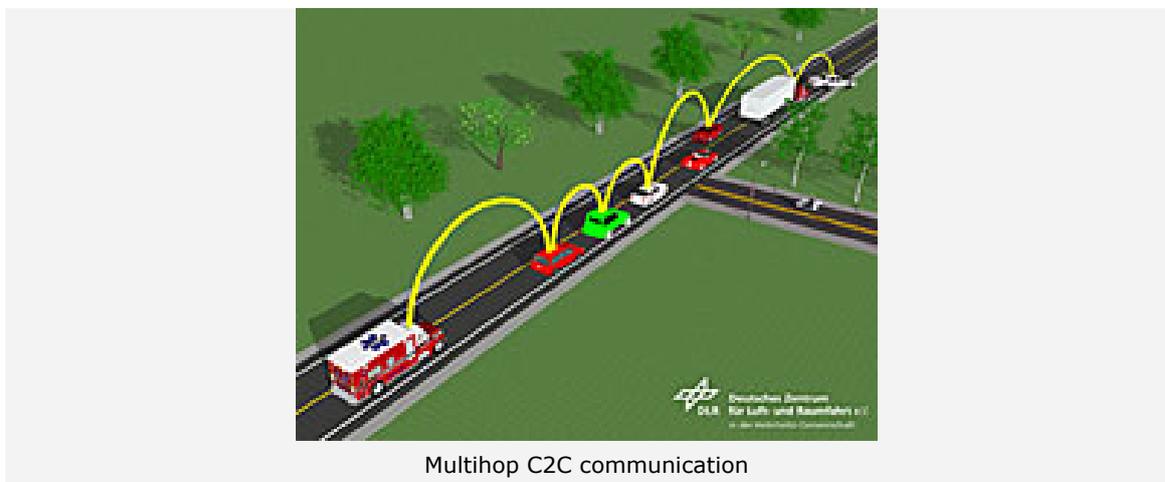


**News Archive Transportation 2008**

**Communication from car to car - DLR brings mobile communications network into operation**

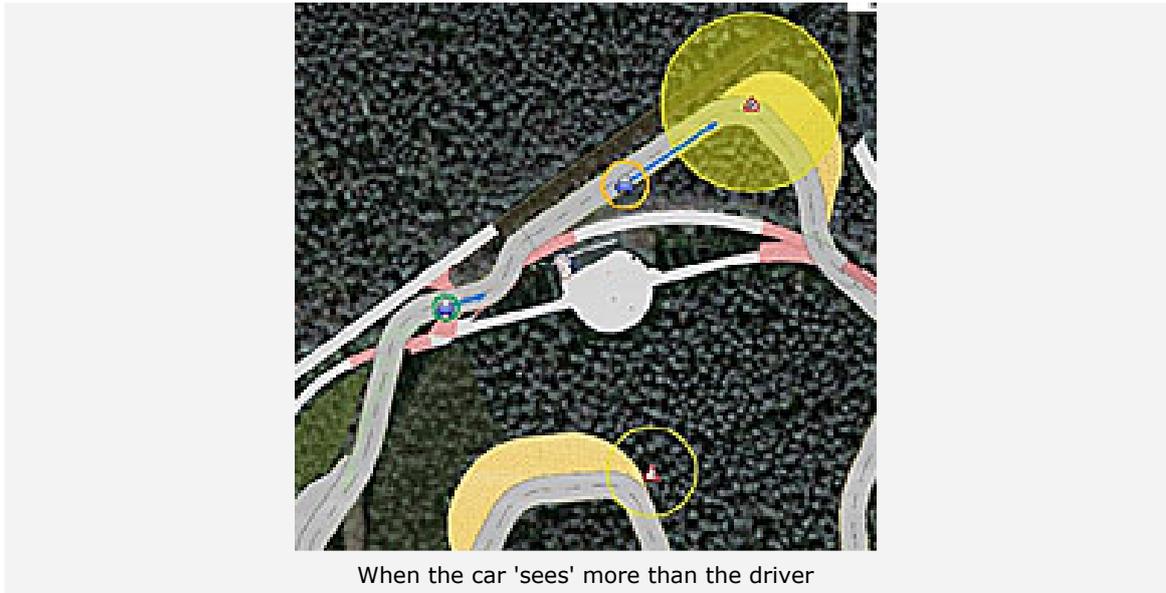
*10 April 2008*



**Transport research programme presented in Cologne**

A new mobile communications network between vehicles (car-to-car, or C2C for short) has been brought into operation at the German Aerospace Center (DLR) Oberpfaffenhofen site. Scientists are using it to find out to what extent specially-equipped vehicles can 'inform' each other of their relative positions, state, and the traffic situation. The aim is totally new applications, leading to increased road safety and traffic-flow efficiency. Information about the new technology and the DLR transport research programme will be presented from 14 – 17 April 2008 at an exhibition held at DLR in Cologne.

The possibilities offered by communication from car to car range from calculating the optimum driving speed in a zone with favourably-synchronised traffic lights, through co-operative driver-assistance systems, to management of a complex process such as co-ordinated convoy driving. The 'C2x' communications technology (the x refers either to car-to-car communications or car-to-infrastructure, as appropriate), which DLR helped to develop, is an evolution of the WLAN communications technology, often used in private households. The new technology aims to open up the benefits of these communications networks for vehicles and ultimately lead to a self-organising network between vehicles and either other vehicles, or traffic infrastructure such as traffic lights.



### Transport research network

DLR is driving the development of this new communication technology with various partners, principally in the automotive sector, within the framework of the Car-to-car Communications Consortium. Using CODAR technology (Co-operative Object Detection And Ranging), information gleaned from various sensors in the vehicles can be collated, evaluated and processed in line with the current traffic situation. In this way, it is possible to warn a driver of a potentially dangerous situation, such as the end of a tail-back around the next bend or a vehicle approaching from a hidden side road. Another example is where vehicles on the road register a drop in the ambient temperature below freezing point: rain detected by a sensor on the windscreen wipers will then be interpreted as a warning of ice. Other control functions the DLR experts are working on include adaptive cruise control (ACC).

The subject of C2x is part of the DLR transport research programme relating to motorist assistance. That includes not just communications and navigation know-how, but also expertise on traffic behaviour and traffic flows. In doing this, DLR is making a contribution to European traffic research projects, aiming not least to investigate the scalability of the new technology, so that it becomes possible to make claims about compatibility, reliability and user acceptance. At the same time, the possibility of using the technology for the benefit of traffic flows is being explored.

### Unique presentation

The presentation in Cologne gives an insight into what DLR is doing in the field of C2xC communications. From 14 – 17 April 2008, a presentation with a unique focus will show what DLR is currently working on in the field of transport research. Scientists from the various DLR sites will be displaying research vehicles, test layouts and various other exhibits from their current research, and will be explaining personally (at DLR's main site) the scope of their R&D work and their latest projects.

Journalists are cordially invited to the exhibition, from 14 – 17 April 2008, at DLR, Linder Höhe, 51147 Köln-Porz. Please call (+49)2203 601-3876 if you wish to attend.

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