Ref no.:	Project title		SEIX-SOU NATURA 2000 FOREST FIRE PROTECTION; THESSALONIKI, GREECE					
Epsilon	Country	Overall contract value (€)	Proportion carried out by Epsilon	No of staff provided	Name of Client	Origin of funding	Dates (start/end)	Consortium Members
	Greece	874.200,00	50%	11	Region of Central Macedonia	EU 75% GR 25%	07/02/2009 31/12/2013	EPSILON SA (prime) ATESE SA

## **Detailed description of project**

The Seix-Sou Forest is a NATURA 2000 protected site. The project developed and delivered an Integrated System for Forest Fire (FF) Management and Monitoring (applicable at any River Basin System), aimed to consider four modules in a separate mode from each other, one for each of the four (4) phases of a Forest Fire Life-Cycle:

- Awareness phase (prior to the Fire)
- Emergency phase (during the Fire)
- Impacts phase (after the Fire
- Dissemination phase (best practices).

The project considers the Wild Land Urban Interface (WUI) which is a city-zone-Interface highly exposed to high FF Risk because Forest mixes with Dwellings/ Networks & Infrastructures. Awareness offers pre-emptive methods for assessing and reducing forest fire risks in order to minimize impacts to the environment and people:

- Assessment tells where and what is the Risk.
- Prevention applies techniques to reduce risk.

Smart FF emergency technology delivered the functionalities:

- Fire front simulation with extra care on the fire propagation irregularities at the WUI due to houses and road networks that mix with the vegetation.
- Ground units & tracking.
- Dynamic rooting/evacuation according to fire front propagation.
- Web-map-services to mobile users.

Dissemination was organized in structures, the accumulated experience/knowledge from past FF disaster, and then makes this knowledge readily available to Civil Protection Authorities and Decision Makers. Dissemination:

- Documents the state-of-the art of best practices and technologies applied in all 3 phases of FF management: Awareness, Emergency, Impacts
- Collects and organize a complete FF history in a spatio-temporal geodatabase.

EPSILON & ATESE assumed the operation & maintenance of the monitoring system up to the end of 2013. All actions were in agreement with the CITES convention.

## Type and scope of services provided

- Species & Forestry filed data collection monitoring
  Meteorological Data Station Installation
- Weteorological Data Station Histaliation
- Geospatial Web Service Development for Data Diffusion
- H/W and S/W Supply
- Wifi technologies installation
- Fire Propagation Modeling
- CCC: Fire management and Civil Protection systems installation
- Deployment of fire monitoring equipment (meteo stations and cameras)
- Development of Fire Simulation, Monitoring and Management System based on Geospatial Technologies
- Nature protection and conservation systems development
- System Integration & s/w package (a generic use for any River Basin or Regional Area)
- Workshops and Training of personnel
- Capacity building assistance to the Region of N. Greece and the Fire Brigade
- Biodiversity inventory and mapping, field surveys for habitat types, on species and for taxonomic groups
- Assessment of the available biomass supply potential in the area.

