



**OTIF/RID/CE/GTDD/2016/1**

11 March 2016

Original: German

**RID:** 5<sup>th</sup> session of the RID Committee of Experts' working group on derailment detection  
(Berne, 19 and 20 April 2016)

**Subject:** Next steps

#### **Proposal transmitted by Switzerland**

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1. Following the 4<sup>th</sup> session of the working group on derailment detection (DDD WG) held in Paris in December 2015, the following comments can be made as a result of the discussions:
  - From the technical point of view, as soon as autonomous energy supply systems for freight wagons become available, the electronic detection of derailments can be introduced rapidly.
  - Autonomous energy supply systems already exist, but still need to be tested in day to day operations. It is anticipated that it will be 6 to 8 years until solutions for providing freight wagons with an electricity supply will be available.
  - The effect of fitting all freight wagons with a means of detecting derailments would be to reduce risks considerably. This would result in the highest cost/benefit ratio.
  - The DDD WG supported the voluntary use of mechanical derailment detectors in the meantime. To this end, such detectors should be included in the Technical Specifications for Interoperability in order to ensure that a freight wagon fitted with mechanical derailment detectors is deemed to be approved in the entire EU and OTIF area.

2. In view of the above, Switzerland believes the next steps can be defined as follows:
  - (a) Incorporate requirements for mechanical derailment detection in the TSI (voluntary application).
  - (b) Produce an overall timetable for the step by step introduction of derailment detection.
3. Next steps for 2 (a) above: At the 4<sup>th</sup> session of the DDD WG, it was agreed on the basis of an offer by the representative of ERA that for the next session, he would submit a draft programme for the work to be carried out.
4. Next steps for 2 (b) above: Switzerland proposes the following steps for the introduction of derailment detection in the 2019 edition of RID in coordination with Appendices APTU/ATMF:
  - **Proposal 1**

From 2023: New tank-wagons for particularly dangerous goods to be fitted with derailment detection. The 2012 draft text could be used for this purpose (see Annex).
  - **Proposal 2**

From 2027: Dangerous goods to which special provision TE xx is assigned may only be carried in trains in which all wagons are fitted with derailment detection. The scope of this provision should be specified (e.g. restrict it to tank-wagons and tanks according to RID Chapters 6.7 to 6.9 or specify a minimum quantity per wagon). A corresponding proposal will have to be drafted.
  - **Proposal 3**

As an alternative to proposal 2, fitting all freight wagons could be made mandatory in the TSIs (e.g. from 2030, in order to enable retrofitting in connection with normal servicing from 2026).
5. The time periods proposed take account of the period until electronic derailment detectors for freight wagons are available on the market. Early introduction of the provisions into the regulations gives the industry a clear signal and creates an incentive to develop products that are as diverse and economical as possible.
6. In parallel, the requirements for electronic derailment detection systems should be defined, analogous to the work referred to under 2 (a) and 3.
7. Switzerland proposes that the DDD WG should recommend a correspondingly agreed approach to the RID Committee of Experts and the Committee of Technical Experts.
8. In view of the comments referred to, it no longer seems worthwhile pursuing the questions that have been prepared, which are listed in the Annex to each of the meeting reports and which have partly been answered. If these questions were to be pursued, this would take up a lot of the DDD WG's time and would not really provide it with any new information. This approach should not be continued.

**Amended draft text in accordance with the final report of the 51<sup>st</sup> session of the RID Committee of Experts (Berne, 30 and 31 May 2012) (OTIF/RID/CE/2012-A, Annex 1)**

**Amendments to enter into force on 1 January ~~2015~~ 2019**

Add the following new transitional measure:

- ["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 substances of classes 3 to 8 carried in the liquid state and 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 ~~2015~~2023 which do not, however, conform to the requirements of 6.8.4 (b) concerning special provision TE xx ~~applicable from 1 January 2015~~ may continue to be used."]

**[Chapter 3.2  
Table A**

In **column (13)**, insert "TE xx" 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.]

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

**"TE xx** Tank-wagons for substances carried in the liquid state and gases, and battery-wagons shall be equipped with a detection device that provides an immediate and clear signal to the locomotive driver that a derailment has occurred.

This device shall meet the requirements of the relevant technical specifications for interoperability (TSI) and OTIF's uniform technical prescriptions (UTP) (wagons, operation, tunnel safety)."]