

Submitted by the experts from the Netherlands and IMMA

Informal document **GRVA-15-29**

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Provisional agenda item 9(b)

“Complex Electronic Control Systems” Annex in UN Regulation No. 78

(ECE/TRANS/WP.29/GRVA/2023/4)

“Complex Electronic Control Systems” Annex in UN Regulation No. 78 (1/3)

Background

- During GRVA-13 (May 2022), IMMA proposed to further harmonize R78 with R13H on stop lamp activation to ensure consistency amongst categories M1/N1 and L ([GRVA-13-15](#)).
 - This included stop lamp activation by automatically commanded braking, such as ACC.
 - By introducing a definition of ‘automatically commanded braking’, **Netherlands responded there is also the need for applying a safety concept and fault strategy (‘CEL Annex’)**.
- Without such, TAAs will have to give their own interpretation, e.g., applying:
 - CEL annex from R13H or R13
 - Schedule 7 of 1958 agreement (exemption approval for new technologies)
 - Article 39 within the EU framework directive (exemption approval for innovative technologies)
 - OEM’s responsibility
- To ensure harmonisation, Netherlands proposed **to copy/paste Annex 8 of R13H as soon as possible.**

“Complex Electronic Control Systems” Annex in UN Regulation No. 78 (2/3)

Proposal for CEL Annex

- IMMA and NL jointly prepared informal document [GRVA-14-09](#) in September for a new 06 series to R78.
 - This received general support.
- The informal document is now transposed into formal document [GRVA/2023/4](#).
 - This proposal will address the short-term concerns on the need for a safety concept and fault strategy for newly applied technologies on motorcycles, such as ACC.
- The new Annex does not apply to conventional vehicles equipped with non-complex electronic braking systems (e.g., ABS, CBS).
 - ABS/CBS, etc. are systems that operate based on the rider’s manual actuation of the brake control, while ‘automatically commanded braking’ operates without the rider's braking manual actuation. Complex Electronic Control Systems is for ‘automatically commanded braking’.
- As the amendments introduce new requirements for high-end vehicles already on the market (e.g., ACC motorcycles), a certain transitional period is provided while ensuring a quick implementation.

“Complex Electronic Control Systems” Annex in UN Regulation No. 78 (3/3)

Outlook

- From a safety point of view, there is a need in R78 for a CEL annex as quickly as possible after the requirements of stop lamp activation by automatically commanded braking devices.
- Once the CEL Annex in R13 has been updated, the alignment of R78 can be considered in a 2nd step.