

Internet connected car: defining a roadmap toward communication convergence

Date: 22/11/2006 (11.00-12.30) — Room: Room 217

Schedule

- 11:00** Presentation of the session by the moderator: Arnaud de La Fortelle (Mines Paris, France);
- 11:05** ISO standardization view point: Knut Evensen (QFree, Finland);
- 11:15** Viewpoint of applications & services: Jose Ignacio Herrero Zarzosa (GMV SISTEMAS, Spain);
- 11:25** IETF Standardization view point: Thierry Ernst (INRIA, France);
- 11:35** Internet Service Provider view point (Alain Durand, Comcast, USA);
- 11:45** Wrap-up of presentations by the moderator;
- 11:50** Open discussion between speakers and the audience in order to build the roadmap;
- 12:25** Wrap-up of discussions by the moderator;
- 12:30** End of the Networking Session.

Description of the session

In order to reach the objectives of the European Commission on halving the road fatalities by 2010, efficient communication between vehicles and the infrastructure (V2I) and between vehicles themselves (V2V communications) will be needed.

More and more communication means (GPRS, 3G, DSRC, M5, WIFI, WIMAX, Satellite, ...) and protocols (NEMO, OLSR, ...) are now available on the market and standardized by different communities with very diverging objectives (IETF, ISO, ESTI, 3GPP, C2C-CC). The reason is that these protocols and communication medium are being deployed for various purposes and usages (leisure, road navigation, road safety, etc) and in various environments: private cars, vehicle fleets (police, fire crew, logistics), in public transportation (bus, trains and taxis), in mobile telephony as well as for domotic (people don't want to be wired, even at home).

While these technologies are being validated in various projects across the world, some of them financed by the European Commission (CVIS, SafeSpot, SeVeCOM, ANEMONE, COM2REACT...), it is urgent to ensure the interoperability of the different communication protocols, without any of them is bound to any specific communication medium (in order to ensure a border-free coverage area and reliability). New communication medium appear every year and equipments (like vehicles) have a much longer life cycle than the medium themselves.

IPv6 therefore appears as the unifying communication layer, however the application requirements and the details of the protocol stack remain unknown. Basically, V2I and V2V have very diverging needs and view points and not much has been exchanged between people involved in the various discussion forums.

This session therefore aims at exchanging ideas about a roadmap toward the convergence of these mobile technologies into a simple protocol architecture for the user (being a driver, a passenger, a pedestrian) to communicate easily and efficiently, from anywhere, at any time.