

PRESS RELEASE

"FOR IMMEDIATE RELEASE"

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THE FUTURE: SMART ROADS AND COOPERATIVE CARS

The significant increase of traffic accidents on European roads as a result of the growing demand and concentration of vehicles and drivers over the last decade, has driven .EU countries to take action in the shape of political and financial cooperation. The European Commission (EC) and the automotive industry have committed themselves to halving loss of life by 2010. In this context, and since 2008, <u>IMDEA-Networks</u>, in collaboration with <u>NETCOM Research Group</u> from University Carlos III of Madrid, have been actively involved in the development of <u>GeoNet</u> (Geoaddressing and Georouting for vehicular communications) project. This project concluded on January 29th at INRIA's premises in Paris, with the celebration of a Final Workshop, which consisted of a joint public presentation of its achievements.

The goal of the GeoNet Project has been to contribute to improve road safety in Europe by means of the development and practical application of new technologies to driving. Thus, it has researched a reference implementation of a geographic addressing and routing protocol, with support for IPv6 (the latest version of the IP protocol for Internet addressing), to be used to deliver safety messages between cars and the roadside infrastructure within a designated area.

Car-to-Car Communications and those with the surrounding roadside infrastructure mean, in practical terms, that vehicles will be able to detect and share information about the state of the roads, such as the existence of icy patches, or warn others about potentially "dangerous" maneuvers, such as the application of the brakes. This flow of information promises to enable security applications to activate their alarm functionalities and mechanisms to reduce risk in dangerous situations and, as a direct consequence, reduce the incidence of fatal accidents.

GeoNet has taken the basic results of the <u>CAR 2 CAR Communication</u> <u>Consortium</u>'s work to the next step by further improving these specifications and creating a baseline software implementation that interfaces with IPv6. Thus, the goal of GeoNet has been to implement and formally test a networking mechanism as a standalone software module that can be incorporated into Cooperative Systems. This implementation enables transparent IP connectivity between a vehicle and the infrastructure, even in cases when delivery must hop

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over several vehicles or be cached along the way, which provides more reliable and scalable road information.

The GeoNet consortium has been composed of the following organizations, representing the private and public sectors: <u>INRIA</u>, <u>IMDEA-Networks</u>, <u>BroadBit</u>, <u>EFKON</u>, <u>Hitachi</u>, <u>NEC</u> y <u>Lesswire</u>.



GeoNet: Geoaddressing and Georouting for vehicular communications

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ABOUT IMDEA NETWORKS

IMDEA Networks is an international research institute supported by the Regional Government of Madrid and the European Union. The Institute brings together distinguished and young scientific researchers to develop cutting-edge science and technology in the field of networking. In order to ensure a truly international perspective, the Institute's working language is English. Promoting interdisciplinary collaboration, the Madrid-based Institute works in partnership with leading businesses and scientists from around the globe. By generating new knowledge and understanding through its activities, the Institute supports the continued development of Madrid and Spain as a centre for international scientific and technological research.

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