

GINA holds successful high level stakeholder Workshop

On 1 October, the GINA project held its first workshop at the Radisson Blu Hotel in Brussels. Attended by 30 high level experts representing public authorities, private toll operators and industry stakeholders, the aim of the GINA workshop was to present the first findings of the GINA exhaustive trials and, in more general terms, to raise awareness of the possibilities offered by EGNOS and Galileo and the technology proposed.

Content and presentations

Following a brief tour de table by participants, the meeting was kicked off by **Joaquín Cosmen** from GMV, who provided an overview of the characteristics and advantages of European GNSS. In his presentation, he stressed the importance of European independence for GNSS and explained that the **position integrity** offered by EGNOS can be a crucial element for road charging.

As a follow up, **Philippe Hamet** from DG Enterprise, European Commission presented participants the current state of play with respect to the deployment of EGNOS and Galileo. His main message is that EGNOS is already operational for a number of services, such as the **Open Service**, **Safety of Life** and **Commercial Service** (EDAS) will be made fully available at the end of 2010 and in 2011 respectively. Mr. Hamet urged participants to take advantages of the possibilities offered. Furthermore, he provided a timetable for

the deployment of Galileo, which is now expected to come fully into service by 2016/2017.

The floor was subsequently passed to Ms. Fiammetta Diani from the European GNSS Supervisory Authority who provided an



overview of the **trends, opportunities** and **actions** with respect to GNSS road pricing. She pointed out that the need for **a more efficient use of existing infrastructure**, resulting from the combination of growing mobility needs, pressure on national budgets and increasing concerns over the environmental impact of road transport, offered opportunities for Road User Charging schemes across Europe. Furthermore, she explained that EGNOS was a freely

available cost effective solution for RUC schemes that did not require additional infrastructure (toll gates) and that inspired a high level of confidence in users through its guarantee of position.

Last but not least, **Sara Gutiérrez** from GMV, and coordinator of the GINA project, provided an in-depth explanation of the GINA trials and results.

She started by clarifying that GINA project was not another **proof of concept** but rather involved a **large scale demonstrator** of a GNSS-based RUC & VAS scheme using the Dutch ABvM system and requirements defined by real end users as a reference. Relying heavily on the use of position integrity as a guarantor of reliable charging, the GINA project defined two sets of trials, **exhaustive trials** and **end-to-end trials**.

The objective of the exhaustive trials was to test the performance of the system proposed (based on the use of European GNSS (e.g. EGNOS) and other GNSS-centered technologies (geo-fencing based

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on position integrity) for a reliable road user charging scheme based on the Dutch ABvM. It involved 2 vehicles driving for 4 weeks following pre-defined routes and using three OBU configurations, i.e. GPS only, GPS+CANBUS (odometer) and GPS+CANBUS (odometer)+EGNOS.

Three test routes were defined to be representative of the conditions to be envisaged by any Dutch driver: the first in Amsterdam combined a large motorway section with some small roads in urban environment and some tunnels, the second in the Hague combined large numbers of narrow streets and numerous turns in urban roads, and the third in Rotterdam, combined some tall buildings and urban canyons, in Amsterdam, the Hague and Rotterdam. Each route, which was deliberately chosen to challenge charging performance, was repeated over 20 times, with some routes performed additional times where possible.

A large amount of data was generated and from the subsequent

data processing, the overall conclusion of the exhaustive trials was that: first, GNSS is a **reliable tool** for different RUC schemes, second, the GINA proposed technology allows for distance-based charging with **good performances** and a simple, affordable solution; and third, European GNSS (e.g. EGNOS) and other GNSS centered techniques **improve performances and reliability**

Subsequently, Sara Gutiérrez proceeded with an overview of the **end to end trials**. Involving 100 vehicles driving freely for a period of six months by Arval customers, the objectives of the end to end trials are to first, perform a **functionality/usage analysis** by assessing the overall capabilities of the system from different perspectives (generating invoices, driver feedback, influence on driver behaviour etc) and second, undertake **an exhaustive performance analysis** for those variables with no need of a reference system. For the end to end trials, four municipalities involving large geo-objects have been iden-

tified as charging zones in Utrecht, Den Haag, Rotterdam and Nijmegen.

The trials are currently ongoing and will run until December 2010. The results will be presented at the second GINA workshop that will take place during the first quarter of 2011.

All presentations and the summary of the GINA workshop can be found on the project's website: www.gina-project.eu.

GINA present at the OPTI-TRANS Workshop

On 20 September, the GINA project was invited at the OPTI-TRANS Workshop (<http://www.optitrans-fp7.eu/index.php/component/content/article/14>) which was held in Madrid. Sara Gutiérrez, coordinator, participated in the workshop and had the opportunity to deliver a presentation on the GINA project and to provide participants with the latest state of play with respect to the GINA large scale demonstrator.

The presentation of the workshop can be found on the project's website.



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