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## **Economic Commission for Europe**

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**World Forum for Harmonization of Vehicle Regulations** 

Working Party on Brakes and Running Gear

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International Whole Vehicle Type Approval (IWVTA) –
Regulation No. 13-H

Proposal for amendments to Regulation No. 13-H (Braking of passenger cars)

Submitted by the experts from the International Organization of Motor Vehicle Manufacturers \*

This document supersedes document ECE/TRANS/WP.29/GRRF/2014/10 and is based on informal documents GRRF-79-05-Rev.1 and GRRF-80-32. The changes to the current text of the regulation are marked in bold for new and strikethrough for deleted characters.

<sup>\*</sup> In accordance with the programme of work of the Inland Transport Committee for 2014–2018 (ECE/TRANS/240, para. 105 and ECE/TRANS/2014/26, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.





## I. Proposal

Contents, reference to Annex 9 and its appendices, amend to read:

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*Insert a new paragraph 1.2.3.*, to read:

- "1. Scope
- 1.1. This Regulation applies to the braking of vehicles of categories  $M_1$  and  $N_1$ .
- 1.2. This Regulation does not cover:
- 1.2.1. Vehicles with a design speed not exceeding 25 km/h;
- 1.2.2. Vehicles fitted for invalid drivers.
- 1.2.3. The approval of the ESC and BAS systems of the vehicle."

Paragraphs 2.24. to 2.34.2., shall be deleted.

Paragraphs 4.4.3. to 4.4.4., shall be deleted.

Paragraph 5.1.3., amend to read:

"5.1.3. The requirements of Annex 8 shall be applied to the safety aspects of all complex electronic vehicle control systems, **including those defined in an independent regulation**, which provide or form part of the control transmission of the braking function included those which utilize the braking system(s) for automatically commanded braking or selective braking.

However, **vehicles equipped with** systems or functions, **including those defined in an independent Regulation**, which use the braking system as the means of achieving a higher level objective, are subject to Annex 8 only insofar as they have a direct effect on the braking system. If such systems are provided, they must not be deactivated during type approval testing of the braking system."

Paragraphs 5.2.24. to 5.2.24.1., shall be deleted.

Paragraphs 12.5. and 12.6., shall be deleted:

- "12.5. Subject to the provisions of paragraph 12.6 below, even after the date of entry into force of Supplement 16 to this Regulation, Type Approvals to any Supplements of this Regulation shall remain valid and Contracting Parties applying this Regulation shall continue to accept them."
- 12.6. Contracting Parties applying this Regulation shall not be obliged to accept, for the purpose of national or regional type approval, a Type Approval for

those vehicle types not fitted with a Vehicle Stability Function or ESC and BAS."

Paragraph 12, amend to read (deletion of all previous paragraphs):

- "12. Transitional provisions
- 12.1. As from [01 September 2017] no Contracting Party applying this regulation shall refuse to grant or refuse to accept type approvals to this regulation as amended by the 01 series of amendments.
- 12.2. Even after [01 September 2017] Contracting Parties applying this regulation shall continue to accept type approvals granted to the 00 series of amendments to this regulation.

However, Contracting Parties applying this regulation shall not be obliged to accept, for the purpose of national or regional type approval, type approvals to the 00 series of amendments to this regulation for vehicle types not fitted with a Vehicle Stability Function (VSF) or ESC and BAS.

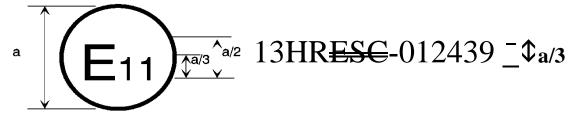
- 12.3. As from [01 September 2017], Contracting Parties applying this regulation shall grant type approvals only if the vehicle type to be approved meets the requirements of this regulation as amended by the 01 series of amendments.
- 12.4. Contracting Parties applying this regulation shall not refuse to grant extensions of type approvals for existing types, regardless of whether they are fitted with a Vehicle Stability Function (VSF) or ESC and BAS or not, on the basis of the provisions valid at the time of the original approval."

Annex 1,

Paragraphs 21. to 22.1.2., shall be deleted.

Annex 2,

Approval mark and Paragraph of Model A, amend to read:



The above approval mark affixed to a vehicle shows that the vehicle type concerned has, with regard to braking, been approved in the United Kingdom (E11) pursuant to Regulation No. 13-H under approval number 012439. The first two digits of the approval number indicate that the approval was granted in accordance with the requirements of Regulation No. 13-H in its original form 01 series of amendments. The additional marking "ESC" indicates that the vehicle meets the Electronic Stability Control and Brake Assist System requirements of Annex 9 to this Regulation."

Annex 9, shall be deleted.

## II. Justification

- 1. This document supersedes ECE/TRANS/WP.29/GRRF/2014/10 and informal document GRRF-79-05-Rev.1, and addresses the necessary modifications to Regulation No. 13-H related to the regulation split.
- 2. Paragraph 1. (scope): the proposed addition of sub-paragraph 1.2.3. clarifies to the approval authorities that the new version of the regulation does not cover anymore ESC and BAS.
- 3. The definition of the words, the marking, the required performance, and the equipment relevant to ESC and/or BAS are not necessary.
- 4. According to the comments received at the seventy-sixth GRRF meeting by a majority of Contracting Parties, Industry amends the proposals related to Regulation No. 13-H split to switch them to "option 2" as described in document GRRF-76-40, Slide 3. This in turn provokes necessary amendments to paragraph 5.1.3. in order to introduce a reference linking Regulation No. 13-H (as a "basic function regulation") to the new regulations on ESC and BAS (as "independent regulations").
- 5. Paragraph 1 (scope): the proposed addition of sub-paragraph 1.2.3. clarifies to the approval authorities that the new version of the regulation does not cover anymore ESC and BAS.
- 6. Transitional provisions:
  - (a) The proposed paragraph 12 supersedes the existing Paragraph 12 introduced by Supplement 16 to the original version of Regulation No. 13-H (ECE/TRANS/WP.29/2014/46/Rev.1).
  - (b) The split of Regulation No. 13- H in three distinct UN Regulations on Braking, Brake Assist Systems (BAS) and Electronic Stability Control (ESC) will require from Contracting Parties mandating BAS or ESC to take in proper time necessary actions for inclusion of all the three mentioned UN Regulations into the national/regional list of mandatory regulations for the purpose of national/regional type approval. Contracting Parties have to be advised about such a legislative action, but this advice cannot become a part of provisions of the 01 series of amendments to Regulation No. 13-H.
  - (c) Introducing a certain lead time for implementation of the 01 Series of amendments would help the Contracting Parties to complete their necessary legal actions.
    - (i) The separate UN Regulations on ESC and BAS are already in force;
    - (ii) The process of transposition of the separate UN Regulations on ESC and BAS into the national/regional legislation is likely to be finished. Maybe the tentative lead time can be specified by Contracting Parties.
  - (d) The process of transposition of the separate UN Regulations on ESC and BAS into the national/regional legislation is likely to be finished. Maybe the tentative lead time can be specified by Contracting Parties.
    - <u>Paragraph 12.1.</u>: this paragraph actually "switches-on" the 01 series of amendments. It provides a date as from witch the 01 series can be used for approval purposes. The task-force follows the WP.29 recommendation to use a defined date (vs. a nebulous time related to the date of the administrative entry into force of the document) for the entry into force of the new series of amendment. The date of 1 September 2017 is proposed between square

brackets for permitting the interested experts to make their opinion in view of the process of the splitting of the regulation (e.g. date of entry into force of the separate regulations on ESC and BAS).

<u>Paragraph 12.2.</u>: the first sub-paragraph establishes the general rule that the approvals to the 00 Series of amendments shall continue to be accepted. The second sub-paragraph establishes an exemption to the general rule to permit some Contracting Parties (e.g. European Union and Japan) to mandate ESC/BAS even though they are optional in the 00 Series of amendments.

<u>Paragraph 12.3.</u>: this paragraph was part of the original proposal ECE/TRANS/WP.29/GRRF/2015/33). It had the same target as the second sub-paragraph of paragraph 12.2. and therefore becomes obsolete.

<u>Paragraph 12.4</u>: this paragraph is part of the existing transitional provisions of the 00 series of amendments and aims at providing time to the Industry to adapt their production to the new requirements with regard to the symbols and tell-tales. This paragraph can be deleted because it will be obsolete when the 01 series will become applicable.

<u>Paragraph 12.5</u>:: this paragraph actually "switches-off" the 00 series of amendments, i.e. as from the date indicated in this paragraph, contracting parties applying the 01 series of amendments are prevented from granting UN approvals to the 00 series of amendments. In the special situation of the split of Regulation No. 13-H, the task-force chose the same date as for the "activation of the 01 series of amendments (paragraph 12.1.), yet this date could be any time later (see also items 4 and 5 of the justifications).

<u>Paragraph 12.6</u>.: regular wording taken over from the current text of the regulation for the extension of approvals.

- 7. Annex 1, paragraphs 21. to 21.1.2.: these entries can be deleted from the communication form because they specify to which category of BAS the fitted system corresponds; this is useless in a regulation not regulating BAS.
- 8. The example of the approval mark in Annex 2 should not contain any reference to ESC and should refer to the 01 Series of amendments.
- 9. Annex 9 (Electronic Stability Control and Brake Assist Systems): logical deletion due to the extraction of ESC/BAS from the regulation.