GEOSPATIAL TECHNOLOGY SERVING THE PUBLIC

INTERGRAPH WEB TECHNOLOGY HELPS IMPROVE RURAL ECONOMIC AND SOCIAL CONDITIONS IN BULGARIA.

The public increasingly demands that local governments provide services quickly and efficiently. Whether delivering clean drinking water, providing safe streets and roads, collecting garbage, ensuring accurate property assessments, or responding to emergency situations, local governments are on the front line. Planning, programming, and delivering these services consistently, in the face of budgetary and staff constraints, require the best tools available supported by people who understand local government needs.

Geospatial technology is widely recognized as an effective tool for integrating disparate local government business systems and processes. Companies like Intergraph offer modern business solutions based on pioneering technology. These new business solutions help local governments to geospatially enable their information technology (IT) infrastructure, providing unprecedented levels of access to geospatial data and functionality throughout the enterprise. As virtually every piece of information in local government has a spatial reference, geospatial information management can provide the backbone necessary to pull operations together. Integrating geospatial data, functionality, and workflows with open and highly scalable enterprise technology, some geospatial solutions help local and regional governments maximize departmental and enterprise wide efficiencies. This translates into improved services and operating efficiency.

A new GIS solution is supporting the Integrated Administration and Control System's (IACS) efforts to improve rural economic and social conditions in Bulgaria, serving Bulgarian Farmers in several ways.

The Challenge

Living and working conditions in Bulgaria during the next several years depend on the competitiveness of the agriculture and forestry industries. As a new member of the European Union (EU) the Bulgarian government places a high priority on restructuring its agriculture holdings. In the interest of economic growth, the EU's Phare program provides economic aid to central and eastern European countries. The Integrated Administration and Control System (IACS) manages financial aid distribution in Bulgaria's agricultural and forestry sector. The IACS determines aid allocations for arable crops, beef and veal, and other farm animals. It also manages farm production in the mountains, hills, and other areas of Bulgaria.

To ensure the success of the IACS, Datecs led a consortium to develop and supply the organization with an information system. The company provides EU clients with services in the fields of geographic information system (GIS)/mapping data conversion services, multilingual data entry, and software development of GIS/mapping applications and Internet solutions. Datecs' partners in the project included Technologica and Insyst Services. The system was needed to support the government's distribution of 400 million euros annually to Bulgarian farmers, and to help farmers meet EU requirements. The integrated system would be required to manage massive amounts of data, including 110,000-square kilometers of orthophoto images and parcels.

The project objectives are:

- Develop an information system containing nationwide geospatial data that could be assessed by 300 users concurrently via the Web.
- Integrate data from government, Ministry of Agriculture, and Paying Agency (PA) sources.
- Store, compare, import, and export large quantities of data and aid applications.
- View, edit, and print GIS data online.

The Paying Agency (PA), Ministry of Agriculture and Food, Bulgaria, is responsible for the management of the Integrated Administration and Control System and all activities connected to EU-supported funding programs for Bulgarian farmers. The agency employs more than 1,500 qualified staff.

The Solution

Making GIS data easily accessible to more than 300 concurrent users presented a significant challenge. The project was completed successfully using Intergraph® GeoMedia® WebMap Professional. Datecs also developed an in-house global positioning system (GPS) application with integrated workflow within IACS.

The IACS information system is built on an Oracle database, incorporating many different applications, supporting IACS' efforts to improve rural economic and social conditions in Bulgaria. The GIS application enables visualization of raster and vector data in different layers, which are carefully managed. The parcels editing tool offers sophisticated editing functions such as snap functionality. The system creates a central database for land parcels and animal registration, while expediting processing of aid applications.

The Future

With help from Datecs, the PA will continue to support IACS using its GeoMedia WebMap experience and Bulgaria's largest online GIS solution. The PA signed a 3-year support contract with Technologica and Datecs to ensure optimal usage of the system.

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