



## Working Group - ICT for Clean & Efficient Mobility

### Draft terms of reference (v5.0a)

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#### Aim

Identify and promote the potential benefits ITS applications & services can bring towards cleaner and more energy-efficient mobility for people and goods.

#### Background

The environmental effects of steadily increasing demand for mobility of people and goods present challenges that need to be addressed in the interest of long-term sustainability and public concern. The European economy and the prosperity of its citizens depend on a high level and quality of mobility of people and goods, while there is less and less opportunity to create new transport infrastructure.

Information and communication technologies (ICT) are the basis of intelligent transport systems, applications and services (ITS). ITS can be applied in support of “cleaner and efficient mobility” by improving communication and the collection and flow of information amongst vehicles and infrastructure in order to manage a smoother, more flexible traffic flow of people and goods and in the most cost-efficient way.

ITS applications for traffic efficiency can produce as side effects positive environmental benefits, for example traffic management systems that reduce vehicles’ delay leading to less fuel consumption and lower emissions. However, there are relatively few ITS systems and services that specifically address environmental objectives.

The eSafety Forum is looking towards the environment as a potential area for future ITS development and deployment exploiting the architectures and technologies under development for safety applications. This new Working Group is intended to take the first steps to mobilise the various sectors that need to cooperate to work towards identifying possible new solutions.

#### Work areas

Examples of the technical and non-technical work areas could include:-

- Environmental traffic management strategies & operations, e.g. environment-optimised traffic light synchronisation, automatic traffic



incident detection and management, congestion management, parking management, urban goods delivery management, air pollution crisis management etc.;

- Integrated traffic/mobility management systems, traveller information and guidance services;
- Infrastructural measures reducing the negative environmental impact of mobility;
- Cooperative vehicle-infrastructure systems, e.g. optimisation of vehicle-traffic management in order to avoid congestion, with accompanying environmental benefits;
- On-line environmental information services for drivers, travellers and operators;
- Systems, tools and incentives to support and educate drivers in environmentally-friendly driving;
- Innovative business and organisational models to deliver environmental ITS;
- Cost-benefit analysis of environmental ITS policies and options
- Measures to promote and support the deployment of ITS for Clean and Efficient Mobility.

### Objectives

The eSafety Forum brings together a wide range of stakeholders in each work area to identify priorities for action to promote deployment of ITS and advanced safety systems and services. The area of ICT for Clean and Efficient Mobility is relatively new, and there is a need for an early assessment of the scope for action. Certainly there is a need for R&D in basic and applied eSafety technologies, but much progress can be made by better application and organisation of existing techniques. Also there is probably scope to apply in the ITS domain results coming from other domains.

The role of this Working Group should therefore focus on the identification of priority actions in R&D and deployment support.

The following objectives are proposed as first steps in this new work area:

- Identify and assess which ICT applications and services for mobility have the strongest potential to yield environmental benefits;
- Examine relevant measures that could complement and enhance the environmental compatibility and sustainability of mobility;
- Examine potential for educational and support tools and feedback to promote more environment-friendly driver behaviour;
- Undertake a cost-benefit assessment of measures to reduce environmental impact of mobility;



- Identify specific measures to promote and support deployment.

**Participants**

Representatives of key stakeholders: users, public authorities, infrastructure and telecom operators, automotive industry, transport & environment industries, NGOs, integrated traffic management specialists, energy industries, R&D institutes etc.