

Euro-Med GNSS Project Overview

Galileo Joint Undertaking



Presentation Outline

○ Introduction

○ Project objectives

○ Project activities

○ Interaction with other activities

Context

- ***The Vth Euro-Mediterranean Conference of Ministers for Foreign Affairs (Valencia 2002) adopted an Action Plan stressing:***
 - ***"the need to boost co-operation on satellite navigation, by means of considering concrete introduction for the benefit of different application sectors"***
- ***European GNSS strategy foresees the early introduction of GNSS services with EGNOS***
- ***Great number of applications are envisaged both in transport and non-transport sectors***



EUROMED GNSS PROJECT

- ***Infrastructure development, training and demonstration project for the benefit of the Mediterranean Partners***
- ***Implemented over a 3 -year period***
- ***Funded by the MEDA Regional Transport Programme***



The Euro-Med GNSS Project: Objectives (1/2)

- ***Raise the awareness of local decision makers, service providers and product manufacturers on the potential of EGNOS and GALILEO for the region***
- ***Establish elements for Mediterranean GNSS policy in order to encourage a common approach to radio navigation, positioning and timing means across all potential sectors of utilisation***
- ***Identify the benefits of EGNOS and GALILEO vis-à-vis the specific needs of the region***



The Euro-Med GNSS Project: Objectives (2/2)

- ***Increase safety of related operations in the region***
- ***Enhance performance and promote integration of Euro-Mediterranean navigation systems in different modes***
- ***Promote interoperability of navigation, positioning and timing systems in adjacent regions***
- ***Foster the emergence of national MEDA projects regarding the development of GALILEO services, initially through EGNOS***

Euro-Med GNSS Project Major Activities

- ***The Euro-mediterranean GNSS project shall address the following major activities:***
 - ***Activity A: GNSS Regional Plan***
 - ***Activity B: Training and Awareness***
 - ***Activity C: GNSS Service Demonstration***
 - ***Activity D: GNSS Signal In Space Provision***

Expected Results (1/2)

- ***The extension of the Trans-European navigation and positioning network to the region, by validating EGNOS service extension capabilities in the region***
- ***Identification of the priority markets in the region***
- ***Assess the financial sustainability of service provision schemes***
- ***Recommendations and plan for the optimal GALILEO service provision in the region***

Expected Results (2/2)

- Regional plan including the identification of regulatory measures to be proposed to national administrations***
- Identification of potential service providers***
- Adequate involvement of MEDA Partners in the application, demonstration and validation activities***
- Customised training plan for the benefit of the region***

Procurement Approach

- ***Activities A, partly B and C (Regional Plan, Training and Awareness and GNSS Service Demonstration)***
 - ***Through the dedicated GJU call "Euro-Med GNSS Project – Demonstration and Training"***
 - ***All activities are open to the participation of EU25 MS and MEDA partners***

- ***Activity D (GNSS Signal in Space Provision) and partly activity B (Vocational Training)***
 - ***To be implemented by the European Space Agency on a basis of an agreement with the GJU***
 - ***All activities are open to the participation of EU25 MS, ESA MS and MEDA partners***

Activity A Objectives GNSS Regional Plan

- The GNSS Regional Plan shall identify further activities for the region assessing specific needs with respect to planned developments***
- Building on existing plans***
e.g. for civil aviation: available ICAO APIRG decision on EGNOS extension to all Africa
- The final regional plan shall be endorsed at an appropriate level***

Activity B Objectives Training and Awareness

- ***Identify training needs and available means***
- ***Develop links with training facilities***
- ***Produce training and communication material***
- ***Launch and implement dissemination and awareness activities***
- ***Implement an education and awareness campaign in the Mediterranean region***

Activity C Objectives GNSS Service Demonstration

- ***Definition and implementation of demonstration projects for the development of GNSS services and applications in the Mediterranean area***
- ***Transport and non-transport applications***
- ***Implement test campaigns***
- ***Results dissemination***
- ***Develop long-term strategy***



GNSS Signal-In-Space Provision

Objectives(1/2)

- ***Assessment of available and planned GNSS coverage in the area***
- ***Identification of regional upgrade requirements for an adequate implementation of the demonstration programme***
- ***Definition, design, and development of the additional infrastructure needed for an early provision of the GNSS signal in space in the defined service area, with the required level of performance***
- ***Support and interface for the definition and execution of the demonstrations***

GNSS Signal-In-Space Provision

Objectives (2/2)

- Activity shall be based on upgrades of the EGNOS infrastructure***
- The extension of the EGNOS services in the Mediterranean region will be dealt with in accordance with the European GNSS Strategy and Euro-Med partnership regional objectives***
- According to the defined targets regarding the EGNOS integration into GALILEO, such activities shall ease the introduction of the full GALILEO services***



Interaction with the GALILEO Euro-Med Co-operation Office

- *The activities performed by the Euro-Med GNSS project shall be co-ordinated with those of the GALILEO EURO-MED Co-operation Office targeting resource optimisation*
- *The Office shall constitute a reference point for the promotion of GALILEO services and applications in the region by*
 - *promoting the use of GNSS technology in the greater Mediterranean region*
 - *implementing education and awareness activities*
 - *facilitating interaction between GNSS actors in the region*
 - *assuring information flow within the region and with other regions*
- *Additional in-kind contribution by European and MEDA Partners as well as the participation of local actors shall be strongly encouraged*



Interaction with the 6th Framework Programme

- *The 6th Framework Programme for Research and Development (2002-2006) constitutes an additional platform in support to the training and demonstration activities launched in the region*
- *Support assured and optimised through the GALILEO activities*
 - *1st call: ProDDAGE*
 - *2nd call: Area 3 Innovation and International Initiatives*
- *International co-operation and mobility activities of the 6th Framework Programme can contribute*



2004

2005

2006

2007

Building on existing plans

Regional Plan

Different applications

Demonstrations

EGNOS MEDA Service Area

Infrastructure

Signal Availability

Co-ordination with Co-operation Office

Training and Awareness

JU Business Development

Application Development FP6 RTD

ESA GNSS Activities

Conclusions

- *Training and demonstration activities are expected to benefit the greater Euro-mediterranean area*
- *Partnerships among MEDA and European partners will be supported*
- *Co-ordination between the EUROMED GNSS project and Office*
- *Co-ordination with FP6 activities*
- *Part of the overall European Commission strategy for GNSS training and demonstration activities for different regions worldwide*



Additional Information

***http://europa.eu.int/comm/dgs/energy_transport/galileo
(EURO-MED GNSS site)***

<http://www.esa.int/navigation/>

http://europa.eu.int/comm/external_relations/euromed/index.htm

<http://www.galileo.ju.com/>