

eSafety Working Group Communication: Terms of reference and work programme

Version 1.1, 20.09.2005, U. Daniel

1. Mission and Motivation

The eSafety Forum Steering Group (SG) decided to establish the Working Group Communication (WG-C) in its meeting on March 14th, 2005. The objectives given by the SG are to cover all communication technologies and modes relevant for the general mission of eSafety. Although vehicle-to-vehicle (V2V) communication is seen as a cornerstone for advanced traffic management and driver assistance, vehicle-to-infrastructure (V2I) and, when relevant, infrastructure-to-infrastructure (I2I) communication will be included.

The WG-C will be established in fall 2005 and shall include all stakeholders in traffic and road issues which could be influenced positive by the above communication technologies. Special focus will be directed to

- Spectrum issues, helping the Commission with CEPT and Radio Spectrum Committee (RSC)
- Standardisation, working together with Intelligent Transportation Systems Steering Group (ITSSG) towards ETSI, CEN and ISO
- International cooperation, i.e. establishing contacts to similar groups in the US and Japan to coordinate international issues in the WG-C work areas

The biggest obstacle to the successful introduction of most vehicle based communication systems is that network effects are needed to cause significant results on road safety, fuel economy, congestion avoidance etc. Often a minimum percentage of vehicles equipped with communication based electronic control units (ECUs) is needed to enable features like co-operative traffic, accident warning or traffic management. This threshold is much more difficult to overcome if different standards and systems will be used within the member states. Therefore a key mission of WG-C is to provide the SG with all information needed to give recommendations to the commission how a harmonised EU wide communication system for V2V and V2I could be established so that all stakeholders can develop business models based on common standards in a common market.

A subsequent goal could be to promote this EU based system worldwide so that the European industry will be able to gain economies of scale for the components developed.

2. Constitution

This document will be presented at the next SG meeting on September 20th, 2005 and refined according to the SG feedback. The following list of stakeholders will be completed at this date and a call for participation will be issued by the chairman of WG-C directly afterwards so that the first constitutional meeting of WG-C can be held in October. It is planned that the WG-C will have reached its objectives after two years.

Possible stakeholders/participants are representatives of

- the Car-to-Car-Consortium (C2CC) of the Car industry, <http://www.car-to-car.org>, preferably the chairman of this group
- the Car industry and its suppliers of ECUs
- road authorities
- road operators
- service providers for traffic information and location based services
- providers/operators of communication infrastructure
- current and future EU projects in this context like GST, CVIS etc.

The Group is chaired by Bosch and is open to any stakeholder with an interest and expertise to contribute to the work of the group.

Already nominated participants are:

- Dave Marples, Telcordia Technologies (representing GST)
- Peter van der Perre, ERTICO (mail only)
- Matthias Schulze, DaimlerChrysler
- Peter-M. Ludwig, tri-consult
- Mats Rosenquist, Volvo
- Michael Møller Nielsen, ERTICO (representing COM eSafety)
- Uwe Daniel, Bosch

3. Objectives and Scope

Former work on V2V, V2I (V2X) has shown that there is a strong demand for a single standard and system specification as well as the allocation of exclusive spectrum. The WG-C will focus on the following work areas to support these requirements at EU level:

- Highlight the contribution of V2X to road safety, environmental and economic effects
- Identify optimum standards and spectrum requirements and promote these via the SG towards the relevant bodies
- Prepare use cases for traffic management, driver assistance etc using V2X
- Maintain links to the other WGs and i2010 in related areas

In addition WG-C will establish and maintain cooperation with non EU groups working at V2X issues, especially with the US and Japan.

Depending on the number of participants and the depth of work needed in a specific area the foundation of task forces (TC) reporting into the WG-C will be considered. Especially regarding spectrum issues and standardisation it can be foreseen that these topics will be worked on most effectively in separate expert groups.

4. Reporting

The WG-C will report regularly into the SG and will organise at least one workshop session, ideally integrated in a congress like the ITS Europe. Reports of members to other interest groups like C2CC will be arranged on an ad hoc basis. eSafety Forum presentations will be planned according to progress and decision points.

5. Work Programme (preliminary)

October 2005	constitutional meeting
November 2005	first international contacts established during ITS World Congress
December 2005	task assignment, foundation of TCs
Fall 2006	mid term reporting/general assembly to re-adjust objectives
Spring 2007	detailed recommendations delivered to SG, followed by continuous support to ITSSG, RSC etc. to finalise the proposed standards and recommendations
Fall 2007	final report

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