Spatial Data Infrastructure for the Municipality of Heraklion: Supporting Heraklion to become a smart city

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Heraklion is the capital of Crete, the fourth largest city in Greece and one of the Mediterranean region's most fascinating and vibrant cities. Heraklion city is expanded and its influence on the nearby urban regions as well as in Mediterranean is continuously growing.

According to its Smart City Strategic Plan (SCSP), the Municipality of Heraklion (MoH) plans to become a Metropolitan center of Mediterranean and one of the most sustainable smart cities in Europe. The Municipality invests in new technologies and innovative solutions which improve life for residents and visitors, develop and enhance e-Governance, tackle effectively environmental and energy challenges and support entrepreneurship. Geospatial information is considered a keystone for the implementation of the SCSP.

In this context and in order to cope with problems deriving from the very complex urban fabric of Heraklion city, the Department of Urban Planning in cooperation with Geospatial Enabling Technologies (GET) created a thematic Spatial Data Infrastructure. The SDI, designed and developed according to the requirements of the INSPIRE Directive and Open Geospatial Standards, is considered to be one of the most useful tools supporting the smart city vision. The SDI includes a variety of spatial data (approx. 700 datasets), concerning urban zoning, spatial plans, infrastructure, environment and relative legislative framework. Data are made available through INSPIRE network services to the public, including and not limited to, engineers, professionals, organizations, the academia and of course other municipality departments. A very rich, in terms of functionality, geoportal serves as the interface to the infrastructure. The system was developed with the exclusive use and customization of Free and Open Source Software.

The main challenge for MoH and GET was to develop the SDI in order to serve as the base for further development of the e-Governance culture and enhance cooperation among municipal departments, while promoting sustainability and enabling development of vertical applications in other sectors, such as environment, transport, agriculture, energy, asset management.

The SDI aims to constitute the infrastructure on which the vision and effort for a smart sustainable city will be based upon.