

Cars that talk: Commission earmarks single radio frequency for road safety and traffic management

As part of its overall fight against road accidents and traffic jams, the Commission decided today to reserve, across Europe, part of the radio spectrum for smart vehicle communications systems (so called co-operative systems). They are based on wireless communication technology and allow cars to 'talk' to other cars and to the road infrastructure providers. They can, for example, warn other drivers of slippery roads or of a crash which just happened. Smart vehicle communication systems have the potential to make safer and ease the lives of Europe's drivers: in 2006, more than 42,000 people died in road accidents in the European Union and more than 1.6 million were injured while every day there are some 7,500 km of traffic jams on the EU's roads. Today's Commission Decision also intends to foster investment in smart vehicle communication systems by the automotive industry, at the same time spurring public funding in essential roadside infrastructure.

"Today's Commission decision is a decisive step towards meeting the European goal of reducing road accidents. Getting critical messages through quickly and accurately is a must for road safety," said Viviane Reding, EU Telecoms Commissioner. "We should also keep in mind that with 24% of Europeans' driving time spent in traffic jams the costs caused by congestion could reach €80 billion by 2010. So clearly saving time through smart vehicles communications systems means saving money."

Today's Commission Decision provides a single EU-wide frequency band that can be used for immediate and reliable communication between cars, and between cars and roadside infrastructure. It is 30 MHz of spectrum in the 5.9 Gigahertz (GHz) band which will be allocated within the next six months by national authorities across Europe to road safety applications, without barring other services already in place (such as radio amateur services).

A typical example is the case of a vehicle detecting a slippery patch on a road: if it is equipped with a cooperative car-to-car communication device, it can deliver this information – thanks to the 5.9 GHz band – to all cars located nearby. If a traffic management centre needs to inform drivers about a sudden road closure, the alternative route to take or speed limits, it will also be able to send this information to a transmitter detector along the respective road, which then passes it on to the vehicles driving by.

Today's decision is an example of successful cooperation in Europe to establish conditions for interoperability and cross-border use of car-to-car and car-to-infrastructure communication. It will facilitate the development and testing of road safety related applications in the EU by providing a common and long term spectrum access to the automotive industry and road operators.

Background:

Today's Commission decision is part of the Intelligent Car Initiative, launched in 2006, which promotes the use Information and Communication Technologies (ICT) to achieve smarter, safer and cleaner road transport (IP/06/191).

The EU's radio spectrum policy:

http://ec.europa.eu/information society/policy/radio spectrum/

The Commission Decision on harmonised spectrum for safety related applications of Intelligent Transport Services:

http://ec.europa.eu/information society/policy/radio spectrum/ref documents/

Smart vehicle conmunication systems at work

Annex

