

Galileo: a new application for transport

Thales leads a study on the Galileo Wagon Tracking system to support Europe's rail freight

Vienna, 9 december 2009— A consortium of European companies led by Thales and supported by the Fraunhofer Institute, Kayser-Threde, SELSYS and TriaGnoSys carried out a study on the Galileo Wagon Tracking system (GaWaLoc). A central consideration of the research was to increase the efficient use of the existing infrastructure and rolling-stock to reduce transport costs and provide a competitive advantage. The specification and design of GaWaLoc was finalised along with a market analysis. The next stage could be the commercial development of the satellite tracking system, with the product hitting the market in 2010/2011.

GaWaLoc, an Era-Star project partially funded by Austria and the Bavarian state of Germany, is one of the many planned applications of the Galileo global satellite navigation system. The GaWaLoc system will provide a cost effective, independent tracking solution for wagons, locomotives and block trains as well as a logistic support and surveillance in the European countries. GaWaLoc is a real-time technology providing some additional benefits, such as sensors to detect any unusual activity on the vehicle, enhanced information about the status and condition of each vehicle, real time monitoring and automatic provision of information about the vehicle.

GaWaLoc uses cutting-edge technology to provide real-time monitoring of wagon movements and flags up any deviations from the schedule or location. Most importantly, the information is independent of the train-operating companies, giving increased control to freight owners. The GaWaLoc technology is unique, using a next generation Galileo transponder, which has two key attributes: modules can be added to a GSM transmitter and extend coverage cost effectively with satellite services and the low energy transponder harvests power intelligently.

Robert Sappl, product manager of Thales's rail signalling activity in Vienna said: "The GaWaLoc satellite tracking system for railway fleets will help improve productivity, and





therefore reduce costs, through more effective operational and maintenance management. An important aspect of the design was to make the system as cost-effective as possible. One of the major costs is GSM and satellite usage, so the solution will reduce operational costs by using state-of-the-art compression and optimisation techniques. In addition, we can collate information from all the wagons in a train so that the information is sent in one blast, as opposed to individual wagons sending individual messages. The total savings are certainly significant."

GaWaLoc can be used as a complement to the solutions already existing for transport.

About Thales

Thales is a global technology leader for the Aerospace and Space, Defence, Security and Transportation markets. In 2008, the company generated revenues of 12.7 billion euros with 68,000 employees in 50 countries. With its 25,000 engineers and researchers, Thales has a unique capability to design, develop and deploy equipment, systems and services that meet the most complex security requirements. Thales has an exceptional international footprint, with operations around the world working with customers as local partners. www.thalesgroup.com

Press contacts

Thales, Security Solutions & Services Victoire Le Barazer
Tel. +33 1 73 32 13 20
victoire.lebarazer@thalesgroup.com

Thales, Corporate Communications Alexandre Perra Tel. +33 1 57 77 87 27 alexandre.perra@thalesgroup.com

