

DRAFT REPORT

3rd meeting of the GRRF informal group on

Advanced Emergency Braking and Lane Departure Warning Systems

Venue: OICA Offices, 4 rue de Berri, F 75008 Paris (<http://oica.net/category/contact/>)
Chairman: Mr. Johan Renders (EC) (johan.renders@ec.europa.eu)
Secretariat: Mr. Olivier Fontaine (OICA) (ofontaine@oica.net)

1. Welcome and Introduction

2. Approval of the agenda

Agenda approved with the addition of some new documents:

- AEBS/LDWS-03-05 : Comments from Japan about AEBS warning
- AEBS/LDWS-03-06 : Proposal from Japan for the text of AEBS
- AEBS/LDWS-03-07 : Proposal from Japan for a text for the LDWS test speed
- AEBS/LDW-02-09-Rev.1: Update of the Japanese statistical data.
- AEBS/LDWS-03-08: Chair consolidated comparison of the principles of the existing AEBS systems.

Anticipating the discussions under agenda item 12 (schedule for further TF and IG meetings) the Chair stressed the need for extended informal group meetings for the following steps in order to meet the tight deadlines set up in the Terms of Reference.

3. Approval of the minutes of the 2nd meeting (Geneva, 14 September 2009)

Document: AEBS/LDWS-02-12 (Secretariat)

The minutes were adopted with no modification.

4. Outcome of GRRF 66

Document: ECE/TRANS/WP.29/GRRF/66, §.24 to 27

D repeated their wish to introduce the provisions for LDWS into UNECE R79. The delegate referred to the introduction of the Regulation, which clearly stipulates in its paragraph 3 that the text of the regulation was designed to subsequently incorporate systems like LDWS.

The Chair suggested to the German delegate to raise his point at GRRF at its 67th session in February, because the Informal Group cannot deviate from the GRRF guidance it received.

5. Update of the Terms of Reference and Rules of Procedure

Document: AEBS/LDWS-01-07-Rev 1(Chair)

The Terms of Reference were slightly amended to improve the language. The Secretary was tasked to edit a final revision of the document.

6. Outcome of the 2nd Task Force meeting on AEBS/LDWS

Report by the Chair (oral)

The Chair reported about the 2nd Task Force meeting, held in London on 5-6 November, under UK DfT hospitality.

Quite good progress was achieved, in particular for the definition of the LDWS performance requirements. An interesting and useful brainstorming took place about the functional requirements of the AEBS. It permitted to assess the differences and similarities of the two existing systems, and to conclude that some room exists for bringing closer the diverging positions about the principal performance requirements, in particular with regard to warning time before automatic braking and the differential speed reduction to be achieved. Some other items still need to be clarified, for example the operating speed range of the systems.

The Informal Group agreed with the Chair's recollection as a basis for continuing the discussions on AEBS.

7. HMI issues

Documents: ITS-17-03 (IHRA)
ITS-18-04 (J)
ITS-18-06 (OICA)

The group was informed that the WP29-ITS informal group agreed at its November meeting that the ITS-17-03 is not contradictory to SAE J2808: visual modality should be used as secondary modality only.

OICA informed that detailed analysis in SAE J2808 indicates that some combinations (e.g. auditory/haptic) provoke slower driver reaction. SAE does not provide guidance.

Conclusion: Item to be revised at the relevant agenda item.

8. LDWS

8.1. Action points from previous meetings

8.1.1. Straight vs. curved roads.

Contracting Parties were requested to provide information about proving ground availability.

UK: Still investigating

NL:

- Proving ground available up to 160 m of radius.

- Questioned the assumption that if the system is compliant on straight roads, it is also safe on curved roads. If the test on curved road is not necessary, there is no need for the informal group to spend time on elaborating a test procedure, if however there is some reasonable doubt about system compliance on curved roads, then there is a need for a test.

Chair: If the tests are to be performed on public roads, this might create possible legal problem in certain countries.

8.1.2. UK text on drifting rate and speed.

UK: Clarified that this is no action point anymore because TF03 rejected the idea of a steering wheel angle.

8.1.3. US concern about a description of “good conditions of marking”.

Proposal from CLEPA (document AEBS/LDWS-03-04) covers this issue.

8.1.4. OICA and UK to propose wording for horizontal visibility.

Proposal from Dr. Trost (AEBS/LDWS-TF02-08): favours no indication at all, or very general requirements.

8.1.5. Test procedure.

J questioned the feasibility of the proposed test procedure, need to get precisions about the test procedure, its accuracy, etc.

8.1.6. test speed. (AEBS/LDWS-TF-03-07)

8.2. Skeleton paper: review and update

Document: AEBS/LDWS-02-03-Rev.1 (Secretariat)
 AEBS/LDWS-03-04 Clepa LDWS TF skeleton proposal_191109
 AEBS/LDWS-03-07 LDWS test speed J

The informal group revised all important outstanding items in document AEBS/LDWS-02-03-Rev.1

Conclusion :

- Secretariat was tasked to produce a revised working document reflecting the decisions and discussions taken by the informal group.
- Informal Group to present an informal document to GRRF at its 67th session. Items still in discussion to remain between [], and "homework" from the different parties to be included as far as possible.

9. AEBS

9.1. Action points from previous meetings

Not discussed.

9.2. Skeleton paper: review and update

Document: AEBS/LDWS-TF02-03-Rev.2 (Secretariat)
Working document (Secretariat)
AEBS/LDWS-03-03 Clepa AEBS TF skeleton proposal_191109
AEBS/LDWS-03-05 Comments on AEBS warning J
AEBS/LDWS-03-06 AEBS amendment proposal J
AEBS/LDW-02-09-Rev.1 (J)
AEBS/LDWS-02-02-Rev.1 (Secretariat)

The informal group held in-depth discussions, based on the Japanese document AEBS/LDWS-03-05 about:

- The system principles
- The definition of a reference point in the emergency process to distinguish the warning phase and the automatic emergency braking phase.
- The definition and limits of the warning phase

Agreement was reached on the need to specify a braking demand or deceleration value for the automatic emergency braking phase and to specify a limit for vehicle speed reduction during the warning phase, as well as a minimum warning time before the automatic emergency braking is activated. Detailed outcome can be found in document AEBS/LDWS-02-02-Rev.1 (Secretariat)

10. Other business

11. List of action items and issues for guidance from GRRF67

12. Schedule for further TF and IG meetings.

Document: AEBS/LDWS-03-02-Rev.1 (Secretariat)

The IG agreed to hold an extra-ordinary extended task force meeting from 13 to 15 April 2010 in Berlin with the aim to focus and make substantial progress on the AEBS requirements.