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Local Governments Use GIS to Promote Interagency Cooperation and Coordination

# GIS Fosters Government, Public Communication in Europe

### - Highlights -

- Local governments expand use of GIS to implement enterprise-wide systems.
- The Cham district in Bavaria, Germany, now is an enterprise GIS-based organization.
- Gävle, Sweden, meets its goal of an established and maintained regional geographic database.

With growing populations, aging infrastructure, and an ongoing mandate to reduce costs while maintaining or expanding service levels, local governments throughout Europe are facing increasing challenges in meeting their civic and legal obligations. GIS technology has proved to be a unique tool in expediting the exchange of information among government agencies and underpinning citizen notification systems.

With the increasing need for accurate, up-to-date information, local governments are expanding their use of GIS beyond the fulfillment of departmental tasks to implement enterprise-wide systems capable of managing diverse spatial datasets for applications ranging from regional analysis to disaster management.

The following examples provide some uses of GIS among European local governments.

Bavarian Rural District Uses GIS to Improve Information Management and Distribution Cham, a rural district in the German state of Bavaria, includes 39



With GIS, Cham integrated disparate information into an efficient data management system.

local municipalities and approximately 130,000 inhabitants within its boundaries. The population in the district is widely dispersed, and the inherent fragmented nature of the local government structure was beset with administrative problems. A major challenge was the need to integrate disparate information into an efficient data management system with the ability to easily maintain and exchange data within the district.

In 2005, Cham implemented an interdistrict GIS, locally known as IKGIS Cham. In addition, local public utility companies and other local government agencies agreed to participate in the development of the GIS.

To make certain that it could meet future as well as current requirements, Cham chose to base the system on ArcGIS software. Application areas include cadastre, land-use planning, water/wastewater infrastructure, and regional tourism. This is all aided by the provision of homogeneous geodata, including aerial imagery, digital elevation models, and precise basemaps.

With the implementation of its GIS, Cham has transformed a rural, decentralized, regional government administration into a modern enterprise-based service organization. This was accomplished by optimizing its business processes between the central district administration offices and the various municipalities.

Commenting on the implementation, Wolfgang Egner of ESRI Geoinformatik GmbH, ESRI's distributor in Germany, says, "The extremely heterogeneous set of applications within the district was too complicated for most available GIS systems."

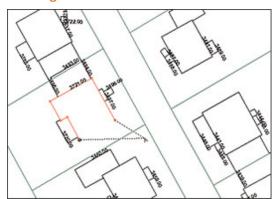
Therefore, the district of Cham chose ArcInfo in conjunction with the integrated ArcSDE geodatabase as the basis of its overall enterprise GIS system."

#### **More Information**

For more information, contact Wolfgang Egner, ESRI Geoinformatik GmbH (e-mail: <u>W.Egner@esri-germany.de</u>).

## Gävle Kommun Expands Use of GIS Throughout Public and Private Sectors

While the Gävle Kommun in Sweden has been building and maintaining geographic databases for more than 30 years, its growing accumulation of data in various formats and the need to share data with nearby local governments and agencies demanded the implementation of a more efficient data management system. The kommun, or district, needed an efficient method to manage spatial data from many sources, including neighboring municipalities, the National Land Survey, the National Rail Administration, the Swedish National Road Administration, and the county



Gävle Kommun established and maintains a regional geographic database for use by participating local governments and other agencies.

administrative board. In addition, the general public needed access to certain information.

In 1997, the municipality successfully moved all its digital geographic information to ESRI's GIS software platform. This allowed it to develop applications to link various databases with the GIS to create a common data platform for more efficient use by both the private and public sectors. The Gävle Kommun GIS is based on ArcGIS and Microsoft's SQL Server, which is used for data storage and administration. The kommun has developed nearly 20 applications to assist in its work, from private property information management to determining bus pass eligibility.

Gävle Kommun met its goal of establishing and maintaining a regional geographic database for use by participating local governments and other agencies. In turn, these organizations provide services to other potential users, such as taxi firms, ambulance services, fire and rescue services, county mass transit, and waste management. In parallel with this project, Gävle Kommun developed an address and information application to make information available to those organizations from their respective Web sites.

Concludes Eddie Larsson, GIS manager for Gävle Kommun, "With careful planning and management, we have successfully implemented a comprehensive regional GIS."

## **More Information**

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