

BREAKING NEWS

PTV investigates green ITS solutions

February 28, 2011 - news4its@ropl.com

Integrated solutions for green ITS and logistics can potentially deliver up to 20 per cent overall fuel savings and CO2 emissions reduction. Because of this, the European Union initiated the research project eCoMove in spring 2010. A consortium of 32 partners will test the energy efficiency of cooperative systems and services until March 2013.

"The European Commission has funded eCoMove in order to develop an integrated solution. The aim is to increase the energy efficiency in road transport," says Michael Ortgiese, VP ITS Technology at PTV Germany.

The Karlsruhe-based specialist for traffic and transportation planning software is involved in three eCoMove sub-projects. In this context, PTV's team of transportation experts and its partners are in charge of the development of basic technologies to be integrated into the entire project. A primary focus is on the standardisation of protocols which are used for vehicle-to-infrastructure communication.

"The different stakeholders from across the European Union have been tackling the car-to-x communication issue in a very heterogeneous manner," explains Ortgiese. "To be able to implement a comprehensive sustainability concept in the field of ITS, standardisation is urgently required. We are glad to be part of that process."

Another sub-project deals with applications for cooperative, eco-friendly traffic management and control. This includes the development of a digital map that shows emissions. Historical and current data from traffic management, for example, are used in order to provide information on pollutant emissions. The team members of this sub-project have chosen PTV software products for transportation modelling and forecast as the basis for their technological approaches.

However, environment experts are not only concerned about motorised private transport, but also about the CO2 emissions produced in freight transport. Therefore, an eCoMove sub-project concentrates on ecoFreight & Logistics. The aim is to make logistics more eco-friendly by adopting a range of measures that integrate transport planning, implementation and post-assessment. To this end, PTV is currently developing a solution designed to minimise the CO2 footprint of all transport runs.

This solution takes traffic data and forecasts into account: "For example, if there is a construction site within a specific route section, this will have an impact on the road network", says Ortgiese. "Sustainable transportation planning must take this information into account because traffic flow can stagnate in this area. Subsequent traffic jams will lead to higher CO2 emissions and will cost time and money." In coordination with a city logistics portal the calculated and optimised transport run data will then be transmitted to the truck while flexibly reacting to current updates.

"We are planning to define the specification by spring 2011. And then everything will be implemented," says Ortgiese.

As part of the eCoMove project experts are also developing solutions for efficient driving behaviour and testing the use of a virtual driving instructor. Moreover, the consortium is evaluating the interaction of driving behaviour, mobility and road network by taking environmental aspects and costs into consideration.

eCoMove started in April 2010 and is scheduled to be completed by March 2013. The project is part of the 7th framework programme of the European Commission.

