Cooperative Vehicle Infrastructure Systems - CVIS

THE CONNECTED TRAVELLER

How communication technology can support road network management and increase road safety – Opportunities for public authorities

2-3 December 2009 in Hannover, Germany

Cooperative systems: "talking" cars and roadside infrastructure

Cooperative vehicle-infrastructure systems provide technology to allow cars to communicate with one another and with roadside infrastructure.

Cooperative systems promise to substantially **increase the efficient use of the road network, to increase road safety**, and to **reduce the environmental impact of road transport.**

One example of such cooperative applications is the priority application: some vehicles deserve higher attention than others, for instance emergency vehicles, public transport vehicles, heavy trucks or trucks with dangerous goods. The priority application communicates with roadside infrastructure in order to gain priority at junctions, and the application aims at a more fluid and safe intersection crossing for the vehicle categories set by the authorities.

Another example (which aims at increasing safety) involves warning vehicles about impending collisions at urban intersections. In order to reduce the likelihood of collision, a warning for left or right turns can be given to the driver if there are vehicles or cyclists approaching: This warning is triggered via vehicle-to-vehicle or vehicle-to-infrastructure communications.

These are just two examples, but there are many others! Cooperative systems will allow public authorities to improve their traffic management and road safety services by using the new communication channels and communicating with individual vehicles. Additionally, this communication with individual vehicles will allow for benefits in terms of data collection for public authorities (more data and better quality).
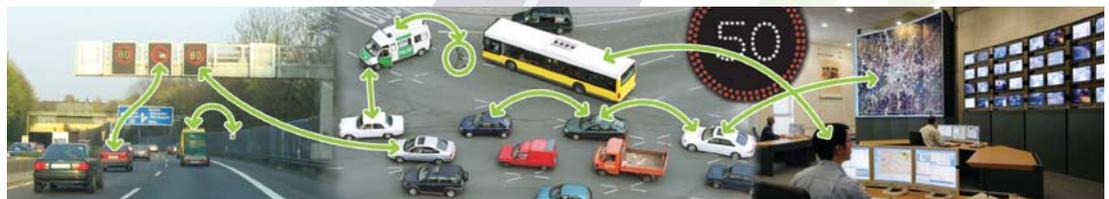
The training workshop

The two-day training workshop aims at providing participants with a solid grounding in the basic concepts and current research & development related to cooperative systems, as well as introducing the potential of this technology to address transport challenges at urban and regional levels.

The training workshop on cooperative systems is organised by Polis – a European network of cities and regions for transport innovation – within the framework of the European research project **CVIS** (Cooperative Vehicle Infrastructure Systems – www.cvisproject.org, co-ordinated by ERTICO – ITS Europe). It is offered in cooperation with ITS-EduNet, an International Network aiming to improve training and education in ITS (Intelligent Transport Systems) at European level (http://www.its-edunet.org/).

Who should join?

The workshop is mainly addressed at traffic managers, transport planners, and decision makers from local and regional authorities.

The workshop is also open to researchers, consultants and others interested in the topic. If you are interested in the upcoming developments of CVIS, then join us in Hannover!

Please note that in February 2010 a similar training workshop will be organised in Prague, and it will focus on transport challenges and the status of ITS deployment in Central and Eastern Europe. More information on this will soon be available on www.cvisproject.org.

The programme – be inspired!

The programme is organised around plenary and working group sessions. The plenary sessions will include information about road network management and the concepts, benefits, and possible deployment of cooperative systems. The working group sessions will allow for in-depth discussions of the potential use and benefits of cooperative systems, and possible ways in which deployment of cooperative systems could be managed by public authorities.

The workshop will start with reviewing the current state of the art of road network management. Based on case studies from different cities, the morning session on day 1 will conclude with a discussion on the main challenges for road traffic management and the limitations of current ITS solutions. This will lay the ground for the afternoon session introducing cooperative systems and exploring their potential to tackle the challenges.

Day 2 will start with case studies on successful tests of cooperative systems, before giving room for intensive discussions on the benefits of cooperative systems for cities and possible ways to bring them on the road. The workshop will conclude with an outlook on further testing of cooperative systems, developments on the policy level, and further opportunities for cities to involved in development and deployment of cooperative systems.

As well as discussions about cooperative systems, there will also be a demonstration and exhibition area to make the world of cooperative systems more than just a concept to the participants. This demonstration area will include in-vehicle user interface simulations and short films of the in-vehicle experience from prototype systems developed within the CVIS project.

Programme

Wednesday, 2 December 2009

Cities' transport problems Chair: Prof. Martin Fellendorf, University of Graz

09.30   Registration and coffee

10.00   **Welcome and introduction to the workshop**
Peter Christ, ERTICO-ITS Europe, CVIS coordinator

10.15   **Road Traffic Management - State of the art**
Nick Hounsell, Transportation Research Group, University of Southampton

11.00   **Main challenges for road traffic management**
Managing commercial vehicles in the city
Pierre Schmitz, Brussels region
Informing the traveller – How cooperative systems could improve the travel information system in The Hague
Toine Molenschot, City of The Hague
Road user charging
Eirik Skjetne, Norwegian Public roads administration
Environmental concerns and access restrictions

12.30   **Discussion: Main challenges for road traffic management and limitations of current ITS solutions**
Moderator: Nick Hounsell, Transportation Research Group, University of Southampton

13.00   Lunch

Cooperative systems: toolkit of solutions to cities' transport problems? Chair: ERTICO

14.00   **Introduction to Cooperative Systems**
Peter Christ, ERTICO-ITS Europe, CVIS coordinator

14.30   **Vehicle-infrastructure communication - a short introduction to the technology**
Maartje Stam, Logica

14.50   **Cooperative applications for road network management and increased traffic safety**
Applications for road traffic management
Nuno Rodrigues, Vialis
Applications for freight & fleet management
Magnus Gunnarsson, Volvo Technology
Applications for increased road safety
Gertjan Spierenburg, Logica

15.45   Coffee break and visit to exhibition

16.15   **How cooperative systems can increase energy efficiency and reduce emissions**
Jaap Vreeswijk, Peek Traffic

16.45   **Evaluating cooperative road traffic management**
Prof. Martin Fellendorf, University of Graz

17.15   Summary and closing of day 1

19.30   Networking dinner

Programme

Thursday, 3 December 2009

Benefits of cooperative systems Chair: Prof. Martin Fellendorf, University of Graz

09.00 **Cooperative systems on the road – Cities sharing their experience**
Cooperative loading bay management for freight vehicles
Steve Kearns, Transport for London
Using cooperative systems for intersection safety
Representative of the city of Helmond (tbc)
Smoothing traffic with cooperative solutions
Fabrizio Arneodo, 5T, City of Torino
Reducing congestion, increasing road safety: why Hessen region is investing in cooperative systems
Gerd Riegelhuth, Hessian agency for road traffic and transport

10.30 Coffee break and visit to exhibition

11.00 **Cooperative systems: new opportunities for policy delivery**
Fred Verweij, Rijkswaterstaat

11.30 **Benefits of cooperative systems**
Discussion in small groups

12.45 Lunch

Deployment of cooperative systems Chair: ERTICO

13.45 **How to bring cooperative systems on the road? Deployment issues and deployment scenarios**
Lina Konstantinopoulou, ERTICO-ITS Europe

14.15 **The role of cities in deployment - How cities could benefit in the different scenarios**
Discussion in small groups

15.30 Coffee break

16.00 **Making it work in Dortmund**
Michael Ortgiese, PTV

16.20 **National policies and how they could affect local authorities: The Dutch Policy Roadmap for cooperative systems**
Representative from Dutch Ministry for transport / RWS (tbc)

16.40 **Let's start deploying cooperative systems – how cities can get involved!**
Lina Konstantinopoulou, ERTICO-ITS Europe

17.00 End of training workshop

Venue and directions

The workshop takes place at Hotel Crowne Plaza (Schweizer Hof) in Hannover, Germany. Hannover is in the North of Germany, and is easily accessible.

Hotel Crowne Plaza Hannover (Schweizer Hof)
Address: Hinüberstrasse 6, 30175 Hannover
Phone: +49-511-34950 www.crowneplaza.com/hannover

You can find a map here.

The hotel is in walking distance from Hannover main station (Hannover Hauptbahnhof).

There is a regular train connection (local train S5) from the airport to the main station (Hannover Hbf) every 30 minutes. The trip takes about 20 minutes. Get a ticket (2.80 EUR) before entering the train. You can check the timetable here.

A trip by taxi will take about 20 minutes and costs about 25.00 EUR.

Accomodation

The Hotel Crowne Plaza (Schweizer Hof) offers single rooms which you can book until 18 November 2009 at a price of 118/130 EUR (standard/business) (keyword 'CVIS').

Some other options in walking distance:

Hotel Atlanta Central *** - Single room: 79,-EUR
http://www.hotel-atlanta-hannover.de/index.html

Andor Hotel Plaza *** - Single room: 95,- EUR
http://www.hotel-plaza-hannover.de/

InterCityHotel Hannover **** - Single room: 90,- EUR
http://www.intercityhotel.com/aw/InterCityHotel_Hannover/~fvqz/

Central-Hotel Kaiserhof **** - Single room: 80,- EUR
http://www.centralhotel.de/

Registration

Participation in the training workshop is **free of charge**.
Deadline for registration is Monday, November 23.
Please use the registration form.

Contact and information

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CVIS Co-ordinator: **Paul Kompfner**, ERTICO – ITS EUROPE (cvis@mail.ertico.com)

www.cvisproject.org

Registration form

Cooperative systems training workshop
Hannover 2-3 December 2009

PLEASE RETURN THIS REGISTRATION FORM BY

23/11/09

TO

mkloth@polis-online.org, fax: +32 2 500 5680

☐ **I would like to attend the Cooperative systems two-day training workshop on 2-3 December 2009.** (please tick box if you would like to attend)

Title: **First name:**

Last name:

Organisation:

Street: **NR:**

City: **Postal code:**

Country:

E-mail: **Phone:**