

## **Japanese Comments concerning the illumination of stop lamps**

**Japan has the experience about such systems as ACC in the market.  
Therefore we believe these comments will contribute GRRF activity.**

- 1) For Automatically Commanded Brake using service brake whose purpose is to decelerate the vehicle such as ACC, the stop lamp should be activated regardless of the deceleration. It is the same as the application of the service brake by the driver. But on such Automatically Commanded Brake it should be permitted not to activate the stop lamp at low deceleration.

(Justification)

When the service brake is applied by the driver, the stop lamp activates regardless of the deceleration. It has the purpose of the advance warning of the brake for the driver of the rear vehicle. Automatically Commanded Brake has the same function as service brake application by the driver. Therefore the philosophy should be the same fundamentally.

And we should also consider the particular characteristics of Automatically Commanded Brake.

On some Automatically Commanded Brake Systems, there is the possibility that the intermittent illumination of the stop lamp at low deceleration will bother the driver of the rear vehicle. In order to avoid such trouble it will be appropriate to permit not to activate the stop lamp at low deceleration in such systems.

The threshold value of the deceleration should be considered carefully.

- 2) Concerning the Retarder, ECE R48 is appropriate. It says that the stop lamp may be activated by the application of a Retarder. But for the higher deceleration by the Retarder it should be permitted to require the activation of the stop lamp.

(Justification)

The Retarder produces rather the constant deceleration fundamentally and its function is different from that of the service brake. It looks like the function of the engine brake.

And we should also give the importance to our experience in the market.

Therefore the provisions of ECE R48 will be appropriate.

But Japan also believes that for higher deceleration it should be permitted to require the activation of the stop lamp.

There is the possibility that the threshold deceleration will differ depending on the market condition of transport circumstances.

In Japan it is required to activate the stop lamp at not less than 2.2m/s<sup>2</sup>

(Reference)

In Japan the car manufacturers used to introduce such system voluntarily that the stop lamp activates even at less than 2.2m/s<sup>2</sup>.

But it invited some trouble by flickering for the driver of the rear vehicle. And they decided to stop such system. Therefore threshold value should be considered carefully.

- 3) For Selective Brake such as ESP, it is not necessary to require the activation of stop lamp.

(Justification)

The purpose of those systems is to stabilize the vehicle behavior and they produce the

deceleration as the result of control. The driver is pressing the accelerator pedal during such control. Those systems are already introduced in Europe, US and Japan in these years.

Therefore it seems to be appropriate to permit the present system.