

Grand Cooperative Driving Challenge

The prestige of rising to the challenge of more efficient mobility

Initiated by HTAS and TNO

International teams competing to deliver the most effective cooperative vehicle-infrastructure system in predetermined traffic scenarios: this is the challenge being presented by HTAS and TNO. The Grand Cooperative Driving Challenge aims to accelerate the implementation of these systems and contribute significantly to alleviating traffic problems worldwide. The winners of this prestigious event will not only gain international fame but also a technology development boost. And why should the Netherlands be the perfect location to host such an event? We have a strong need and drive to solve the huge societal problems caused by traffic congestion.



Cooperative driving: state-of-the-art technology

Cooperative driving is a promising technology for reducing traffic jams, limiting CO₂ emissions and preventing traffic accidents. Cooperative systems offer the drivers, road authorities and the infrastructure more information about the vehicles, their location, their intention and the road conditions – there is connectivity between vehicles and between vehicles and roadside infrastructure. This enables more efficient and safer traffic as well as early warnings for upcoming traffic situations (like incidents and hazards).

Those bold enough to take up the challenge will have to negotiate their vehicles as efficiently as possible through a range of predetermined traffic scenarios. The extent to which the traffic flow is improved by this and the speed at which this improvement can be implemented will be uppermost in the judges' minds. The challenge is thus a unique tool for the rapid transfer of research findings to real-life driving conditions. The challenge will take place on a specially-equipped public road network (on the A270 between the cities of Eindhoven and Helmond).

The route to success

The challenge begins in 2009, with the finals scheduled for 2011. The timetable is:

- 14 May 2009: first of a series of workshops in Helmond to swap ideas on rules, protocols and technology.
- March 2010: Cooperative driving technology demonstration (in Amsterdam) based on Shockwave Traffic Jam Experiment at the showcase event involving the CVIS, SAFESPOT and COOPERS R&D projects
- 2011: Actual Highway Challenge between Helmond and Eindhoven

After 2011, the organizers intend to expand the challenge to an annual international event in which new and gradually more challenging traffic situations will be addressed to stimulate the development of cooperative driving technology in the longer term.

The participants

Registration is open to universities, companies and knowledge institutes. This challenge gives them the opportunity to develop new technologies and demonstrate them in real-life situations. Participants will compete with some of the most highly respected R&D teams from around the world, and success will be noted not only by the media and the public at large, but also by government and industry.

The Netherlands

High Tech Automotive Systems (HTAS) and TNO are the initiators of the challenge. In the Netherlands, congestion is a national problem; traffic jams are all over the country. Therefore, the Dutch government actively supports the introduction of intelligent vehicle technology through its traffic policies. Across the Netherlands, industry, knowledge institutes, road operators and government are all energetically cooperating to reduce our traffic problems. As an international frontrunner in cooperative driving technologies, the Netherlands will make this challenge a success.



Pre-registration and sponsors

If you think that the Grand Cooperative Driving Challenge could interest your organization, why not register for one of the scheduled workshops (which are free of charge) or the news letter at http://www.gcdc.nl. We will get in touch with further information. The initiators are also hoping to find additional sponsors. If you are interested please let us know by sending an e-mail to info@gcdc.nl

About HTAS

High Tech Automotive Systems is a Dutch automotive innovation program empowered by the Dutch Ministry of Economic Affairs together with industry, knowledge institutes and university partners.

The focus areas of HTAS are Driving Guidance and Efficient Vehicles. In addition HTAS has an 'Enablers' program for automotive education, knowledge transfer and business development.

More info: www.htas.nl

High Tech Automotive Systems

About TNO

Developing, integrating and applying knowledge: it is this combination that differentiates TNO from other knowledge institutions.

By encouraging the effective interplay of knowledge areas, TNO generates creative and practicable innovations: new products, services and processes, fully customized for business and government. Through our core areas.

More info: www.tno.nl



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