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PARTNER SEARCH GALILEO: TRA7-EU-03CP-1

01 dicembre 2017

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Richiesta di un'azienda greca alla ricerca di partner da includere in un loro progetto da presentare nel programma COOPERATION tematica TRASPORTI- GALILEO.

Di seguito, una breve descrizione del progetto e le caratteristiche del partner richiesto.

Per maggiori informazioni sulla Ricerca Partner e per conoscere i contatti del proponente, potete consultare il seguente indirizzo web.

http://www.apre.it/formaAssist/scheda.asp?id=1222

------- PARTNER SEARCH TRA7-EU-03CP-1 --------

<Reference n.: TRA7-EU-03CP-1>

<Deadline: 13/02/2009>

<Programme: Trasporti>
<Project Title: SMARTBUS PROJECT>
<Financial Scheme: >
<Description: GALILEO CALL.

Potential Coordinator: Leading Greek Telematics and Fleet Management Solutions provider specializing in both software and hardware for Public Transport providers and private transport companies.

ABSTRACT: The SMARTBUS project will concentrate on research required so as to upgrade a Fleet Management and Telematics System currently using the GPS constellation and operating in a real world environment through a Public Bus Transport Provider, to using the

Galileo constellation having the ability to not only receive, but to also transmit using Galileo and the EGNOS signal.

TECHNICAL DESCRIPTION: The SMARTBUS project will concentrate on research required so as to upgrade a Fleet Management and Telematics System currently using the GPS constellation and operating in a real world environment through a Public Bus Transport Provider, to using the Galileo constellation having the ability to not only receive, but to also transmit using Galileo and the EGNOS signal. Research and development into upgrading existing Fleet Management software will need to be undertaken so as to be able to take full advantage of the Galileo's 3rd layer capabilities for use in communication and steer away from current GSM/GPRS data transfer methods. Research and development into new hardware with EGNOS capabilities will also have to be undertaken.

The system itself will concentrate on the reception of the EGNOS signal by each vehicle in the fleet via the onboard Telematics device fitted with an EGNOS receiver/transmitter. From the received signal, geographical location data will be extrapolated along with precise time, speed and altitude. The processed data will then be forwarded to the control centre via the Galileo constellation through a satellite service provider.

Currently, this data is collected by the Telematics device using the GPS constellation and then forwarded to the control centre using the GSM/GPRS network available as GPS is only able to send to a device and not receive. This limitation will be overcome when the EGNOS system comes online.

Additional data such as whether the engine is operating, the air conditioning unit is operating, fuel reserves and tire pressures etc will be collected, along with connectivity to ticket validation devices and the route allocation sign in the front of the vehicle. It will also have the option to manage the driver's allocated shift by using a smartcard that will be issued to every driver with their serial number and will connect to the ERP payroll system.

The system also connects to the Audio and Visual Notification system located inside the bus. By harnessing the Galileo signal and processing the exact location of the vehicle, the software will process, via an algorithm, where the next stop is and announce that stop via the loudspeakers installed in each bus. A visual notification will also be displayed via an LED display sign inside the vehicle.

The 3rd phase of the project involves converting existing "Smart Bus Stops" to operate using the EGNOS signal. Currently there are LED display signs installed at bus stops showing the route number of the next approaching bus, its destination and the estimated time of arrival to that stop. The Telematics device currently installed within these signs makes use of the GPS constellation to receive its current geographical location in relation to the geographical location of the vehicle and sends and receives this data via the GPS/GPRS network. Research and development into a new Telematics device harnessing the EGNOS signal must be undertaken for these signs to work using the Galileo constellation.

A horizontal activity associated with this project will be to analyze the difference in statistical data received by using the EGNOS system compared to the GPS system and for the development of new services based on Galileo's 3rd layer capabilities.

KEYWORDS1: Satellite Technology / Systems / Positioning / Communication

<Organisation Type: Impresa>
<Partner Sought: TARGET PARTNER

TYPE: Research/Technology Centre

Expertise: Satellite Service Provider, research/technology center specializing in development of Galileo/EGNOS related hardware, universities specializing in communication technologies.

Task: Research, development and evaluation of communication technologies. Research by Satellite Services provider outlining best practices available. Research and development in