Proposal for amendment to document AEBS/LDWS-TF02-03-Rev.2

(Monitoring of braking demand signal)

A. Proposal

Insert a new Paragraph 6.X.X., to read:

"6.X.X. The manufacturer shall notify the Technical Service of the correlation between the braking demand signal and the actual physical quantity (such as brake pressure, deceleration, etc.) at the time of submission of the application for type-approval. It shall be demonstrated to the satisfaction of the Technical Service that the braking demand signal and the actual physical quantity under the conditions specified by the manufacturer correlates."

B. Justification

Typically there are two means to monitor the AEBS braking demand for the service braking system (Brake ECU) on CAN bus.

Monitoring configuration 1 (Fig.2) is the ordinary case for evaluation of the braking demand signal by using a bus monitor tool. The whole vehicle system is operated by the real production components except the bus monitor tool. Monitoring configuration 2 (Fig.3) shows there is a special reason such as there being no signal which shows the braking demand on the bus. Therefore Special ECU is needed for type approval testing in this configuration.

In each case, it needs to be evaluated whether the signal is appropriate as a braking demand. For example, the relation between the signal and the actual physical quantity (such as brake pressure, deceleration, etc.) is measured in advance.

Particularly, since configuration 2 is not a production component, the manufacturer needs to give detail explanation of signal flow in advance that the Special ECU and production component are identical. From the perspective of type approval tests, case 1 is more preferable in terms of simplicity.



The wording refers to R13H Annex 9. B. Para.4.2 (BAS test procedure).