



*This project is co-funded  
by the European Commission within the FP7*

---

## PRESS RELEASE N° 4 /2012

### **UIC launches SATLOC, a new EU funded project for the development of satellite based operation of local low rail traffic lines**

(Paris, 13 February 2012). The International Union of Railways (UIC), together with the European Commission and the European Global Navigation Satellite System Agency, launched the SATLOC project in Braşov (Romania).

Satellite positioning has already become the standard and essential navigation tool for aviation and maritime transport, but has not yet gained a foothold in the field of automatic train control. The main reasons for this are the unreliable positioning function of current Global Navigation Satellite Systems (GNSS), and the lack of comprehensive information and an operating guarantee. Automatic train control involves a considerable level of technical complexity and needs a high degree of reliability due to the exceptionally high safety requirements.

The SATLOC project addresses the development of satellite based operation and management of local low rail traffic lines and contributes to the adoption of EGNOS as a precursor and to the introduction of Galileo in the rail safety related domain. The European Commission and the GNSS Agency are co-funding the SATLOC project within the 7th EU Framework Program for Research and Development, under UIC's coordination.

SATLOC is carried out by a widely representative consortium of 11 partners, bringing together expertise from the railways, supply industry, universities, infrastructure managers and the European railway community from six European countries, whose work will be developed over a period of 28 months. This project's power also stems from the combination of the high-level technical competence and the political will in the field of signalling, train control, operations and traffic management.

The overall objectives of SATLOC are to develop the concept to demonstrate the suitability of GNSS for train control and to produce advanced operation on low traffic lines which represent ~40 % of the European network and much more worldwide, hence:

- Proof of evidence that the GNSS based train positioning and speed determination is compliant with the current applications for train control and traffic management. GNSS is an enabler of the ERTMS/ETCS Level 3 application. The ERTMS Regional (UIC project with a pilot line in Borlange in Sweden) will directly benefit from this development.
- Stimulate adoption of EGNOS within new innovative rail operation with important market impact and with important effects on socio-economic, mobility and environment.

- Stimulate EU GNSS industry competitiveness in domains which are reputed (railway safety, railway integrated operations) for using mostly traditional ground-based technologies and conservative for global approach. The railway industries and the satellite navigation industries will cooperate.
- Economic evaluation for extension of applications and proof of conditions for exporting the concept.

The overall expected result is the full specification, applied technology and live demonstration on the Brasov – Zarnesti line operated by RCCF-TRANS (Romania) in order to create impact and proof of feasibility and economic evidence, validated and certified in accordance with the EU. The region of Brasov is one of the most economically dynamic regions in Romania and is home to one of the best Romanian universities, which may be involved in international research projects.

The Project Officer of the European Global Navigation Satellite System Agency spoke about the Commission's priorities with regard to railway transport. He underlined that the Agency is strongly focusing on the rail sector as there is a real need to achieve satellite navigation and there are a lot of applications needed in the railway market – more than in other sectors.

This year is a crucial one for defining a GNSS roadmap for the railway sector. The SATLOC project is expected to give concrete results and to be a real example.

This issue will also be addressed at the 10th UIC ERTMS World Conference "ERTMS Global Dimensions" that will take place in Stockholm from 24 – 26 April 2012:

<http://www.ertms-conference2012.com/>

#### **About UIC – International Union of Railways**

UIC, the international railway association which celebrates its 90th anniversary this year, counts 200 members across 5 continents (railway companies, infrastructure managers, rail-related transport operators, etc.). UIC's members represent 1 million kilometres of lines, 2,800 billion passenger-km, 9,500 billion tonne-km, and a workforce of 6.7 million people.

UIC's chief task is to promote railway transport around the world and help its members to meet all the current and future challenges of mobility and sustainable development.

UIC's cooperative undertakings aim to boost the railway system's competitiveness and interoperability, particularly on an international scale. The 700 technical leaflets which make up the "UIC Code" constitute a technical benchmark across the globe. UIC also comprises 8 forums and cooperation platforms, 6 regional assemblies, 30 study bodies coordinating circa 180 railway projects, world congresses, conferences and information sessions organised each year, as well as a host of services offered to its members.

[www.uic.org](http://www.uic.org)

#### **CONTACT:**

Liesbeth de Jong, Media Relations  
Tel.: + 33 1 44 49 20 53 [dejong@uic.org](mailto:dejong@uic.org)