

## Summary

# Executive summary

Road transport is enormously important for the European economy. Of all goods that are moved in the EU, 44 percent are moved by commercial vehicles and 74 percent of all EU inland freight transport is similarly transported by trucks. The total volume of road transports undertaken by haulers registered in the EU in 2002 was 1,347 billion tonne-kilometres. Moreover coaches and buses annually carry over 400 billion passengers per kilometre, enabling Europe's citizens to carry out business and to socialise. Eurostat estimates the total turnover for road transport in EU-15 was around € 250 billion in 2000. The industry is highly fragmented and is characterised by small enterprises.

At the end of 2004 there were around 31 million registered commercial vehicles in Europe. These were split between 24.8 million light commercial vehicles, 5.4 million trucks and 0.8 million buses and coaches. The number of commercial vehicles equipped with a telematics unit is still below one million. New registrations almost reached 2.5 million vehicles – split between 2.0 million light commercial vehicles, 0.4 million trucks and less than 0.1 million buses and coaches.

Commercial vehicles constitute a significant part of the total wireless M2M market. Addressing the market has however been much more difficult than what was originally anticipated. Currently there are numerous solutions commercially available, but barely enough customers to achieve a critical market volume. Around 1.1 million commercial vehicles in Europe were connected to a telematics service at the end of 2005.

Commercial vehicle telematics services are based on a range of enabling technologies and standards, spanning the areas wireless communication, positioning, broadcasting and short range communication. Cellular networks and satellite positioning are the primary technologies for automotive wireless M2M applications. Broadcasting over the RDS-TMC channel is a key enabler for dynamic navigation systems and DSRC, a subset of RFID, is used for most road charging systems.

Fleet management is the most comprehensive commercial vehicle telematics service category that may include a range of related services which are also available separately such as navigation, tracking and vehicle diagnostics. Electronic road charging has also become a major telematics service through the Toll Collect system in Germany. The pan-European automatic emergency call system eCall proposed by the European Commission could become a paramount telematics service for both commercial vehicles and passenger cars in the future. The current proposal suggests that eCall could become operational as early as 2009, but a later launch date is deemed more likely.

DaimlerChrysler, MAN, Renault Trucks, Scania and Volvo Trucks offer fleet management services on the European market. DAF Trucks plans to launch a service during 2006, which will leave Iveco as the only major heavy truck manufacturer in Europe without a telematics offering. Moreover hundreds of third party vendors compete on the European market for fleet management solutions. Many vendors only offer tracking and monitoring functionality. Only a smaller percentage of the solutions not offered by vehicle manufacturers also connect to the onboard computer systems in a vehicle.