

## HUMBOLDT Application Scenario

### Urban Planning

**The Urban Planning Scenario is focused on the harmonization of spatial data used in urban and spatial planning. This Scenario represents the ideal example for spatial data harmonization needs at the international level, because elaborate spatial and urban planning lacks high-quality spatial data sets to enable qualified administrative and legislative decisions. The publication of spatial planning activities makes possible integration, cooperation and control of public, too. Also the sharing of spatial and urban planning data is very important for data providers, municipalities and planners. It is necessary to realize that only harmonized data could be shared.**

The use case of the Urban Planning Scenario is focused on harmonization of Spatial Analytic Backgrounds (SAB) and Corine Land Cover (CLC) data set. The SAB represent the Czech standard of background data used in spatial and urban planning. The SAB are collected for design of urban or spatial plans (there is not any standardized data model). The different data sets (from different providers) can be very heterogeneous, because there is no standard defined by legislative (just a list of data themes). They can be based on CAD model, GIS model, raster map etc. The SAB data are composed of 156 thematic data layers defined by ordinance 500/2006 (e.g. cultural monuments, natural ecosystems, hydroengineering structures, piping systems, traffic infrastructure etc.).

They are selected from many different sources and

providers. These sources are not defined but recommended. The SAB data are without any detailed description (any data models, mandatory attributes, data types, restriction of values, scale etc.). So far there is just a simple example available which describes just geometry and code of SAB (code A1-A119 for items collected by municipalities; code B1-B37 for regions). Some layers of SAB contain land cover or land use information.

Therefore an interconnection of SAB and international data set CLC enables more efficient, faster and cheaper collecting, updating and checking of spatial data. The method based on mapping of data models could be used in other data sets used in urban and spatial planning (e.g. hydrology data, environmental data etc.).

**General harmonisation of urban and spatial planning data could have the following benefits:**

- ⊕ avoidance of any duplicities in data,
- ⊕ clear origin and assurance of quality of the data,
- ⊕ data structure standardisation,
- ⊕ data purity,
- ⊕ security,
- ⊕ structure uniformity,
- ⊕ reciprocal data accessing per:
  - ⊕ WMS (Web Map Service),
  - ⊕ WCS (Web Coverage Service) and
  - ⊕ WFS (Web Feature Service),
- ⊕ fall of cost for data updating and maintenance,
- ⊕ enhanced software development,
- ⊕ advanced source exploitation,
- ⊕ improvement of chances in communication with authorities or increasing educational activities.

Different types and versions of spatial plans symbolize heterogeneities in spatial planning and the need of harmonization.

**Cooperation:**

The Urban Planning Scenario cooperates also with other similarly oriented European project like Plan4all ( [www.plan4all.eu](http://www.plan4all.eu)) or SDI-EDU ([www.sdi-edu.zcu.cz](http://www.sdi-edu.zcu.cz)).

**INSPIRE compliance:**

The results of the Urban Planning Scenario (data models, metadata profile) will be INSPIRE compliant.

**Contact:**

**Karel Charvat**  
[charvat@lesprojekt.cz](mailto:charvat@lesprojekt.cz)

**HUMBOLDT Project Office:**

zeitform Internet Dienste

Fraunhoferstraße 5

64283 Darmstadt

Germany

Phone: +49 6151 155 637

Fax: +49 6151 155 634

Email: [po@esdi-humboldt.eu](mailto:po@esdi-humboldt.eu)

<http://www.esdi-humboldt.eu>