

**REGULATIONS Nos. 13 AND 13-H (Braking)**

**Brake Assist System (BAS)**

**INDIA’S COMMENTS ON PROPOSED AMENDMENTS TO REGULATIONS No. 13-H**

**A. PROPOSAL :**

Proposed modification to document ECE/TRANS/WP.29/GRRF/2008/15 submitted by the experts of the informal working group on Brake Assist Systems.

**4.2 Test 2: for activation of BAS**

Second Paragraph of this clause should read:

It shall be demonstrated to the satisfaction of the Technical Service that the BAS activates under the conditions specified by the manufacturer in accordance with paragraph 22.1.2. or 22.1.3 of *Annex 1*.

Third Paragraph should read:

After  $t = t_0 + 0.8$  s and until the vehicle has slowed down to a speed of 15 km/h, the brake pedal force shall be maintained in a corridor between  $F_{ABS, upper}$  and  $F_{ABS, lower}$ , ~~where~~ *where*  $F_{ABS, upper}$  is  $0.7 F_{ABS}$  and  $F_{ABS, lower}$  is  $0.5 F_{ABS}$ .

Following clause should read:

**4.3. Data evaluation**

The presence of BAS 'B' is ~~proven~~ *proved* if a mean deceleration ( $a_{BAS}$ ) of at least  $0.85 \cdot a_{ABS}$  is maintained from the time when  $t = t_0 + 0.8$  s to the time when the vehicle speed has been reduced to 15 km/h.

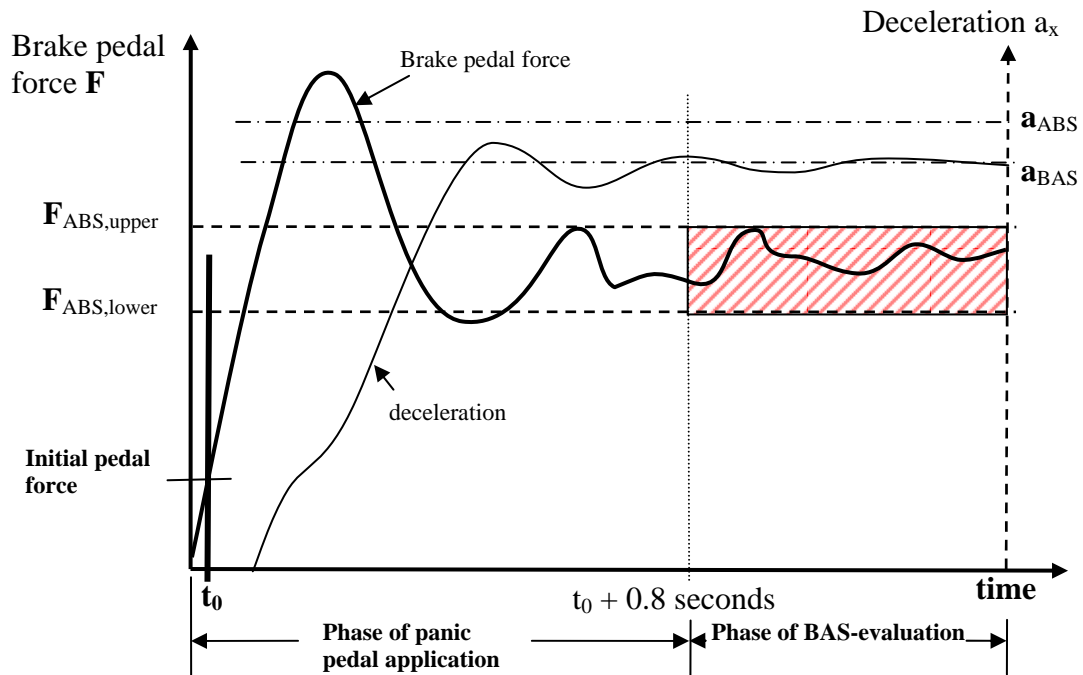


Figure 2: Example of test 2 of a category "B" BAS system

Annex 10, Appendix 1

METHOD FOR DETERMINATION OF  $F_{ABS}$  AND  $a_{ABS}$

Following clause should read:

- 1.3. The example in Figure 3 has its origin at the time  $t_0$  crossing the  $a_{ABS}$  line at 2 seconds. Once full deceleration has been achieved the pedal travel  $S_p$  shall not be decreased for at least 1 s. The time of full activation of the ABS system is defined as the time when pedal force  $F_{ABS}$  is achieved. The measurement shall be within the corridor for *variation of increase in deceleration* ~~variance of deceleration increase~~ (see Figure 3).

**B. JUSTIFICATION :**

India proposes *the changes in italics* to have a better clarity to the proposal from the experts of the informal working group on Brake Assist Systems for draft amendments to R13H on Brake Assist Systems (BAS). The suggested corrections are basically editorial in nature.

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