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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**



Definition Studies

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

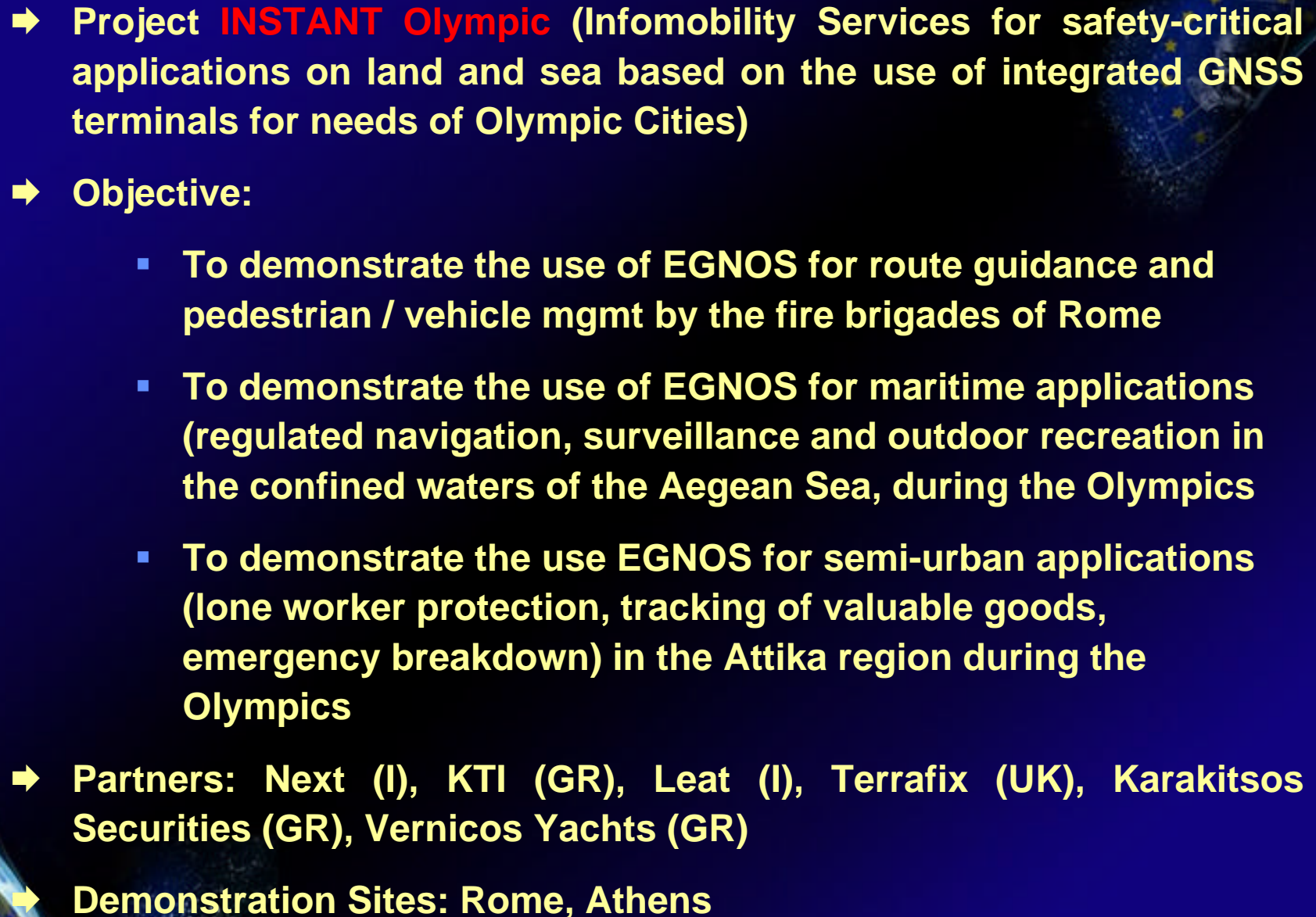
- **Improved performance (cities, tunnels, in-door)**
- **Awareness**
- **User involvement**
- **Synergies with terrestrial mobile communication / positioning networks**
- **Added value of Integrity Information**
- **Local components: design definition, awareness, promotion, market acceptance**

New activities

4 Pilot Projects

- **GADEROS**
- **GALLANT**
- **INSTANT**
- **NAUPLIOS**



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- ➔ **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,

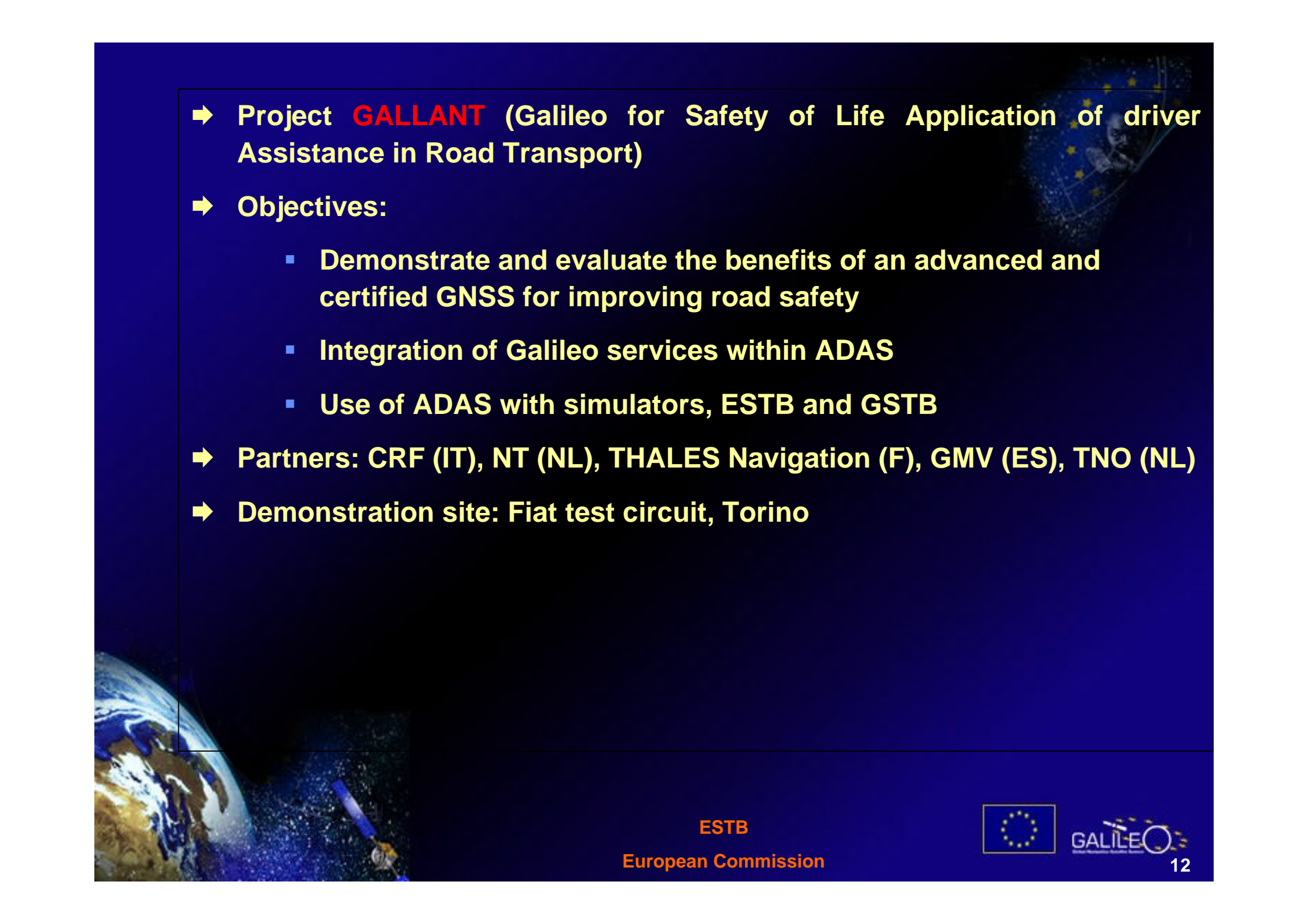
- one in Northern France
- one in Spain

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- ➔ **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**

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- ➔ **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 €



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GALILEO
Global Navigation Satellite System