From Geo-Ontology To Map

The questions connected to linked spatial data and ontological systems are counted among trends and hot topics of the contemporary cartography, geomatics, geoinformatics and GI science. Existing researches are focused above all on development data models, problems of serialization or migration of traditional data (for example stored in relational databases). But there is lack of studies of real usability of linked spatial data and applications based on linked spatial data.

In this paper the map application based on linked spatial data is introduced. The main principles of our approach could be paraphrased as "to get large amount of information from very limited amount of explicitly inputted data (stored in a simple ontological system)". It means to base a development process on an interconnection of linked data, external data resources, Application Programming Interfaces (API) and map layers. The whole process of transformation of source data to the map application is realized with use Extensible Stylesheet Language – Transformation (XSLT) templates and other standards, open-source software and libraries (e.g. map client library Leaflet).

The paper shows specific steps of the application development (which follow from linked spatial data usage). The other aim is to introduce an application of a solution based on linked spatial data in teaching of geomatic and cartography classes.