Availability of an Additional Power Supply to ISO7638

Note: The text reproduced below was prepared by the expert from Germany in order to make it clear that, under certain conditions, it is permitted to provide an additional power supply to that available from the ISO 7638 connection. This document supersedes document TRANS/WP.29/GRRF/2003/9.

A. PROPOSAL

Paragraph 5.2.2.17., amend to read:

"5.2.2.17. .... vehicles in paragraphs 5.2.1.29.4, 5.2.1.29.5 and 5.2.1.29.6.

Trailers equipped with an ISO7638 connector as defined above shall be marked in indelible form to indicate the functionality of the braking system when the ISO7638 connector is connected and disconnected. This marking is to be positioned so that is visible when connecting the pneumatic and electrical interface connections."

Insert a new paragraph 5.2.2.17.1. to read:

"5.2.2.17.2 It is permitted to connect the braking system to a power supply in addition to that available from the ISO7638 connector above. However, when an additional power supply is available the following provisions will apply:

In all cases the ISO7638 power supply is the primary power source for the braking system, irrespective of any additional power supply that is connected. The additional supply is intended to provide a back up should a failure of the ISO7638 power supply occur.

- It shall not have an adverse effect on the operation of the braking system under normal and failed modes.
- In the event of a failure of the ISO 7638 power supply the energy consumed by the braking system shall not result in the maximum available power from the additional supply being exceeded.
- The trailer shall not have any marking or label to indicate that the trailer is equipped with an additional power supply.
- A failure warning device is not permitted on the trailer for the purposes of providing a warning in the event of a failure within the trailer braking system when the braking system is powered from the additional supply.
- When an additional power supply is available it shall be possible to verify the operation of the braking system from this power source.

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B. JUSTIFICATION

During the 53rd GRRF Document GRRF/2003/9 was presented. The objective of this proposal being to clarify that it is permitted to power the braking system from an additional source in the event of a failure of the ISO7638 connection. When such a connection is installed it is important that adequate protection is provided to ensure the integrity of the braking system under normal and failed conditions. However following discussion within GRRF it was requested that additional provisions should be considered to make it clear that the additional power supply was not an alternative to the ISO7638 power supply and that uniform provisions should be defined otherwise this could lead to misunderstandings and possible misuse of the ISO7638 connection. This proposal has defined additional provisions that must apply whenever the braking system is installed with an additional power supply.

There have also been discussions with GRRF on the “in service” use of the ISO7638 connection which to ensure compatibility between towing vehicles and trailers must be utilised. Paragraph 5.2.2.17 has been extended to require that the trailer is marked to indicate to the driver that during coupling of the trailer that the functionality of the braking system with respect to the ISO7638 connection is clearly visible.