

## **DRAFT AGENDA**

### **3<sup>rd</sup> meeting of the dedicated task force (TF03) & 4<sup>th</sup> meeting of the GRRF informal group (IG04)**

**on**

### **Advanced Emergency Braking and Lane Departure Warning Systems**

**TF03:** Venue: CCFA Offices, 2, rue de Presbourg 75008 PARIS (<http://www.ccfa.fr/le-comite/> )

Duration of the sessions: Thursday, 28 January 2010, 1:30 p.m. until 6:00 p.m.

Friday, 29 January 2010: 9:00 a.m. until 4:00 p.m.

**IG04:** Venue: UNECE, Palais des Nations, GENEVA (<http://www.unece.org/meetings/practical.htm>)

Duration of the session: Monday, 1 February 2010, 10:30 p.m. until 6:00 p.m.

Chairman: Mr. Johan Renders (EC) (johan.renders@ec.europa.eu)

Secretariat: Mr. Olivier Fontaine (OICA) (ofontaine@oica.net)

**Note:** Any comments or documents relating to these meetings should be sent to the OICA Secretariat (ofontaine@oica.net) in e-format, so that meeting documents can be made available to the UNECE secretariat for publication on the website of WP29.

#### **1. Welcome and Introduction**

#### **2. Approval of the agenda**

Documents: AEBS/LDWS-04-01 (Chair)  
AEBS/LDWS-01-07-Rev.2 (Secretariat)

The updated Terms of Reference target the sixty-eighth session of GRRF in September 2010 for tabling a final draft regulatory text on LDWS. As a consequence, it can be found opportune to permit the experts attending the 67<sup>th</sup> session of GRRF (2-5 February 2010) to examine a first attempt from the AEBS/LDWS informal group for a text addressing LDWS provisions.

In view of the above timing consideration, the experts may wish to focus at these meetings of the AEBS/LDWS informal group and its dedicated task force on the completion of a consistent draft regulatory text addressing LDWS.

#### **3. Approval of the minutes of the 3<sup>rd</sup> IG meeting (Paris, 3-4 December 2009)**

Document: AEBS/LDWS-03-09 (Secretariat)

#### **4. Outcome of the 3<sup>rd</sup> Task Force meeting on AEBS/LDWS**

Report by the Chair (oral) on the outcome of the TF03 meeting in Paris on 28 + 29 January 2010 (will be made at the beginning of the IG04 meeting in Geneva on the 1<sup>st</sup> of February 2010)

## 5. HMI issues:

Documents: ITS-18-04 (J )  
ITS-18-06 (OICA)

Outcome of the 18<sup>th</sup> meeting of the WP29 informal group on ITS. Above documents are available at <http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/genits18.html> ). The experts may wish to consider the design principles for high-priority warnings proposed by the WP29-ITS informal group. As a reminder, IG03 found it opportune to consider whether ITS-17-03 can provide useful guidance for its decision-making on the warning strategy for AEBS and LDWS.

## 6. LDWS:

Documents: AEBS/LDWS-02-03-Rev.2 (Secretariat)  
AEBS/LDWS-03-04 (CLEPA)  
AEBS/LDWS-04-XXX (OICA)

According to the decision on the target delivery date referred to under item 2 above, experts are invited to focus on the completion of a draft regulatory text addressing LDWS provisions.

### 6.1. Action points from previous meetings

6.1.1. Contracting parties to mandate and notify the scope of application of the LDWS Regulation (§. 1.3)

Parties to present their position on the applicability of the proposed approach, in view of the guidance that will have be asked from GRRF.

6.1.2. Definition of Lane (§ 2.5)

The parties are requested to present their position about the three remaining options for the definition of "Lane".

6.1.3. Compliance with Electromagnetic Compatibility provisions (§ 5.1.2)

CLEPA is expected to provide a wording aligned on the braking regulations (UNECE R13)

6.1.4. General performance requirements (§ 5.2.1)

CLEPA is expected to provide some wording, improved compared to the proposal specified in document AEBS/LDWS-03-04, addressing the general requirements of the system.

6.1.5. Particular departure warning performance provisions (§.5.2.1.1)

IG03 agreed with testing on straight lanes only, but with the need for general requirement for both curved and straight road situations. NL and CLEPA are expected to present the outcome of their bilateral discussions concerning identification of a “worst case” pursuant AEBS/LDWS-03-04 (proposed footnote 2).

6.1.6. Particular failure detection provisions (§. 5.2.1.2 & §.5.4.5)

OICA is expected to present some draft wording for the three cases, i.e. failure warning test, optional system disabling, system temporarily not available (document AEBS/LDWS-04-XXX). Contracting Parties in favour to make the “capability warning” mandatory are requested to propose draft wording (also about a possible test).

#### 6.1.7. Departure warning suppression criteria (§.5.2.1.3)

OICA is expected to provide wording adding some criteria, other than driver voluntary action, justifying the suppression of the lane departure warning.

#### 6.1.8. Departure warning indication (§.5.4)

The experts may wish to refer to the outcomes of the 18<sup>th</sup> meeting of the WP29 informal group on ITS.

##### 6.1.8.1. Number of simultaneous warning means (§.5.4.1)

Some flexibility to the vehicle manufacturer could be opportune as the most efficient solution depends on the vehicle category (coach vs. truck), the adjustment of the system (early vs. late warning) and the experience gained with the current systems. However, flexibility can be of some danger when the driver is requested to frequently change the vehicle he is driving (e.g. bus/coach drivers).

Parties are expected to present their position on the number of warning means to be specified (1 or 2)

##### 6.1.8.2. Means of the warning signal (§.5.4.1)

While optical warning means seems to be avoided for a system expected to intervene in case of driver’s drowsiness, experience from the field indicates that LDWS provides frequent false warnings on secondary roads leading the driver to switch off the system if the warning means is of an annoying nature.

Parties are expected to present their position on the choice among acoustic, haptic and optical)

##### 6.1.8.3. Particular provisions for the optical signal (§.5.4.1.1)

The experts are expected to make a decision about the possibility to use the malfunction optical warning signal in a flashing mode for indicating lane departure, in view of the request by the manufacturers to limit the quantity of dedicated optical warning signals on the dashboard, and for the driver to limit the quantity of displayed information to integrate in case of emergency.

#### 6.1.9. Provisions concerning the visible lane marking of the test ground.(§.6.1.3)

Document AEBS/LDWS-03-04 (CLEPA) is considered covering this item. OICA however is expected to present their position toward the CLEPA proposal, as it could lead the manufacturers to develop algorithms for all territories to get approval for one territory only, i.e. spending unnecessary working resources. Other parties are also invited to present their position on the CLEPA proposal.

#### 6.1.10. Accuracy of measurements (§.6.2)

The group agreed on absolute accuracy values (vs. relative values) for all measurements. Some debate is still needed about the value for distances and longitudinal test speed. The group agreed to suppress provisions for time & delay measurement accuracy.

#### 6.1.11. Failure detection test (§.6.6)

The parties are expected to present their positions toward

- a possible exhaustive list of means for simulating the LDWS failure,
- the necessity of requirement to perform the test while driving the vehicle
- some wording addressing repaired failures.

### 6.2. Skeleton paper: review and update

Document: AEBS/LDWS-02-03-Rev.2 (Secretariat)

The above document will be updated according to the outcome of the discussions held under item 6.1. above. The group is expected to present a consistent regulatory text to the 67th GRRF session under the format of an informal document.

## 7. AEBS:

### 7.1. action points from previous meetings

According to the decision made under item 2 above, the experts may wish to focus on the completion of a draft regulatory text addressing LDWS provisions, limiting the discussions about AEBS to the general principles with the ambition of clearing the field for future agreement on detailed provisions.

#### 7.1.1. Definition of the emergency braking phase

OICA is expected to provide information about the means to capture the CAN signals (feasibility of recording the braking demand), or any other logic signal commanding the ancillary systems (warning, braking, etc.) with the purpose of defining an approval procedure. The group is expected to make a decision about the choice of a key parameter to best define the emergency braking phase (full braking vs. maximum braking demand).

#### 7.1.2. Definition of the warning phase

Japan is expected to clarify their position as to why the ESS generation should be avoided during the warning phase. According to the information provided, the group may wish to keep or release ESS deceleration threshold as a limiting parameter for the braking rate when braking is used as a haptic warning means. The experts may then decide on some values and parameters defining the “shape” of the haptic braking, e.g. definition of a maximum braking reduction and of a maximum delay before the reference point.

#### 7.1.3. Definition of a reference point

Acknowledging that the group agreed to take the start of the emergency braking phase as the reference parameter, all parties are expected to present their positions toward the time prior to the reference point when the warning phase should commence.

#### 7.1.4. Definition of a speed reduction

The experts may wish to start discussions about the value of the mandatory vehicle speed reduction under the conditions of the test.

**7.2. skeleton paper: review and update**

Document: AEBS/LDWS-02-02-Rev.1

The above document will be updated according to the outcome of the discussions held under item 7.1. above.

**8. Other business**

**9. List of action items and issues for guidance from GRRF67**

**10. Schedule for further TF and IG meetings.**

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