REPORT

1. Welcome and opening remarks
The Chairman opened the meeting by welcoming all the participants.

2. Introduction of participants and organisations
The Chairman recalled the intention and encouragement to increase the participation of CPs, as SLR is now in its Stage 2 of “Simplification”. A list of all participants is available in Annex 1 to this Report.

3. Adoption of the agenda
The agenda was adopted with the insertion of new documents. A revised agenda, reflecting the agreed modifications, was circulated as document SLR-45-11/Rev.1.

4. Approval of the reports of the previous sessions
- Report 39th meeting - WebEx, 7-10 July 2020
- Report 40th meeting - WebEx, 26-28 August 2020
- Report 41st meeting - WebEx, 21-23 September 2020
- Report 42nd meeting - WebEx, 3-5 November 2020
- Report 43rd meeting - WebEx, 9-11 December 2020
- Report 44th meeting - WebEx, 12-14 January 2021
The approval of the above SLR reports was postponed to the next session.

5. Deletion of Parking Lamps
GTB draft proposal for Regulations Nos. 48 and 148 (Rev. of SLR-43-08)
Mr. Schwenkschuster briefly reported that GTB is now considering to provide a “parking signal” (using front and rear position lamps) as an alternative to parking lamps. In this way the proposal would not result in a new series of amendments since parking lamps would not be deleted. GTB will keep SLR informed on the future developments of this proposal.
### Visibility of red light and white light

As agreed at SLR-44, the discussion on SLR-44-07 was resumed to further consider some concerns from the German administration regarding the verification during CoP.

Mr. Kooss commented that, if the applicant requests during type-approval to verify the visibility of red light towards the front and/or white light towards the rear of a vehicle (according to Par. 4.8.3.1.1. in Reg. 148 and Par. 4.18. in Reg. 149), it shall also be verified during CoP. For this reason, he proposed to delete Par. 6.5. in Reg. 148 and Par. 6.1.8. in Reg. 149.

CLEPA and OICA representatives were not in favour to delete these paragraphs because it would result in extra burden for industry. Moreover, set makers cannot be responsible for the body of the vehicle.

SLR agreed to put the two paragraphs in square brackets for the time being (see SLR-44-07/Rev.1) and seek the opinion of more CPs before taking a final decision on this.

### HID colour restrictions

In order to have technology neutral requirements, SLR considered whether the current “Neutral White” colour restrictions for HID should be lifted or, instead, should be extended to all Light Sources, in view of the concerns due to the blue component of LEDs. The discussion will resume at SLR46 on the basis of document SLR-45-12 and the outcome of SLR-45.

### Transitional Provisions of the Device Regulations

- Aide-mémoire (for information)
- Homework Team revised proposal

Mr. Bauckhage briefly reported on the outcome of the ad-hoc meeting on 11 February 2021, involving the Homework Team leaders and the SLR experts most involved in TPs.

He reported that the preference was to propose the same TPs (namely “2026”) for all Device Regulations in square brackets. This was reflected in doc. SLR-45-05. This document showed, paragraph-by-paragraph, that the proposal was based on the “Aide-mémoire” on Transitional Provisions for equipment and parts (document ECE/TRANS/WP.29/1044/Rev.2).

The SLR agreed to use the text showed in doc. SLR-45-05 in the draft 01 series of amendments to UN Regulations Nos. 148, 149 and 150.

### UN Regulations on Installation (Item 9)

- Regulations Nos. 48 and 86: Mr. Puglisi will align the layout of the latest R48 proposals (i.e. SLR-43-17/Rev.3, SLR-43-18/Rev.2) based on the R86 text (doc. SLR-45-17/Rev.1). All the installation proposals for “Stage 2 / Step 1” (Regs. 48, 53, 74, 86) will be finally reviewed at SLR46 prior to submission to GRE-84.

- Regulation No. 48 “Stage 2 / Step 2” (i.e. the proposal for additional contributors for driving-beam, more than four, without AFS) was discussed and all SLR members were invited to study the proposal in doc. SLR-43-16. The discussion will resume at SLR-46.
The Chairman warned about the number of proposals by GRE to WP.29 and recommended to be careful on the total number of documents produced. Mr. Goldbach informed that OICA will check whether it is possible to avoid amending the 03 series of amendments to Reg. 48, but recalled that there are countries that still use old versions of the Regulation.

**Headlamp levelling (Item 10)**

The German concerns on the upper inclination limit have been solved. This is -0.2% (as indicated in the table under Par. 6.2.6.1.2.) while -0.5% is the “initial” aiming (as indicated in the table under Par. 6.2.6.1.1.).

Mr. Goldbach recalled that the goal is to take into account the tolerances which have to be considered during PTI of headlamps. This topic was addressed during an Ad-hoc SLR meeting on “Headlamp levelling”, held in Bonn on 28 November 2019.

**UN Regulation No. 148 (Item 11)**

The latest draft consolidated document is SLR-45-08/Rev.1. This document, based on SLR-44-03/Rev.1, reflects all the comments and modifications agreed during SLR-45. The “Homework Team R148” shall finalise this document in time for discussion and approval at the next SLR session. In particular the HWT shall work on: “Marking requirements clarification” Par. 3.3.4. (see document SLR-45-06/Rev.1) and “Light source issue” paras. 4.3./4.7./4.8./Annex 8 (see doc. SLR-45-14/Rev.1).

**Status update on light source issue (Item 11)**

- *IEC proposal based on R149 approach*
- *Homework Team alternative approach for consideration*
  - *Decision tree for Light Source usage:*
    - *Homework Team proposal*
    - *IEC proposal*

The Secretary informed that an ad-hoc meeting was held on 11 Feb 2021, involving the Homework Team leaders, the IEC representatives and the SLR experts mostly involved in this topic. Following the introduction of SLR-45-03 and SLR-45-15, the SLR examined the different approaches.

The SLR considered to send to GRE-84 the different approaches and seek guidance. SLR would then finalise the proposals for GRE-85 using the same agreed approach. IEC would support as long as there is only one approach used consistently in both Regulations 148 and 149.

Mr. Langhammer observed that the “alternative approach” (see document SLR-45-14/Rev.1) could be used also in Reg. 149.

After further discussion it was finally agreed that the HWTs 148 and 149 will work to align as much as possible the text according to the “alternative approach” currently proposed for Reg. 148. For doing this, Mr. Langhammer asked the HWT-R148 to send, as soon as possible, their improved proposal to the HWT-R149.
UN Regulation No. 149 (Item 12)
The latest draft consolidated document is SLR-46-01. This document, based on SLR-45-13/Rev.1, reflects all the comments and modifications agreed during SLR-45 including improved tables (doc. SLR-45-01/Rev.1) and TPs (doc. SLR-45-05). The “Homework Team R149” shall finalise this document in time for discussion and approval at the next SLR session.

In particular the HWT shall work on: Par. 4.5.3./Annex 10 “Light source issue” (align with new approach proposed for R148), Par. 3.3. “Marking requirements clarification” (text alignment with R148 and R150), Annex 12 (improve the text below the Voltage markings figures), editorial improvements (Class vs. class, Road Illumination Devices vs. road illumination devices, etc.).

UN Regulation No. 150 (Item 13)
The latest draft consolidated document is SLR-46-02. This document, based on SLR-45-20, reflects all the comments and modifications agreed during SLR-45 (including TPs from doc. SLR-45-05). The “Homework Team R150” shall finalise this document in time for discussion and approval at the next SLR session. In particular the HWT shall work on: Par. 3.3.4. “Marking requirements clarification” (doc. SLR-45-06/Rev.1), Tables 4 and 5 “Chronological order of tests”, Annex 21 “Marking examples” (improve the drawings). After having improved and renumbered the Annexes, all the cross references in the text shall be verified.

Correlation tables
The 3 Homework Teams are invited to further develop for SLR-46 the draft correlation tables between Stage 1 and 2 for each of new device Regulations. These tables are not intended for submission to GRE84 but rather as a tool for SLR to answer questions during GRE, as well as for keeping track of the evolution of the Regulations from Stage 1 to Stage 2.

Editorial correction to documents WP.29/2021/30 and WP.29/2021/31
Mr. Puglisi will contact the GRE Secretariat to inform that a minor numerical error in a reference to a paragraph (see SLR-45-10) has been identified and shall be fixed at the next WP.29 session prior to the final adoption of the proposals (WP.29/2021/30 …/31). The SLR and GRE Officers will be copied to the message for information.

Japanese proposal for adding the “park condition” to the scope of UN Regulation No. 48
Mr. Horii briefly introduced document SLR-45-04, regarding Park condition and answer-back signal in Reg. 48, with the purpose of seeking initial feedback from CPs and OICA. He announced that the document was also submitted as a formal proposal to GRE (doc. GRE/2021/2).
Mr. Goldbach informed that OICA will provide its feedback in due time. The Chairman suggested to consider merging this proposal with other proposals for R48 under development. Mr. Bailey suggested to discuss it in a separate session since this is not a SLR topic.
| 16. | The Chairman encouraged everyone to send their comments/views/ideas to Japan and mentioned that perhaps Japan, or any other CP, may wish to organise a separate meeting on this (outside SLR). |
| 16. | “CPs moment”  
The Secretary provided a general overview on the main outcome of the SLR session. He also explained the composition of the complete package of informal documents for submission to GRE-84 in April 2021. The CPs present appreciated the useful summary provided. |
| 17. | **Unique Identifier**  
Mr. Puglisi will contact the DETA Secretariat to confirm the participation from SLR at the upcoming “DETA sub-group on UI” on 24 February 2021 and to provide a copy of the latest UI presentation as agreed at SLR-45 (doc. SLR-44-05/Rev.1). | **SLR-44-05** |
| 18. | **Any Other Business**  
No other business was discussed. |
| 19. | **Next meeting(s)**  
The SLR agreed the following meeting schedule:  
➢ *46th SLR meeting* – WebEx, on 24-26 March 2021  
➢ *47th SLR meeting* – WebEx, on 10-12 May 2021  
➢ *48th SLR meeting* – WebEx, on 16-18 June 2021  
➢ *49th SLR meeting* – WebEx, on 20-22 July 2021 |
| 20. | **Closure**  
The Chairman thanked all the participants for their fruitful contribution and closed the meeting. |
## Participation at 45th SLR meeting

**WebEx, 17-19 February 2021**

<table>
<thead>
<tr>
<th>17 February 2021</th>
<th>18 February 2021</th>
<th>19 February 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Derwin ROVERS (NL, SLR Chair)</td>
<td>Mr. Derwin ROVERS (NL, SLR Chair)</td>
<td>Mr. Derwin ROVERS (NL, SLR Chair)</td>
</tr>
<tr>
<td>Mr. Davide PUGLISI (GTB, SLR Secr)</td>
<td>Mr. Davide PUGLISI (GTB, SLR Secr)</td>
<td>Mr. Davide PUGLISI (GTB, SLR Secr)</td>
</tr>
<tr>
<td>Ms. Elena ANSALONI (IT)</td>
<td>Ms. Elena ANSALONI (IT)</td>
<td>Ms. Elena ANSALONI (IT)</td>
</tr>
<tr>
<td>Mr. Phil BAILEY (UK)</td>
<td>Mr. Thomas BAUCKHAGE (CLEPA)</td>
<td>Mr. Phil BAILEY (UK)</td>
</tr>
<tr>
<td>Mr. Oliver BARTELS (DE)</td>
<td>Mr. Marcus BERG (DE)</td>
<td>Mr. Oliver BARTELS (DE)</td>
</tr>
<tr>
<td>Mr. Thomas BAUCKHAGE (CLEPA)</td>
<td>Ms. Aurélie BERTHEL (OICA)</td>
<td>Mr. Thomas BAUCKHAGE (CLEPA)</td>
</tr>
<tr>
<td>Ms. Aurélie BERTHEL (OICA)</td>
<td>Mr. Sebastian FAHR (OICA)</td>
<td>Mr. Eric BLUSSEAU (CLEPA)</td>
</tr>
<tr>
<td>Mr. Jürgen EWALD (CLEPA)</td>
<td>Mr. Thomas GOLDBACH (OICA)</td>
<td>Mr. Jürgen EWALD (CLEPA)</td>
</tr>
<tr>
<td>Mr. Sebastian FAHR (OICA)</td>
<td>Mr. Marcin GORZKOWSKI (SAE)</td>
<td>Ms. Kiyomi FUJIMOTO (JP)</td>
</tr>
<tr>
<td>Mr. Thomas GOLDBACH (OICA)</td>
<td>Mr. Mark GRAinger (OICA)</td>
<td>Mr. Manabu FUSHIMI (JP)</td>
</tr>
<tr>
<td>Mr. Mark GRAinger (OICA)</td>
<td>Mr. Beny GRIGORESCU (GTB)</td>
<td>Mr. Thomas GOLDBACH (OICA)</td>
</tr>
<tr>
<td>Mr. Beny GRIGORESCU (GTB)</td>
<td>Mr. Frédéric HAY (CLEPA)</td>
<td>Mr. Marcin GORZKOWSKI (SAE)</td>
</tr>
<tr>
<td>Mr. Frédéric HAY (CLEPA)</td>
<td>Mr. Pere HERNANDEZ (IMMA)</td>
<td>Mr. Mark GRAinger (OICA)</td>
</tr>
<tr>
<td>Mr. Pere HERNANDEZ (IMMA)</td>
<td>Mr. Dieter KOOß (DE)</td>
<td>Mr. Beny GRIGORESCU (GTB)</td>
</tr>
<tr>
<td>Mr. Dieter KOOß (DE)</td>
<td>Mr. Takahiro KOYAMA (JP)</td>
<td>Mr. Frédéric HAY (CLEPA)</td>
</tr>
<tr>
<td>Mr. Takahiro KOYAMA (JP)</td>
<td>Mr. Rainer KRAUTSCHEID (DE)</td>
<td>Mr. Pere HERNANDEZ (IMMA)</td>
</tr>
<tr>
<td>Mr. Rainer KRAUTSCHEID (DE)</td>
<td>Mr. Gert LANGHAMMER (CLEPA)</td>
<td>Mr. Kousuke HORII (JP)</td>
</tr>
<tr>
<td>Mr. Gert LANGHAMMER (CLEPA)</td>
<td>Mr. Michael PERNKOPF (GTB)</td>
<td>Mr. Timo KÄRKKÄINEN (FI)</td>
</tr>
<tr>
<td>Mr. Federico MATARAZZO (GTB)</td>
<td>Mr. Philipp PLATHNER (IEC)</td>
<td>Mr. Dieter KOOR (DE)</td>
</tr>
<tr>
<td>Mr. Paul-Henri MATHA (GTB)</td>
<td>Mr. Jean-Marc PRIGENT (OICA)</td>
<td>Mr. Takahiro KOYAMA (JP)</td>
</tr>
<tr>
<td>Mr. Michael PERNKOPF (GTB)</td>
<td>Mr. Walter SCHLAGER (IEC)</td>
<td>Mr. Gert LANGHAMMER (CLEPA)</td>
</tr>
<tr>
<td>Mr. Philipp PLATHNER (IEC)</td>
<td>Mr. Lukas SCHWENK SCHUSTER (GTB)</td>
<td>Mr. Michael PERNKOPF (GTB)</td>
</tr>
<tr>
<td>Mr. Jean-Marc PRIGENT (OICA)</td>
<td>Mr. Christophe TISSIER (CEMA)</td>
<td>Mr. Philipp PLATHNER (IEC)</td>
</tr>
<tr>
<td>Mr. Walter SCHLAGER (IEC)</td>
<td>Mr. Wilfried VAN LAARHOVEN (NL) – pm only</td>
<td>Mr. Jean-Marc PRIGENT (OICA)</td>
</tr>
<tr>
<td>Mr. Lukas SCHWENKSCHUSTER (GTB)</td>
<td>Mr. Lukas SCHWENKSCHUSTER (GTB)</td>
<td>Mr. Lukas SCHWENKSCHUSTER (GTB)</td>
</tr>
<tr>
<td>Mr. Christophe TISSIER (CEMA)</td>
<td>Mr. Christophe TISSIER (CEMA)</td>
<td>Mr. Christophe TISSIER (CEMA)</td>
</tr>
</tbody>
</table>