



Galileo enabled Public/Private cooperation for regulated transport tracking (GENTRAC)

7th Framework programme research and development proposal

Overview

WSP Intelligent Transport Systems and **DGMT-MTI/CETEsO** are leading a European consortium in the preparation of the **GENTRAC** project proposal for participation in the 7th Framework “FP7-GALILEO-2007-GSA-1” call for proposals. This call for proposals, launched on 15th November 2007, is aimed at encouraging research projects for determining and analysing the transport applications of the Galileo Satellite Navigation System. A GENTRAC proposal based on a much larger Field Operational Trial is also being prepared in response to the 7th Framework “FP7-SST-2008-TREN-1” Sustainable Surface Transport call for proposals launched on 30th November 2007.

Introduction

The aim of the project is to produce a cost/benefit analysis of tracking and tracing of regulated transport (e.g hazardous goods and live animals) by Satellite. The project will investigate the potential benefits for both public and private sector organisations employing a cooperative approach to sharing tracking data that reduces the administrative burden of meeting regulatory requirements whilst delivering safety, environmental and economic benefits. A pan-European trial that tracks and traces vehicle movements in the consortium partner countries of Portugal, Spain, France and the UK will form the basis of the cost/benefit analysis. The project will also focus on analysing Galileo and EGNOS as appropriate tracking applications.



What will the project deliver?

The project is structured around delivering four main objectives:

1. Produce a cost/benefit analysis of the tracking and tracing of regulated transport – this will include identifying and evaluating the potential safety, environmental, economic and traffic management benefits. This objective will also assess how tracking and tracing can assist EU member states in meeting the requirements of the live animal transportation EU directive
2. Evaluate the potential application of Galileo and EGNOS as means of tracking vehicles and goods – this will investigate the coverage, accuracy and integrity of the signals along with an evaluation of the in-vehicle equipment and associated running costs
3. Identify the minimum standardisation requirements to enable pan-European tracking and tracing – this objective will propose an appropriate technical platform for exchanging tracking data between organisations including an evaluation of data security implications and appropriate inter-organisation agreements regarding its usage
4. Evaluate the potential secondary benefits of the availability of tracking data – Potential secondary benefits include using tracking data to calculate journey times for traffic information purposes; using tracking data for Electronic Fee Collection on toll routes and using ‘geo-fencing’ to ensure hazardous goods vehicles only use authorised routes.





Potential benefits

Previous research projects in this area have identified a number of potential benefits for road authorities, road operators, emergency services, incident managers and freight operators through the tracking and tracing of hazardous goods. The GENTRAC project's cost/benefit analysis will help inform these beneficiaries in identifying the benefits of investing in this technology. Some of these benefits include:

- Incident management – Should an incident occur on the road network that involves a vehicle carrying hazardous goods, incident managers will be able to identify immediately the nature of the goods being transported and the appropriate clean-up method. This is an opportunity to reduce the amount of time required to clear an incident, along with reducing the safety and environmental risks associated with dealing with a spillage of an unknown substance
- Avoiding secondary incidents – Any hazardous goods vehicles that are known to be in the vicinity of an incident can be re-routed to avoid the area
- Visibility of foreign goods vehicle movements on the road network is an opportunity to analyse the routes being used and identify any operational risks to parts of the network from high volumes of hazardous goods movements
- Tracking data can be included with traffic information data to help freight operators avoid congestion and enjoy more reliable journey times

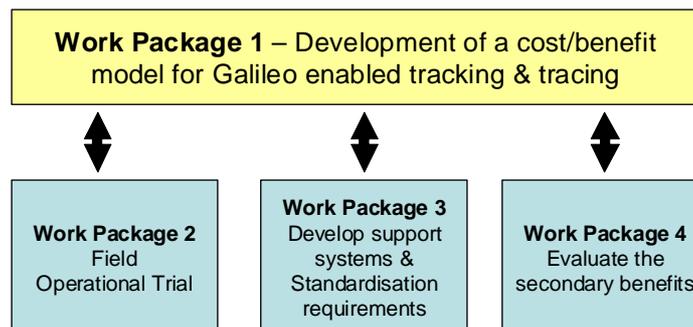


Consortium Partners

Confirmed participants in the consortium so far include WSP Intelligent Transport Systems (UK); CETE du Sud-Ouest (France); SANEF (France); Novacom (France); Carte Blanche Conseil (France); BRISA (Portugal) and the European Commission's Joint Research Centre based in Italy.

The diagram below gives an overview of the breakdown of the project's work packages.

Work package 0 – Project Management & Communication



Timescales

The deadline for project proposals for the FP7-GALILEO-2007-GSA-1 call is the 29th February 2008, should the proposal be successful in being allocated funding by the European Commission then it is anticipated that the project would commence in September 2008 and will run for two years.

The deadline for the FP7-SST-2008-TREN-1 call is 7th May 2008; the proposal for this call entails a three to four year project with a much larger Field Operational Trial.

For further details please contact:

JP.Mechin of the CETE du Sud Ouest : Jean-Philippe.Mechin@equipement.gouv.fr

Or Phil Rowley of WSP: philip.rowley@wspgroup.com