

**Working Group - Human Machine Interaction
Terms of Reference
Draft 04.02.09**

Context

The WG-HMI focuses on the interaction between the driver and on-vehicle technology such as driver information, communication and warning systems (Human Machine Interaction -HMI). The need for new activity in the area results from the outcome of publication of the “European Statement of Principles on HMI” (known as the ESoP) and a subsequent meeting with Member States on September 30th 2008.

Development of the ESoP

On 21st December 1999, following requests from Member States, the Commission adopted a “Recommendation on safe and efficient in-vehicle information and communication systems: a European Statement of Principles on human machine interface” (OJ L19, 25.1.2000).

In July 2001 the Commission’s Expert Group published a report on updating and expanding the principles. During 2003/4 the eSafety WG on HMI provided a forum for stakeholders to discuss the ESoP further and finalised its report to the European Commission in early 2005. The Commission made some funding available through existing HMI-related projects HUMANIST and AIDE and invited a small group of HMI specialists to implement the WG-HMI recommendations concerning the ESoP. A specific focus for attention was the increasing popularity of portable “nomadic” devices by drivers within vehicles.

The resulting 2006 ESoP (Commission Recommendation of 22nd December 2006 published on 6th February 2007 as OJ L 32/2007) applies to both portable and permanently installed information systems and hence applies to OEM systems and to after-market and nomadic devices.

Following a request for clarification from ACEA, a further ESoP was published on 12th August 2008 (OJ L 216/2008) which includes minor modifications (one footnote) clarifying visual displays’ mounting (in Installation Principle IV).

Content of the ESoP

The principles of the ESoP (2008) are organised into 6 groups:

1. Design goals (5)
2. Installation principles (6)
3. Information presentation principles (5)
4. Principles on interaction with displays and controls (9)
5. System behaviour principles (5)
6. Principles on information about the system (7)

In addition, there are principles concerning Recommendations on Safe Use which comprise essential safety aspects related to use of, and influencing use of, in-vehicle information and



communication systems. Following text concerning the context of use, principles are presented relevant for Employers, Point-of-sale, Vehicle Hire Companies and drivers themselves.

Other context

On June 05-06 2007 at the Berlin eSafety conference under the German presidency, the need for rapid application of the ESoP by industry was highlighted and it was recommended that special attention be paid to the integration of nomadic devices.

Nomadic device (ND) integration is a specific challenge and requires co-operation between automotive industry and nomadic device manufacturers. A Nomadic Devices Forum, which acted as a discussion platform concerning business, interfacing and human interface aspects of ND integration, is now established as a WG under the eSafety umbrella and is co-chaired by nomadic and device manufacturers' representatives. A Memorandum of Understanding is under discussion by that WG which includes the ESoP.

The meeting with Member States on 30th September 2008 made a number of recommendations and requests including the re-activation of the WG-HMI under the eSafety Forum.

Aims and Objectives

The WG-HMI will take into account questions raised in the meeting with MS of 30th September 2008 and check whether clarifications in the ESoP and extensions of scope, can be achieved.

The WG-HMI will:

- Review the state-of-the-art and the technological progress made since the recent adoption of the ESoP to verify whether the ESoP's scope is still suitable or needs enlargement
- Scrutinise the ESoP with respect to sufficient coverage of the different requirements induced by the variety of vehicle users
- Look in depth into aftermarket issues, specifically related to nomadic devices, and for this will work closely with the Nomadic Devices WG of the eSafety Forum
- Discuss protection against misuse and manipulation in co-operation with the eSecurity WG of the eSafety Forum
- Agree on the desirability and practicality of including specific verification methods and criteria
- Identify any outstanding issues of liability issues related to HMI
- Consider the role of driver training
- Discuss the need for international harmonisation, recognising the global nature of vehicle markets (e.g. UNECE activities) and will include discussion of Certification issues

Based on the consensus, the WG-HMI will conclude whether an update of the ESoP 2008 can be recommended or not.

The WG-HMI will also discuss raising of awareness. It will:



- Identify the need for information material (with commonly agreed points) for drivers and other involved parties
- Consider awareness raising of HMI issues, recognising the diverse characteristics of drivers

The WG-HMI will report to the eSafety Forum on progress achieved with regard to the implementation of ESoP and the next steps planned. A report will be presented at a further MS meeting on HMI planned for autumn 2009.

Organisation and structuring of the work

The WG-HMI will operate under the umbrella of the eSafety Forum. It will be co-chaired by:
Alan Stevens, TRL (astevens@trl.co.uk)
Christhard Gelau, BAST (gelau@bast.de)

The WG-HMI is expected to meet three to four times per year. The meetings will normally take place in Brussels. The co-Chairs will arrange for distribution of agendas, notes of meetings and any supporting material with assistance of eSafetySupport.

Membership

The WG-HMI will be a European group open to any interested organisation that wants to actively support the Forum's activities. The WG-HMI especially welcomes stakeholders concerned with in-vehicle devices such as:

- Vehicle manufacturers
- Portable navigation system manufacturers
- Pocket PC/PDA manufacturers
- Automotive suppliers
- Navigation map suppliers
- Mobile telecom operators
- Service providers
- Public Authorities
- Research Organisations and academic establishments
- European projects concerned with development of in-vehicle HMI

WG-HMI participants are expected to contribute expertise and participate actively and positively in discussions of the working group and to support documentation and reporting activities.

Draft Timetable and Calendar

The WG-HMI is expected to be active for 9-12 months on its current task and will report towards the end of 2009.

The meeting of the working group will be as follows:

- 28 January 2009 Kick-Off meeting at the Commission offices in Brussels.



- 16 April 2009 - Brussels
- 30 June 2009 - Brussels
- 08 September 2009 - Brussels

Reporting

The WG-HMI will provide regular status reports on its progress to the eSafety Steering Group and will present its results to the eSafety Forum Plenary meetings when invited. All reports are considered to be public.

The WG-HMI Chairs and members may be invited to present the Group's progress, reports and recommendations in other public meetings, workshops and conferences.

The Commission may use the WG-HMI results in its internal reporting and in reports to the Council and the Parliament.

