

Informal document No. GRRF-56-9

(56th GRRF, 20-22 September 2004,  
agenda item 6.6.)

**PROPOSAL FOR AMENDMENT OF TRANS/WP.29/GRRF/2002/17/Rev.3**

(Run flat tyre - Zero pressure detection devices)

Transmitted by the expert from Japan

**PROPOSAL**

Paragraph 5.1.6., amend to read:

" 5.6.1. In the case of vehicles equipped with run-flat tyres the vehicle shall also be fitted with a run-flat [warning] system (defined in paragraph 2.11.) that warns the driver that an individual tyre, which is in contact with the road, is **at least** in flat tyre running mode."

Paragraph 5.1.6.3., should be deleted

\* \* \*

**JUSTIFICATION**

Re. Paragraph 5.1.6.:

It is not appropriate to exclude the system that detects earlier than flat tyre running mode (0 – 70 kPa).

Such earlier detecting contributes the road safety.

Re. Paragraph 5.1.6.3:

Direct detection systems, which intermittently transmit sensor signals, are already being applied in the market and can now be accepted even though in some circumstances there is a significant detection time. There is no special necessity to improve their function given the capability of run flat tyres to continue satisfactory operation even when substantially deflated.

The time to detect is not straight-forward to specify and also we should consider more detailed consideration for finding the appropriate requirement.

According to the investigation, for the typical direct type when the vehicle is operated at speeds in the range about 5 km/h -40 km/h transmitter interval is generally about 1 hour and the condition is detected within about 1 hour.

Therefore the direct type detects within about 40km when the vehicle is operated at low speeds (less than about 40km/h) and the run-flat tyre durability performance for 80km at 80km/h was prescribed on the previous UK draft.

When the vehicle speed is in the range 40 km/h - 100km/h, transmitter interval will be about 1 minute and the condition will be detected within about 10 minutes.

When the vehicle speed is over 100km/h transmitter interval is same 1 minute, but it has not been possible to find sufficient data for fixing the time to detect.

Another difficulty has been found, due to the above reason, when it comes to prescribing an initial check requirement..

With the indirect type of detection, insufficient data could be obtained for setting the limit value.

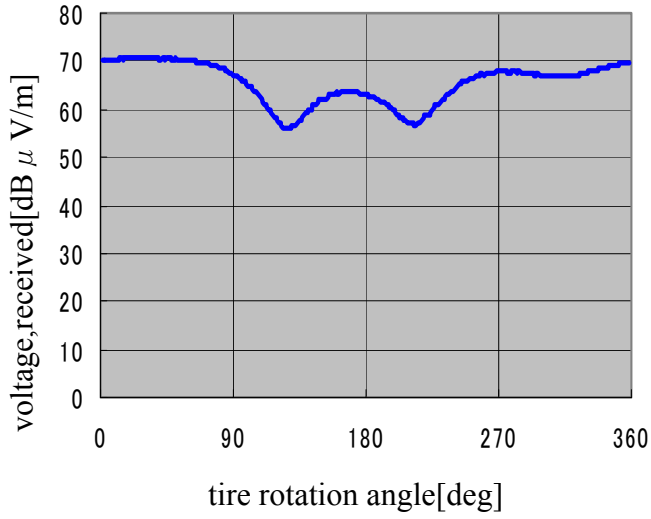
Additionally prescribing detailed requirements will make it a necessity to check the detection performance at the time of Type Approval. From the efficiency point of view at Type Approval, this is a questionable task considering the time it will take to make a thorough test.

Therefore this proposal is to delete any detailed detection requirements for the first step at least.

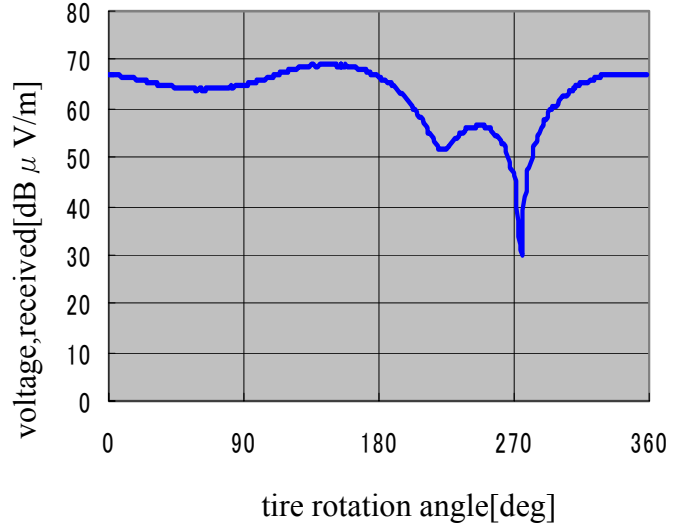
**Reference**

Receiving Performance of Direct Type  
(Bench Test Results)

Case 1



Case 2



Case 3



Case 4

