

SLR special meeting on “Headlamp levelling”
- Hybrid session -

LTI (Light Technology Institute)
Engesserstr. 13, Building 30.34, 76131
Karlsruhe, Germany

Wednesday, 14 September 2022
9:00 - 12:30 hrs (CEST)

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

DRAFT MINUTES

		Documents
1.	<p>Welcome and opening remarks</p> <p>The chairman opened the meeting welcoming all the participants and provided a brief overview on the purpose of this special SLR session. He emphasised the significant efforts made by the SLR in order to agree on an alternative aiming diagram for submission to GRE, further to the decision at GRE-84 not to adopt the SLR proposal in GRE/2020/8/Rev.2. Regretfully, after five special meetings on “Headlamp levelling” since GRE-84 (namely: 18 June 2021, 20 July 2021, 16 September 2021, 18 May 2022, 27 June 2022), not much progress was made. Furthermore, the chairman explained that, unless consensus on a new diagram will be reached during this special session, the SLR will be forced to report to GRE-87 such a stall situation.</p> <p>A list of all participants is available in Annex 1.</p>	
2.	<p>Adoption of the agenda</p> <p>The secretary informed that inputs were received by Poland and by OICA, circulated respectively as documents SLR-HL-28/Rev.2 and SLR-HL-34.</p> <p>In addition, a brief summary of the measurements resulting from the workshop held on 13 September 2022 was added, as document SLR-HL-33, to a new item 4 on the agenda.</p> <p>No additional input was provided by the participants, who adopted the agenda without additional modifications. The updated agenda, reflecting all the inputs received, was uploaded on the website as doc. SLR-HL-32/Rev.1.</p>	SLR-HL-32/Rev.1
3.	<p>Approval of the minutes of the last meeting</p> <p>The minutes were shown on the screen and approved without modifications.</p>	SLR-HL-31

<p>4.</p>	<p>Results of measurements during workshop on 13 September 2022</p> <p>The chairman informed that the meeting was preceded, on 13 September 2022, by a “hands-on” workshop kindly hosted by the Karlsruhe Light Technology Institute. The workshop session included a set of measurements on vehicles fitted with automatic aiming devices of current production; scope of the measurements was to understand the reaction to the loading condition and the potential ability of these systems to fulfil possible new aiming ranges.</p> <p>The expert from OICA showed document SLR-HL-33, summarising the results of the various measurements, made on five different passenger vehicles, during the “hands-on” workshop held in the light-tunnel of the Karlsruhe Light Technology Institute on 13 September 2022. She explained that the document was prepared to easily visualise where the measurements would be reflected on the three aiming diagrams under consideration, i.e. the one in UN Regulation No.48 (until 08 series), the one contained in the SLR proposal (doc. GRE/2020/8/Rev.2) and the latest one proposed by Poland (doc. SLR-HL-28/Rev.2).</p>	<p>SLR-HL-33</p>
<p>5.</p>	<p>Concrete proposals to improve aiming diagram in GRE/2020/8/Rev.2</p> <ul style="list-style-type: none"> - Revised input from Poland - OICA discussion document - Ideas for discussion <p>The expert from OICA briefly introduced document SLR-HL-34: an updated version of the presentation on vehicle headlamp levelling data that was presented at the last meeting (doc. SLR-HL-29), including further information about the influence of the various components of an automatic headlamp levelling system.</p> <p>The expert from Poland provided a detailed introduction of document SLR-HL-28/Rev.2, including its justification, and described how it was intended to amend the SLR proposal GRE/2020/8/Rev.2. He explained that, with the Polish proposal, the initial aim would no longer be required to be marked on the device since it would be calculated/determined; the tolerances instead would remain like today.</p> <p>The chairman recommended to discuss the Polish proposal focussing separately on the two main aspects: 1) the initial aiming; 2) the shape of the diagram.</p> <p>Regarding the initial aiming, the participants observed that UN Regulations are not made only for Europe; in some countries PTI may not be so advanced to determine initial aim with the precision proposed by Poland and, for this reason, some tolerance for initial aim should also be considered. In general, there seems to be no need to force carmakers to such a rigid initial aim.</p> <p>SLR did not support the initial aiming as proposed by Poland.</p> <p>Regarding the shape of the diagram, the expert from UK commented that there are unavoidable factors influencing glare, but there must be an improvement. In the visibility-glare “compromise” no improvement on glare avoidance has been made while visibility has been improved, despite there was no complaints on visibility. He appreciated the logic of the Polish proposal and added that, in the future, a more stringent aiming diagram backed by some research studies may be taken into account. However, he concluded that SLR needs a strategic advice from GRE on how to proceed.</p> <p>The expert from The Netherlands expressed a similar position as UK, i.e. open for improving the left side of the diagram</p>	<p>SLR-HL-28/Rev.2 SLR-HL-34 SLR-HL-30</p>

	<p>The expert from OICA reported that improvements were made on the left side of the diagram and that it would not be possible to further improve. He pointed out that the first big improvement would be the auto-levelling, then we could consider other options.</p> <p>The expert from France reiterated his support for the original SLR proposal in GRE/2020/8/Rev.2 and commented that, if the left side of the diagram is modified, perhaps also the right side has to be adjusted accordingly. He recommended to report to GRE the status of the discussion and, if needed, vote by majority.</p> <p>The expert from Japan renewed his support for the original SLR proposal and reported that there is no need to modify the left side of the diagram.</p> <p>SLR did not support the aiming diagram as proposed by Poland.</p> <p>Since the Polish proposal (doc. SLR-HL-28/Rev.2) was the only input received from the CPs, the SLR could not reach consensus on an alternative aiming diagram.</p> <p>The chairman summarized that the discussion on the aiming diagram was inconclusive and concluded this will be reported back to GRE. Furthermore, he noted that SLR will advise GRE to further discuss it and make a final decision on the topic (i.e. not send it back to SLR again).</p>	
<p>6.</p>	<p>Next steps for submission to GRE-87</p> <p>SLR intended to work on a suitable solution, based on the results of this meeting and taking into account all the constraints in the practical application of the new aiming requirements.</p> <p>The initial target of SLR was to submit a first proposal to GRE-87 (Oct 2022) followed by a formal one for GRE-88 (April 2023). However, since no consensus could be reached on the aiming diagram, SLR will report to GRE that a clear GRE decision is imperative in order to make progress.</p>	
<p>7.</p>	<p>Next meeting(s)</p> <p>No further SLR special sessions on “Headlamp levelling” were planned.</p>	
<p>8.</p>	<p>Closure</p> <p>The chairman thanked all the participants for their contribution and, before closing the meeting, he expressed a special thanks to Dr. Kooss and to LTIK for hosting this session and the “hands-on” workshop. Furthermore, he thanked all those who contributed to the workshop by providing the vehicles and the measurement equipment.</p>	

Annex 1 to SLR-HL-35

SLR special meeting on “Headlamp levelling” Karlsruhe + WebEx, 14 September 2022

List of participants

1. Mr. Derwin ROVERS (NETHERLANDS, SLR Chairman) (*)
2. Mr. Davide PUGLISI (GTB, SLR Secretary) (*)
3. Mr. Yoshiro AOKI (JAPAN)
4. Mr. Phil BAILEY (UK) (*)
5. Mr. Thomas BAUCKHAGE (CLEPA) (*)
6. Mr. François BEDU (OICA) (*)
7. Ms. Aurélie BERTHEL (OICA) (*)
8. Mr. Sebastian FAHR (OICA) (*)
9. Mr. Marc FISCHER (GERMANY) (*)
10. Ms. Kiyomi FUJIMOTO (JAPAN)
11. Mr. Manabu FUSHIMI (JAPAN)
12. Mr. Valter GENONE (GTB) (*)
13. Mr. Mark GRAINGER (OICA) (*)
14. Mr. Beny GRIGORESCU (GTB)
15. Mr. Frédéric HAY (CLEPA) (*)
16. Ms. Yoko KATO (JAPAN)
17. Mr. Takahiro KOHYAMA (JAPAN) (*)
18. Mr. Dieter KOOß (GERMANY) (*)
19. Mr. Gert LANGHAMMER (CLEPA) (*)
20. Mr. Alexis NIEDZIALKOWSKI (GTB) (*)
21. Mr. Antoine PAMART (FRANCE)
22. Mr. Jean-Marc PRIGENT (OICA)
23. Ms. Yuto SAKURAI (JAPAN)
24. Mr. Walter SCHLAGER (IEC)
25. Mr. Torsten SCHWARZ (OICA)
26. Mr. Tomasz TARGOSIŃSKI (POLAND) (*)
27. Mr. Ludovic TOULISSE (GTB) (*)

Note: the asterisk “” indicates those who have participated in person.*