land Register contains:

- data on the existing state of built-up land and
- vacant building land

Vacant land has certain **development stages (1-5)** which indicate the possibility of actual land activation due to the current state of the land's utilities and spatial development, as well as spatial constraints.



- 1 - unbuildable land
- 2 - spatially disordered land
- 3 - building land without urban infrastructure provided
- 4 - unorganized buildable land
- 5 - buildable land

Thank you for your time and attention.