



Submitted by the experts from
CLEPA and OICA

Informal document **GRVA-13-20**
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Provisional agenda item 8(a)



Mandatory ESC on 4-axles concrete mixer vehicles

Industry proposal

GRVA-13



Background

- At GRVA-12, France proposed the **mandatory installation of ESC on 4-axles concrete mixers vehicles** (informal document GRVA-12-07).
- This document is becoming official document ECE/TRANS/WP29/GRVA/2022/14 at this 13th session of GRVA.

- Extract:

“5.2.1.32. Subject to the provisions of paragraph 12.3. of this Regulation, all vehicles of the following categories shall be equipped with a vehicle stability function:

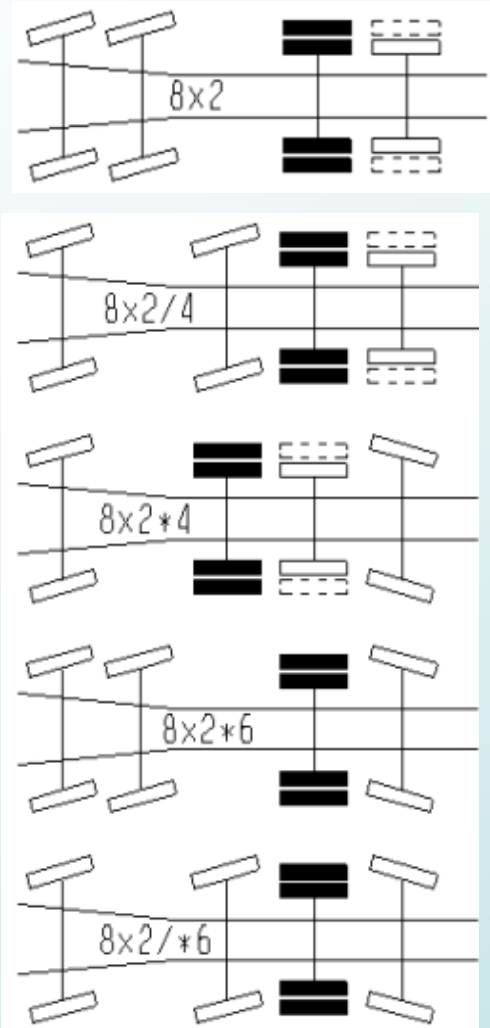
- (a) M_2, M_3, N_2^{12} ;
- (b) N_3^{12} having no more than 3 axles;
- (c) N_3^{12} with 4 axles, **either** with a maximum mass not exceeding 25t and a maximum wheel diameter code not exceeding 19.5 **or maintaining transported material’s state through continuous movement (concrete mixer truck for example).**

The vehicle stability function shall include roll-over control and directional control and meet the technical requirements of Annex 21 to this Regulation.”



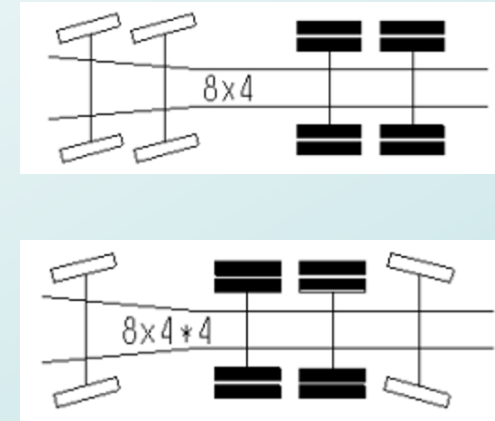
Industry analysis of 4-axles diversity how to identify “concrete mixers”?

8x2



- Very few concrete mixers are 8x2
- Complex variants
- Low volumes

8x4



- Most of concrete mixers are 8x4 or 8x4*4
- High volumes (among 4-axles)

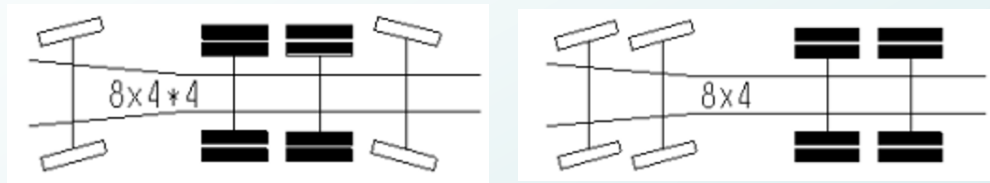


The proposal is to focus on those vehicles



Industry proposal

- Given the difficulty to identify “concrete mixers” in the regulation, industry proposal is to focus on “4-axles vehicles with two power-driven axles at the rear”:



- This proposal achieves in a fairly good way the objectives of France, since most of the concrete mixers are 8x4 or 8x4/4, and only very few are 8x2.
- It should be noted that this proposal is actually addressing higher volumes than only the concrete mixers, which is only a small fraction of 8x4 and 8x4*4 vehicles, while excluding off road vehicles from the scope (footnote 12).

Paragraph 5.2.1.32, amend to read:

- 5.2.1.32. Subject to the provisions of paragraph 12.4. of this Regulation, all vehicles of the following categories shall be equipped with a vehicle stability function:
- (a) M_2, M_3, N_2 ; ¹²
 - (b) N_3 ¹² having no more than 3 axles;
 - (c) N_3 ¹² with 4 axles, with a maximum mass not exceeding 25 t and a maximum wheel diameter code not exceeding 19.5.
 - (d) N_3 ¹² with 4 axles, with two power-driven rear axles**

The vehicle stability function shall include roll-over control and directional control and meet the technical requirements of Annex 21 to this Regulation.