

Stage 2 Simplification of UN lighting Regulations (GRE-IWG SLR)

~ ~ ~

Update on GTB activities



*21-22 SEPTEMBER 2021 - HYATT PALACE HOTEL
NOVI, MI (USA)*



*Davide Puglisi
GTB Secretary-General*

CONTENTS:

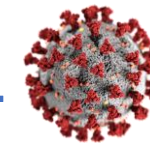
✓ **GRE-IWG SLR**

- Stage 2 Simplification of UN lighting Regulations
- Headlamp levelling
- DETA – Unique Identifier

✓ **Brief update on GTB activities**

- Workload and meeting pace -

- | | | | |
|--------|---|----------|---------------------------------------|
| I. | 11 September 2014 in Brussels (BE) | XXVI. | 24-26 September 2018 in Brussels (BE) |
| II. | 23 October 2014 in Geneva (CH) | XXVII. | 10-12 December 2018 in Brussels (BE) |
| III. | 14 January 2015 in Brussels (BE) | XXVIII. | 25-27 February 2019 in Brussels (BE) |
| IV. | 13 April 2015 in Geneva (CH) | XXIX. | 27-29 March 2019 in Brussels (BE) |
| V. | 13 October 2015 in Brussels (BE) | XXX. | 22-24 May 2019 in Brussels (BE) |
| VI. | 5-6 November 2015 in Brussels (BE) | XXXI. | 3-5 July 2019 in Brussels (BE) |
| VII. | 15-16 December 2015 in Brussels (BE) | XXXII. | 3-5 September 2019 in Tokyo (JP) |
| VIII. | 13-14 January 2016 in Brussels (BE) | XXXIII. | 9-11 October 2019 in Brussels (BE) |
| IX. | 29 February & 1 March 2016 in Brussels (BE) | XXXIV. | 4-6 November 2019 in Brussels (BE) |
| X. | 14-15 April 2016 in Brussels (BE) | XXXV. | 11-13 December 2019 in Brussels (BE) |
| XI. | 9-10 June 2016 in Brussels (BE) | XXXVI. | 8-10 January 2020 in Brussels (BE) |
| XII. | 5-7 September 2016 in Brussels (BE) | XXXVII. | 2-4 March 2020 in Brussels (BE) |
| XIII. | 5-7 October 2016 in Brussels (BE) | XXXVIII. | 27-29 May 2020 – WebEx |
| XIV. | 5-7 December 2016 in Brussels (BE) | XXXIX. | 7-10 July 2020 – WebEx |
| XV. | 21-23 February 2017 in Brussels (BE) | XL. | 26-28 Aug 2020 – WebEx |
| XVI. | 22-24 March 2017 in Brussels (BE) | XLI. | 21-23 Sep 2020 – WebEx |
| XVII. | 16-18 May 2017 in Tokyo (JP) | XLII. | 3-5 Nov 2020 – WebEx |
| XVIII. | 13-15 June 2017 in Brussels (BE) | XLIII. | 9-11 Dec 2020 – WebEx |
| XIX. | 12-14 July 2017 in Brussels (BE) | XLIV. | 12-14 Jan 2021 – WebEx |
| XX. | 4-6 October 2017 in Brussels (BE) | XLV. | 17-19 Feb 2021 – WebEx |
| XXI. | 18-21 December 2017 in Brussels (BE) | XLVI. | 24-26 Mar 2021 – WebEx |
| XXII. | 29 Jan / 1 Feb 2018 in Shenzhen (CN) | XLVII. | 10-12 May 2021 – WebEx |
| XXIII. | 4-6 April 2018 in Brussels (BE) | XLVIII. | 16-18 June 2021 – WebEx |
| XXIV. | 30 May / 1 June 2018 in Brussels (BE) | XLIX. | 20-22 July 2021 – WebEx |
| XXV. | 3-5 July 2018 in Brussels (BE) | L. | 9-10 Sept 2021 – WebEx |



Next meetings:

SLR-51 on 7-8 Oct 2021

SLR-52 on 15-17 Dec 2021

Simplification of UN Lighting and Light-Signalling Regulations

Stage 2 = Update the new Regulations 148, 149 and 150, as well as the installation Regulations 48, 53, 74 and 86, to be technology neutral and performance based, suitable for the future!



STEP 1

Focus on the **device Regulations** Nos. 148, 149 and 150 and to update the installation UN Regulations accordingly.

STEP 2

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

SLR “Stage 2 / Step 1” submission to GRE-85

| Reg. | Topic / Item | GRE doc. No. |
|----------------|---|--------------|
| R48.06/.07/.08 | <i>Adaptation of Installation Regs to introduce new headlamp Classes in R149.01</i> | GRE/2021/16 |
| R48.03/.04/.05 | | GRE/2021/17 |
| R53.02/.03 | | GRE/2021/19 |
| R53.01 | | GRE/2021/20 |
| R74.01/.02 | | GRE/2021/21 |
| R86.01/.02 | | GRE/2021/22 |
| R148 | <i>Draft consolidated 01 series of amendments to Reg. 148</i> | GRE/2021/13 |
| | <i>Presentation of the main changes introduced with the 01 series of amendments to Reg. 148</i> | GRE-85-03 |
| R149 | <i>Draft consolidated 01 series of amendments to Reg. 149</i> | GRE/2021/14 |
| | <i>Presentation of the main changes introduced with the 01 series of amendments to Reg. 149</i> | GRE-85-04 |
| R150 | <i>Draft consolidated 01 series of amendments to Reg. 150</i> | GRE/2021/15 |
| | <i>Presentation of the main changes introduced with the 01 series of amendments to Reg. 150</i> | GRE-85-05 |

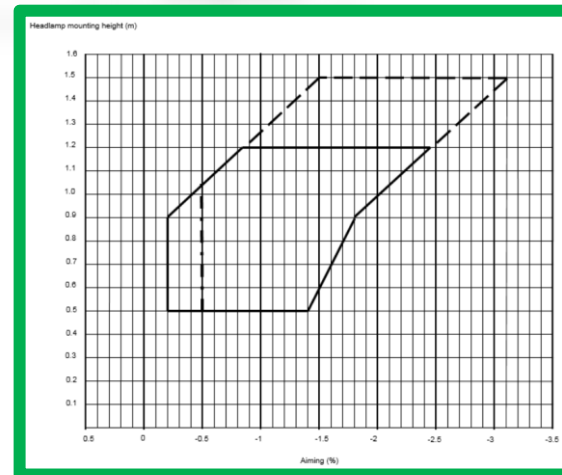
Headlamp Levelling

GRE-IWG SLR submitted a Revised proposal to GRE-84

GRE/2020/8/Rev.2

Removal of the manual levelling option, except for off-road vehicles (i.e. M₂G, M₃G, N₂G, N₃G)

New aiming diagram

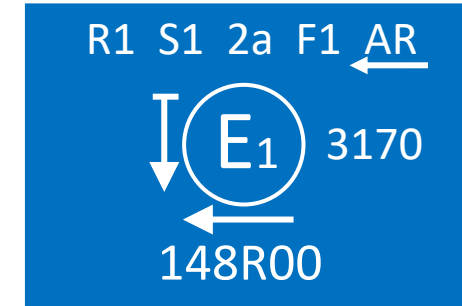


“GRE noted diverging positions on the proposed aiming diagram and manual levelling for off-road vehicles only. GRE remained optimistic that a consensus could be reached and requested IWG SLR to convene 1-2 additional separate meetings with the aim to reconcile the different positions and to prepare a revised proposal for the next session”

The (traditional) Approval Marking specifies (Example R148):

1. The number of the type approval
2. The contracting party (country) who is responsible for the type approval
3. The Regulation Number the device was type approved to
4. The status of the Regulation at the time of type approval
5. The different functions that are included in the device
6. Any possible restrictions in mounting height
7. Any possible restrictions in mounting position
8. Any possible restriction to the number of devices necessary (D or Y)

3170
E1
148R
(series) 00
R1 S1 2a F1 AR
↓
←
(2a)Y



IMPORTANT:

ALL these markings must be visible after the installation of the device on the vehicle

MAY BE REPLACED BY

The (new) Unique Identifier Marking specifies:

1. The unique number of the type approval

270650

IMPORTANT:

ALL these markings must be visible after the installation of the device on the vehicle



With the UI, currently required information becomes invisible, unless you are part of one of the existing user groups in DETA

UNIQUE IDENTIFIER / DETA Database

Example: Device used as a beam contributor for different AFS systems

Approval marking

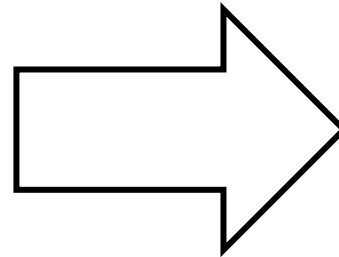
(On any fixed part visible after installation i.e. lens)



60+ mm

35+ mm

| | | | | | | | |
|--------|------|-------|---------|--------|--------|-------|-------|
| F3 | K PL | Valeo | 00 XEWR | 11111 | 22222 | 33333 | 44444 |
| | | | 00 XCV | 55555 | 66666 | 77777 | |
| R14900 | | Koito | 00 XCWT | 88888 | 99999 | | |
| 1122 | | | 00 XCVR | 121210 | 112211 | | |
| | | | 00 XCWR | 14441 | 14442 | | |
| | | | 00 XCWR | 552200 | 552201 | | |



Unique Identifier

(On any fixed part visible after installation i.e. lens)



Marking

20 mm

9 mm

1234567

Database

Electronic database (DETA)

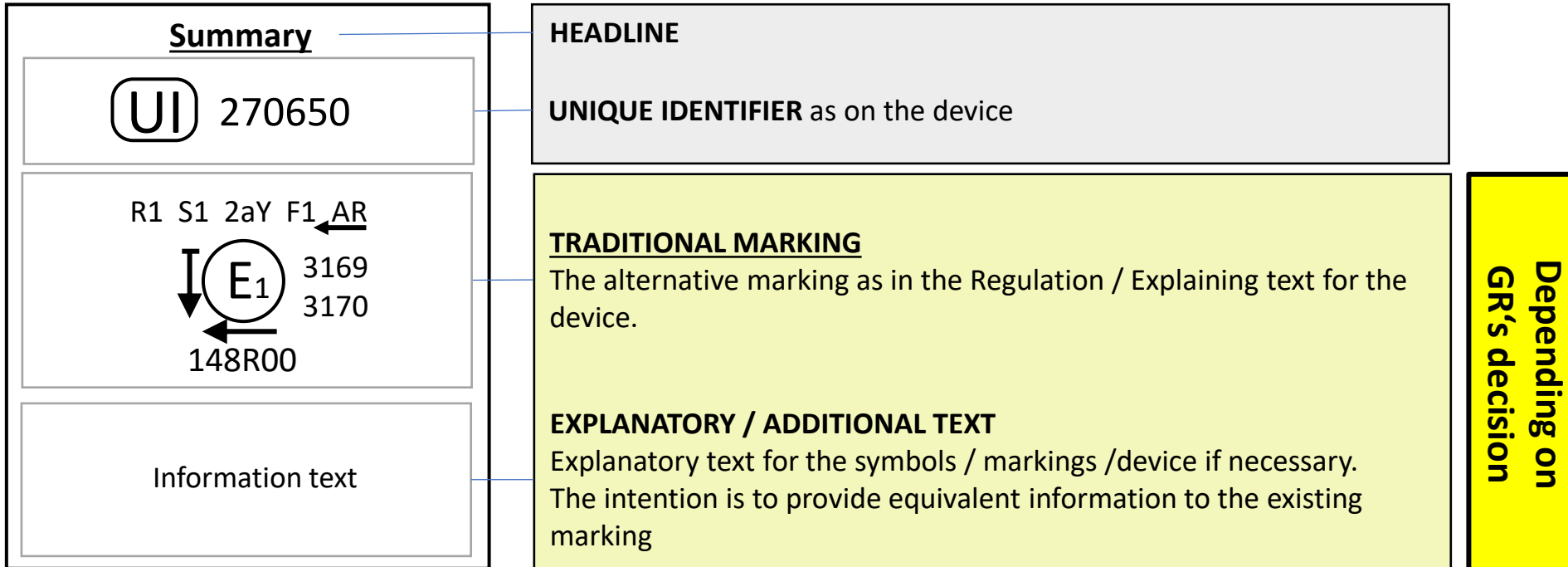
- Information
- Information
- Information

The presence of the marking in front of the optics could have an influence on the quality of the optical system

UNIQUE IDENTIFIER / DETA Database

SLR approach endorsed by DETA

Part A – “Summary” document management



UNIQUE IDENTIFIER / DETA Database

SLR approach endorsed by DETA

Part B – Usergroup management

| | | DOCUMENTS AVAILABLE IN DETA | | | | | + |
|-----------------|--|---|------------------------|---------------------------------|------------------------------|--------------------|--|
| | | CERT (communication on type approval) | TR (test report) | IF (information document) | OTHER (other document) | "Summary" (PDF) | |
| USERGROUPS DETA | Approval granting TAA (for granted approval) | W | W | W | W | W | <div style="border: 2px solid red; padding: 2px;"> <p>Existing access rights And documents (177th + 183rd WP.29)</p> <p>Additional summary document</p> <p>Additional usergroup</p> </div> |
| | CP applying the UN Reg. for which the approval was granted **) | R | R | R | R | R | |
| | CP applying UN Reg. 0 (access to the approvals of R0 and the annexed UN Regulations) | R | R | R | R | R | |
| | CPs not applying that UN Reg. | R | - | - | - | R | |
| | Manufacturer *) (only for own approvals) | R | R | R | R | R | |
| + | Periodical technical inspection, Law enforcement bodies, Repair shops | - | - | - | - | R | <p>The public has only read access right of the new document „Summary“ via a separate web application</p> |

Explanation:

R = read

W = read + write + delete

Existing access rights
And documents (177th + 183rd WP.29)

Additional summary document

Additional usergroup

**The public has only read access
right of the new document
„Summary“ via a separate web
application**

*) Manufacturers get access upon request to the DETA Administrator.

***) The DETA focal point may provide access to the Market Surveillance Authority of his/her Country,
subject to adherence with para. 91 of ECE/TRANS/WP.29/1145.

GTB proposal to allow Driver Assistance Projections, on the road ahead of the vehicle, as part of the ADB

- The GTB revised proposal received general support during GRE-84 in April 2021, but several concerns over the proposed technical details were expressed by the CPs.
- Much work took place within the GTB/WGs after GRE-84, in order to improve the text for taking into account the observations from GRE. Two special sessions between GTB and Contracting Parties in GRE were organised in June and July 2021 to collect additional feedback.
- GTB submitted a revised – and much improved – official proposal to GRE-85 in October 2021 (see GRE/2021/18)
- Some of the aspects that have been addressed and improved:
 - *How many (different) symbols or patterns can be used at the same time*
 - *Clarify if and when flashing and transforming is allowed*
 - *Positive vs. negative contrast*
 - *Consider only one symbol/pattern per use case (i.e. no options)*
 - *Distraction for other road users (incl. adjacent lane)*
 - *Synergy with Reg. 125 on Field of Vision Assistant*
 - *Clarify in which conditions the Driver Assistance Projections may be used*
 - *Fail safe conditions*

Brief update on GTB activities *(cont.)*

Work in progress

- Continue to support SLR during the Stage 2 simplification
- “Parking signal” performed by front and rear position lamps (instead of dedicated parking lamps)
- Consolidation of Reg. 48-07 with correction of errors

Future work

- Signalling Road Projections
- Reduced Low Beam, DRL and other lighting functions to save energy

Thank you for your attention!



Davide PUGLISI
GTB Secretary-General

Secretary of the GRE Informal WG
on the Simplification of the
UN Lighting and Light Signalling
Regulations (SLR)

Secretary@gtb-lighting.org

www.gtb-lighting.org

<https://www2.unece.org/wiki/pages/viewpage.action?pageId=23759699>