




GOOD ROUTE

Dangerous GOODS Transportation
ROUTing, Monitoring and Enforcement

GOOD ROUTE aims to make *European road transportation safer* by providing Dangerous Goods Vehicles (DGV) with a validated and integrated Dangerous Goods Transportation Routing, Monitoring and Enforcement cooperative system for (DGV) driver support, based upon dynamic data to generate cost efficient solutions, while minimizing the Societal Risks associated with DGV movements, instead of the current arbitrary and unguided practices.



More Information:

www.goodroute-eu.org

Contact us:

Name: Dr Dimitrios Tzovaras
 Organisation: Centre for Research and
 Technology Hellas
 Telephone: +30-2310-487515
 E-mail: tzovaras@iti.gr

GOOD ROUTE targets at the

- Automatic notification of the infrastructure and booking/issuing of permission of passage.
- Provision of navigation and optimal route guidance to the driver by a cooperative system that fuses data from the vehicle on-board sensors, the infrastructure and other equipped vehicles.
- Re-routing to the safest route, in case of need for re-routing due to an accident, incident, denial of passage or due to change in business goals.
- Automatic enforcement, by providing key data (vehicle speed, profile, total weight per axle, etc.) to a local/central checkpoint.
- Provision of real-time information of all stakeholders in the dangerous goods logistics chain (dispatcher, transporter, client, recipient, etc.), regarding vehicle position and status, expected arrival time, cargo level and condition, as well as any unforeseen malfunction.
- Automatic and semi-automatic accident notification and key info (type of cargo, level of loading, location of different compartments' loading, etc.) provision to all support teams.

To achieve its objectives, **GOOD ROUTE** aims to develop:

- A classification system and ontological framework between dangerous cargo, vehicle types and road infrastructure elements, to automatically permit or re-route specific dangerous good vehicles through specific road infrastructure.
- A collaborative platform, that is able to gather and process in real time vehicle and cargo, as well as environmental data (road status, unexpected obstacles, weather conditions, population density), as input to an optimal routing and route guidance system.

- A minimum risk guidance system, that is able to route and re-route dangerous goods vehicles, taking into account individual and public risk (based upon the collaborative platform based dynamic data), as well as performing conflict resolution and equity schemes.
- A Control Center algorithm, to oversee the routing and monitoring of all dangerous goods vehicles within a certain geographical area, provide the necessary traffic and environmental data to them and inform in real time their logistic chain for any unscheduled re-routing required.
- An on-board automatic data retrieval and storage system, to monitor key dangerous goods vehicle parameters.
- Optimal user interfaces for both the drivers of the dangerous goods vehicle and the control operator, to provide them with appropriate information and/or warning, without causing extended workload or other unnecessary behavioral adaptations.

The system will be integrated with an automatic, local node based, enforcement functionality and tested in three European Pilot sites (in Finland, Switzerland and Italy), with emphasis on densely populated areas, tunnels and bridges. In addition, rerouting information and estimated delays will be communicated to the vehicles' logistic chain, thus optimally combining safety with transportation efficiency enhancement.

Project Acronym:	GOOD ROUTE
Project Reference:	IST-2004-027873
Contract Type:	Specific Targeted Research Project (STReP)
Start Date:	01/01/2006
Duration:	36 months
End Date:	31/12/2008
Project Cost:	4.887.402 €
EC project funding:	2.800.000 €

Participants:

The project Consortium consists of 14 partners: CERTH, PTV, SIEMENS, TID, CRF, IVECO, GST, FINRE, SITAF, ELPA, CERTH/ITI and HIT, UPM, USTUTT, ICCS and COAT. The project is coordinated by the Centre for Research and Technology Hellas (CERTH).