A GIS BASED APPLICATION FOR SEISMIC RISK OPERATIONAL RESPONSE SUPPORT.

N. Voulgaris (1), E. Vassilakis (2), I. Parcharidis (1), K. Soukis (2), J. Alexopoulos (1)

(1) Department of Geophysics-Geothermics, University of Athens, Panepistimiopolis, Zografou 15784, Greece, (2)Department of Dynamic Tectonic and Applied Geology, University of Athens, Panepistimiopolis, Zografou 15784, Greece. (voulgaris@geol.uoa.gr / Fax +30 2107274787)

Information flow and management represents one of the main tasks of seismic risk mitigation. The recent experience, following a number of disastrous earthquakes in Greece during the last decade, underlined the necessity of a flexible system in order to support earthquake disaster response organizations. Due to the large volume of spatial data required, a GIS platform represented the most efficient choice for the development of such an application. A number of basic thematic layers, such as topography, administrative, tectonic and seismological data, are available and can processed by the user through a specially designed menu driven system in order to obtain a variety of reports.

Following the declaration of a damaging earthquake, location data are immediately transmitted by the seismological agencies to the primary earthquake response organization (EPPO) and administrative data are selected and sorted according to preliminary estimated damage zones. Thus, the user is able to access all the relevant contact and communication data in order to obtain and record predefined damage report information. These data can be stored, updated and reviewed within the system or forwarded as reports to the corresponding agencies for further action. At present the system is in operation at the Earthquake Planning and Protection Organization (EPPO) in Greece, while further enhancements are also planned according to user requirements.