RID: 43rd Session of the Committee of Experts on the Transport of Dangerous Goods  
(Helsinki, 2 – 5 October 2006)

Subject: Barrier wagon rules in 7.5.3

Proposal transmitted by Finland

With reference to paragraphs 26-29 of document A 81-03/504.2006 and to paragraphs 76-79 of  
the report of the 42nd session of the RID Committee (A 81-03/501.2006), Finland has carried out a  
study concerning the benefits of barrier wagons in the transport of dangerous goods.

The study was made taking into account the principles of the new risk analysis guideline in foot-  
note 14 of section 1.9.3 of RID version 2007.

The accident data in the study were based on all the rail cargo accidents that have happened in  
Finland, because the number of accidents involving only dangerous goods is too low for the statisti-  
cal assessment.

The results were:

1. Most of the accidents were derailments.

2. Derailment also often happened in the middle of the train. For transport in a block train, the  
barrier wagons are of benefit in the case of derailment of the locomotive or of the end of the  
train.

3. Use of the barrier wagons has a clearly positive effect in collision accidents.

4. In shunting work, the speeds are normally too low to cause an accident where dangerous  
goods might be released.
Based on the results of the study, it seems justifiable to use barrier wagons to separate dangerous goods that present a major hazard in the event of an accident.

An accident with toxic gases in which they are released might have an effect over a wide area and might cause a high risk to the population. Due to this, the use of barrier wagons should at least be considered for the carriage of toxic gases in tank-wagons.

Proposal

7.5.3 Add a new second paragraph as follows:

“Every tank-wagon containing toxic gases (classification codes containing the letter(s) T, TF, TC, TO, TFC and TOC) and bearing a label conforming to model No. 2.3 shall be separated in the direction of the track from wagons bearing a label conforming to models Nos. 2.1, 3, 4.1, 4.2, 4.2, 5.1 or 5.2 and from the locomotive and the end of the train by a protective distance.”

Additionally we would like to ask the RID Committee of Experts to consider whether LPG tank-wagons should also be separated by barrier wagons, bearing in mind the risk of BLEVE.