

# GEOinformatics

Magazine for Surveying, Mapping & GIS Professionals

1

Jan./Feb. 2009  
Volume 12



- Bentley V8i ● Trimble VX
- ArcGIS Desktop 9.3 ● ASPRS Pecora Symposium

# Improving the Usability for Web Mapping Services

## New Portal for Czech Land Survey Office

*The Czech Land Survey Office was looking for a better way to share accurate government data to comply with new legislation, that required free distribution of governmental data to central, regional, and local authorities. The measure also called for the office to better support commercial access to nationwide geospatial data. To meet these requirements, the Land Survey Office wanted a new service for users of map data, one that would provide the support needed for map publishing in an Internet environment. The solution was a Web portal that is now used by hundreds of government agencies and thousands of users taking advantage of easier access to spatial data.*

By Petr Dvořáček

*The Czech Land Survey Office teamed with Intergraph to develop a Web portal that provides mapping services and nationwide geospatial data to government agencies, commercial business, and the public.*



Governments are increasingly sharing data with other service agencies as well as the community. That's particularly true when it comes to collecting and disseminating land information. This data can provide information for land ownership, land valuation, surveys, agriculture, and natural resource management. The Czech Land Survey Office was looking for a better way to share accurate government data to comply with new legislation. The legislation required free distribution of governmental data to central, regional, and local authorities. The measure also called for the office to better support commercial access to nationwide geospatial data. To meet these requirements, the Land Survey Office wanted a new service for users of map data, one that would provide the support needed for map publishing in an Internet environment.

The Project Objectives were as follows:

1. Create a Web portal that offers easy access to mapping services for government agencies, commercial businesses, and the public

2. Provide up-to-date and accurate data to regional offices

### The Solution

With help from Intergraph technology, the Land Survey Office's GEOPORTAL ZU Web portal is improving communication and the ordering process for digital and paper maps via the Internet. Emphasis is put on the maximum usability of provided map services for customers, particularly in the geographic information systems (GIS) of regional offices. The geoportal contains a set of Open Geospatial Consortium (OGC) map services and clients, making data accessible to a wide variety of users.

The geoportal includes the Commercial Module and the Portal of Map Services. The Commercial Module makes available the office's complete portfolio of products. It issues data in separate files in existing vector and raster formats, as well as in geography markup language (GML) and analog forms. The module provides the solution for manag-

ing the entire process for purchase orders and transactions. Its unique feature is the automatic export of digital data according to specifications from the purchase order. The map services portal offers online access to map data collected by the Land Survey Office. The GeoViewer Web Mapping Service (WMS) application provides users an opportunity to try the service with demonstration data for free. The Land Survey Office also started publishing metadata information as a map service through the GeoViewer Metadata.

The Czech Land Survey Office's GEOPORTAL ZU Web portal is based on Intergraph's GeoMedia technology. Using Web mapping services, GEOPORTAL ZU features an Internet store where customers can order digital and paper maps. The portal also provides Web services for agencies needing to download geospatial datasets of the Czech Republic. Intergraph's GeoMedia technology is used for integrating the various formats in which geographic data is stored, the publication of vector and raster data to meet the WMS specification, and the automatic export of the data in desired formats. Intergraph developed the portal solution and provides support services. The data sources seamlessly cover the entire Czech Republic.

The Web portal makes examining, ordering, and using geographic data easier for the public, commercial businesses, and government agencies. The Czech Land Survey Office can also quickly provide up-to-date and accurate data for regional state administration offices. Hundreds of government agencies use the portal, while thousands of users take advantage of the easier access to spatial data. The Web portal was recognized by a board of independent industry experts as "The Geo-application of the Year" in 2004.

*Petr Dvořáček, Head of department for geodata management and application at Czech Land Survey Office.*

*For more information on Internet: <http://geoportal.cuzk.cz>*

*The English Web site for the Czech Land Survey Office is: [www.cuzk.cz/english](http://www.cuzk.cz/english)*

*More information on Intergraph solutions for governments can be found at: [www.intergraph.com/govt](http://www.intergraph.com/govt)*