

Service-oriented architectures

Background

Advances in communication technology and in-vehicle electronics have set the stage for the transition of vehicles from autonomous units to communicating, highly-interactive systems that share intelligence with each other and their environment.

Thanks to advances at the level of the control and automated operation of provisioning platforms, it is now possible to set-up an “open”¹ telematics market in which content and service functions are provisioned along the lifecycle of the vehicle to on-board equipment, across standardised access and carrier networks that rely on mobile and fixed IP-based infrastructure.

Objectives of the working group

Worldwide, different initiatives² exist that seek to standardise the use of this emerging technology across vehicle manufacturers. A wide range of applications spanning different market segments as well as related business interests have been identified. But despite the richness of today’s in-vehicle electronics and the fact that virtually all Europeans access their car equipped with a powerful communications device, clear paths to deploy the technology have not yet emerged.

The working group will review the progress made today as well as different market scenarios. It will draft a roadmap for deployment and make recommendations for issues to be addressed by the 7th Framework Programme.

Sectors represented

Automotive industry
Telecom operators
Suppliers
Universities & research institutes
National authorities & road operators

¹ The openness relates to the existence of common mechanisms for the installation, operation, updating and removal of new services and applications based on standardised protocols – under the control of the vehicle manufacturers

² The 90-partners Internet ITS Consortium (<http://www.internetits.org/en/top.html>) in Japan and the 50-partners Global System for Telematics project (www.gstforum.org) in the EU are examples