

Informal document GRE-89-07 (89<sup>th</sup> GRE, 24-27 October 2023, agenda item 4)

# Simplification of the UN Lighting and Light-signalling Regulations

Progress report to GRE-89

### - Workload and meeting pace -

<i>I</i> .	11 September 2014 in Brussels (BE)
   .	23 October 2014 in Geneva (CH)
    .	14 January 2015 in Brussels (BE)
IV.	13 April 2015 in Geneva (CH)
V.	13 October 2015 in Brussels (BE)
VI.	5-6 November 2015 in Brussels (BE)
VII.	15-16 December 2015 in Brussels (BE)
VIII.	13-14 January 2016 in Brussels (BE)
IX.	29 February & 1 March 2016 in Brussels (BE)
Х.	14-15 April 2016 in Brussels (BE)
XI.	9-10 June 2016 in Brussels (BE)
XII.	5-7 September 2016 in Brussels (BE)
XIII.	5-7 October 2016 in Brussels (BE)
XIV.	5-7 December 2016 in Brussels (BE)
XV.	21-23 February 2017 in Brussels (BE)
XVI.	22-24 March 2017 in Brussels (BE)
XVII.	16-18 May 2017 in Tokyo (JP)
XVIII.	13-15 June 2017 in Brussels (BE)
XIX.	12-14 July 2017 in Brussels (BE)
XX.	4-6 October 2017 in Brussels (BE)
XXI.	18-21 December 2017 in Brussels (BE)
XXII.	29 Jan / 1 Feb 2018 in Shenzhen (CN)
XXIII.	4-6 April 2018 in Brussels (BE)
XXIV.	30 May / 1 June 2018 in Brussels (BE)
XXV.	3-5 July 2018 in Brussels (BE)
XXVI.	24-26 September 2018 in Brussels (BE)
XXVII.	10-12 December 2018 in Brussels (BE)
XXVIII.	25-27 February 2019 in Brussels (BE)
XXIX.	27-29 March 2019 in Brussels (BE)
XXX.	22-24 May 2019 in Brussels (BE)
XXXI.	3-5 July 2019 in Brussels (BE)
XXXII.	3-5 September 2019 in Tokyo (JP)
XXXIII.	9-11 October 2019 in Brussels (BE)
XXXIV.	4-6 November 2019 in Brussels (BE)
XXXV.	11-13 December 2019 in Brussels (BE)

XXXVI.	8-10 January 2020 in Brussels (BE)
XXXVII.	2-4 March 2020 in Brussels (BE)
XXXVIII.	27-29 May 2020 – WebEx 🦳 🦳
XXXIX.	7-10 July 2020 – WebEx
XL.	26-28 August 2020 – WebEx
XLI.	21-23 September 2020 – WebEx
XLII.	3-5 November 2020 – WebEx *
XLIII.	9-11 December 2020 – WebEx *
XLIV.	12-14 January 2021 – WebEx *
XLV.	17-19 February 2021 – WebEx
XLVI.	24-26 March 2021 – WebEx
XLVII.	10-12 May 2021 – WebEx
XLVIII.	16-18 June 2021 – WebEx *
XLIX.	20-22 July 2021 – WebEx *
L.	9-10 September 2021 – WebEx *
LI.	6-8 October 2021 – WebEx
LII.	15-17 December 2021 – WebEx
LIII.	19-21 January 2022 – WebEx
LIV.	23-25 March 2022 – WebEx 🌙
LV.	18-20 May 2022 – Brussels (BE) *
LVI.	27-29 June 2022 – Brussels (BE) *
LVII.	15-16 September 2022 – Karlsruhe (DE)
LVIII.	12-14 October 2022 – Brussels (BE)
LIX.	14-16 December 2022 – Brussels (BE)
LX.	18-20 January 2023 – Brussels (BE)
LXI.	22-24 March 2023 – Brussels (BE)
LXII.	26-28 June 2023 – Brussels (BE)
LXIII.	30 Aug / 1 Sep 2023 – Brussels (BE)

Next meetings (Hybrid sessions from Brussels): SLR-64 on 8-10 November 2023 SLR-65 on 13-15 December 2023 SLR-66 on [7-9] February 2024





\*

\* = In conjunction with a special SLR session on "headlamp levelling" (https://wiki.unece.org/pages/viewpage.action?pageId=113345289)

United Nations

# **SLR submission to GRE-89**



# **Economic and Social Council**

#### **Formal submissions**

- Reg. 48 → to corrects a reference to Reg. 148
  → ECE/TRANS/WP.29/GRE/2023/13
- Regs. 148, 149, 150 → to correct and clarify the text
  → ECE/TRANS/WP.29/GRE/2023/14, .../15, .../16

### **Informal submissions**

- **Reg. 48** → Collation of approved proposals for the 09 series of amendments (GRE-89-02)
- SLR recommendation of UI usage in lighting UN Regulations (GRE-89-03)
- **Reg. 48** → Technical neutral failure provisions for R48 based on R149-01 (GRE-89-04)
- SLR Status Report to GRE-89 (GRE-89-07)

# Collation of approved proposals for the 09 series of amendments to R48

According to the 88<sup>th</sup> GRE Report (doc. ECE/TRANS/WP.29/GRE/88, para. 22), "GRE suggested that a consolidated text of the draft 09 series of amendments to UN Regulation No. 48 be prepared".

GTB offered to do this and then shared the results with SLR for final review and approval, which occurred at the 63<sup>rd</sup> SLR session.

#### Main amendments

- Headlamp levelling (SLR) → GRE/2020/8/Rev.3
- Device transition (SLR)  $\rightarrow$  GRE-88-27
- Park condition (SIG) → GRE-88-16/Rev.3

#### **Other amendments**

- Increase the number of manoeuvring lamps on trailers, according to the length of the trailer
  → GRE-88-24 (CLCCR)
- Visibility of red light towards the front and/or white light toward the rear (<del>less</del> not more than 0.25 cd)
  → GRE-88-18 (OICA)
- Prolonged Transitional Provisions
  → See ECE/TRANS/WP.29/GRE/88, Annex II (OICA)

See GRE-89-02

# SLR recommendation of UI usage in lighting UN Regulations

#### Excerpt from GRE-88 Report

13. To review UN Regulations under its purview for the purposes of UI (GRE-88-26), GRE made the following classifications:

(a) Obsolete device UN Regulations that had been frozen in the course of two freezing exercises;

(b) New simplified device UN Regulations Nos. 148, 149 and 150;

(c) Installation UN Regulations Nos. 48, 53, 74 and 86;

(d) Light sources UN Regulations Nos. 37, 99 and 128; and

(e) Standalone UN Regulations Nos. 10, 45 and 65.

14. GRE agreed that UI could be used for the group (b) above, but definitely not for (a) and probably not for (c) and (d). For the group (e), GRE invited IWG SLR and the Informal Working Group on Electromagnetic Compatibility (IWG EMC) to prepare recommendations. Finally, GRE decided to revert to this topic at the next session, including the issue of additional markings.

See GRE-89-03

# Technical neutral failure provisions for R48 based on R149-01

#### Correction to the 09 series of amendments to Reg. 48

Unfortunately, this amendment was missed in the initial proposal for "device transition" adopted at GRE-88 (see doc. GRE-88-27).

This proposal is <u>intended to complete the requirements needed for "device transition"</u>, as requested by the European Commission, i.e. the mandatory installation of headlamps from UN R149-01

If this proposal is unable to be adopted, the failure requirements will not be fully aligned with the 01 series of UN Regulation No. 149. This will mean that some new light sources or light sources modules will have no failure provisions.

See GRE-89-04

# Stage 2 / Step 2 Specific items and general topics for consideration

#### THE GOAL:

"Simplify and update the technical requirements of the UN <u>installation Regulations</u> (Nos. 48, 53, 74, 86), to become <u>technology neutral</u> with <u>performance-based</u> and objective test requirements".

- ✓ SLR produced <u>a list of specific items and general topics</u> that should be dealt with in "Stage 2 / Step 2" of the Simplification. For example, the following subjects are considered as relevant ones:
  - Simplify and improve the definition of apparent surface
  - Objective assessment of the actual functions as installed on the vehicle
  - Harmonise requirements with other regions where possible
  - > Consistency among similar requirements and definitions in installation regulations
- ✓ The <u>complete list is available in doc. SLR-64-01</u>. Having completed the collection from CPs and NGOs, inputs have been grouped and prioritised by assigning different colours and a brief "problem statement" has been indicated for each subject.

#### Need input from CPs and NGOs on contents of the specific items

### **Apparent surface – Problem statement**

### Main applications of apparent surface:

- Edges of the functions,
- Distance between lamps,
- Single lamp definition,
- Areas where requested,
- Geometric visibility

#### <u>Currently, two different methods to determine the apparent surface:</u>

- Light emitting surface
- Illuminating surface



Need to provide a level playing field without very significant differences depending on the definition used to determine the apparent surface

### Need to simplify the current system.

> Be as close as possible to reality, but without unnecessary complications.

# Input from CPs and NGOs is <u>always</u> welcome

