

EasyWay



Annual Forum 2010



Shortcut to the future.
Lisbon • November 16th-18th



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SCUTUM : Tracing and Tracking
Dangerous Goods using EGNOS

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Contents

- EGNOS for dangerous goods transports
- EGNOS CS/EDAS
- MENTORE: EGNOS OS for dangerous goods transports
- SCUTUM: EGNOS OS + CS for dangerous goods transports
- Facts and next objectives
- SCUTUM Think Tank June 2011
- Contacts





EGNOS services

European services interoperable with present technologies and improving their performances (i.e. GPS)

Services	Open	Free to air; mass market; better than GPS		Operational
	Commercial	High accuracy; encrypted; professional market		Test since April 2009
	Safety of Life	Integrity and authentication of the signal		Under certification

EU R&D projects to:

- Develop technology
- Prepare the market (validate business models/ possibly create new ones, create awareness towards user community)
- Lead researches into fruition
- Turn proven demonstration into adoption, starting from nation operational best cases
- Support institutions in the regulatory process



EGNOS for dangerous goods transports

Outcomes from various R&D projects demonstrations:

- EGNOS for land applications: **combination of EGNOS OS (i.e. from SiS) and EGNOS CS (distributed via EDAS)**
- Target: **professional/ regulated markets** in road and freight transport
- Priority: **tracking & tracing services for dangerous goods transports**

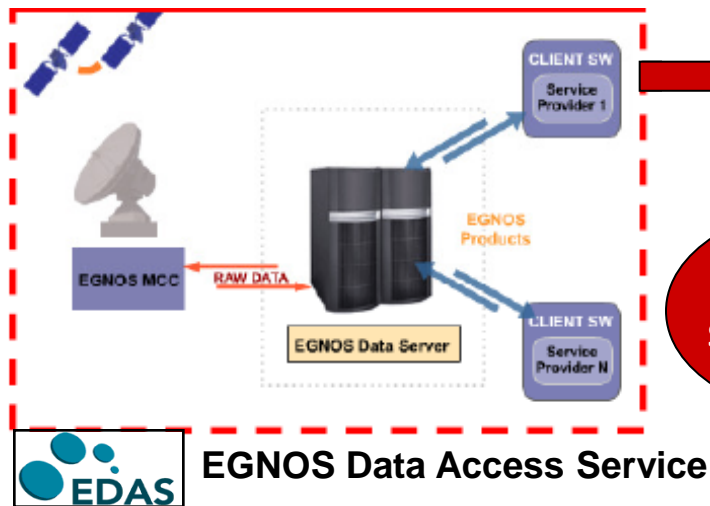
EGNOS benefits for dangerous goods transports:

- EGNOS OS → Better accuracy
- EGNOS CS/EDAS → Higher confidence/guarantee on position
Enhanced availability
- Adding value to GPS now, and preparation to Galileo

State of play of EGNOS use for dangerous goods transport:

- **Needs and interest** of end-users and institutions
- **EGNOS OS adopted** in nation operational best cases
- **EGNOS CS/EDAS commercial solutions** available and validated

EGNOS CS/EDAS



EGNOS data (real-time):

- RIMS raw observations
- SBAS messages

Value-Added Service Provider



End users



User-specific information

- **EDAS distributes EGNOS raw data to VAS SPs connected to it, in real-time, within guaranteed delay and controlled access**
- **VAS SPs implement solutions/ create products built on EGNOS data (such as delivering of EGNOS data via different telecommunication means and value added services exploiting EGNOS integrity)**

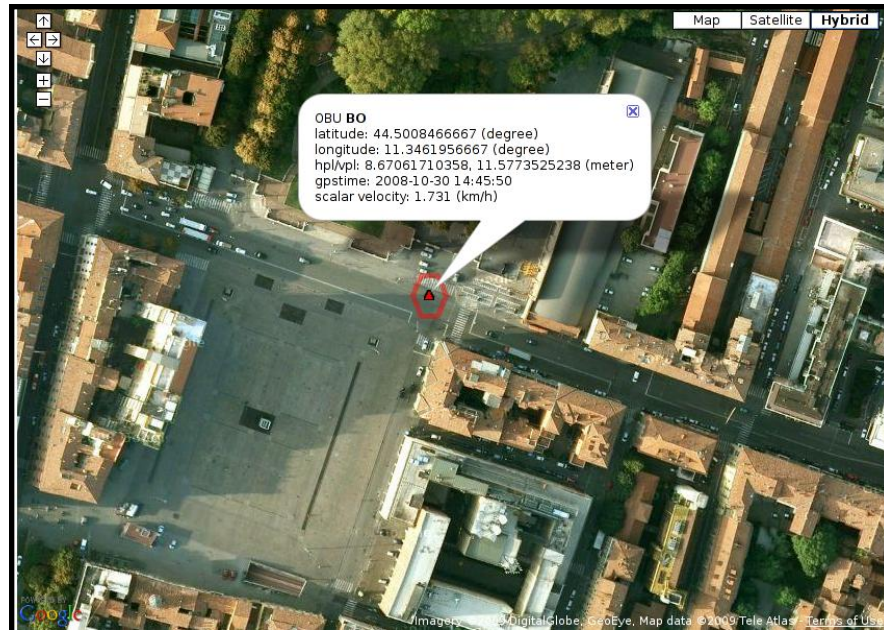


EGNOS CS/EDAS based services

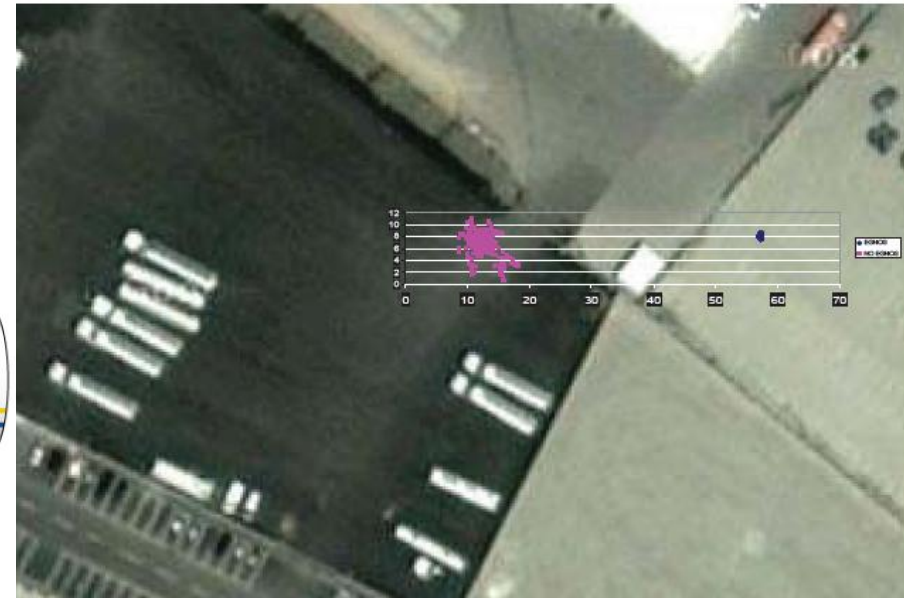
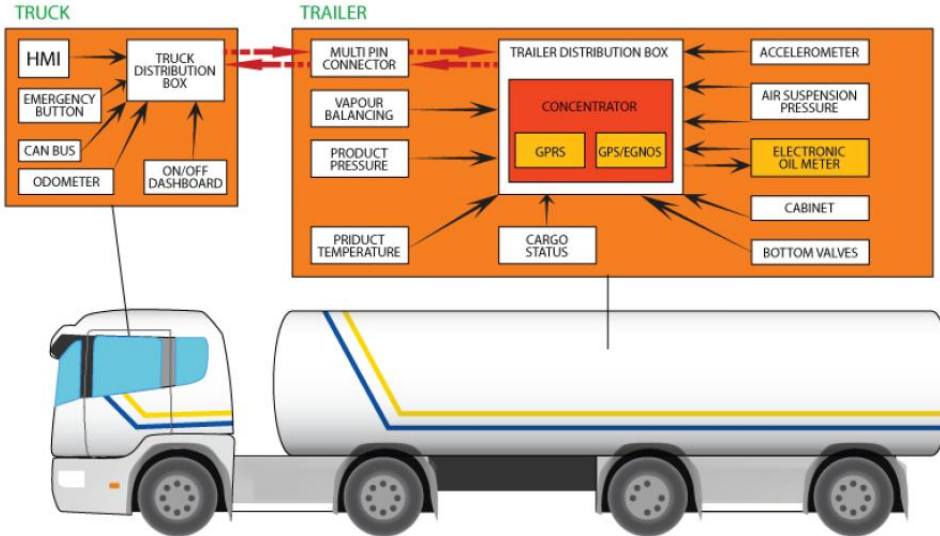
- Processing Algorithm is an EGNOS CS/EDAS product
- Provided functions/ services are:

Protection level (exploitation of the integrity) → confidence on the position to be used in applications driven by stringent constraints, in terms of safety and liability

SBAS corrections in case of difficult environment → enhanced availability of the EGNOS augmentation

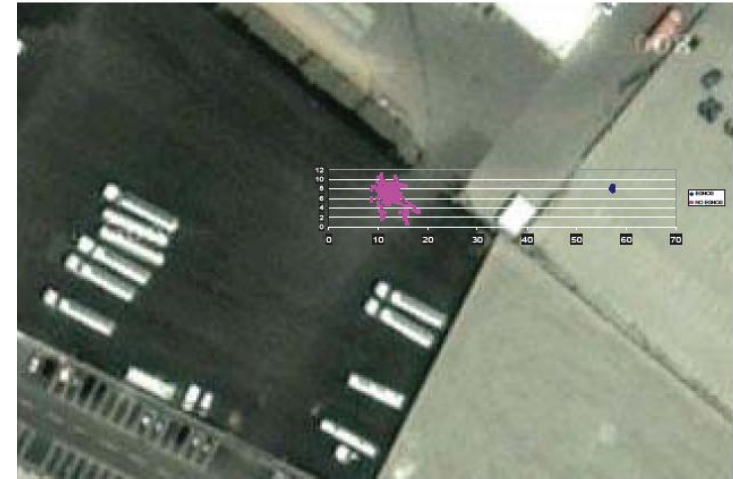
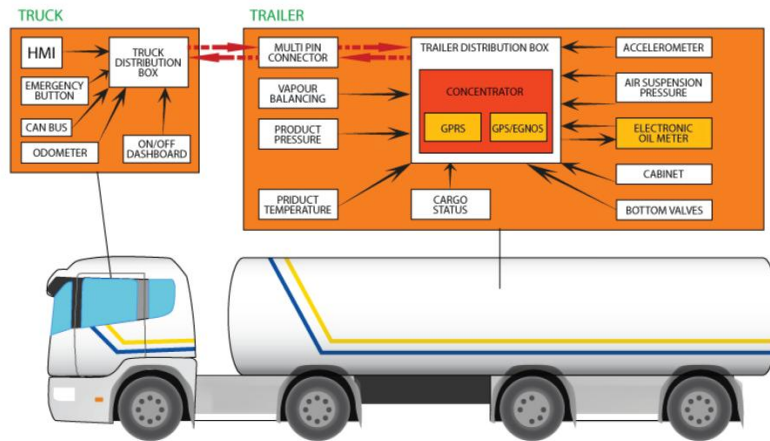


MENTORE: EGNOS OS for dangerous goods transports

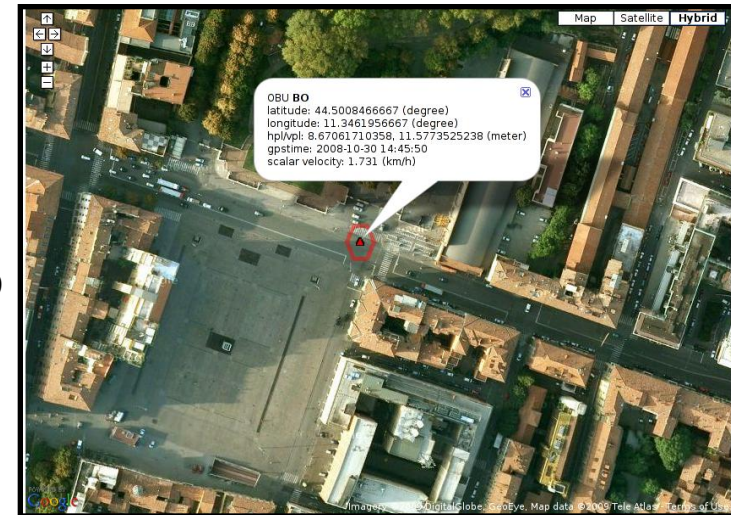


eni considered **EGNOS** enhanced stability and accuracy
interesting features for operational uses

SCUTUM: EGNOS OS + CS for dangerous goods transports



+



EGNOS benefits for dangerous goods transports:

- Better accuracy
- Higher confidence/guarantee on position
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Facts and next objectives



Following MENTORE: eni adopted EGNOS OS to track operating fleet transporting hydrocarbon (presently more than 400 vehicles in Italy and France)

In SCUTUM: eni will use EGNOS CS/EDAS to track 225 operating vehicles in Italy, France and Austria for hydrocarbon and chemical transports (first 100 vehicles by end of November 2010)

Italy's and France's Ministries of Transport are involved in SCUTUM



The EU policy/ regulatory environment

Underlying EU policy formulation to support MS in establishing strategies stimulating EGNOS/Galileo introduction for dangerous goods transport:

-EU “Directive on the framework for the deployment of ITS in the field of road transport and for interfaces with other modes of transport” for the implementation of the EC “Action Plan for the Deployment of ITS in Europe”

-EC “Action Plan on Global Navigation Satellite System (GNSS) Applications” defining a set of actions to stimulate and support the adoption of EGNOS/Galileo in various domains, being the road sector among the priorities (in particular transport of dangerous goods, tracking & tracing of heavy vehicles and freights)

-EC e-Freight initiative, proposing a set of measures (including the adoption of the European GNSS) for the creation of a technology framework to facilitate the movement of goods into/out-of and around the Union



SCUTUM Key milestones

- Upgrading eni operational system from EGNOS OS to EGNOS CS/EDAS
- Extending it on a cross-border basis (France and Austria)
- Starting a EU-wide technical standardization for EGNOS CS/EDAS based services (CEN Workshop SCUTUM)

SCUTUM timeline

- February 2010: kick-Off
- 28 September 2010: CEN Workshop kick-Off
- December 2010: start of operation
- **7 June 2011: Think Tank**
- December 2011: approval of CEN Workshop Agreement/end of project

Agenda and invitations will be circulated soon



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