

Production of a GIS Database and Cartographic Visualization for the Protection and Rescue in the City of Zagreb

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Abstract: Public need for establishing GIS database that contains the key institutions and general geographic objects is for the purposes of protection and rescue in the City of Zagreb. Emergency Management Office continuous cooperation with the Faculty of Geodesy was established by regular updating the GIS database and all its elements. Establishment of GIS performed within the web application of GIS Cloud, which provides the necessary manipulation in the analytical and simulation sense and covers most of the tactical needs in managing the crisis. In order to achieve viability of the system in crisis situations that often bring interruption of infrastructure connections (electrical energy, internet connection, etc.), an identical database is provided for usage on the desktop computer. In addition, the process of establishing a GIS database has educational purposes, as part of the formation and update database by participating students of the Faculty of Geodesy and their lecturers. The base provides spatial analysis leading to the thematic maps that expedite and help in decision-making in crisis management.

Keywords: GIS, protection, rescue, cartographic visualization, Zagreb