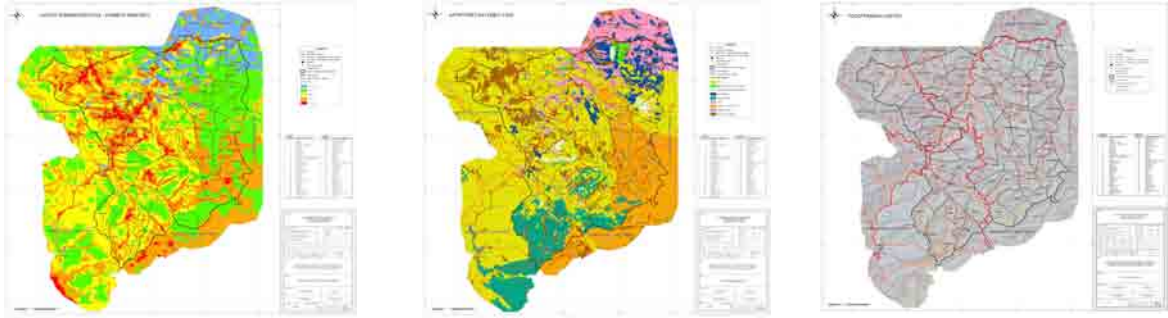
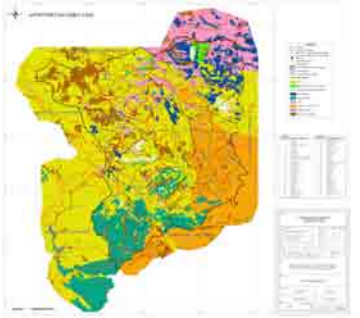
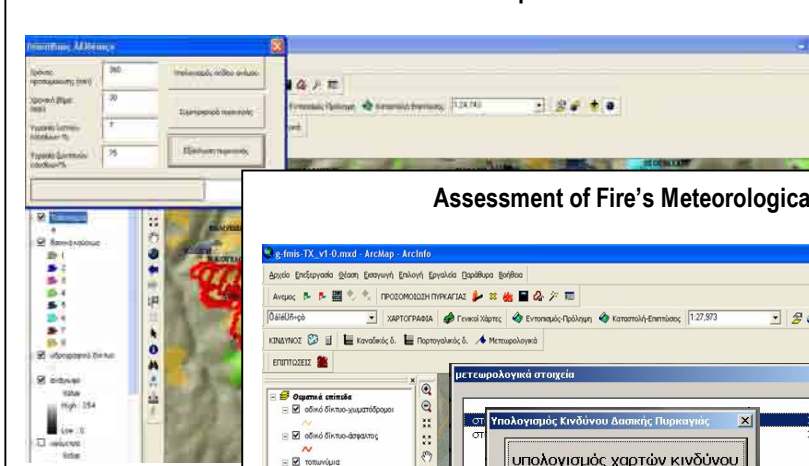


	Project title		Design, Development and Operation of a Natural Disasters from Fires Prevention and Monitoring System using GIS at the forest of Taxiarchis – Vrastamon, Prefecture of Chalkidiki					
Name of legal entity	Country	Overall project value (EUR)	Proportion carried out by candidate (%)	No of staff provided	Name of client	Origin of funding	Dates (start/end)	Name of partner(s) [if any]
EPSILON	Greece	153.745,00	31,50%	3	FOREST INSPECTION OF POLYGYROS	FOREST INSPECTION OF POLYGYROS	01/2007 – 05/2008	I. GALANOS / A. MPALTZH
Detailed description of project						Type of services provided		
The overall objective of the project was the design and development of a Geographic Information System for the prevention and monitoring of natural disasters that derived from forest fires at the university forest Taxiarchis - Vrastamon as well as a zone of one kilometre around the forest. Under the project, among Epsilon tasks was the creation of a database, with data concerning forest fires (vegetation, topography, networks etc), production of thematic maps and the development of a Geographic Information System that has the potential of particular analysis of available data relating to the fire in order to bring out the importance and the spatial dimension of the problem and the support to systematic planning for prevention, early intervention and effective suppression. In total seventy two (72) layers were created, using the ARCGIS v.9.2 software, organized in the structure of a spatial database (Geodatabase) with appropriate classes and subclasses and a basic cartographic background of nineteen (19) thematic maps in a scale of 1:15.000. These thematic maps are related with significant environmental and fire parameters that are described in the respective layers.						• Development of a Geographic Information System for recording and evaluation of fire historic on the assessment of risk indicators regarding the beginning and spread of fire, the flammability of vegetation, the meteorological parameters affecting the inception and progression of the fire, the characteristics of a potential fire (spread rate, heat intensity, etc.) in relation to the effects of all these parameters on the natural environment. • Development of a tool that records and monitors the effects of a fire in the natural environment. • Production of thematic maps. • Drafting of tender documentation for the necessary equipment and software concerning the operation of Geographic Information System. • Provision of training to the users of Geographic Information System.		
  Risk - Structural Risk Map  Fuel Map  Topographical Map								

Moreover G-FMIS v. Tax.1 application was developed, which is a special version of the management of forest fires G-FMIS software. The application runs on ARC-GIS 9.2 desktop environment, ARCMAP-ARCIInfo in particular, requires the function of the extension Spatial Analyst. The various processes in the application have been organized according to their function and are activated by corresponding "buttons" organized into groups of tools concerning types of procedures related to

- Import of wind data and estimation of wind field (wind map) for the region
- Behaviour and simulation of forest fire
- Management of the area's thematic maps (Cartography)
- Assessment of meteorological risk
- Effects

Simulation of forest fire spread



Assessment of Fire's Meteorological Risk

