

**OTIF**



**ORGANISATION INTERGOUVERNEMENTALE POUR  
LES TRANSPORTS INTERNATIONAUX FERROVIAIRES**

**ZWISCHENSTAATLICHE ORGANISATION FÜR DEN  
INTERNATIONALEN EISENBahnVERKEHR**

**INTERGOVERNMENTAL ORGANISATION FOR INTER-  
NATIONAL CARRIAGE BY RAIL**

**OTIF/RID/CE/2007/17**

23 October 2007

Original: German

**RID: 44<sup>th</sup> Session of the Committee of Experts on the Transport of Dangerous Goods  
(Zagreb, 19 - 23 November 2007)**

**Subject: Safety device to detect derailments of rail tank-wagons**

**Proposal transmitted by Germany**

## **Introduction**

At the 41<sup>st</sup> session of the RID Committee of Experts (Meiningen, 15 – 18 November 2004), the following decision of principle concerning the future use of derailment detectors was adopted (see also document A 81-03/511.2004, paragraph 15):

"The RID Committee of Experts is convinced of the need for measures to prevent derailments in the transport of dangerous goods. It will get in touch with the other competent bodies dealing with the subject of derailment in order to develop the best suitable measures. In connection with this, RID should include a general description of the objective, the entry into force of which is planned for 2009, subject to the resolution of technical problems."

This subject was dealt with further at subsequent meetings of the working group on tank and vehicle technology (Bonn, 21/22 April 2005, London, 6/7 April 2006 and Munich, 14/15 June 2007) (see also documents A 81-03/503.2005 – item 2a), A 81-03/504.2006 – item 2a) and OTIF/RID/CE/GT/2007-A – item 2a)).

At the last session of the working group, a representative of ERA also spoke about derailment detection and the status of a related European standard. He explained in his presentation that the TSI for freight wagons did not yet contain any standards for this area, but that the RID Committee of Experts was free to introduce a special rule in RID for the carriage of dangerous goods (see also paragraphs 5 and 6 of the final report OTIF/RID/CE/GT/2007-A).

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The result of the last meeting in Munich was that the working group recommended that the RID Committee of Experts should start to include limited provisions in RID for fitting tank-wagons/ battery-wagons with derailment detectors. In the context of a mandatory “pilot project”, this would make it possible to gain the experience necessary for their comprehensive application (see also paragraph 12 of the final report OTIF/RID/CE/GT/2007-A).

In the process, the following conditions should be observed:

- no specific system (mechanical/ pneumatic, electronic) should be prescribed;
- the locomotive driver had to receive a clear signal indicating that a derailment had occurred. The venting of the main brake pipe was considered to be a clear signal;
- the derailment detector must trip reliably at speeds between 35 and 40 km/h;
- this measure should only apply to new-builds;
- the groups of substances must be established;
- after two to four years, it should be checked what the effects of this pilot project were in practice and which groups of substances derailment detectors should be prescribed for.

The draft of a corresponding proposal by Germany was also discussed at the special meeting of the working group on tank and vehicle technology that was subsequently convened (Berlin, 12 October 2007) (see also paragraphs 6 to 11 of report OTIF/RID/CE/GT/2007-B). The working group agreed to include the provision in RID from 1 January 2009, but only to apply this rule from 1 January 2011 (see also paragraph 9 of the report). This should enable the provision to be introduced without any problems. Including the provision in RID 2009 should give the industry and the approval authorities sufficient time for planning and the later date of entry into force should give them sufficient lead time to fit suitable equipment.

In addition, some editorial amendments were made at the working group. The revised proposal is as follows:

### **Proposal**

In accordance with the vote taken at the working group on tank and vehicle technology held on 14 and 15 June 2007 in Munich and the special meeting of the working group on tank and vehicle technology (Berlin, 12 October 2007), Germany submits the following proposals:

- Insert the following new special provision TE xx in 6.8.4 (b) (left-hand column only):

**“TE xx** Tank-wagons for liquids and gases, and battery-wagons shall be equipped with a derailment detection device. This device shall provide an immediate and clear signal to the locomotive driver that a derailment has occurred. Venting of the main brake pipe shall be considered as a clear signal.

The requirements shall be considered to have been fulfilled if the device is approved in accordance with UIC leaflet 541-08 (version applicable as at June 2007, 4<sup>th</sup> edition).

**Note.** The symbol “\*” in connection with the indication of special provision TE xx in column (13) of Table A of Chapter 3.2 means that this provision will only enter into force on 1 January 2011.”

- Insert the following Note in 3.2.1 in the third indent of the explanatory remark concerning column (13):

**“Note.** The symbol “\*” in connection with special provision TE xx means that this provision will only enter into force on 1 January 2011.”

- Insert “TE xx\*” in column 13 of Table A of Chapter 3.2 in the following cases:
  - for tanks for gases of Class 2 with classification codes containing the letter(s) F, T, TF, TC, TO, TFC or TOC, and
  - for tanks for substances of classes 3 to 8 with tank code L10BH, L10CH, L10DH, L15CH, L15DH or L21DH.
- Add a new transitional provision to 1.6.3 as follows:

**“1.6.3.x** Tank-wagons and battery-wagons

- for gases of Class 2 with classification codes containing the letter(s) F, T, TF, TC, TO, TFC or TOC, and
- for liquids of classes 3 to 8, to which tank code L10BH, L10CH, L10DH, L15CH, L15DH or L21DH is assigned in column (12) of Table A of Chapter 3.2,

constructed before 1 January 2011 which do not, however, conform to the requirements of 6.8.4 (b) concerning special provision TE xx applicable from 1 January 2011 may continue to be used.\*

\* This transitional provision shall enter into force on 1 January 2011.”