

Submitted by the Secretary of the IWG VRU-Proxi

Informal document **GRSG-114-21**
(114th GRSG, 9-13 April 2018
agenda item 5.)

Proposal for a new UN Regulation on uniform provisions concerning the approval of motor vehicles with regard to the Blind Spot Information System

The text reproduced below was prepared by the secretary of the IWG on Awareness of Vulnerable Road Users proximity in low speed manoeuvres (VRU-Proxi) to demonstrate the current status of the proposed regulation on Blind Spot Information Systems.

I. Proposal

Regulation No. XXX

Uniform provisions concerning the approval of motor vehicles with regard to the Blind Spot Information System

1. Scope

- 1.1. This Regulation applies to the blind spot information system of vehicles of categories [M₂] N₂ (>8t permissible maximum mass) and [M₃ and] N₃; other vehicles may be approved at the request of the manufacturer.
- 1.2. The requirements of this Regulation are so worded as to apply vehicles which are developed for right-hand traffic. In vehicles that are developed for left-hand traffic these requirements shall be applied by inverting the criteria, when appropriate.
2. Definitions
For the purposes of this Regulation:
 - 2.1. "Approval of a vehicle type" means the full procedure whereby a Contracting Party to the Agreement certifies that a vehicle type meets the technical requirements of this Regulation;
 - 2.2. "Vehicle type with regard to its Blind Spot Information System" means a category of vehicles which do not differ in such essential respects as:
 - (a) The manufacturer's trade name or mark;
 - (b) Vehicle features which significantly influence the performances of the Blind Spot Information System;
 - (c) The type and design of the Blind Spot Information System.
 - 2.3. "Blind Spot Information System (BSIS)" means a system to inform the driver of a possible collision with a bicycle near side, travelling in a trajectory parallel to the vehicle, if the driver would initiate a turn manoeuvre.
 - 2.4. "Reaction time" means the time between the information signal is given and a driver reaction has occurred.
 - 2.5. "Driver Brake deceleration" means the deceleration that typical drivers apply after receiving the information signal.
 - 2.6. "Stopping distance" means the distance required by the vehicle to come to a full stop after the Blind Spot Information Signal has been given, taking into account reaction time and brake deceleration.
 - 2.7. "Collision point" means the position where the trajectory of any vehicle point would intersect with any bicycle points if a turn by the vehicle would be initiated.
 - 2.8. "Last Point of Information (LPI)" means the point at which the information signal shall have been given. It is the collision point minus the stopping distance on the vehicle trajectory.

Comment [JB1]: Agreed in 5th VRU Proxi meeting to use 8t for N2 as this is similar to other EU and ECE Regulation

EC comment: EU Regulation may also include buses, EC will deliver accident data. For time being M2 and M3 between brackets in this regulation.

DE: Accidentology does not provide a motivation for inclusion of buses.

- 2.9. "Near side" means the side of the vehicle near the bicycle. The near side of the vehicle is the right side for right-hand traffic and the left side for left-hand traffic.
- 2.10. "Information signal" means an optical signal with the purpose of informing the vehicle driver about a nearby moving bicycle.
- 2.11. "Vehicle Trajectory" means the connection of all positions where the front right corner of the vehicle has been or will be during the course of a test run, projected towards the ground plane.
- 2.12. Bicycle means a combination of a bicycle and cyclist. This is simulated in test cases as specified in section 6.5 with a test device according to ISO [WD] 19206-4
- 2.13. "Common space" means an area on which two or more information functions (e.g. symbols) may be displayed, but not simultaneously
- 2.14. "Lateral displacement" means the distance between the vehicle and the bicycle at the near side of the vehicle where the vehicle and bicycle are parallel to each other. The distance is measured between the plane parallel to the median longitudinal plane of the vehicle and touching its lateral outer edge, disregarding the projection of devices for indirect vision, and the median longitudinal plane of the bicycle minus half of the bicycle width being 250 mm. The lateral outer edge of the vehicle is only to be regarded in the area between the vehicle's forwardmost point and up to 6 m rearward.
- [2.15. **"First point of information" means the most forward point at which the information signal can have been given. It is the collision point minus the stopping distance on the vehicle trajectory plus a travel time of [8] seconds, taking into account the respective moving speeds of bicycle and vehicle.]**
- [2.16. **"Vehicle Front right corner" means the projection of the line that results from the intersection of vehicle side plane (not including mirrors) and vehicle front plane (not including mirrors) with the road surface.]**

Comment [s2]: Should be published approximately in Q3 2018.

3. Application for approval

- 3.1. The application for approval of a vehicle type with regard to the BSIS shall be submitted by the vehicle manufacturer or by his authorized representative.
- 3.2. It shall be accompanied by the documents mentioned below in triplicate and include the following particular:
- 3.2.1. A description of the vehicle type with regard to the items mentioned in paragraph 5. below, together with dimensional drawings and the documentation as referred to in paragraph 6.1. below. The numbers and/or symbols identifying the vehicle type shall be specified.
- 3.3. A vehicle representative of the vehicle type to be approved shall be submitted to the Technical Service conducting the approval tests.

4. Approval

- 4.1. If the vehicle type submitted for approval pursuant to this Regulation meets the requirements of paragraph 5. below, approval of that vehicle type shall be granted.
- 4.2. The conformity of the requirements in paragraph 5. below shall be verified with the test procedure as defined in paragraph 6. below, however its operation shall not be limited to these test conditions.
- 4.3. An approval number shall be assigned to each vehicle type approved; its first two digits (00 for the Regulation in its initial form) shall indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party shall not assign the same number to the same vehicle type equipped with another type of Blind Spot Information System, or to another vehicle type.
- 4.4. Notice of approval or of refusal or withdrawal of approval pursuant to this Regulation shall be communicated to the Parties to the Agreement applying this Regulation by means of a form conforming to the model in Annex 1 and photographs and/or plans supplied by the applicant being in a format not exceeding A4 (210 x 297 mm), or folded to that format, and on an appropriate scale.
- 4.5. There shall be affixed, conspicuously and in a readily accessible place specified on the approval form, to every vehicle conforming to a vehicle type approved under this Regulation, an international approval mark conforming to the model described in Annex 2, consisting of either:
 - 4.5.1.1. A circle surrounding the letter "E" followed by the distinguishing number of the country which has granted approval;¹
 - 4.5.1.2. The number of this Regulation, followed by the letter "R", a dash and the approval number to the right of the circle prescribed in paragraph 4.5.1. above; or:
 - 4.5.2. An oval surrounding the letters "UI" followed by the Unique Identifier.
- 4.6. If the vehicle conforms to a vehicle type approved under one or more other Regulations annexed to the Agreement, in the country which has granted approval under this Regulation, the symbol prescribed in paragraph 4.5. above need not be repeated; in such a case, the Regulation and approval numbers and the additional symbols shall be placed in vertical columns to the right of the symbol prescribed in paragraph 4.5. above.
- 4.7. The approval mark shall be clearly legible and be indelible.
- 4.8. The approval mark shall be placed close to or on the vehicle data plate.

¹ The distinguishing numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.6 - www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29resolutions.html

5. Specifications

5.1. Any vehicle fitted with a BSIS complying with the definition of paragraph 2.3. above shall meet the requirements contained in paragraphs 5.2. to 5.5. of this Regulation.

5.2. General requirements

The effectiveness of the BSIS shall not be adversely affected by magnetic or electrical fields. This shall be demonstrated by compliance with the technical requirements and transitional provisions of UN Regulation No. 10, 04 series of amendments or any later series of amendments.

5.3. Performance requirements

5.3.1. The BSIS shall inform the driver so that the vehicle can be stopped before crossing the bicycle trajectory, taking into account a reaction time of 1.4 seconds and a deceleration of 5 m/s². This shall be tested as specified in paragraph 6.5.

It shall also inform the driver about approaching bicycles while the vehicle is stationary before the bicycle reaches the vehicle front, taking into account a reaction time of 1.4 seconds. This shall be tested as specified in paragraph 6.6.

The signal shall be maintained for as long as the conditions are fulfilled and for at least three additional seconds.

5.3.1.1. **[Proposal from drafting group: Two-stage deactivation process similar to e.g. ESC deactivation. First stage/activation: e.g. sounds, warning functions, etc are turned off. Second stage: System is completely turned off, but is reactivated as soon as driving conditions significantly change].**

[GER: Provisions to deactivate any optional functions as specified in 5.4.3 are allowed if the functionality as described in 5.3.1. maintained.]

5.3.1.2. The information signal shall meet the requirements of paragraph 5.4. below.

5.3.1.3. The BSIS shall operate for all forward vehicle speeds between 0 km/h and 30 km/h and for lateral displacement of the bicycle from [0.25] to [4.5] m. The manufacturer shall demonstrate the operation and limitations in accordance with paragraph 6.1.

5.3.1.4. The BSIS shall be able to give an information signal for a bicycle moving with a speed between 5 km/h and 20 km/h at a lateral displacement between bicycle and vehicle of between 1.15 and 4.5 metres, which could result in a collision between bicycle and vehicle [0] to 6 m with respect to the front right corner of the vehicle, if typical steering input would be applied by the vehicle driver.

5.3.1.5. The BSIS shall be designed not give an information signal for static non-VRU objects such as cones, traffic signs, hedges and parked cars, **[however it may give an information signal when a collision is imminent]**

Comment [s3]: France: In addition we suggest to confirm the immunity check by adding in the UNECE n°10 regulation the following wording : "§ 2.12. "Immunity related functions" are: [...]"
(b) Functions related to driver, passenger and other road user protection:
(i) e.g. airbag and safety restraint systems, **blind spot information system.**"

Comment [JB4]: Between brackets to no common agreement / different opinions. EC is not in favour of switching off as this is an information system only. Russia prefers switch off in case of extreme weather conditions. EC challenged the industry to manage this.

- 5.3.2. The system shall also provide the driver with the failure warning specified in paragraph 5.5.1. below when tested in accordance with the provisions of paragraph 6.9. below (failure detection test).
- 5.4. Information signal
- 5.4.1. The blind spot information referred to in paragraph 5.3.1. above shall be an information signal and noticeable and easily verifiable by the driver from the driver's seat .This information signal shall be visible even by daylight
- 5.5. Failure warning signal
- 5.5.1. The failure warning referred to in paragraph 5.3.2. above shall be a yellow optical warning signal [and shall be other than or clearly distinguishable from the information signal]. The failure warning signal shall be visible even by daylight and shall be easily verifiable by the driver from the driver's seat.
- 5.5.2. The BSIS optical failure warning signal shall be activated either when the ignition (start) switch is turned to the "on" (run) position or when the ignition (start) switch is in a position between the "on" (run) and "start" that is designated by the manufacturer as a check position (initial system (power-on)) or when the vehicle is in "active driving possible mode" (whichever is applicable). This requirement does not apply to warning signals shown in a common space.
- 5.5.3. When the driver is provided with an optical warning signal to indicate that the BSIS is temporarily not available, for example due to inclement weather conditions, the signal shall remain active as long as the BSIS is not available. The failure warning signal specified in paragraph 5.3.2. above may be used for this purpose.
- 5.6. Provisions for inspection
- 5.6.1. It shall be possible to confirm the correct operational status of the BSIS by a visible observation of the failure warning signal status.

6. [Test procedure [this has not been discussed in the IWG yet]

- 6.1. The manufacturer shall provide a documentation package which gives access to the basic design of the system and, if applicable, the means by which it is linked to other vehicle systems. The function of the system shall be explained and the documentation shall describe how the operational status of the system is checked, whether there is an influence on other vehicle systems, and the method(s) used in establishing the situations which will result in a failure warning signal being displayed. The documentation package shall give sufficient information for the type-approval authority to identify the type and to aid the decision-making on the selection of the worst-case.
- 6.2. Test conditions
- 6.2.1. The test shall be performed on a flat, dry asphalt or concrete surface.
- 6.2.2. The ambient temperature shall be between 0° C and 45° C.
- 6.2.3. The test shall be performed under visibility conditions that allow safe driving at the required test speed.
- 6.3. Vehicle conditions

Comment [s5]: The Secretary explained the origin of the paragraph as the best way found by the author to cover all the multiple situations encountered in the life of a vehicle while limiting the number of tests as reasonable as possible. The regulation hence imposes one test scenario, yet the manufacturer must demonstrate compliance for all the other real world situations via documentation. This does not preclude the Technical Service to impose an additional test when they believe increased evidence is necessary.

The chair found it a good approach, perhaps with some rewording. NL was keen that Technical Services get a means to recognize the type of BSIS with regard to the regulation in this documentation package as well as the worst case scenario.

OF to explain, IWG to decide on this paragraph.

- 6.3.1. Test weight
- The vehicle may be tested at any condition of load, the distribution of the mass among the axles being that stated by the vehicle manufacturer without exceeding any of the maximum permissible mass for each axle. No alteration shall be made once the test procedure has begun. The vehicle manufacturer shall demonstrate through the use of documentation that the system works at all conditions of load.
- 6.3.2. The vehicle shall be tested at the tyre pressures for normal running conditions.
- 6.3.3. In the case where the BSIS is equipped with a user-adjustable information timing, the test as specified in paragraph 6.5. below shall be performed with the information threshold set at its latest setting. No alteration shall be made once the test procedure has begun.
- 6.4. Optical failure warning signal verification test
- With the vehicle stationary check that the optical warning signal(s) comply with the requirements of paragraph 5.4.3. above.
- 6.5. Blind Spot Information Dynamic Test
- 6.5.1. Using cones and the bicycle dummy, form a corridor according to Figure 1, Appendix 1 of this document and the additional dimensions as specified in Table 1, Appendix 1 of this Regulation.
- 6.5.2. Position the bicycle target (as detailed in Annex 3 of this Regulation) at the appropriate starting position as shown in Figure 1, Appendix 1 of this Regulation.
- 6.5.3. Position a local traffic sign corresponding to sign C14 as defined in the Vienna convention on road signs and signals (speed limit 50 km/h) or the local sign closest to this sign in meaning on a pole at the entry of the corridor as shown in Figure 1, Appendix 1 of this Regulation.
- 6.5.4. Drive the vehicle at a speed as shown in Table 1, Appendix 1 of this document with a tolerance of +/- 2 km/h through the corridor.
- 6.5.5. Do not operate the turn lights when initiating the turn towards the bicycle trajectory.
- 6.5.6. Move the bicycle dummy on a straight line as shown in Figure 1, Appendix 1 of this document in a way that the dummy position crosses line A (Figure 1, Appendix 1) with a tolerance of +/- 0.5 m at the same time when the vehicle crosses line B (Figure 1, Appendix 1) with a tolerance of +/- 0.5 m.
- The lateral deviation of the dummy with respect to a straight line connecting initial starting position and theoretical impact point shall be maximum ± 0.2 m.
- Move the dummy in a way that the dummy moves in a steady state for at least 8 seconds, with the speed as shown in Table 1, Appendix 1 of this document (with a speed tolerance of ± 0.5 km/h), before reaching the collision point.
- 6.5.7. Verify that the Blind Spot Information signal has been activated before the vehicle crosses line C, Figure 1, Appendix 1 of this document.

- 6.5.8. Verify that the Blind Spot Information signal has not been activated when passing the traffic sign and any cones as long as the bicycle dummy is still stationary.
- 6.5.9. Repeat paragraphs 6.5.1. to 6.5.8. for test cases shown in Table 1, Appendix 1 of this Regulation **[Where this is deemed justified, the technical service may select test cases different than shown in Table 1, Appendix 1, within the range of vehicle speed, bicycle speed and lateral clearance as indicated in paragraphs 5.3.1.3. and 5.3.1.4. The technical service shall check that the selected parameter combination would lead to a collision between bicycle and vehicle with a collision point not more than 6 m from the front of the truck.]**
- 6.5.10. The test is passed when the Blind Spot Information signal has been activated in all test cases as shown in Table 1, Appendix 1 of this Regulation before the vehicle has crossed line C (see paragraph 6.5.7. above) and the Blind Spot Information signal has not been activated in any test run when the vehicle passes the traffic sign (see paragraph 6.5.8. above).
- 6.6. **Blind Spot Information Static Tests**
- 6.6.1. **Static Test Type 1**
- Leave the vehicle under test stationary. Then maneuver the bicycle dummy perpendicular to the vehicle's center axis with an impact position of the most forward point fo the vehicle, with the minimum bicycle speed of 5 km/h, as shown in Figure 2 in appendix 1.
- The test is passed if the Blind Spot information signal is activated at the latest when the distance between bicycle and vehicle is [2] m.
- 6.6.2. **Static Test Type 2**
- Leave the vehicle under test stationary. Then maneuver the bicycle dummy parallel to the vehicle's center axis, with a lateral separation of [3] ± 0.2 m between bicycle line of movement and the vehicle's moust outer point not counting mirrors, with a bicycle speed of 20 ± 0.5 km/h, as shown in Figure 2 in appendix 1. The bicycle should be at constant speed at least 44 m before passing the most forward vehicle point.
- The test is passed if the Blind Spot information signal is activated when the vehicle is 7.77 m away from the projection of the vehicle's most forward point to the bicycle line of movement.
- 6.7. The manufacturer shall demonstrate, to the satisfaction of the type-approval authority, through the use of documentation, simulation or any other means, that the Blind Spot Information signal is activated, as described in paragraph 6.5.10., also for smaller bicycles and smaller bike target postures, differing by not more than 20% from the values detailed in ISO [WD] 19206-4:2018.
- 6.8. The manufacturer shall demonstrate, to the satisfaction of the type-approval authority, through the use of documentation, simulation or any other means, that the Blind Spot Information signal is not activated, as described in paragraph 6.5.10., when the vehicle passes any other usual stationary object than the traffic sign. In particularly parked cars shall be addressed.
- 6.9. Failure detection test
- 6.9.1. Simulate a BSIS failure, for example by disconnecting the power source to any BSIS component or disconnecting any electrical connection between

Comment [w6]: To be discussed bas on general GSR approach. Options see comment to 5.3.1.3. (require speeds). Proposal: P/F criteria is LPI at 15 m line all cases.

Comment [s7]: Reworded. All to ch for clarity until IWG meeting.

Comment [s8]: Background: This test meant to replicate roundabout situations

Comment [s9]: equals approx. 1.4 s TTC

Comment [s10]: No further definitio of planes is needed to my understanding m away refers to the position the bicycle would impact the vehicle on its line of movement.

Comment [s11]: Background: This test is meant to replicate situations with a stopped truck due to traffic and fast approaching (additional) bicycles from t rear.

Comment [s12]: equals approx. 8 s TTC

Comment [s13]: equals approx. 1.4s TTC for 20 km/h

Comment [T.M.H.14]: Juveniles are mostly involved in these accident types in The Netherlands. Juveniles have a small posture and bike than the Annex 3 bike target.

Comment [s15]: NL to check if this acceptable

Comment [T.M.H.16]: The NL has concerns whether the system is robust against parked cars.

Comment [s17]: This addresses false positives due to static objects.

BSIS components. The electrical connections for the failure warning signal of paragraph 5.4.3. above shall not be disconnected when simulating a BSIS failure.

- 6.9.2. The failure warning signal mentioned in paragraph 5.4.3. above shall be activated and remain activated while the vehicle is being driven and be reactivated after a subsequent ignition "off" ignition "on" cycle as long as the simulated failure exists.]

7. Modification of vehicle type and extension of approval

- 7.1. Every modification of the vehicle type as defined in paragraph 2.2. of this Regulation shall be notified to the Type Approval Authority which approved the vehicle type. The Type Approval Authority may then either:
- 7.1.1. Consider that the modifications made do not have an adverse effect on the conditions of the granting of the approval and grant an extension of approval;
- 7.1.2. Consider that the modifications made affect the conditions of the granting of the approval and require further tests or additional checks before granting an extension of approval.
- 7.2. Confirmation or refusal of approval, specifying the alterations, shall be communicated by the procedure specified in paragraph 4.4. above to the Contracting Parties to the Agreement applying this Regulation.
- 7.3. The Type Approval Authority shall inform the other Contracting Parties of the extension by means of the communication form which appears in Annex 1 to this Regulation. It shall assign a serial number to each extension, to be known as the extension number.

8. Conformity of production

- 8.1. Procedures concerning conformity of production shall conform to the general provisions defined in Article 2 and Schedule 1 to the Agreement (E/ECE/TRANS/505/Rev.3) and meet the following requirements:
- 8.2. A vehicle approved pursuant to this Regulation shall be so manufactured as to conform to the type approved by meeting the requirements of paragraph 5. above;
- 8.3. The Type Approval Authority which has granted the approval may at any time verify the conformity of control methods applicable to each production unit. The normal frequency of such inspections shall be once every two years.

9. Penalties for non-conformity of production

- 9.1. The approval granted in respect of a vehicle type pursuant to this Regulation may be withdrawn if the requirements laid down in paragraph 8. above are not complied with.
- 9.2. If a Contracting Party withdraws an approval it had previously granted, it shall forthwith so notify the other Contracting Parties applying this

Regulation by sending them a communication form conforming to the model in Annex 1 to this Regulation.

10. Production definitively discontinued

If the holder of the approval completely ceases to manufacture a type of vehicle approved in accordance with this Regulation, they shall so inform the Type Approval Authority which granted the approval, which in turn shall forthwith inform the other Contracting Parties to the Agreement applying this Regulation by means of a communication form conforming to the model in Annex 1 to this Regulation.

11. Names and addresses of the Technical Services responsible for conducting approval tests and of Type Approval Authorities

The Contracting Parties to the Agreement applying this Regulation shall communicate to the United Nations Secretariat the names and addresses of the Technical Services responsible for conducting approval tests and of the Type Approval Authorities which grant approval and to which forms certifying approval or extension or refusal or withdrawal of approval are to be sent.

Appendix 1

Figure 1: Dynamic Tests

Mark corridor using cones *,
spacing not more than 5 m

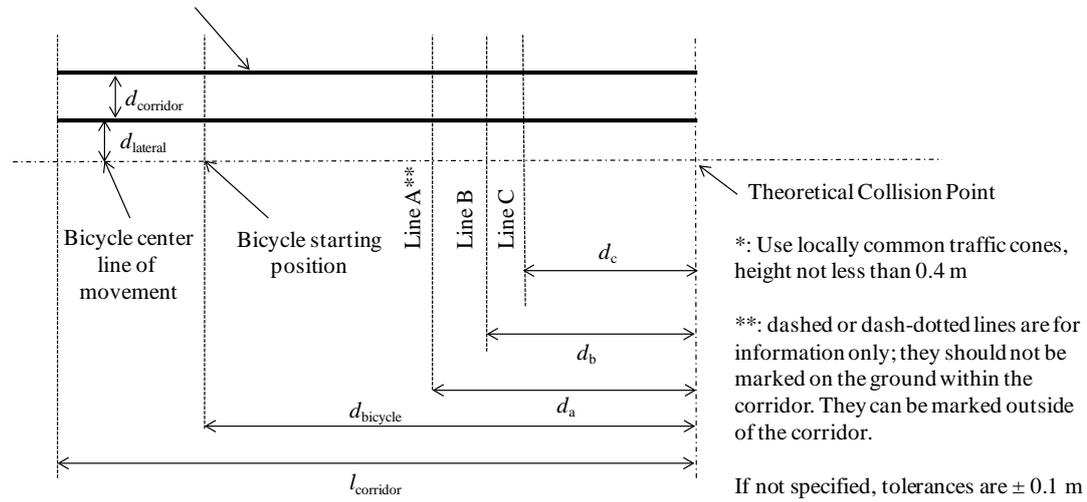


Figure 2: Static Tests

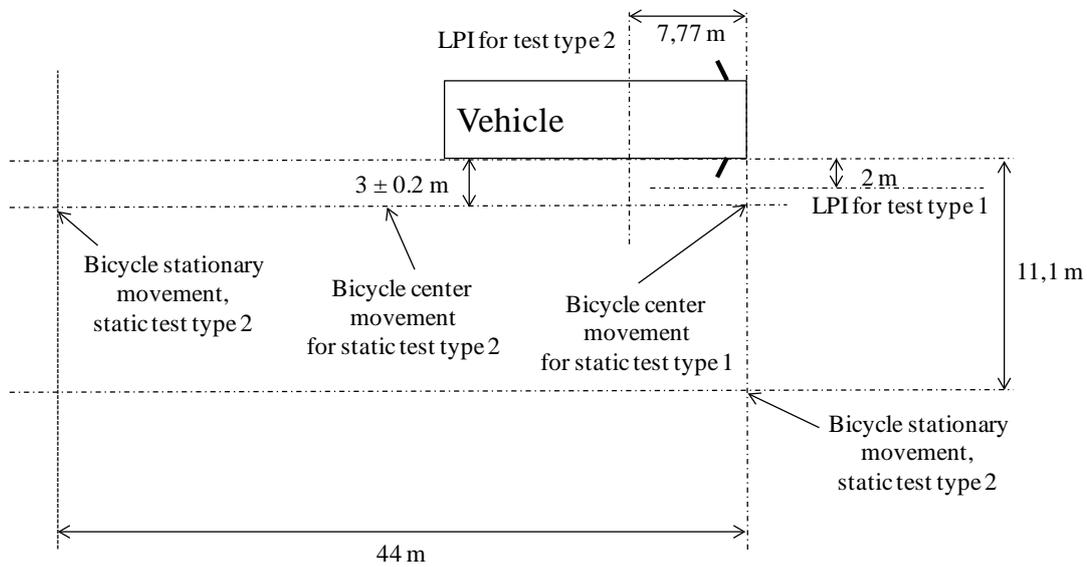


Table 1

Test Case	v_{vehicle} [km/h]	v_{Bicycle} [km/h]	d_{lateral} [m]	d_a [m]	d_b [m]	d_c [m]	d_{bicycle} [m]	l_{corridor} [m]	d_{corridor} [m]	
1	10	20	1.5	44.4	15.8	[15]	< 55	> 70	vehicle width + 1m	
2	10	20			22	[15]				
3	20	20			38.3	[15]				
4	20	10	4.5	22.2	43.5	[15]				
5	10	10			19.8	[15]				
6	10	20			44.4	14.7				[15]
7						17.7				

Annex 1

Communication

(Maximum format: A4 (210 x 297 mm))



issued by :

(Name of administration)

.....

Concerning: ² Approval granted
 Approval extended
 Approval refused
 Approval withdrawn
 Production definitively discontinued

of a type of vehicle with regard to the Blind Spot Information System (BSIS) pursuant to Regulation No. XXX

Approval No.:

1. Trademark:
2. Type and trade name(s):
3. Name and address of manufacturer:
4. If applicable, name and address of manufacturer's representative:
5. Brief description of vehicle:
6. Date of submission of vehicle for approval:
7. Technical Service performing the approval tests:
8. Date of report issued by that Service:
9. Number of report issued by that Service:
10. Reason(s) for extension (if applicable) :
10. Approval with regard to the BSIS is granted/refused/extended/withdrawn:²
11. Place:
12. Date:
13. Signature:
14. Annexed to this communication are the following documents, bearing the approval number indicated above:
15. Any remarks:

Comment [T.M.H.18]: Extension number is part of the approval number since the Revised 1958 Agreement.

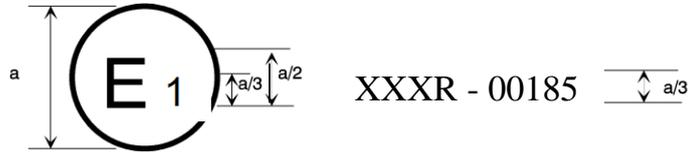
¹ Distinguishing number of the country which has granted/extended/refused/withdrawn an approval (see approval provisions in the Regulation).

² Strike out what does not apply.

Annex 2

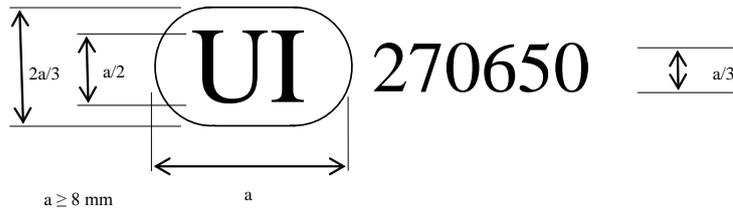
Arrangements of approval marks

(see paragraphs 4.5. to 4.5.2. of this Regulation)



$a = 8 \text{ mm min}$

The above approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in Germany (E1) with regard to the BSIS pursuant to Regulation No. XXX. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. XXX in its original form.



The above Unique Identifier shows that the type concerned has been approved and that the relevant information on that type-approval can be accessed on the UN secure internet database by using 270650 as Unique Identifier. Any leading zeros in the Unique Identifier may be omitted in the approval marking.

Comment [T.M.H.19]: Updated according to the Revised 1958 Agreement

II. Justification

The justification and information about the test procedure was provided in informal document GRSG-109-19 and in presentations GRSG-110-18-Rev.1 and GRSG-111-24. The draft Regulation was further explained during the 112th session of the Working Party on General Safety Provisions (GRSG) on the basis of another informal document, and consequently forwarded to the Proxy-VRU working group for technical discussion.

This document reflects the current status of the discussion in the Proxy-VRU working group. It is expected that decisions for the brackets as well as an agreement on chapter 6 will be found during the meeting Proxy-VRU 06 in June 2018 and a final working document is expected for the 115th GRSG.
