



## LoG IN Facilitates E-government

To stimulate cooperation among countries around the North Sea, the European Union created the North Sea Programme several years ago. This program funds projects that are innovative and sustainable, particularly in the support of e-government transactions. Jim Baumann from ESRI reports.

The programme supports multinational cooperation and recognizes that challenges and solutions do not end at a national border. A recently completed project within the North Sea Programme called LoG-IN was developed by a consortium of three of ESRI's European distributors—ESRI BeLux (Belgium and Luxembourg), ESRI (UK) Ltd. (England, Scotland, and Wales), and ESRI Geoinformatik GmbH (Germany) as well as the German applications developer con terra.

The LoG-IN project encourages e-government transactions in the North Sea region through the use of networked Internet technology linking computer databases that have been spatially enabled with geographic information system (GIS) software. Providing regional government with innovative tools and strategies that can be used by business will help them become more directly involved in the local economy.

Because the processing of spatial data is central to the LoG-IN project, the consortium developed a generic information infrastructure (GII). The GII makes it possible for users to access heterogeneous databases with the aid of Web services and download them to a geodatabase for editing and publishing regardless of their original file format.

The technical infrastructure of LoG-IN is based on distributed, interoperable software with ArcGIS Server at its center. Other ESRI components such as ArcEditor and ArcSDE are included, as are con terra's SecurityManager and ServiceMonitor and Safe Software's SpatialDirect.

At the core of the system is the Administration Workflow Manager, which enables an applications supervisor to oversee the entire process without having to be an Information and Communication Technology (ICT) or GIS expert. In addition, it isn't necessary to install plug-ins for special software routines. If, however, browser-based enhancements are

required, Java applets, Flash, or Scalable Vector Graphics (SVG), can be integrated into the solution and used on the client side.

The Workflow Manager/ArcGIS Server architecture is not only a state-of-the-art Web publishing tool but also provides a fully functional GIS server solution. LoG-IN partners can further enhance their respective systems with additional applications that perform functions such as checking data integrity, performing spatial analyses, or creating reports within the administrative workflow.

The regional governments participating in the LoG-IN project are Landkreis Rotenburg, Germany; Norfolk County Council, England; and Intercommunale Leiedal, Belgium. They all share some of the same problems in developing innovative IT-related solutions to support their administrative functions. The implemented GII is a good example of economy of scale because none of the 35 municipalities involved in the project could develop a project of this scope by itself.

In Rotenburg, the LoG-IN system is allowing businesses to conduct necessary transactions with regional government agencies through local offices rather than physically visiting those agencies. The system has consolidated a whole range of services and information that was previously scattered across several departments housed in separate locations.

The second hurdle is the critical need for accurate information. On average, a decision taken by a local authority has a life span of 50 years, because those decisions directly affect such things as zoning for private housing, business locations, and roadway construction. Because local authorities have only limited access to this information, incorrect or insufficient information can lead to bad decisions, and the consequences might be suffered by a whole generation. Once relevant government

## Comments

Claudia Harms, the LoG-IN project manager at Landkreis Rotenburg, "Basically, it's about efficiency. By implementing LoG-IN, we have reduced redundant data storage and the bureaucracy often associated with regional government procedures. We have subsequently reduced the workload of our staff and the waiting time of those seeking information or services from us."

Norfolk had already been working on getting better information from the data it collects by cross-referencing databases such as business registrations, building permits, and tax records. The addition of GIS through the LoG-IN project allows access to the data in a form everyone can recognize—maps. For example, instead of lists of addresses for every business in the municipality, the actual locations can be seen on a map with pop-up boxes containing additional details.

Tim Anderson, GIS coordinator for Norfolk County Council, says, "Local authorities are generally very cautious about the risk associated with initiating new projects. Because the LoG-IN project involves three regional governments, it allows us to jointly develop common solutions and minimizes the startup risk."

From implementing an automated book checkout system to electronically submitting plans for home extensions, Leiedal residents have enthusiastically adopted the convenience and efficiency of LoG-IN. Though Leiedal is a traditional region where change comes slowly, residents recognized the benefits of their municipal GIS implementation that provided, among other things, alerts for road closings and automatically notified affected businesses when the Tour de France cycled through.

Observes Filip Meuris, LoG-IN project leader in Belgium, "We know from experience that local governments have the data, the skills, and the ambition to serve GIS data via the Internet to their citizens but lack the means to do it. The GII enables them to fulfill this dream.

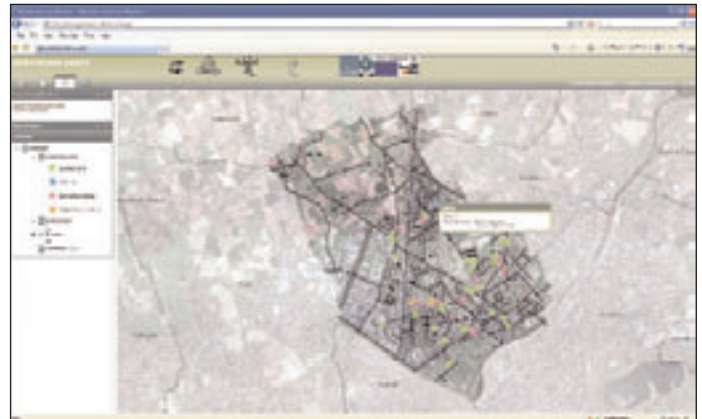
agencies were convinced of the advantages of data sharing with local authorities, there were no problems in cracking open the databases."

Through a process of think tanks involving some of the top experts from the three host regions, the LoG-IN project has laid the foundation for a new way of thinking about the government's role in the local community and beyond. It's generated an image of what e-government is and how it can help empower ordinary citizens. For additional information, visit: [www.login-project.net/php/data.php](http://www.login-project.net/php/data.php) or [www.govmaps.eu](http://www.govmaps.eu).

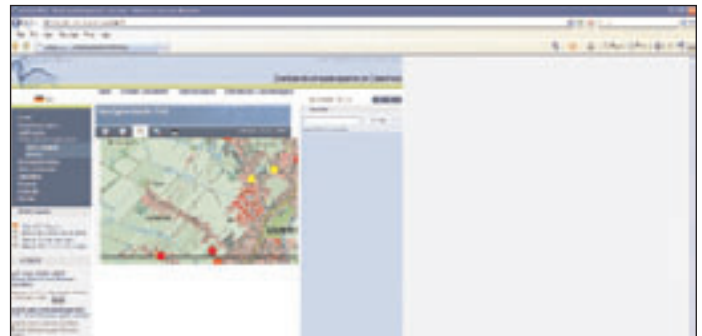
*Jim Baumann, ESRI*



An application to allow residents to examine wastewater ordinances.



An up-to-date overview of services available in the vicinity of the family home.



Mash-up: The integration of ArcGIS Server on Web pages.