

Economic and Social Council

Distr.: General 6 November 2023

Original: English

Economic Commission for Europe

Inland Transport Committee

World Forum for Harmonization of Vehicle Regulations

Working Party on General Safety Provisions

126th session

Geneva, 10-13 October 2023

Report of the Working Party on General Safety Provisions on its 126th session

Contents

| | | | Paragraphs | Page |
|------|-----|---|------------|------|
| I. | Att | endance | 1 | 3 |
| II. | Ado | option of the Agenda (agenda item 1) | 2 | 3 |
| III. | Am | endments to Regulations on Buses and Coaches (agenda item 2) | 3–6 | 3 |
| | UN | Regulation No. 107 (M ₂ and M ₃ vehicles) | 3–6 | 4 |
| IV. | Am | endments to Safety Glazing Regulations (agenda item 3) | 7–8 | 4 |
| | A. | UN Global Technical Regulation No. 6 (Safety glazing) | 7 | 4 |
| | B. | UN Regulation No. 43 (Safety glazing) | 8 | 4 |
| V. | Aw | areness of the Proximity of Vulnerable Road Users (agenda item 4) | 9–13 | 4 |
| | A. | UN Regulation No. 46 (Devices for indirect vision) | 9 | 5 |
| | B. | UN Regulation No. 158 (Reversing motion) | 10 | 5 |
| | C. | UN Regulation No. 159 (Moving Off Information Systems) | 11 | 5 |
| | D. | UN Regulation No. 166 (Vulnerable Road Users in Front and Side Close Proximity) | 12 | 5 |
| | E. | UN Regulation No. 167 (Vulnerable Road Users Direct Vision) | 13 | 5 |
| VI. | Am | endments to External Projections Regulations (agenda item 5) | 14–15 | 6 |
| | A. | UN Regulation No. 26 (External projections of passenger cars) | 14 | 6 |
| | B. | UN Regulation No. 61 (External projections of commercial vehicles) | 15 | 6 |
| VII. | UN | Regulation No. 39 (Speedometer and Odometer) (agenda item 6) | 16 | 6 |
| III. | UN | Regulation No. 55 (Mechanical couplings) (agenda item 7) | 17 | 6 |
| IX. | UN | Regulation No. 66 (Strength of superstructure (buses)) (agenda item 8) | 18 | 7 |

| X. | Amendments to Regulations on Gas-Fuelled Vehicles (agenda item 9) | 19–20 | 7 |
|---------|--|-------|----|
| | A. UN Regulation No. 67 (Liquified Petroleum Gas vehicles) | 19 | 7 |
| | B. UN Regulation No. 110 (Compressed Natural Gas and Liquified Natural Gas vehicles) | 20 | 7 |
| XI. | UN Regulation No. 122 (Heating systems) (agenda item 10) | 21 | 7 |
| XII. | UN Regulation No. 125 (Forward field of vision of drivers) (agenda item 11) | 22 | 7 |
| XIII. | Event Data Recorder (agenda item 12) | 23-31 | 8 |
| | A. Guidance on Event Data Recorder Performance Elements Appropriate for Adoption in the 1958 and 1998 Agreement Resolutions or Regulations | 23 | 8 |
| | B. UN Regulation No. 160 (Event Data Recorder) | 24 | 8 |
| | C. New UN Regulation on Event Data Recorder for Heavy Duty Vehicles | 25-31 | 8 |
| XIV. | UN Regulation No. 0 (International Whole Vehicle Type Approval) (agenda item 13) | 32–33 | 10 |
| XV. | Consolidated Resolution on the Construction of Vehicles (agenda item 14) | 34–35 | 10 |
| XVI. | Special Resolution No. 1 concerning the Common Definitions of Vehicle Categories, Masses and Dimensions (agenda item 15) | 36 | 11 |
| XVII. | Exchange of Views on Vehicle Automation (agenda item 16) | 37 | 11 |
| XVIII. | Election of officers (agenda item 17) | 38 | 11 |
| XIX. | Other Business (agenda item 18) | 39–46 | 11 |
| | A. Exchange of Views on the Future Work of the Working Party on General Safety Provisions | 39 | 11 |
| | B. Periodical Technical Inspections | 40 | 11 |
| | C. Highlights of the June 2023 session of World Forum for Harmonization of Vehicle Regulations | 41 | 12 |
| | D. Three-dimensional H point machine | 42 | 12 |
| | E. Any Other Business | 43 | 12 |
| | F. Strategy of the Inland Transport Committee on Reducing Greenhouse Gas Emissions in Inland Transport | 44 | 12 |
| | G. UN Regulation No. 118 (Burning behaviour of materials) | 45 | 13 |
| | H. Provisional Agenda for the Next Session | 46 | 13 |
| Annexes | | | |
| I. | List of Informal Documents Considered During the Session | | 15 |
| II. | Draft Amendments to UN Regulation No. 107 (Safety glazing) | | 17 |
| III. | Draft Amendments to UN Regulation No. 46 (Devices for indirect vision) | | 18 |
| IV. | UN Regulation No. 167 (Vulnerable Road Users Direct Vision) | | 21 |
| V. | Draft Proposal for a GRSG Task Force on UN Regulation No. 39 to Cover Mileage Values | | 22 |
| VI. | Draft Amendments to UN Regulation No. 55 (Mechanical couplings) | | 24 |
| VII. | GRSG Informal Working Groups | | 25 |

I. Attendance

1. The Working Party on General Safety Provisions (GRSG) held its 126th session from 10 to 13 October 2023 in Geneva. The meeting was chaired by Mr. A. Erario (Italy). Experts from the following countries participated in the work, following Rule 1 of the Rules of Procedure of the World Forum for Harmonization of Vehicle Regulations (WP.29) (ECE/TRANS/WP.29/690/Rev.1): Australia, Canada, China, Finland, France, Germany, India, Italy, Japan, Netherlands, Norway, Poland, Republic of Korea, Russian Federation, Zimbabwe, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States of America and Zimbabwe. Experts from the European Commission (EC) participated. Experts from non-governmental organizations participated: American Automotive Policy Council (AAPC), European Association of Automotive Suppliers (CLEPA), Federation International de l'Automobile (FIA), International Motor Vehicle Inspection Committee (CITA), International Motorcycle Manufacturers Association (IMMA), International Organization of Motor Vehicle Manufacturers (OICA), International Road Federation (IRF), International Road Transport Union (IRU) and International Association of Public Transport (UITP).

II. Adoption of the Agenda (agenda item 1)

Documentation: ECE/TRANS/WP.29/GRSG/2023/17

Informal documents: GRSG-126-03-Rev.2 and GRSG-126-11-Rev.1

2. GRSG considered and adopted the agenda (ECE/TRANS/WP.29/GRSG/2023/17) proposed for the 126th session, the running order (GRSG-126-03-Rev.2) and the annotations (GRSG-126-11-Rev.1). Annex I of this report lists the informal documents that were distributed during the session. Annex VII of this report lists the GRSG Informal Working Groups (IWG).

III. Amendments to Regulations on Buses and Coaches (agenda item 2)

UN Regulation No. 107 (M₂ and M₃ vehicles)

Documentation: ECE/TRANS/WP.29/GRSP/2023/30

Informal documents: GRSG-126-05, GRSG-126-08, GRSG-126-28,

GRSG-126-29 and GRSG-126-36

- The expert from Spain informed GRSG that the Working Party on Passive Safety (GRSP) would consider, December at its 2023 session, (ECE/TRANS/WP.29/GRSP/2023/30) of revised terms of references (ToRs) for IWG on Safer Transport of Children in Buses and Coaches (IWG-STCBC). The expert from Germany, on behalf of the Chair of IWG-STCBC, introduced a presentation (GRSG-126-05) on the work progress. He confirmed that the new UN Regulation prepared by IWG-STCBC would deal with existing systems used in passenger cars, favouring built-in Child Restraint Systems (CRS) and Enhanced CRS that were type approved according to UN Regulation No. 129 (ECRS). In the meantime, he confirmed that the second phase of the UN Regulation would entail CRS in combination with two-point safety belts. He clarified that separate components on CRS for installation would not be allowed, nor combination of two-point belts and top tether or support leg. Finally, he explained the ongoing and upcoming IWG activities on test procedures. GRSG agreed to resume consideration on this subject at its April 2024 session and endorsed the revised IWG ToR (ECE/TRANS/WP.29/GRSP/2023/30) without amendments. The GRSG Chair encouraged GRSG experts to liaise with GRSP to backup this activity.
- 4. The experts of UITP introduced a proposal of amendments to UN Regulation (GRSG-126-08) in presentation (GRSG-126-29). The experts from UITP underlined that notwithstanding that more buses had become increasingly accessible, a significant number

of passengers with restricted mobility still complain about accessibility. They added that specific tests in real-life situations showed that, even in buses that comply with the latest regulation, the journey of passengers with restricted mobility could remain a challenge. The expert from the United Kingdom underlined that not only large buses should be addressed in this endeavour, but also Class B (vehicles not designed to carry standing passengers) buses used for the purposes of charity. Finally, GRSG agreed to establish a "Task Force on Bus and Coach Accessibility" led by the expert from Germany, and to resume discussion at the April 2024 GRSG session, based on the follow-up work of the Task Force (TF).

- 5. GRSG noted GRSG-126-28 from the expert of Norway, announcing an assessment study conducted by his country on the extent of bus collisions in Europe. He added that the results of this assessment would then be the basis of a comprehensive technical study, which would include specific proposals to enhance collision safety for buses. GRSG agreed to resume discussion following the study outcome at its April 2024 session.
- 6. Finally, GRSG adopted GRSG-126-36, as reproduced in annex II to the report, on aligning the French translation with the English text of the UN Regulation. GRSP requested the secretariat to submit the proposal as draft Corrigendum 2 to the 06 series of amendments to UN Regulation No. 107 for consideration and vote at the March 2024 session of WP.29.

IV. Amendments to Safety Glazing Regulations (agenda item 3)

A. UN Global Technical Regulation No. 6 (Safety glazing)

7. GRSG noted that proposals had not been submitted.

B. UN Regulation No. 43 (Safety glazing)

Documentation: Informal document: GRSG-126-16

GRSG noted a proposal (GRSG-126-16) from the expert of OICA on an exemption in a specific situation - when safety-belts and an airbag limit head movement - for the mandatory headform test to limit head injuries. The experts from Finland argued that the restraint system could fail, and that safety glazing were also designed for Vulnerable Road Users (VRU). The expert from the Netherlands proposed to limit the exemptions to those vehicles where the changes proposed would be allowed. The expert from Italy shared the concerns of the expert from Finland. The expert from Germany clarified that UN Regulation No. 127 (Pedestrian safety) did provide safety for VRU. He clarified that contact would not occur with the windscreen if the occupants were restrained. He supported the proposed exemptions because UN Regulation No. 21 (Interior fitting) was designed to prevent sharpedge injuries in case of unrestrained occupants. The expert from France suggested that gaps for these tests should be considered. He added that UN Regulation No. 21 provides set of dummies to check that contact did not occur. He stressed the need to provide evidence that contact did not occur and therefore that occupants were not at risk for any category of vehicle. GRSG agreed to resume discussion based on a revised document. GRSG also noted that if a new replacement proposal was not received by the secretariat, GRSG-126-16 should be confirmed for submission as an official document before the deadline.

V. Awareness of the Proximity of Vulnerable Road Users (agenda item 4)

A. UN Regulation No. 46 (Devices for indirect vision)

Documentation: ECE/TRANS/WP.29/GRSG/2023/23

Informal documents: GRSG-126-23, GRSG-126-24-Rev.1 and GRSG-

126-25-Rev.1

9. The expert from Germany, Chair of TF on UN Regulation No. 46 (Devices for indirect vision) introduced TF status report (GRSG-126-23). He then introduced GRSG-126-24-Rev.1 amending the UN Regulation on those parts agreed so far by TF as a new series of amendments. Many of the experts were in favour of the pendulum with a diameter of 165 ± 1 mm and a 5 ± 1 mm thick rubber covering for the impact test. Finally, GRSG adopted ECE/TRANS/WP.29/GRSG/2023/23 as amended by GRSG-126-24-Rev.1 and GRSG-126-25-Rev.1. The secretariat was requested to submit GRSG-126-25-Rev.1 as draft Supplement 1 to the 05 series of amendments (as reproduced by annex III to the report) and ECE/TRANS/WP.29/GRSG/2023/23 (as amended by annex III to the report) as draft 06 series of amendments to UN Regulation No. 46, for consideration and vote at the March 2024 sessions of WP.29 and AC.1. GRSG agreed that TF work would continue to solve the remaining issues in UN Regulation No. 46.

B. UN Regulation No. 158 (Reversing motion)

Documentation: ECE/TRANS/WP.29/GRSG/2023/20 Informal document: GRSG-126-32

10. The expert from EC on behalf of IWG VRU-Proxi, presented GRSG-126-32 to introduce the proposal of amendment (ECE/TRANS/WP.29/GRSG/2023/20) that would clarify the text of the UN Regulation, and would amend conditions under annex 9 (Test methods for close-proximity rear-view field of vision). GRSG adopted ECE/TRANS/WP.29/GRSG/2023/20 not amended and requested the secretariat to submit it as draft Supplement 3 to the original version of UN Regulation No. 158, for consideration and vote at the March 2024 sessions of WP.29 and AC.1.

C. UN Regulation No. 159 (Moving Off Information System)

11. GRSG noted that proposals had not been submitted.

D. UN Regulation No. 166 (Vulnerable Road Users in Front and Side Close Proximity)

12. GRSG noted that proposals had not been submitted.

E. UN Regulation No. 167 (Vulnerable Road Users Direct Vision)

Documentation: ECE/TRANS/WP.29/GRSG/2023/19

ECE/TRANS/WP.29/GRSG/2023/21

Informal documents: GRSG-126-06, GRSG-126-07-Rev.1, GRSG-

126-31, GRSG-126-33 and GRSG-126-35

13. The expert from EC on behalf of IWG VRU-Proxi, introduced through a presentation (GRSG-126-31) ECE/TRANS/WP.29/GRSG/2023/21 that would allow vehicles with narrower cabs or A pillars positioned inboard of the edge of the cab to be approved on a reduced limit value, providing a level of safety equivalent to that of the original version of the UN Regulation. Moreover, he added that the proposal also introduced an alternative approach for vehicles with competing objectives (e.g. high-capacity transport, high efficiency, new powertrain technology, impact on freight industry) with direct vision challenges. He also introduced GRSG-126-06 to clarify the term "direct vision". The expert from the United Kingdom introduced two presentations (GRSG-126-33) and reminded GRSG about the premise that established the method of UN Regulation No. 167 and that highlights a concern with the proposed amendment. He also introduced GRSG-126-35 commenting on the above proposal from IWG VRU-Proxi. He finally introduced ECE/TRANS/WP.29/GRSG/2023/19 to define a Subsection Frontal Visible Volume within the area of greatest risk with the aim of ensuring that VRUs directly in front of the vehicle cannot be in a blind spot between direct and indirect vision. Finally, GRSG adopted

ECE/TRANS/WP.29/GRSG/2023/21 as amended by GRSG-126-06 and GRSG-126-07-Rev.1. At the same time, it was agreed to send ECE/TRANS/WP.29/GRSG/2023/19 to IWG VRU-Proxi for revision and possible submission of an official document at the April 2024 session of GRSG. The secretariat was requested to submit ECE/TRANS/WP.29/GRSG/2023/21 (as amended by annex IV to the report) as draft Supplement 1 to the original version of UN Regulation No. 167, for consideration and vote at the March 2024 sessions of WP.29 and AC.1.

VI. Amendments to External Projections Regulations (agenda item 5)

A. UN Regulation No. 26 (External projections of passenger cars)

Documentation: ECE/TRANS/WP.29/GRSG/2023/22

14. On request of the expert from Germany, Chair of TF on UN Regulation No. 46, GRSG agreed to defer discussion on this agenda item to its April 2024 session.

B. UN Regulation No. 61 (External projections of commercial vehicles)

Documentation: ECE/TRANS/WP.29/GRSG/2023/24

15. As per agenda item 5(a), GRSG agreed to defer discussion on this agenda item at its April 2024 session.

VII. UN Regulation No. 39 (Speedometer and Odometer) (agenda item 6)

Documentation: Informal documents: GRSG-126-15, GRSG-126-01 and GRSG-126-21-Rev.1

16. The expert from the Netherlands, Chair of TF on UN Regulation No. 39, introduced TF status report (GRSG-126-15) and TF ToRs (GRSG-126-21-Rev.1 superseding GRSG-126-01). The expert from IMMA stated that L categories (motor vehicles with two, three or four wheels) had different characteristics and needs from other categories of vehicles, and therefore he supported TF activity. The expert from OICA questioned GRSG about the strategy decided at the 109th session of GRSG in 2015 to postpone the consideration on "antitampering measures for electronic vehicle interfaces, such as odometer", until "the subgroup on 'Automated Driving' dealing with this subject" had finalized their work. He asked why GRSG would not respect their strategy to wait to see the effect of UN Regulation No. 155 (cyber security) that clearly deals with protecting mileage data (annex 5, table A1, paragraph 4.3.6., item 20.4) and mitigation solutions (table B5, item 20.4). The expert from OICA also pointed out that the data and studies tabled so far in TF do not justify any need for improvement on odometer accuracy and tampering. Finally, GRSG adopted the ToR (GRSG-126-21-Rev.1) as reproduced in annex V to the report and agreed to resume discussion at its next sessions based on outcome of TF work.

VIII. UN Regulation No. 55 (Mechanical couplings) (agenda item 7)

Documentation: ECE/TRANS/WP.29/GRSG/2023/18

Informal document: GRSG-126-19-Rev.1

17. The experts from Austria and the Netherlands, introduced GRSG-126-19-Rev.1 superseding ECE/TRANS/WP.29/GRSG/2023/18, aimed at clarifying the need to have a support device for centre axle trailers, independent of the type of coupling device. The expert from France suggested the amendment proposed should have gradual transitional provisions.

Finally, GRSG adopted ECE/TRANS/WP.29/GRSG/2023/18 as amended by annex VI to the report. The secretariat was requested to submit the proposal as draft 03 series of amendments to UN Regulation No. 55 for consideration and vote at the March 2024 sessions of WP.29 and AC.1.

IX. UN Regulation No. 66 (Strength of superstructure (buses)) (agenda item 8)

Documentation: ECE/TRANS/WP.29/GRSG/2023/2

18. The expert from the Russian Federation informed GRSG that his delegation had received several comments to his proposal (ECE/TRANS/WP.29/GRSG/2023/2), and that experts from his country were working on a revision. He also clarified that his country had published a new standard that already reproduces the revised proposal he intended to submit. GRSG agreed to resume discussion on this subject at its April 2024 session.

X. Amendments to Regulations on Gas-Fuelled Vehicles (agenda item 9)

A. UN Regulation No. 67 (Liquified Petroleum Gas vehicles)

19. GRSG noted that proposals had not been submitted.

B. UN Regulation No. 110 (Compressed Natural Gas and Liquified Natural Gas vehicles)

Documentation: Informal document: GRSG-126-17

20. The expert from CLEPA introduced GRSG-126-17 to allow different options to fulfil the marking requirements in cases where more than one UN Regulation applies. GRSG requested the secretariat to distribute GRSG-126-17 with an official symbol at its April 2024 session.

XI. UN Regulation No. 122 (Heating systems) (agenda item 10)

21. The expert from the Republic of Korea asked for guidance from the group on the need for a second step for radiant warmer. The expert from the Netherlands explained that some inconsistencies were noted in the UN Regulation on radiant warmers. He clarified, as an example, that rear seats currently allow for higher temperatures at the outlets in the rear where at the same time rear seats are likely to carry vulnerable children. GRSG agreed to resume discussion on this subject based on possible proposals at its April 2024 session.

XII. UN Regulation No. 125 (Forward field of vision of drivers) (agenda item 11)

Documentation: Informal document: GRSG-125-22

22. The expert from the Netherlands on behalf of IWG on Field of Vision Assistant (FVA) of Drivers, introduced the IWG status report (GRSG-126-22). He explained that the IWG work came from two meetings and workshops. He informed GRSG that human-machine interface experts shared the concerns of contracting parties (CPs) about distraction. He finally announced that plans were for another IWG meeting before submission of an official proposal to the April 2024 session of GRSG. GRSG agreed to resume discussion at its next session based on a possible proposal submitted by IWG.

XIII. Event Data Recorder (agenda item 12)

A. Guidance on Event Data Recorder Performance Elements Appropriate for Adoption in the 1958 and 1998 Agreement Resolutions or Regulations

Documentation: ECE/TRANS/WP.29/GRSG/2023/14

Informal documents: GRSG-125-08 and GRSG-126-12

23. The expert from the Netherlands on behalf of the IWG on Event Data Recorder/Data Storage System for Automated Driving (EDR/DSSAD) introduced the IWG status report (GRSG-126-12). He explained the background of IWG and the state of play of EDR for Heavy Duty Vehicles (HDVs). He stated that more consideration by IWG was necessary on the "Guidance document on EDR for HDV appropriate for adoption in 1958 and 1998 Agreement Resolutions or Regulations" (ECE/TRANS/WP29/GRSG/2023/14), amended by GRSG-125-08. GRSG agreed to resume discussion at its April 2024 session based on the IWG outcome.

B. UN Regulation No. 160 (Event Data Recorder)

Documentation: ECE/TRANS/WP.29/2023/98/Rev.1

24. GRSG noted that the proposal of 02 series of amendments adopted at its last session in March, had been revised (ECE/TRANS/WP.29/2023/98/Rev.1) for submission to the November 2024 session of WP.29, to fully align it with the provisions introduced by Supplement 2 to the original version and Supplement 2 to the 01 series of amendments to UN Regulation No. 160 (ECE/TRANS/WP.29/2023/101 and ECE/TRANS/WP.29/2023/102). GRSG endorsed this revision.

C. New UN Regulation on Event Data Recorder for Heavy Duty Vehicles

Documentation: ECE/TRANS/WP.29/2023/134 and

ECE/TRANS/WP.29/2023/134/Rev.1

Informal documents: GRSG-126-02, GRSG-126-02-Rev.1, GRSG-126-09, GRSG-126-12, GRSG-126-30, GRSG-126-37 and GRSG-

126-38

- 25. The expert from the Netherlands on behalf of the IWG on EDR/DSSAD, with GRSG-126-12 introduced GRSG-126-02 superseding ECE/TRANS/WP.29/2023/134, which was adopted by GRSG at its March 2023 session and submitted for consideration and vote to the WP.29 session of November 2023. He clarified that IWG had not yet decided on including the last stop trigger. He added that IWG had agreed, that instead of the EDR-HDV requirements, manufacturers may comply with the EDR-Light Duty Vehicles (LDV) requirements for vehicles with maximum mass of 8,000 to 12,000 kg, but had not agreed:
- (a) whether this should be addressed in the scope or in the approval section (paragraph 4.); and
- (b) whether for a maximum mass between 8,000 and 12,000 kg, an additional demonstration by the manufacturer to the approval authority is necessary as evidence of effective triggering.

He also introduced GRSG-126-09 for information only, to provide an overview of the potential provisions under EDR Step 2 to be considered by IWG.

26. The expert from EC supported the proposed text of GRSG-126-02, paragraph 1.2.:

"Contracting Parties applying both UN Regulation No. 160 and this UN Regulation may recognize approvals to either UN Regulation as equally valid."

He explained that this compromise for vehicles between 8,000 and 12,000 kgs of maximum mass would prevent the risk of a legislative void, while allowing the Parties to ensure that

the EDR data will be recorded in case of vehicles from 8,000 to 12,000 kgs. He also declared that an alternative solution (application of the material provisions of UN Regulation No. 160 to type-approval of vehicles between 8,000 and 12,000 kgs under paragraph 4.) would be acceptable as the second best solution only if the manufacturers were required to demonstrate to the satisfaction of the type-approval authority the equivalence of the triggering performance with the triggering performance under the UN Regulation on EDR-HDV. GRSG requested a vote of experts from the CPs of the 1958 Agreement on the term "may" or "shall" in the scope of the draft UN Regulation. Most CPs were in favour of the term "may" as proposed by the expert from EC. However, the expert from Finland raised concerns on possible dis-harmonization risks with the term "may". The expert from the United Kingdom introduced GRSG-126-37 proposing the deletion of the alternative LDV requirements to EDR-HDV from the scope and the approval sections, and moving it to the specification section. The expert from OICA stated that the text of the scope proposed by GRSG-126-02 was contrary to the principle of mutual recognition of type approvals of the agreement and introduced GRSG-126-38.

- The expert from AAPC introduced GRSG-126-30 explaining the opinion of his organization on the draft UN Regulation. He reminded GRSG that EDR are data-recording devices used for crash reconstruction to identify potential areas of improvement in safety designs. He added that UN Regulation No. 160 established EDR requirements aligned with the safety designs of the M₁ and N₁ categories of vehicles. The HDV-EDR UN Regulation addresses heavier vehicles with substantially different safety architectures. He clarified that medium vehicles (N₂) derived from light vehicles (N₁) have safety designs consistent with UN Regulation No. 160 across the entire range to 12,000 kg. He stated that the proposed HDV-EDR UN Regulation accepts approvals of such vehicles up to 8 tons under UN Regulation No. 160, but introduces additional requirements for such vehicles between 8,000 and 12,000 kg. Therefore, he noted the absence of evidence-based justifications to support the additional requirements. Thus, he questioned the principle that an EDR compliant with UN Regulation No. 160 could be refused approval under UN Regulation No. 160. Moreover, he stated that AAPC opposed the introduction of uncertainty over whether an N₂ category vehicle integrating an EDR matched to its safety design could be refused approval or could be required to integrate an EDR inappropriate to its design, based solely on an arbitrary weight limit. Finally, he stated that his organization requested that its objection to the additional requirements for approvals under the draft HDV-EDR UN Regulation of vehicles having a maximum mass of 8,000 to 12,000 kg of category N2 derived from N1 vehicles be recorded in the session report.
- 28. GRSG also considered amendment GRSG-126-02-Rev.1 to ECE/TRANS/WP.29/2023/134 as a compromise proposal by the IWG Chair.
- The expert from the United States of America stated that in the spirit of harmonization and cooperation, her country has spent significant resources and time providing expert advice to the IWG from the Department of Transportation's decades of experience with light-duty Event Data Recorders. She clarified that United States Regulation Part 563 serves as the foundation for UN Regulation No. 160. She stated that when the IWG focused on creating a regulation for heavy-duty (H.D.) EDRs under demanding timelines, the United States of America cautioned that the lack of global data and experience with HD EDRs could be a problem. Despite these efforts, the European Commission and European member States chose to focus the UN Regulation on vehicles of 8,000 kg and above, and ignored repeated concerns about the technical deficiencies with the last stop trigger. The United States does not consider the above proposal (ECE/TRANS/WP.29/2023/134 as amended by GRSG-126-02-Rev.1) technically ready for endorsement by GRSG. Without additional flexibilities in the regulatory language to reflect that not all medium- and heavy-duty vehicles mirror the types of vehicles in the European market, the draft UN Regulation may potentially create trade barriers for vehicles produced in North America. Further, she stated that the above proposal does not meet the longstanding objectives of WP.29 to promote safety and harmonization, and therefore it should be returned to the IWG for further work.
- 30. The expert from Canada supported the statement of the expert of the United States of America and the comments from the expert from AAPC regarding the applicability of UN Regulation No. 160 to medium vehicles derived from light vehicles. He believed the adoption

of the proposal was premature because of lack of data and time to fully assess it and expressed support for continued technical discussion of the outstanding issues within the IWG. The expert from France suggested that a case-by-case solution could be the best one for a phase approach and that the proposal could be improved in a second step. The expert from Spain agreed with the approach of the expert from France. The GRSG Chair suggested that after data collection in using the UN Regulation, GRSG would have the basis to amend it. The experts from EC and Germany argued that it was requested several times to provide evidence and data about the concerns expressed by the United States of America.

31. Finally, most CPs to the 1958 Agreement adopted ECE/TRANS/WP.29/2023/134 as amended by GRSG-126-02-Rev.1. The secretariat was requested to replace ECE/TRANS/WP.29/2023/134 with ECE/TRANS/WP.29/2023/134/Rev.1 (ECE/TRANS/WP.29/2023/134 as amended by GRSG-126-02-Rev.1) as a proposal of new a UN Regulation for the Approval of Event Data Recorders on Heavy-Duty Vehicles for consideration and vote at the November 2023 sessions of WP.29 and AC.1.

XIV. UN Regulation No. 0 (International Whole Vehicle Type Approval) (agenda item 13)

Documentation: Informal documents: GRSG-126-26-Rev.2 and GRSG-126-27

- 32. GRSG recalled that its experts were invited to provide further comments and indications on which UN Regulations would not be affected by the Unique Identifier (UI). GRSG also noted that it was expected to complete a tentative list provided at its previous sessions. The expert from CITA introduced GRSG-126-27 to provide clarity on the use of the different markings of a device corresponding to a single UI.
- 33. Finally, GRSG adopted GRSG-126-26-Rev.2 tabled by the experts from CITA and CLEPA and agreed to send it to the IWG on Database for the Exchange of Type Approval documentation as the final deliberation of GRSG on this subject.

XV. Consolidated Resolution on the Construction of Vehicles (agenda item 14)

Documentation: ECE/TRANS/WP.29/GRSG/2023/5

Informal documents: GRSG-126-04 and GRSG-126-39

- The expert from Germany introduced GRSG-126-04, to express support for the 34. proposal from the International Association of the Body and Trailer Building Industry (CLCCR) of assisting driven axles on trailers (ECE/TRANS/WP.29/GRSG/2023/5). He also informed GRSG about the investigation of the Federal Highway Research Institute (BASt) in his country on the influence that driven trailers can have on the driving dynamics of combinations compared to non-driven trailers. He added that BASt had concluded that driven trailers did not negatively impact on vehicle safety in certain conditions. Therefore, he stated that these kinds of axles can distribute and use energy storage more efficiently. The experts from CLEPA and OICA supported the CLCCR proposal and expected coordination between the different working groups to introduce type approvals for this new type of trailer. The expert from France supported the proposal and suggested targeting different combinations of these trailers. GRSG agreed to resume discussion on this agenda item at its April 2024 session based on a revised proposal from CLCCR. At the same time, the Chair was requested to report the highlights of the session to the November 2024 session of WP.29 and to seek guidance on a coordinated activity with other working groups.
- 35. The experts from CLEPA and OICA introduced GRSG-126-39 (GRVA-17-37) introducing consideration on the categorization of automated vehicles. The secretary of the Working Group on Automated/Autonomous and Connected Vehicles (GRVA) announced that GRVA was ready to cooperate with GRSG on new categories of vehicles and was seeking the best way to start this activity. He also announced a workshop on this subject before end of the year by the GRVA secretariat. The Chair of GRSG suggested establishing

a TF on this subject and the expert from OICA volunteered as TF secretary. At the same time, he suggested a Co-Chair from CPs of the 1998 Agreement since S.R.1 would be amended.

XVI. Special Resolution No. 1 concerning the Common Definitions of Vehicle Categories, Masses and Dimensions (agenda item 15)

Documentation: ECE/TRANS/WP.29/GRSG/2022/18

36. GRSG agreed to defer discussion on the amendment to S.R.1 based on a revised proposal superseding ECE/TRANS/WP.29/GRSG/2022/18. In the meantime, the need for a revised proposal to be sponsored by a CP to the 1998 Agreement was reiterated.

XVII. Exchange of Views on Vehicle Automation (agenda item 16)

Documentation: ECE/TRANS/WP.29/GRVA/2023/18

37. The secretary of GRVA informed GRSG on the last outcome of work of the group. He underlined that GRVA was in the pre-regulatory phase and that the working group had specific items to liaise with GRSG such as DSSAD, new vehicle categories and amendments to UN Regulations as a follow-up of the Automated Vehicles Regulatory Screening (AVRS). He said that ECE/TRANS/WP.29/GRVA/2023/18 indicated that UN Regulations Nos. 43, 107, 160, and R.E.3 and S.R.1 were priorities for amendment by GRSG. The expert from the Netherlands informed GRSG that during the week of 16 to 20 October 2023, the representatives of TF- AVRS would convene in Paris to discuss the way forward. He urged a responsive start of the activities on new categories of vehicles and amendments needed to the above-mentioned UN Regulations and Resolutions. Finally, GRSG agreed to resume considerations on the categorization of automated vehicles and amendments on priority UN Regulations based on the follow-up of the meeting of TF-AVRS representatives.

XVIII. Election of officers (agenda item 17)

38. GRSG unanimously elected Mr. A. Erario (Italy) as Chair and Mr. K. Hendershot (Canada) as Vice-Chair for the GRSG sessions scheduled for 2024.

XIX. Other Business (agenda item 18)

A. Exchange of Views on the Future Work of the Working Party on General Safety Provisions

Documentation: ECE/TRANS/WP.29/2023/1/Rev.2

Informal document: GRSG-126-34-Rev.1

39. GRSG adopted GRSG-126-34-Rev.1 (Priority of work of GRSG stemming from ECE/TRANS/WP.29/2023/1/Rev.2) and agreed to submit it to WP.29 at its November 2023 session.

B. Periodical Technical Inspections

Documentation: ECE/TRANS/WP.29/GRSG2023/6

40. GRSG noted that a revised version of ECE/TRANS/WP.29/GRSG/2023/6 was not yet available and agreed to resume discussion based on the feedback from IWG PTI at the October 2023 session of GRSG.

C. Highlights of the June 2023 session of World Forum for Harmonization of Vehicle Regulations

Documentation: Informal document: GRSG-126-10

41. The Secretary reported on the highlights (GRSG-126-10) of the 190th (ECE/TRANS/WP.29/1173) session of the World Forum for Harmonization of Vehicle Regulations.

D. Three-dimensional H point machine

Documentation: Informal document: GRSG-126-20

42. The expert from the Netherlands, Chair of TF on three dimensional "H" (3-D "H) point machine, informed GRSG that TF (with the participation of experts of GRSP) had prepared a new addendum (GRSG-126-20) to the Mutual Resolution No. 1 to be discussed at the December 2023 session of GRSP. He explained that the proposal included specifications and the calibration procedure of the 3-D "H"-point machine, the procedure for determining the point "H", and the actual torso angle for seating positions in motor vehicles which would be used in all referenced UN Regulations and GTRs. GRSG agreed that TF would prepare amendments proposals for the March 2024 session of GRSG to UN Regulations Nos. 35, 43, 46, 125, 166 and 167 and UN GTR No. 6 in the remit of GRSG which would move the references from R.E.3 and from the text of the UN GTR No. 6 to M.R.1. It was also agreed that the authorization to develop the amendments to UN GTRs Nos. 6, 7 and 14 would be coordinated with GRSP would be submitted at the March 2024 session of the Executive Committee of the 1998 Agreement (AC.3). Th aim was to have a complete set of amendments to UN Regulations, UN GTRs and M.R.1 at the November 2024 sessions of WP.29, AC.1 and AC.3,

E. Any Other Business

Documentation: Informal document: GRSG-125-23

43. GRSG noted that the information had not been submitted for further consideration of the use of windscreen with coloured tint (GRSG-125-23).

F. Strategy of the Inland Transport Committee on Reducing Greenhouse Gas Emissions in Inland Transport

Documentation: Informal documents: GRSG-126-13-Rev.1 and GRSG-126-14

The secretariat introduced the Inland Transport Committee (ITC) climate change strategy (GRSG-126-13-Rev.1) on reducing greenhouse gas emissions in inland transport. He also introduced the inputs and feedback from the Working Party on Pollution and Energy (GRPE) to the outline of the ITC climate change strategy and to the biennial report (GRSG-126-14). He informed GRSG that ITC had requested the secretariat to develop a strategy document for reducing Green House Gas (GHG) emissions in inland transport based on international United Nations legal instruments under the Committee's purview with priority actions for ITC and all its relevant subsidiary bodies. This would be considered and possibly adopted by the Committee at its eighty-sixth plenary session in 2024. He added that the secretariat had also been requested to report biennially with in-depth reports to the Committee on climate change and inland transport, starting at the Committee's 2024 session. The expert from the United Kingdom stated that GRSG would have indirect rather than direct contributions to the strategy. He stressed that the protection of children in buses, and cyclists through UN Regulations under its remit, would encourage the shift to green mobility and public transport. He concluded that the strategy rather than limit, should enable people to travel. The expert from OICA remarked that this item should be achieved in cooperation, since specific solutions work better in some countries than in others. He finally encouraged GRSG to view his organization's website on decarbonization (www.oica.net/oica-releasesglobal-decarbonization-framework/). The expert from the Netherlands suggested that assisting driven axles on trailers (e-axles) would definitively contribute to the strategy, even though this contribution would be coordinated among other subsidiary bodies. The expert from India informed GRSG about his country's aim to achieve zero emission by 2070 and how it was fast pacing with measures to achieve this result. He suggested that e-axles and radiant warmers (UN Regulation No. 122) would be a contribution from one side, while on the other, GRSG would contribute to paving the way to use alternative fuels with low-carbon emissions: compressed natural gas (CNG), liquefied natural gas (LNG) and Flex Fuels. The expert from Germany noted that UN Regulation No. 46 allowed the use of a camera instead of large mirrors to reduce aerodynamic drag and fuel consumption. The expert from IMMA underlined that micromobility as a key factor to downsize vehicles and to reduce the environmental impact of vehicles, was on hold because of regional differences in categorizing subcategories stemming from L7. Finally, the GRSG Chair reported that these conclusions of the group would be highlighted to WP.29 at its session in November 2024.

G. UN Regulation No. 118 (Burning behaviour of materials)

Documentation: Informal document: GRSG-126-18

45. Referring to a similar proposal submitted under agenda item 9(b) (paragraph 20. above), the expert from CLEPA introduced (GRSG-126-18) to allow different options to fulfil the marking requirements in cases where more than one UN Regulation was applicable. GRSG requested the secretariat to distribute GRSG-126-18 with an official symbol at its April 2024 session.

H. Provisional Agenda for the Next Session

Documentation: Informal document: GRSG-126-40

46. GRSG noted that its 127th session was scheduled to be held in Geneva from 15 April (14.30 p.m. CET) to 19 April (12.30 p.m.) 2024. GRSG noted that the deadline for the submission of official documents to the secretariat is 22 January 2024, twelve weeks prior to the session. GRSG is expected to follow a proposal (GRSG-126-40) for the provisional agenda as reproduced below:

- 1. Adoption of the Agenda.
- 2. Amendments to Regulations on Buses and Coaches:

UN Regulation No. 107 (M₂ and M₃ vehicles).

- 3. Amendments to Safety Glazing Regulations:
 - (a) UN Global Technical Regulation No. 6 (Safety glazing);
 - (b) UN Regulation No. 43 (Safety glazing).
- 4. Awareness of the Proximity of Vulnerable Road Users:
 - (a) UN Regulation No. 46 (Devices for indirect vision);
 - (b) UN Regulation No. 158 (Reversing motion);
 - (c) UN Regulation No. 159 (Moving Off Information System);
 - (d) UN Regulation No. 166 (Vulnerable Road Users in Front and Side Close Proximity);
 - (e) UN Regulation No. 167 (Vulnerable Road Users Direct Vision).
- 5. Amendments to External Projections Regulations:
 - (a) UN Regulation No. 26 (External projections of passenger cars);
 - (b) UN Regulation No. 61 (External projections of commercial vehicles).
- 6. UN Regulation No. 39 (Speedometer and Odometer).
- 7. UN Regulation No. 66 (Strength of superstructure (buses)).
- 8. Amendments to Regulations on Gas-Fuelled Vehicles:

- (a) UN Regulation No. 67 (Liquefied Petroleum Gas vehicles);
- (b) UN Regulation No. 110 (Compressed Natural Gas and Liquified Natural Gas vehicles).
- 9. UN Regulation No. 118 (Burning behaviour).
- 10. UN Regulation No. 122 (Heating systems).
- 11. UN Regulation No. 125 (Forward field of vision of drivers).
- 12. UN Regulation No. 144 (Accident Emergency Call System).
- 13. Event Data Recorder:
 - (a) Guidance on Event Data Recorder Performance Elements Appropriate for Adoption in the 1958 and 1998 Agreement Resolutions or Regulations;
 - (b) UN Regulation No. 160 (Event Data Recorder);
 - (c) New UN Regulation on Event Data Recorder for Heavy-Duty Vehicles.
- 14. UN Regulation No. 0 (International Whole Vehicle Type Approval).
- 15. Consolidated Resolution on the Construction of Vehicles.
- 16. Special Resolution No. 1 concerning the Common Definitions of Vehicle Categories, Masses and Dimensions.
- 17. Exchange of Views on Vehicle Automation.
- 18. Three-dimensional H-point machine,
- 19. Other Business:
 - (a) Exchange of Views on the Future Work of the Working Party on General Safety Provisions;
 - (b) Periodical Technical Inspections;
 - (c) Highlights of the November 2023 and March 2024 Sessions of the World Forum for Harmonization of Vehicle Regulations;
 - (d) Any Other Business.

Annex I

[English only]

List of Informal Documents Considered During the Session

| No. | (Author) Title | Follow-up | Agenda Item |
|----------|--|-----------|-------------|
| 1 | (TF-R39MV) Draft proposal for a GRSG Task Force on UN Regulation No. 39 covering mileage values (Terms of References) | (a) | 6 |
| 2/Rev.1 | (IWG on EDR/DSSAD) Proposal of new UN Regulation concerning the Approval of Event Data Recorders for Heavy-Duty Vehicles | | 12(c) |
| 3/Rev.2 | (GRSG Chair) Running order of the 126th session of GRSG | (a) | 1 |
| 4 | (Germany) German Statement to GRSG/2023/5 (CLCCR) | (a) | 14 |
| 5 | (Spain) Status Report of the Informal Working Group on Safer Transport of Children in Buses and Coaches (IWG-STCBC) | (a) | 2 |
| 6 | (VRU-Proxi) Proposal for amendment to the original version of UN Regulation No. 167 (Direct Vision) | (a) | 4(e) |
| 7/Rev.1 | (VRU-Proxi) Proposal for amendments to document GRSG/2023/21 (Proposal for Supplement 1 to the original version of UN Regulation No. 167 Vulnerable Road Users Direct Vision) | (d) | 4(e) |
| 8 | (UITP) Proposal for Supplement 1 to the 10 series of amendments to UN Regulation No. 107 (M ₂ or M ₃ vehicles) (EDR/DSSAD) EDR/DSSAD IWG Revisions to ECE/TRANS/WP.29/GRSG/2023/14 | (c) | 2 |
| 9 | (IWG on EDR/DSSAD) EDR Step 2 | (a) | 12(c) |
| 10 | (Secretariat) Highlights of WP.29 June 2023 session | (a) | 18(c) |
| 11/Rev.1 | (Secretariat) Annotated Provisional Agenda for the 126th Session of GRSG | (a) | 1 |
| 12 | (IWG on EDR/DSSAD) IWG on EDR/DSSAD Status Report | (d) | 12(c) |
| 13/Rev.1 | (Secretariat) Development of the ITC Strategy on reducing greenhouse gas emissions in inland transport | (d) | 18(f) |
| 14 | (Secretariat) Inputs and feedback from [GRPE/WP.29] to the outline of the ITC climate change strategy and to the biennial report | (a) | 18(f) |
| 15 | (TF-R39MV) GRSG Task Force on UN Regulation No. Regulation No. 39 covering mileage values - Status Report | (a) | 6 |
| 16 | (OICA) Proposal for the 02 series of amendments to UN Regulation No. 43 (Safety glazing | (b/e) | 3(b) |
| 17 | (CLEPA) Proposal for a new supplement to Regulation No. 110 "CNG and LNG vehicles" | (b) | 9(b) |
| 18 | (CLEPA) Proposal for a new supplement to Regulation No. 118 "Burning behaviour of materials" | | 18(g) |
| 19/Rev.1 | (The Netherlands) Proposal for the 03 series of amendments to UN Regulation No. 55 (Mechanical couplings) | (d) | 7 |
| 20 | (The Netherlands) Proposal for Amendment 5 of the Mutual Resolution No. 1 (M.R.1) of the 1958 and the 1998 Agreements | (a) | 18(d) |

ECE/TRANS/WP.29/GRSG/105

| No. | (Author) Title | Follow-up | Agenda Item |
|----------|---|-----------|-------------|
| 21/Rev.1 | (TF-R39MV) Draft proposal for a GRSG Task Force on UN Regulation No. 39 covering mileage values (Terms of References) | (d) | 6 |
| 22 | (The Netherlands) IWG on FVA Status Report | (d) | 11 |
| 23 | (TF-R46) Status Report of the work of Task Force on UN Regulation No. 46 (Devices for indirect vision) | (a) | 4(a) |
| 24/Rev.1 | (TF-R46) Proposal for the 06 series of amendments to UN Regulation No. 46 (Devices for indirect vision) | (d) | 4(a) |
| 25/Rev.1 | (TF-R46) Proposal for Supplement 1 to the 05 series of amendments to UN Regulation No. 46 (Devices for indirect vision) | (d) | 4(a) |
| 26/Rev.2 | (CITA/CLEPA) 1958 Agreement - Unique Identifier Proposed actions for the IWG on DETA, GRs and WP.29 | (d) | 13 |
| 27 | (CITA) 126th GRSG - Some thoughts about the Unique Identifier | (a) | 13 |
| 28 | (Norway) Frontal protection in buses | (a) | 2 |
| 29 | (UITP) "Accessibility of Buses" Draft Amendment of Regulation No. 107 | (a) | 2 |
| 30 | (AAPC) Global EDR | (a) | 12(c) |
| 31 | (VRU-Proxi) Supplement 1 to UN Regulation No. 167 IWG VRU-Proxi | (a) | 4(e) |
| 32 | (VRU-Proxi) Proposal for the Supplement to Regulation No. 158 (Reversing Motion | | 4(b) |
| 33 | (United Kingdom) Potential amendment to ensure frontal direct vision requirements in UN Regulation No. 167 | (a) | 4(e) |
| 34/Rev.1 | (Secretariat) Work Priorities of the Working Party on General Safety Provisions | (d) | 18(a) |
| 35 | (United Kingdom) 126th VRU proxi group: A- pillar distance measurement and reduction in volume by A-pillar distance | | 4(e) |
| 36 | (France) Proposal for a Corrigendum to the 06-07-08-09-10 series of amendments to UN Regulation No. 107 (Buses and coaches) (CITA) 1958 Agreement - Unique Identifier Proposed actions for the IWG on DETA, Working Parties and WP.29 | | 2 |
| 37 | (United Kingdom) Amendments to GRSG-126-02 | (a) | 12(c) |
| 38 | (OICA) Proposal to amend document GRSG-126-02 to allow vehicles up to 8t/12t to utilise approvals to UN R.160 as being equivalent. | | 12(c) |
| 39 | (OICA/CLEPA) Considerations on the categorization of Automated | (c) | 14 |
| 40 | (Secretariat) Agenda of 127th session of GRSG | (e) | 18(h) |

Notes:

- (a) Consideration completed or superseded.
- (b) Continue consideration at the next session with an official symbol.
- (c) Continue consideration at the next session as an informal document.
- (d) Adopted/Endorsed to be submitted to WP.29.
- (e) Continue consideration on the basis of a revised document.

Annex II

[English/French only]

Draft Amendments to UN Regulation No. 107 (M_2 and M_3 vehicles)

Adopted text based on GRSG-126-36 (see paragraph 6. of this report)

Annex 3, paragraph 7.8.3.6., corrigé comme suit :

"7.8.3.6. L'uniformité de l'éclairement doit être évaluée conformément aux mesures suivantes:

Uniformité d'éclairement maximal = Niveau maximum d'éclairage enregistré

Niveau moyen d'éclairage enregistré

Uniformité d'éclairement minimale = Niveau minimum d'éclairage enregistré

Niveau moyen d'éclairage enregistré

Annex III

Draft Amendments to UN Regulation No. 46 (Devices for indirect vision)

Amendments adopted to ECE/TRANS/WP.29/GRSG/2023/23 (see paragraph 9. of this report)

Amendments to paragraphs 2.1.1.3., 2.2. and 2.3. shall be deleted

Insert new paragraphs 2.7. to 2.8., to read:

- "2.7. "External original surface" means the outside of the vehicle including the bonnet, the lid of the luggage compartment, the doors, the wings, the roof, the lighting and light-signalling devices, the visible strengthening components and additional external original design surfaces defined by the manufacturer excluding protruding supports for devices of indirect vision.
- 2.8. "Impact point" is the position of the hammer, described in paragraphs 6.3.2.2.3. and 6.3.2.2.4., independent of where first contact occurs."

Paragraph 5.2., delete the text in square brackets

Paragraph 6.1.1.2., move the figures after 6.1.1.2.(a)(iii)

Paragraph 6.1.1.6., amend to read:

"6.1.1.6. The device for the attachment of mirrors to the vehicle shall be so designed that a cylinder with a 70 mm radius (50 mm in the case of an L-category vehicle), having as its axis the axis, or one of the axes, of pivot or rotation which ensures deflection of the mirror in the direction of impact concerned, passes through at least part of the **external original** surface **where the device is protruding from.**"

Paragraph 6.3.2., amend to read:

"6.3.2. Impact test

The test according to this paragraph is not to be carried out for:

- (a) exterior devices not projecting beyond the overall width and length of the vehicle and providing a frontal deflecting area of an angle not more than 45° measured in relation to the longitudinal median plane of the vehicle, or
- (b) devices not protruding more than 100 mm measured at the attachment point beyond the circumscribing external original surface of the vehicle according to Regulation No. 26."

See Annex 9."

Paragraph 6.3.2.1.1., amend to read:

"6.3.2.1.1. The test rig consists of a pendulum capable of swinging about two horizontal axes at right angles to each other, one of which is perpendicular to the plane containing the "release" trajectory of the pendulum.

The end of the pendulum comprises a hammer formed by a rigid sphere with a diameter of 165 ± 1 mm and a 5 ± 1 mm thick rubber covering of Shore A hardness 50.

A device is provided which permits determination of the maximum angle assumed by the arm in the plane of release.

A support firmly fixed to the structure of the pendulum serves to hold the specimens in compliance with the impact requirements specified in **paragraph 6.3.2.2.7.** below.

...'

Paragraph 6.3.2.2.2.2., square brackets shall be removed

Paragraph 6.3.2.2.5., amend to read:

"6.3.2.2.5. When, ...

(a) Either ...

Or, in the case of mirrors, the **impact** point **of the** hammer is located **on the reflecting surface** at least 10 mm from the periphery of the reflecting surface."

Amendment to paragraph 6.3.2.2.7.3., shall be removed

Paragraph 15.2.1.1.2., square brackets shall be removed

Paragraph 15.2.1.2., remains unchanged

New paragraph 15.2.3.10., shall be deleted

Paragraph 16.1.2., amend to read:

"16.1.2. Operating readiness (System availability)

Non-operation of the system (e.g. CMS failure or CMS in a folded position) shall be recognizable to the driver and indicated by, e.g. warning indication, display information, absence of status indicator. The information for the driver shall be explained in the operator's manual."

Paragraph 16.1.3.1.3., square brackets shall be removed

Paragraph 16.2.5., remains unchanged

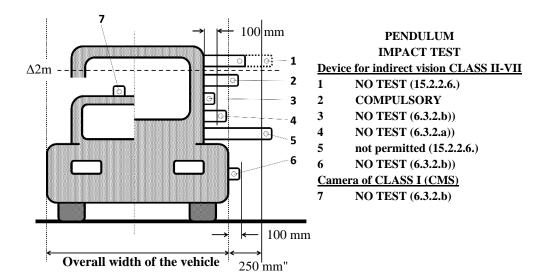
Insert new paragraphs 22.26. to 22.33., to read:

- "22.26. As from the official date
- 22.27. As from 1 September **2025**, Contracting Parties applying this Regulation shall not be obliged to accept type approvals to the preceding series of amendments, first issued after 1 September **2025**.
- 22.28. Until 1 September **2027**, Contracting Parties applying this Regulation shall accept type approvals to the preceding series of amendments, first issued before 1 September **2025**.
- 22.29. As from 1 September 2027, Contracting Parties ...
- 22.30. ...

..."

Annex 9, amend to read:

"Figure 1



Adopted text based on GRSG-126-25-Rev.1 (see paragraph 9. of this report)

The same text of ECE/TRANS/WP.29/GRSG/2023/23 as amended above, without paragraphs 6.3.2.1.1., 6.3.2.2.5., 16.1.2., 22.26 to 22.33 nor Annex 5.

Annex IV

Draft Amendments to UN Regulation No. 167 (Vulnerable Road Users Direct Vision)

Amendments adopted to ECE/TRANS/WP.29/GRSG/2023/21 (see paragraph 13. of this report)

Insert new paragraph 5.2.2.2., to read:

"5.2.2.2. High capacity vehicles and vehicles with competing objectives

N₃ vehicles in Level 3 meeting the design and construction criteria as follows:

- (a) equipped with a coupling device, and;
- (b) having 3 axles or more, and;
- (c) with a maximum engine power of 320 kW or more, and;
- (d) designed with a permissible maximum gross combination weight (GCW) mass exceeding **60** tons,

do not need to meet the required Front Visible Volume."

Paragraph 5.2.2.1., Table 1, amend to read:

"Table 1 Minimum Values of Visible Volume

| | | Minimum Volume (m³) of Direct Vision | | | |
|-------------------------|-----------------------|--------------------------------------|-----------------------|-------------------|-------------------|
| | | Level 1 | | Level 2 | Level 3 |
| Nearside Visible Volume | | 3.4 | | Not Specified | Not Specified |
| Front Visible Volume | IAPD ≥ 2 156mm | 1.8 | IAPD ≥ 2 154mm | 1.0 | 1.0 |
| | IAPD < 2 156mm | See paragraph 5.3 | IAPD < 2 154mm | See paragraph 5.3 | See paragraph 5.3 |
| Offside Visible Volume | | 2.8 | | Not Specified | Not Specified |
| Total Visible Volume | | 11.2 | | 8.0 | 7.0 |

Paragraphs 5.3. to 5.3.3., amend to read:

"...

5.3.1. Level 1: $V = 392.13379*IAPD^2 - 275907.57455*IAPD + 573475207.82932$

5.3.2. Level 2: $V = 329.82551*IAPD^2 - 480212.23549*IAPD + 504819967.89481$

5.3.3. Level 3: $V = 329.82551*IAPD^2 - 480212.23549*IAPD + 504819967.89481"$

Annex 5, Paragraph 2.1.2., amend to read:

"2.1.2. Vehicles of category M₂ and N₂, derived from M₁ or N₁ approved to UN Regulation No. 125, shall be considered compliant with the requirements of this Regulation."

Annex V

Draft Proposal for a GRSG Task Force on UN Regulation No. 39 to Cover Mileage Values

Adopted text based on GRSG-126-21-Rev.1 (see paragraph 16. of this report)

I. Terms of Reference

- 1. In accordance with ECE/TRANS/WP.29/GRSG/104 (report of the Working Party on General Safety Provisions on its 125th session), paragraph 49: the Task Force (TF) shall develop a draft regulatory proposal to amend UN Regulation No. 39, or any other regulatory proposal, with regard to speedometer and odometer equipment including its installation, in respect of mileage values processing. In particular, it shall develop uniform provisions on:
 - (a) accuracy of the on-board odometer mileage values in vehicles and develop a maximum tolerance and type-approval test procedure accordingly;
 - (b) security management and anti-tampering, to prevent and/or detect, to the greatest extent possible, manipulation of the on-board odometer mileage values in vehicles;
 - (c) accuracy, security management and anti-tampering of the odometer mileage values displayed to the driver.

TF shall take into account that mileage values may be transferred and stored off-board and explore potential associated provisions.

The task force will explore the possibility for self-check and external check (enforcement).

- 2. When developing the regulatory proposal(s), TF should take into account existing technology, data and research. Furthermore, it should consider pre-existing standards as well as national and international legislation covering the same scope.
- 3. TF shall focus on vehicles of categories MN taking into consideration vehicles equipped with measures to protect security, e.g. tachographs.

TF shall also consider accuracy requirements for vehicles of category L at an appropriate timing.

- 4. The target completion dates for the work of TF shall be:
 - accuracy of the on-board odometer mileage values: official document for the 128th session of GRSG (October 2024) for M, N (and L at appropriate timing);
 - (b) anti-tampering of the on-board odometer mileage values: official document for the 128th session of GRSG (October 2024) for MN;
 - (c) accuracy and anti-tampering of the odometer mileage values displayed to the driver: official document for the 128th session of GRSG (October 2024).

TF may deliver provisions at a later date for MN equipped with measures to protect security, e.g. tachographs.

5. The adoption process remains under the responsibility of GRSG, WP.29 and AC.1 in line with the administrative procedures as defined in the 1958 Agreement.

TF is expected to take into account the work performed by other Working Parties subsidiary to WP.29 and by WP.15.

II. Rules of Procedure

1. TF is a subsidiary body of GRSG and is open to all Contracting Parties to the Agreements administered by WP.29, vehicle manufacturers and their suppliers, Technical Services and the participants of all Working Parties (GRs) subsidiary to WP.29.

Additional experts may attend on a case-by-case basis, invited per a consensual decision of TF. These experts shall not be part of the decision process.

- 2. A Chair and a Secretary will manage TF.
 - (a) The chairmanship shall be under the responsibility of The Netherlands,
 - (b) The secretariat shall be under the responsibility of OICA.
- 3. The working language of TF will be English.
- 4. All documents and/or proposals shall be submitted to the Secretary of TF in a suitable electronic format in advance of the meeting. TF may refuse to discuss and endorse any item or proposal which has not been circulated 10 working days prior to that meeting.
- 5. An agenda and related documents will be made available on the website by the Secretary, in advance of all scheduled meetings.
- 6. Decisions will be reached by consensus. When consensus cannot be reached, the Chair of TF shall present the different points of view to GRSG. The Chair may seek guidance from GRSG, as appropriate.
- 7. The progress of TF will be routinely reported to GRSG wherever possible as an informal document and presented by the Chair, the Secretary or their representative(s).
- 8. All working documents should be distributed in digital format. Meeting documents should be made available to the Secretary for publication on the website of WP.29.

Annex VI

Draft Amendments to UN Regulation No. 55 (Mechanical couplings)

Amendments adopted to ECE/TRANS/WP.29/GRSG/2023/18 (see paragraph 13. of this report)

Insert new paragraphs 13.6. to 13.10., to read:

"13.6. As from the ...

• • •

13.9. Notwithstanding paragraph 13.7., ...changes introduced by the **03** series of amendments.

. . . "

Annex 7, paragraph 1.4. to 1.4.3., amend to read:

- "1.4. Attachment of coupling devices and drawbars on trailers.
- 1.4.1. Drawbars for centre axle trailers shall have a support device which is adjustable in height if the bearing mass at the coupling device on the trailer exceeds 50 kg, when the trailer is uniformly loaded to its technically permissible maximum mass.

This requirement shall not apply in the case of trailers designed for special operations where they are normally only separated in a workshop (i.e. Class T couplings) or when loading and unloading in specifically designed operating areas.

- 1.4.2. When attaching coupling device and drawbar to centre-axle trailers with a maximum mass, C, of more than 3.5 tonnes and more than one axle, the trailers shall be equipped with device for axle load sharing.
- 1.4.3. Hinged drawbars shall be clear of the ground. They shall not fall below a height of 200 mm from the ground when released from the horizontal position. See also Annex 5, paragraphs 5.3. and 5.4."

Annex VII

[English only]

GRSG Informal Working Groups

| Informal working group | Secretary | |
|--|------------------------------|---------------------------|
| Awareness of Vulnerable Road Users Proximity (VRU-Proxi) | Mr. L. Rozanski (EC) (Chair) | Mr. Johan Broeders (OICA) |
| Field of Vision Assistants (IWG-FVA) | Mr. H. Lammers | |