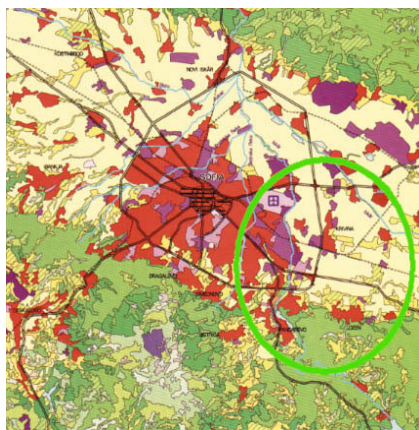


ECOZONE SOFIA: MANAGEMENT OF THE SUSTAINABLE URBAN ENVIRONMENT WITH SICAD GIS

In 1999 Sofia Municipality defined Ecozone "Sofia-East" as part of the new Structural Scheme of the city. The elaborated under PHARE Project BG 9310-03-05-05 Environmental Management Plan of this test area established the base for a Local Model for Sustainable Development for the capital of Bulgaria. More than 15 Pilot Projects are defined in different domains: industry, infrastructure, rehabilitation, environment, transport. Using the Bavarian experience the District of Mladost started the creation of Regional Information Center for Urban Environment. Geographic Information System, based on SICAD technology, integrates all available geospatial information and provides the necessary outputs, which could be used by decision-makers and future investors.



The Customer

The City of Sofia is the capital of Bulgaria and the largest city with a population of approximately 1.2 million people. Sofia enjoys a dominant position in the economic, political and cultural life of Bulgaria. The Municipality is an administrative and territorial unit incorporating in addition to the city itself.

Programme Project Ecozone "Sofia - East" is prepared for an urban/rural area of 207 km², situated to the east of the city of Sofia and Sofia Region. Land use in the area is varied and complex and includes high rise residential flats, small satellite villages, industry and warehousing, highways and transport networks, agriculture and forestry, quarries and landfill sites, as well as the unique Botanical Park Vrana. The project includes a Model for Sustainable Development of Sofia and the region, defines Pilot Projects and a structure for their implementation.

The Challenge

The Pilot Project No.1 defines the creation of Regional Information Center for Urban Environment on the territory of Mladost District. The first priority of this project was the introduction of Geographic Information System (GIS), which had to integrate all datasets and thematic layers available for the Ecozone area. This GIS had to provide the necessary database of geospatial information and to serve as a tool, helping decision-makers and experts to plan the elaboration and implementation of the Pilot Projects. Large amount of data collected from different authorities and in various formats had to be analysed and converted. Aerial photos and satellite imagery was necessary in order to update land cover and land use features.

The Solution

With the strong support of the Permanent Bulgarian-Bavarian Commission, the Bavarian State Chancellery and the Bavarian Ministry of Regional Development and Environment, a GIS solution was chosen, based on the software SICAD Spatial Desktop from SICAD GEOMATICS. The system was installed in the District of Mladost - one of the most populated districts of Sofia, which area is part of Ecozone "Sofia - East". The project was conducted by the Agency for Sustainable Development and Eurointegration "Ecozone Sofia" (ASDE)

together with Stalker-KM, the Bulgarian partner of SICAD and the Bulgarian Aerospace Agency. More than 20 information layers were created - cadastre (provided by GIS-Sofia Ltd), land use/land cover, infrastructure, hydrography, geology, soils, protected zones, Digital Terrain Model, etc. Using the geoprocessing functionalities of SICAD Spatial Desktop, different thematic maps were elaborated, which provide essential information for some Pilot Project like: Kremikovtzi Tailing Pond, Vrana Botanical Park, Intermodal Container Terminal, Ecovillage "Gorubliane", River Iskar Rehabilitation, etc.

Perspectives

The District of Mladost, together with ASDE plans to establish in future a Web-based system, which will be able to provide geospatial information from Ecozone area to public agencies, private companies as well as citizens. It was decided that the software solution SICAD Internet Map Services would be used for that purpose. In November 2001 the Capital Municipal Council approved the Program "Local Agenda 21 - Sustainable Sofia" proposed by ASDE.

Customer Benefits

- Easy integration and maintenance of various data - graphical, raster and alphanumerical
- Decision makers can obtain prepared data for specific queries and spatial analysis
- New thematic maps derived from the existing data via the functionality of SICAD SD
- Increase of the public awareness, citizens could control the project implementation process
- SICAD provides OGC compliant platform, which facilitates the process of data migration in accordance with European and World standards

