Chapter 8.3: Battery master switch

Transmitted by the European Automotive Suppliers Association (CLEPA)

Summary:

Although the ADR mandates the installation of a battery master switch, it does not identify its use. It is considered that this omission could lead to a lessening of the electrical safety provisions required under the ADR.

Action:

CLEPA proposes a minor revision of clause 8.3.6, with respect to running the engine of a vehicle during loading and unloading operations.
Introduction:

The ADR mandates the fitment of a battery master switch to certain categories of vehicles. Although the ad-hoc electrical working group that met in Södertälje during 1998 considered the primary role of the battery master switch to be an operational one, the ADR does not identify when the battery master switch should be used.

From the electrical safety requirements for permanently energised electrical circuits it is clearly understood that all electrical circuits must be capable of being isolated by the battery master switch or they must be certified for use in a hazardous area. However, without identifying when the battery master switch should be operated, electrical safety may be compromised.

It is a requirement in some countries that the battery master switch is operated prior to the commencement of loading and unloading operations. This ensures that only permanently energised electrical circuits are live during these operations when a hazardous zone may exist. However, when the battery master switch is not operated during loading and unloading operations, safety may be compromised if a hazardous zone exists.

Proposal:

WP15 is asked to consider amending clause 8.3.6 to include the operation of the battery master switch during loading and unloading when the vehicle engine is not required to be run.

“8.3.6 Running the engine during loading and unloading

Except where the engine has to be used to drive the pumps or other appliances for loading or unloading the vehicle and the laws of the country in which the vehicle is operating permit such use, the engine shall be shut off and the battery master switch opened during loading and unloading operations.”.

Justification:

If there is no requirement to run the engine of a vehicle during loading and unloading, and there is a possibility that a hazardous atmosphere may exist, then the operation of the battery master switch would provide greater safety from malfunctions of the electrical installation.