

# INSTANT

*Infomobility Services for safety-critical applications on land and sea based on integrated GNSS terminals to satisfy the needs of the 2004 Olympic cities.*



**Supporting emergency and security services on land and sea through a clustered mobile architecture based on state-of-the-art GNSS and communication technology.**

Galileo

The European Programme for  
Global Navigation Satellites

The **INSTANT Olympic Project** featured 3 Pilot Projects. The third one of them was supported by **Karakitsos Security**. Karakitsos S.A. is a private-owned company that is active in the field of security service provision. The third Pilot Project was carried out in the semi-urban environment in the southern suburbs of Athens, where the vast majority of the company's clients are located.

There are two more reasons why the specific area was chosen:

1. The specific part of the Attica prefecture hosted eight (8) Olympic Venues during the Summer Olympic Games of Athens 2004.
2. The need to validate the EGNOS (European Geostationary Navigation Overlay System) signal in the semi-urban environment of southern Attica was a key-factor in achieving reliable and satisfactory results in the project.



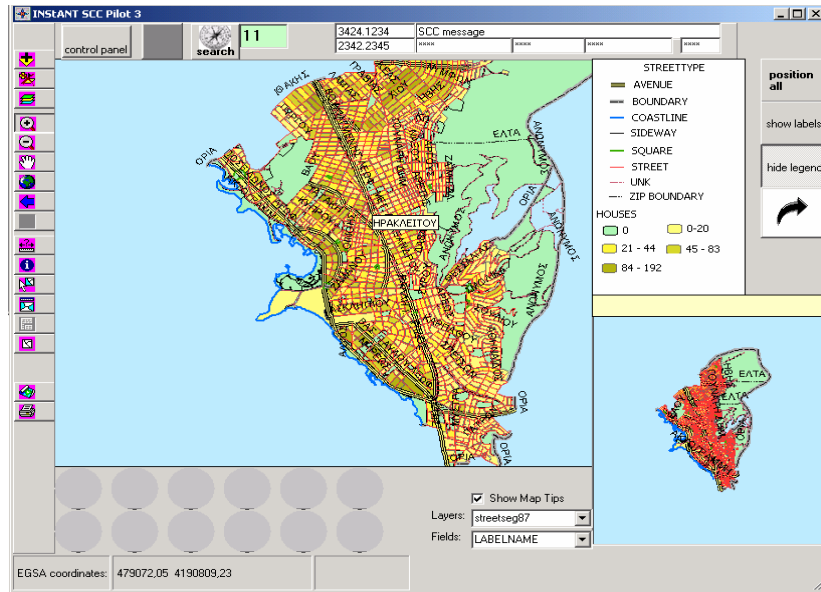
This project was run in a semi-urban environment of Athens testing applications such as lone-worker protection, tracking of high-value and dangerous goods, and route guidance, emergency breakdown, theft and recovery of Light Commercial Vehicles. It focused on safety-related land mobility operational needs in Athens and the wider Attica area arising from the needs 2004 Olympic Games.

The main innovative aspect of INSTANT was the development of a clustered mobile architecture that allows scalability and dynamic operations to achieve robustness, interconnection fault-tolerance and service continuity. INSTANT will design, simulate and integrate the components that are necessary to build a mobile User Terminal. It will incorporate Galileo, GSM/GPRS/UMTS cellular communications, with particular emphasis on new 2.5/3rd generation equipment, and smart and capable (PDA/UT) interfaces, such as personal digital assistants, to reach a high level of usability in the target applications.



INSTANT also delivered a service control centre equipped with:

- ❖ a Geographic Information System database server containing geo-referenced data for location-based services. For the purposes of this Pilot Project extensive use of ARCVIEW v8.3 of ESRI was made. In order to take advantage of the increased accuracy provided by EGNOS, use of high quality maps was made. The specific maps incorporate an RMS error of approximately 2 meters.



- ❖ a web/WAP server to enable mobile internet connections.
- ❖ an application server equipped with data exchange management capabilities to serve dynamic push-model management for control of emergencies and management of mobile equipment under critical alerting constraints.

Responsible for the development and management of this pilot project, was **ALGOSYSTEMS S.A.**



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