



Reaping the Benefits of Geographic Information System (GIS) Technology

Geographic Information Systems (GIS), refer to a mature technology which allows the management of Geographic Information. GIS contribute to the development of a multitude of applications, enabling innovative uses by introducing new capabilities to information systems through browsing, viewing and supervising information on a map.

Strengthening its effort towards the performance of its statutory tasks, EETT has taken the strategic decision to exploit the advantages offered by the GIS technology to support its operations, and at the same time enhance the services offered to enterprises and citizens.

With the introduction of the GIS Technology and the new GIS enabled applications, EETT aims to support the following activities:

- Create a geographical database for all existing and planned Electronic Telecommunications Network infrastructures in Greece, including the Fiber Network infrastructures, by creating the "Broadband Market Cadastre".
- Improve the effectiveness of monitoring regional broadband network deployment in Greece, and the services offered in the telecommunication sector.
- Geographically register the Telecommunications infrastructures of different providers (ducts, shafts, cables, optic fibers) in order to assist the planning and execution of duct laying works, preventing accidental damage to the existing infrastructures.
- Geographically register the municipal networks (e.g., water supply, sewerage), which may be used in optical fiber network development projects.

- Improve the analysis of market data for the Telecommunications Sector and initiate focused - when required - resumption of Regulatory measures.

- Facilitate the licensing and regular inspection tasks performed by EETT, and improve EETT's functions, such as the management of vehicle inspection and the coordination of technical inspections.

- Geographically enable the monitoring and assessment of the Postal Service distribution and delivery networks.

For the telecommunications industry, the registration of the telecoms infrastructures GIS application is expected to be complemented in order to support the process of applications for "Rights of Way" performed by telecom operators. This initiative aims at simplifying the existing bureaucratic application procedures and increasing their transparency and efficiency, thus resulting in the acceleration of optical fiber network infrastructures creation.

This will further promote the development of Telecommunication Infrastructures, deemed as necessary for the development of the Greek economy, through the increase of productivity, the development of the Greek region and the improvement of the liv-

ing standards of the citizens in general.

In its fully developed form, the "Rights of Way Management System" will incorporate the benefits of GIS technology to enable the registration of Fiber Optic network for the "Rights of Way" works. The introduction of a GIS enabled System will result to the faster development of optical fiber based broadband networks and services in order to support and promote the cooperation of providers at the level of design, implementation and exploitation of their infrastructures.

The work to be carried out by EETT regarding the project for the registration of telecommunication networks infrastructures of the Greek telecoms service providers is of considerable size, it has to cut across organizational barriers, it is complicated and it will certainly require continuous monitoring. The success of this project requires the close cooperation and synergy of a large number of organizations, public and private. The initial feedback from the telecommunications providers is very positive, thus setting up a clear ground for success. The success of such a difficult project will be based on viable and financially sound business models which will be built upon the principle of mutual value-added benefits available to all the participants.



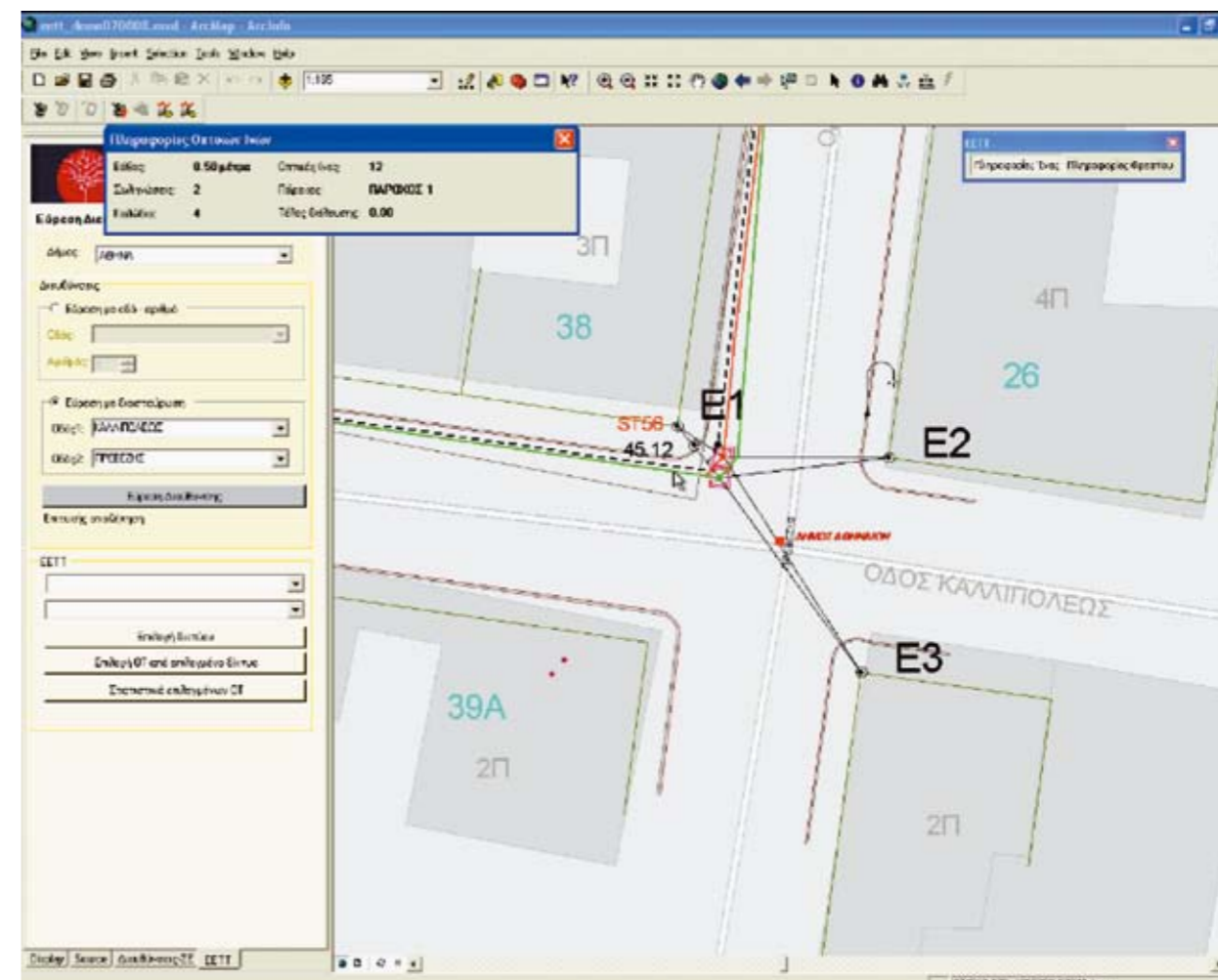
At the same time, EETT is preparing the introduction of a group of services which are based on the increased functionality of Geographic Systems and are targeted to the fixed and broadband consumers. Through the Web, a Citizen will be receiving Information on the available wireless networks (Wi-Fi) and the available wireless broadband access points. To provide the telecommunications services customers with a realistic picture of the expected quality and speed of ADSL connections, using cartography, the information for the distances from the central offices and the anticipated maximum speeds will be provided via a GIS application. Given that

the maximum ADSL connection speed is affected by such factors as the distance from central offices, the quality of copper used and the number of connections in a office center, it is not unusual that the telecommunications services quality does not match expectations mainly due to the fact that the center office is remote. The aforementioned application will be accessible through the web, providing cartographic illustrations and search facilities and returning user friendly visual information on the anticipated maximum speeds of the ADSL connections.

EETT will soon make accessible from its website the applications addressed to the wider public as

described above. Pilot versions of these applications have already been presented in the 73rd Thessaloniki International Fair receiving increased interest and positive comments. In EETT's stand the following applications were presented:

- Registration and illustration of the providers' network infrastructures.
- Application for providing information to consumers regarding the quality of provided connections.
- Geographical illustration of broadband metropolitan fiber optical networks and Wi-Fi hotspots in selected municipalities.



Picture: Providers' Networks Illustration