**SLR special meeting on “Headlamp levelling”**

WebEx on Thursday, 16 September 2021
9:30 - 12:30 hrs (Central European Summer Time)

ALL DOCUMENTS ARE AVAILABLE HERE:
https://wiki.unece.org/pages/viewpage.action?pageId=113345289

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**DRAFT MINUTES**

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<tr>
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<th>Welcome and opening remarks</th>
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<td>1.</td>
<td>The chairman opened the meeting welcoming all the participants and provided a brief overview on the purpose of this special SLR session. A list of all participants is available in Annex 1.</td>
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<th>Adoption of the agenda</th>
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<td>2.</td>
<td>The secretary confirmed that the only input received was from Poland, circulated as document SLR-HL-20. No additional input was provided by the participants who adopted the agenda without modifications.</td>
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<th>Approval of the minutes of the last meeting</th>
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<td>3.</td>
<td>The minutes were shown on the screen and approved without modifications.</td>
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<th>Outcome of GRE-84</th>
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<td>4.</td>
<td>The chairman recalled the general background for the SLR separate meetings on the basis of paragraphs 14. and 15. of the Report on the 84th GRE session.</td>
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<th>SLR revised proposal to amend UN Regulation No. 48</th>
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<td>5.</td>
<td>This item was not discussed during the meeting. It was put on the agenda for reference purposes only.</td>
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<th>Polish proposal to amend SLR revised proposal</th>
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<td>6.</td>
<td>The expert from Poland introduced document SLR-HL-20. He explained how the initial downward inclination “I” should be determined and introduced, in addition to the existing diagram in GRE/2020/8/Rev.2, a narrower diagram intended for vehicles with automatic levelling. He clarified that, in case it would be impossible to stay within this narrow box (e.g., for constructional problems), then the larger box proposed for vehicles with manual levelling (e.g., off-road vehicles) could be used. The expert from OICA pointed out that it would be very difficult to define when there are “design constraints of vehicle which are impossible to avoid”. He explained that generally it is not feasible to apply the narrow green box</td>
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**Documents**

- SLR-HL-19
- SLR-HL-21
- ECE/TRANS/WP.29/GRE/84 (Paragraphs 14. and 15.)
- GRE/2020/8/Rev.2
- SLR-HL-20
for heavy trucks and asked whether it would be possible to apply the larger box for certain vehicle categories, such as heavy trucks. He added that it is not possible to meet the initial aiming with an accuracy as indicated in the green box during normal production (at least not for trucks).

The expert from GTB observed that it is not clear who decides which exceptions could benefit of the larger tolerances in the existing diagram.

At the request from the expert from France whether or not many vehicles would meet the requirements of the proposed green box, the expert from Poland replied that numerous checks, especially on passenger cars, have shown that auto levelling can achieve this.

The expert from OICA commented that the tolerance of ± 0.2% indicated in Par. 6.2.6.1.2.1. might be good in a laboratory but would be practically impossible to achieve since this is the tolerance of the device itself.

The expert from Poland pointed out that the initial aim is what manufacturer must write on the label on the vehicle. However, this is not checked during type approval but only used to set the initial value from which measuring the change after having put the load. He wished to invite all interested people in his laboratory to show in practice the measurement procedure, but unfortunately this is not possible due to the pandemic.

The expert from Germany observed that if the initial cut-off position is not verified during CoP, or PTI, it would have no use since it would only apply to the vehicle manufacturers.

The expert from UK commented that further work seems to be required on the Polish proposal to make sure it could work in real situation. Furthermore, he reiterated the support for the auto-levelling and the exemption for off-road vehicles, but still could not agree on the aiming diagram as proposed in GRE/2020/8/Rev.2.

The expert from Japan reported to be confused by the Polish proposal which seems more experimental than realistic. As the headlamp levelling debate is approaching its final stage, a brand-new proposal from Poland would not be acceptable. He explained that the Polish proposal should be discussed as a next step but, for the time being, the existing proposal (GRE/2020/8/Rev.2) is still the best option and should be adopted by GRE.

The expert from Poland pointed out that the initial aim shall be precisely described but he is open to further discuss and improve the diagram.

The expert from France commented that, in the Polish proposal, it is not clear when to use the second box. He reconfirmed his support for the existing proposal (GRE/2020/8/Rev.2).

The expert from Germany was fine with the existing proposal and did not see improvements with the Polish proposal. However, he would be open to further work on it as a second step. The expert from The Netherlands shared a similar position.

### How to move forward

- **SLR Report to GRE-85**

On the basis of the outcome of discussion on the Polish proposal (see above item 6), the chairman concluded that the SLR has not yet converged on a revised proposal that can reconcile the different positions.

The expert from UK asked whether reverting to the existing diagram currently in force in Reg. 48 and mandate auto-levelling would be an option.
The expert from The Netherlands expressed some hesitation to do that because the new diagram is improving the current situation, especially the seeing distance. The expert from France shared the same position.

The expert from Germany was not in a position to comment on this but agreed that the new diagram would bring some improvements.

The expert from Japan explained that there is no relaxation from the current requirements since the -0.2% is already allowed in the CoP requirements of the current Reg. 48. One of the intentions of this proposal was to eliminate the double standard between the main requirement and the CoP requirement and to unify them. He pointed out that the proposal is justified as it will significantly increase the uptake of automatic levelling and reduce glare.

The expert from GTB confirmed the comments expressed by Japan and added that the SLR proposal would be a good compromise considering all the vehicle variants and the real situations on the road.

The expert from Poland reported that the diagram proposed by SLR would be an improvement compared with the existing one.

The chairman summarised that the message to report back to GRE, as part of the usual SLR status report, should be:
- Despite holding 3 special sessions since GRE-84, SLR has not yet converged on a revised proposal that can reconcile all the different positions.
- The great majority of SLR members believe that the existing proposal (GRE/2020/8/Rev.2) may provide the best basis to find a compromise.
- SLR might consider to continue the discussion in some additional special sessions, if so instructed by GRE. The activity, focussing mainly on Reg. 48, would fit with the Simplification Stage 2 / Step 2.

The group agreed to proceed as suggested by the chairman.

8. **Any Other Business**
   No other business was discussed.

9. **Next meetings**
   No additional meeting was planned for the time being. Further SLR special sessions on "Headlamp levelling" might be scheduled depending on the outcome of the discussion at GRE-85.

10. **Closure**
    The chairman thanked all the participants for their fruitful contribution and closed the meeting.
Annex 1 to SLR-HL-22

SLR special meeting on “Headlamp levelling”
WebEx, 16 September 2021

List of participants

1. Mr. Derwin ROVERS (NL, SLR Chairmen)
2. Mr. Davide PUGLISI (GTB, SLR Secretary)
3. Mr. James ABRAHAM (OICA)
4. Mr. Yoshiro AOKI (JP)
5. Mr. Phil BAILEY (UK)
6. Mr. Thomas BAUCKHAGE (CLEPA)
7. Ms. Aurélie BERTHEL (OICA)
8. Mr. Niklas BLOMQVIST (OICA)
9. Ms. Sarah CHAUDEURGE (FR)
10. Mr. Marco CONTE (OICA)
11. Ms. Kiyomi FUJIMOTO (JP)
12. Mr. Valter GENONE (GTB)
13. Mr. Hartmut GERHARDS (OICA)
14. Mr. Thomas GOLDBACH (OICA)
15. Mr. Mark GRAINGER (OICA)
16. Mr. Beny GRIGORESCU (GTB)
17. Mr. Frédéric HAY (CLEPA)
18. Ms. Yoko KATO (JP)
19. Mr. Dieter KOOß (DE)
20. Mr. Takahiro KOYAMA (JP)
21. Mr. Gert LANGHAMMER (CLEPA)
22. Ms. Celine LEBEAU (OICA)
23. Mr. Antoine PAMART (FR)
24. Mr. Michael PERNKOPF (GTB)
25. Mr. Jean-Marc PRIGENT (OICA)
26. Mr. Seiya TATSUNO (JP)
27. Mr. Thomas SCHRAMM (OICA)
28. Mr. Tomasz TARGOSIŃSKI (PL)
29. Mr. John VEASEY (OICA)