

Submitted by the experts from OICA and CLEPA

Informal document **GRVA-12-25**
12th GRVA, 24–28 January 2022
Agenda item 8(c) and 9(b)

UN Regulations No. 13-H and 78 Stop Lamp Illumination

Seeking Clarification on the term “**Deceleration Demand**” used in documents

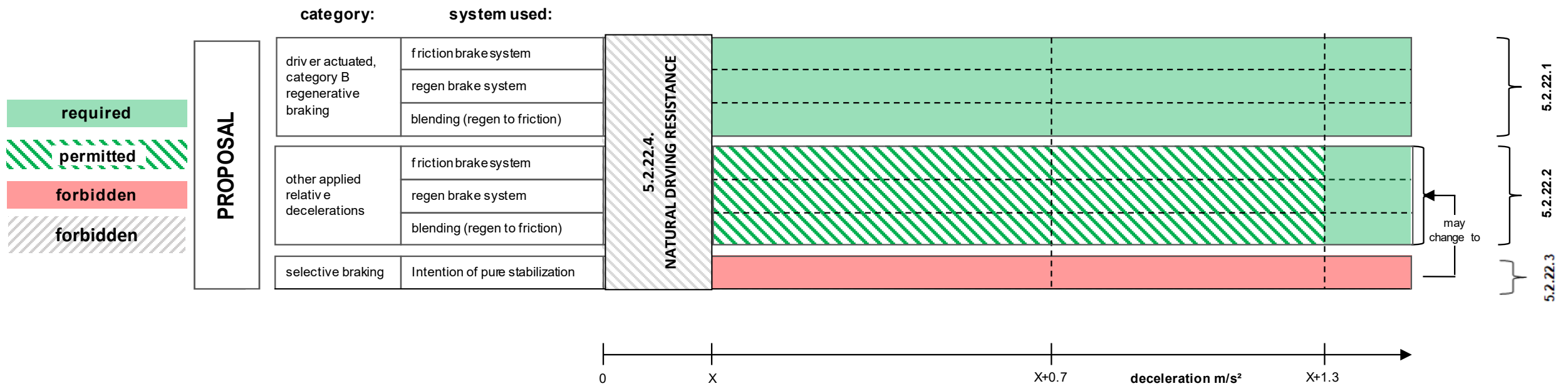
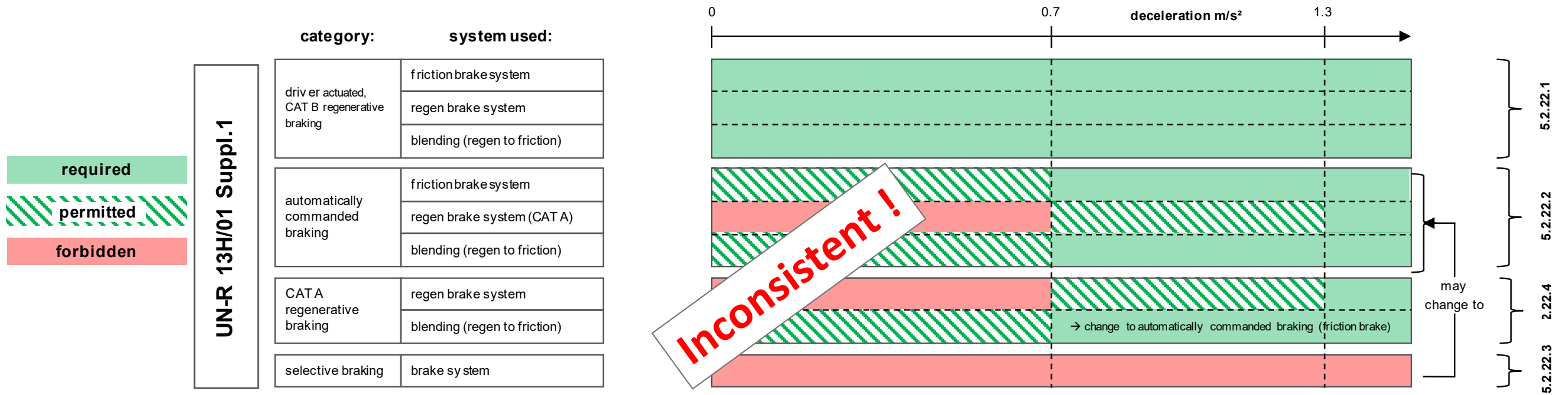
UN R13-H: ECE/TRANS/WP.29/GRVA/2020/31
adopted as **ECE/TRANS/WP.29 WP29/2021/73**

and

UN R13-H: ECE/TRANS/WP.29/GRVA/2022/10 (GRVA-11-39)

Current Status R13H.01 vs. Proposal

Slide 6 of doc GRVA-07-48



Clarification on the term „Deceleration Demand“

"5.2.22.2. → Requirements for vehicles equipped with automatically commanded braking and/or regenerative braking which produce a retarding force (e.g. upon release of the accelerator control).^{6¶}

Deceleration by automatically commanded braking and/or regenerative braking

$\leq 1.3 \text{ m/s}^2$	$> 1.3 \text{ m/s}^2$
May generate the signal	Shall generate the signal

⁶ At the time of type approval, compliance with this requirement shall be confirmed by the vehicle manufacturer.¶

Once generated the signal shall be kept as long as a deceleration demand persists. However, the signal may be suppressed at standstill **or when the deceleration demand falls below 1.3 m/s^2 or that value which generated the signal, whichever is lower.**¶

"5.2.22.4. The signal shall not be generated when retardation is solely produced by the natural braking effect of the engine, air-/rolling resistance and/or road slope."

GRVA-11-39:

clarification on the provisions introduced to paragraph 5.2.22.2. as part of document

[ECE/TRANS/WP.29/2021/73](#)

endorsed by WP29 at its June 2021 session.

ECE/TRANS/WP.29/GRVA/2022/10:

Additions are indicated in red

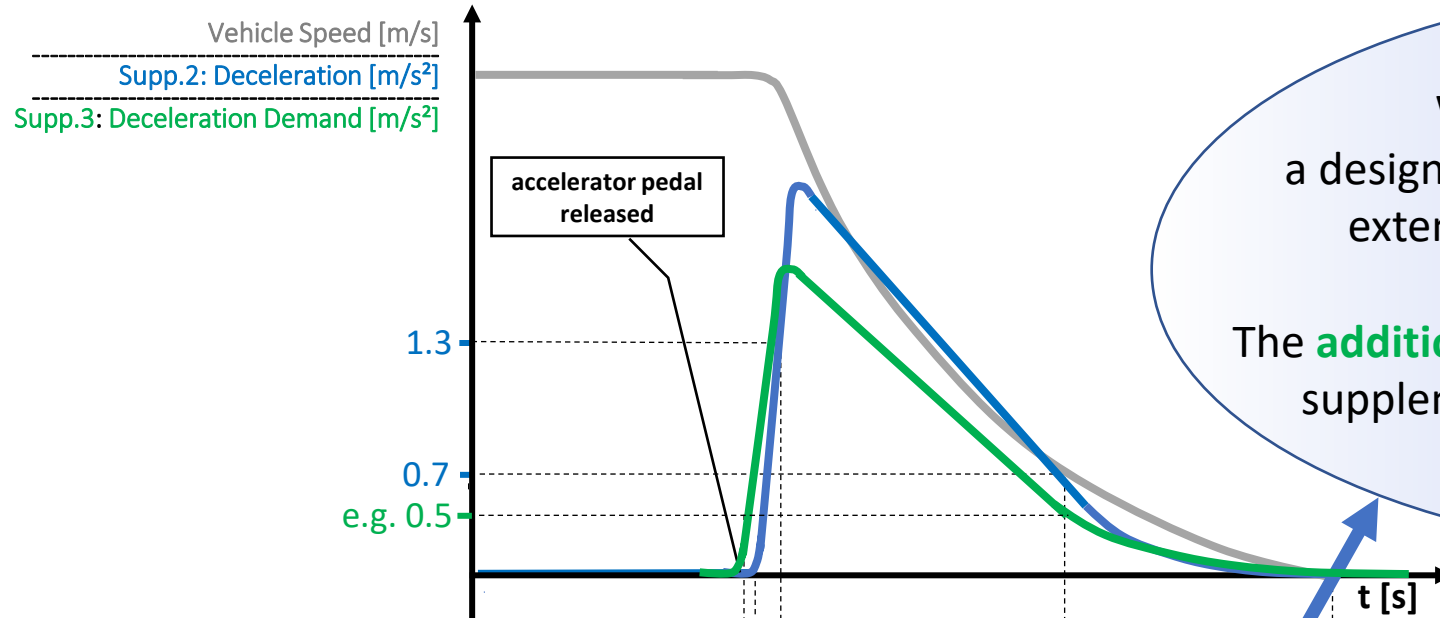
Industry currently gets different interpretations from Technical Services on the question:

When does a deceleration demand no longer persist?

... and consequently when is the signal no longer to be kept acc. to Par 5.2.22.2

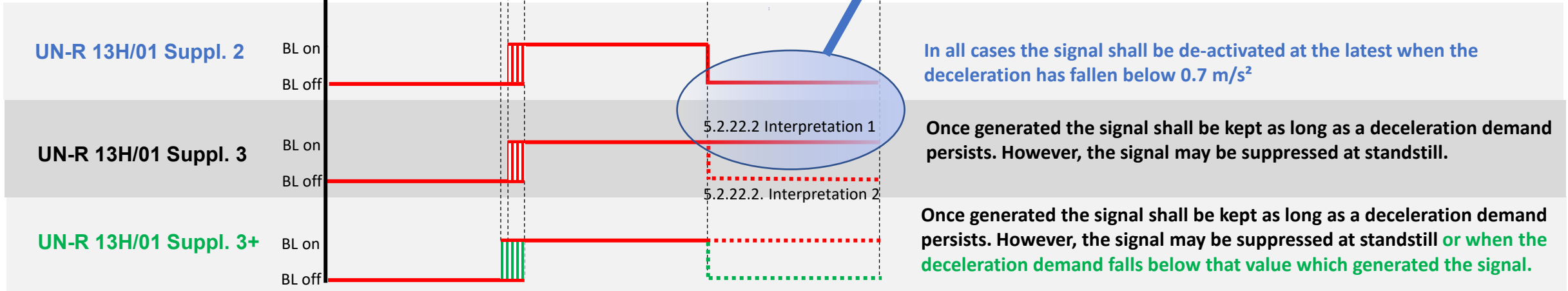
R13-H: GRVA/2020/31 adopted as ECE/TRANS/WP.29 /2021/73

Release Accelerator Control: Stop Lamp Illumination



With interpretation 1 of **Suppl. 3** a design change would be required as part of an extension process of an existing approval.

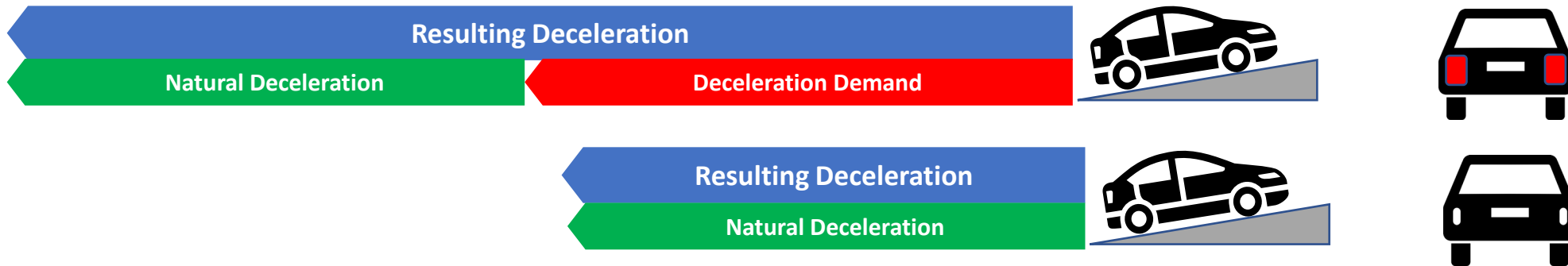
The **addition** would clarify the intention and align the supplement with the rules of procedure of the UNECE 58 agreement.



Clarification on the term „Deceleration Demand“

Industry view:

- A “Deceleration” in the sense of paragraph 5.2.22.2 is a request from an automatically commanded braking function or regenerative braking system to decelerate the vehicle => **Deceleration Demand**
- Not at all the retardation effects as described in Paragraph 5.2.22.4 are to be considered a braking demand.



This understanding matches with the Stop Lamp definition from R48:

2.5.4. "Stop lamp" means a lamp used to indicate to other road users to the rear of the vehicle that the longitudinal movement of the vehicle is intentionally retarded.

The addition in GRVA-11-39 would avoid different interpretations and align the supplement with the rules of procedure of the UNECE 58 agreement.