The Road to Intelligent Mobility
The iMobility Forum is a European Commission lead initiative that regroups all players in the field of ITS (Intelligent Transport Systems).
The vision of the Forum is to promote:

« Safe, smart and clean mobility with zero accidents, zero delays, no negative impact on the environment and connected and informed citizens, where products and services are affordable and seamless, privacy is respected and security is provided ».

In the period 2011-2020, the iMobility Forum estimates ITS to make the following potential contributions:

- 30% reduction in the number of fatalities across Europe
- 30% reduction in the number of seriously injured persons across Europe
- 15% reduction of road traffic related congestion
- 20% improvements in energy-efficiency
- 50% increase in availability of real time traffic and travel information

www.imobilitysupport.eu/imobility-forum

Two European Projects support the work of the iMobility Forum: the ‘iMobility Support’ and ‘iMobility Challenge’ projects. The facts and figures presented in this brochure come from the studies undertaken by these two projects.
iMobility Support is a 3-year project that fosters the deployment of intelligent mobility in Europe by organising the iMobility Forum activities, including stakeholder networking, deployment support, awareness raising and dissemination of results of ICT for smart, safe and clean mobility.

www.imobilitysupport.eu

iMobility Challenge is a 2-year project that focuses on campaigning for the promotion and deployment of intelligent vehicle systems, through exhibition and demonstration events for policy makers and end-users. There people can see and try technologies for themselves. iMobility Challenge also assesses end-users’ awareness, demand for, and attitudes towards new intelligent vehicle systems through survey studies.

www.imobilitychallenge.eu
Which iMobility systems need promoting?

The iMobility Forum, via its ‘Implementation Road Map Working Group’ has identified ‘priority systems’ and key deployment issues for those systems. It has also developed and updated implementation road maps for those systems. The systems are:

**Infrastructure based priority systems:**
- Dynamic navigation
- Dynamic traffic management
- eCall
- Eco-driving assistance
- Eco-driving coaching
- Extended environmental information
- Real-time traffic and travel information
- Speed alert

**Vehicle based priority systems:**
- Adaptive headlights
- Blind spot monitoring
- Emergency braking
- Lane keeping support
- Obstacle and collision warning (including adaptive cruise control)

The impact assessments of these technologies are also documented by the iMobility Support project in the iMobility-effects-database: [www.imobility-effects-database.org](http://www.imobility-effects-database.org)
The iMobility Challenge project also undertook a mapping of systems to identify systems that should be promoted at its demonstration events. The conclusion was to focus mainly on systems which reduce CO2 emissions:

- eco-driving assistance
- real time traffic and travel information
- tyre pressure monitoring system
- start-stop assistant
- cooperative adaptive cruise control
- dynamic traffic light optimisation
- eCall
- eco-driving coaching
- fuel-efficient route choice
- speed alert
Why run the ‘iMobility’ projects?

A series of intelligent systems are currently entering the mass market. As an example, the market penetration of in-vehicle safety systems in new passenger cars is increasing, but starting from a low penetration. The results obtained in the iMobility Support project suggest that the systems analysed are either entering mass market or close to entering it.

The projects focus on understanding which systems benefit mobility the most, measuring their deployment, and identifying how this deployment can be accelerated. The iMobility Challenge in particular aims at integrating end-users in the process: promoting systems to end-users as well as assessing their awareness and demand for technology is also key to technologies’ deployment.
Deployment of infrastructure based priority iMobility systems

Real-time traffic and travel information and dynamic navigation have a moderate fleet penetration and infrastructure coverage on the TEN-T road network in Europe.

Dynamic traffic management and local danger warnings have been implemented on some links and critical spots on the TEN-T road network.

Extended environmental information, speed alert and eco-driving are emerging applications with still limited fleet penetrations.

Preparations for the roll-out of eCall are also ongoing.

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<th>iMobility Support Implementation Road Map Working Group, 2012</th>
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<td>Trans-European Road Network coverage in EU28</td>
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Deployment of eCall

In the near future, your car will have an electronic safety system automatically calling emergency services in case of a serious accident. Even if you are unconscious, the system will inform rescue workers of the crash site’s exact whereabouts, and the rescues will be on its way within minutes. The system is going to work all over the European Union, Iceland, Norway and Switzerland.

Deployment of pan-European eCall is facilitated by HeERO and HeERO2 projects. A first group of countries have already implemented eCall reception and processing capabilities in their public safety answering points (PSAPs). According to a decision of the European Commission, all EU member states shall implement eCall in their PSAPs by the latest on 1st October 2017.

www.heero-pilot.eu
Real-time traffic information deployment

Real-time traffic and travel information (RTTI) is provided via many dissemination channels such as FM radio, RDS-TMC, TPEG over DAB (digital audio broadcasting), Internet and TV. Almost all European countries have established a RDS-TMC traffic information service, and a few have a RTTI service based on DAB.

Many navigators, mobile phones with navigation software and car multimedia systems have the capabilities to receive real-time traffic information and present it to the user.

Coverage of RDS-TMC Services in Europe.
Source: Traveller Information Services Association
What about car users? How much do they know, and what do they want?

iMobility Challenge conducted a study in 2014 looking at commercially available in-vehicle technologies. The technologies were known to more than half of the interviewed European car users. Nevertheless, a minority of car users had actually experienced using the systems themselves.
About half of car users are willing to pay for iMobility systems

The results of the iMobility Challenge study indicated that about half of the car users surveyed are willing to pay for in-vehicle iMobility systems. The share of car users willing to pay ranged from 38% in case of start-stop assistant to 56% for emergency braking.
Characteristics of early adopters of the technologies

The take-up of vehicle systems among different drivers groups is being studied in iMobility Challenge. First results show that there are differences in user acceptance: in general attitudes of males seem to be more positive towards the technologies. Interestingly, for many technologies the attitudes among the 55-64 age group is significantly more positive.

Positive towards having the system

Legend:
- Speed alert
- Emergency braking
- Eco-driving
- RTTI
- Start-stop
- Tire pressure
European car buyers’ preferences were analysed in the iMobility Challenge study. Interviewed car users were asked to select the three most important features of a new car. Fuel consumption and safety were two features most frequently selected by car users. 

**Fuel economy and safety are key concerns among car buyers**
For further information

http://www.imobilitychallenge.eu
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