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Definition Studies

Pilot Projects Concept « Use of GALILEO for … »

• Intermodal Transport of Hazardous Goods
• Crisis Management
• Marine Navigation
• Precision Agriculture and Farm Management
Pilot Projects Concept « Use of GALILEO for … »

- Traffic Surveillance and Law Enforcement
- Fleet Management
- Road Safety and Mobility
- Railway Safety
Definition Studies

Business Cases Concepts

• Danube Region Intermodal – Via Donau
• Safety of Life Rail Applications
• Air Traffic Management
• Galileo Applications for Defence systems architecture
• Security Applications
Definition Studies

Business Cases Concepts

• Positioning in Marine Engineering

• CAS Professional Road Users

• Mobile Communications Network Operator

• Infomobility Service Provider

• EGNOS revenues

• Commercial Rail Applications
Objectives

- Use results
- Accelerate navigation applications
- Exploit the GNSS test beds
- Take into account:
  - Validate the mission concept
  - Certification, Legislation
  - EGNOS / Galileo
  - Mobility in context of high visibility
Expected Results

• Improved performance (cities, tunnels, in-door)
• Awareness
• User involvement
• Synergies with terrestrial mobile communication / positioning networks
• Added value of Integrity Information
• Local components: design definition, awareness, promotion, market acceptance
New activities

4 Pilot Projects

• GADEROS
• GALLANT
• INSTANT
• NAUPLIOS
Project **INSTANT Olympic** (Infomobility Services for safety-critical applications on land and sea based on the use of integrated GNSS terminals for needs of Olympic Cities)

**Objective:**

- To demonstrate the use of EGNOS for route guidance and pedestrian / vehicle mgmt by the fire brigades of Rome
- To demonstrate the use of EGNOS for maritime applications (regulated navigation, surveillance and outdoor recreation in the confined waters of the Aegean Sea, during the Olympics)
- To demonstrate the use EGNOS for semi-urban applications (lone worker protection, tracking of valuable goods, emergency breakdown) in the Attika region during the Olympics

**Partners:** Next (I), KTI (GR), Leat (I), Terrafix (UK), Karakitsos Securities (GR), Vernicos Yachts (GR)

**Demonstration Sites:** Rome, Athens
Project **NAUPLIOS** (Navigation and perilous goods input and output system)

**Objectives:** To demonstrate the added value of GALILEO integrity and precision signal in most aspects of maritime navigation, and in particular:

- The use of integrity information in congested areas
- The use of interconnected and certified data bases
- The improvement foreseen with Search and Rescue Payload
- The impact of Galileo on future law and regulations in maritime applications

**Partners:** CNES (F), CLS (F), NEI (NL), DAMGM (F), CETEMAR (ES), SEATEX (N), Thales Tracs (UK), INAVE (ES).

**Demonstration Sites:** Two mission control centres along the European Atlantic Coasts,

- one in Northern France
- one in Spain
Project GADEROS (Galileo Demonstrator for Railway Operation System)

- To develop test procedures for testing of GNSS rail safety of live developments
- To produce functional specifications of the Galileo component, part of the ERTMS architecture
- To develop a demonstration site for trials of the different prototypes that are currently developed through EC and ESA projects (LOCOPROL, etc)
- Partners: INECO (ES), TIFSA (ES), THALES Navigation (F), ERRI (NL), RSL (UK), GMV (ES), SENER (ES), AENA (ES).
- Demonstration Site: Madrid - Valencia rail line
Project GALLANT (Galileo for Safety of Life Application of driver Assistance in Road Transport)

Objectives:

- Demonstrate and evaluate the benefits of an advanced and certified GNSS for improving road safety
- Integration of Galileo services within ADAS
- Use of ADAS with simulators, ESTB and GSTB

Partners: CRF (IT), NT (NL), THALES Navigation (F), GMV (ES), TNO (NL)

Demonstration site: Fiat test circuit, Torino
In the future

INFRASTRUCTURE

⇒ GALILEI (Local, Interoperability, Market, etc.)

⇒ Development and Validation Phase: 1.1 billion €

APPLICATIONS

⇒ 2002-2006 Framework Programme: 150 million €