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**Toponymic data files**

**The Geonames Database**

Submitted by the Czech Republic \*\*

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### **Summary**

The Geonames database represents collection of table and graphic data with spatial localization. The database metadata are available at the www link: <http://geoportal.cuzk.cz>. The project Geonames was started by the Land Survey Office in 1997. Names from the whole territory of the Czech Republic were completely included to the database in 2005. Since that time the permanent update has been processed in the regular period of three years. New data changes are collected by office's employees in the field and with help of databases of relevant data administrators. At present, the Land Survey Office is to start the web feature service to make possible a connection to the EGN central web service.

The Geonames database represents a main geographical names database for purposes of state civil cartography in the Czech Republic. It has been made up as a list of geographical names with a relation to the spatial localization and an addition of other records about them. Since 1997 the Secretariat of the Commission on Geographical Names has started to digitize the collection of standardized names. The database was fulfilled in 2005. Since then the data update has been processed at regular intervals of three years.

Usually, Land Survey Office's regional topographical departments deal with the field collection of names and initiate updating process. Local and municipal authorities are engaged to make corrections if there are any. Proposals of name changes are being passed to the secretariat of the Commission on Geographical Names of the Czech Office for Surveying Mapping and Cadastre that carries out the Geonames database. After attributing to the geographical features and proving the spelling and the location, changed names are incorporated to the database. Outsourcing is used if it is possible at all.

The topography component is divided into two parts:

1. The graphical part, which displays texts including their rotation referred to map sheets frames of the Basic Map of the Czech Republic 1:10 000 and the used typography according to that map.
2. The database part containing other attributes of entries. Some of them, especially identifiers of some types of features (the hydrography, cities and villages) are taken over from the databases of their specialized administrators.

The database metadata are available at the www link: <http://geoportal.cuzk.cz>.

The Geonames is formed in the relational database ORACLE in special graphical interface. The Geonames data are ordered according to map sheets of the Basic map 1:10 000. The names from database could be transferred to the DGN or SHP formats and they are partially compatible with ZABAGED<sup>®</sup> (Fundamental Base of Geographic Data of the Czech Republic), which is the main GIS carried out by the Land Survey Office in Prague.

As for the appearance in other similar data sets, most of names, which have been contained to the database, are unique. No other topographic database in the Czech Republic has been established in such a complete set of field names and names of small settlement units yet. The customers can order data electronically via the Business Module that is carried out by the Land Survey Office in Prague. Since spring 2007 they can also use web map service

(WMS). Both the Business Module and the web map service are available at the web site as mentioned above.

In a short period of time the Land Survey Office is going to unify both the Geonames and ZABAGED<sup>®</sup> data model. This is intended as a part of the process heading to an integration of main information systems being in charge of the Office. This may prove necessary for the implementation of the EuroGeoNames project as well. The aim is to create links to the equivalent ZABAGED features bearing the attribute *Name* and a new geometry for those features Geonames that cannot be joined to equal entries in the ZAGAGED database. It is supposed that the GM envelope (*bounding box*) surrounding map inscriptions will be chosen for the topographical location of field names.

The final decision about the central EGN data model and the complete architecture of the EGN web service is expected to be made in the second half of the year 2007. At the same time the Land Survey Office is to start the web feature service to make possible a connection to the EGN central web service. All necessary changes in the Geonames database are to be done in the period 2007-2008.