

Draft Proposal for Amendment of Regulation No. 13

Electric Control Line Message "Relative Brake Demand"

A. PROPOSAL

Add a new paragraph 5.1.3.6.4., to read:

"5.1.3.6.4. In the case of trailers equipped with an electric control line, when the average of both "relative brake demand" messages (see byte 7-8 of EBS11) is less than [50%] for more than [2] seconds, the relative brake demand function shall be disabled by the trailer and an "error" indication shall be sent by the trailer in the "support of the axle wise or side wise brake force distribution" message (see byte 2, bit 3 & 4 of EBS21).

5.1.3.6.5. When a towing vehicle is equipped with an electric control line and electrically connected to a trailer with an electric control line and supports automatic braking of the towed vehicle the automatic brake demand shall not be less than the demand requested by the driver."

B. JUSTIFICATION

The message "relative brake demand" is used to brake independent axles or sides of a trailer to enhance stability. The requested brake demand value is transmitted using EBS 11 which is also used for the driver brake demand. The relative brake demand then reduces the pressure to an axle(x) or side. In using this control strategy there is the possibility that the use of the relative demand message could result in the towed vehicle being unbraked. The proposal for paragraph 5.1.3.6.4. limits the amount of time that is permitted for a significant deviation in the pressures between axles or sides.

In consequence that all automatic or driver initiated brake demands utilise a common message EBS 11 there is a need to ensure the driver brake demand is not over ridden. The proposal for paragraph 5.1.3.6.5. is designed to ensure any automatic brake application cannot be less than the brake demand requested by the driver.

- - - - -