

Organisation intergouvernementale pour les transports internationaux ferroviaires Zwischenstaatliche Organisation für den internationalen Eisenbahnverkehr Intergovernmental Organisation for International Carriage by Rail

OTIF/RID/CE/GTDD/2016/3

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(English only)

RID: 5th Session of the RID Committee of Experts' working group on derailment detection (Berne, 19 and 20 April 2016)

Comments on documents OTIF/RID//CE/GTDD/2016/1 and .../2016/2

Transmitted by the Chairman

- The chairman of the WG DDD has carefully examined the documents submitted by ERA (OTIF/RID/CE/GTDD/2016/2) offering a contribution to the conclusions of the WG DDD and by Switzerland (OTIF/RID/CE/GTDD/2016/1) regarding the next steps.
- 2. Firstly, he would like to express his gratitude for the work done by the authors of these documents and for their much appreciated contribution to reaching a final conclusion to our discussions to enable safe and broadly accepted derailment detection to be used in practice.
- 3. These documents are complementary and accurately reflect the opinions expressed during the discussions.
- 4. Some assumptions and proposals made in these documents require further examination by the WG.
- 5. The chairman offers the following comments in order to stimulate the discussion at the forthcoming session and to make sure that no important questions have been forgotten or neglected.

Document OTIF/RID/CE/GTDD/2016/1 (Switzerland)

- 6. § 4: The proposed dates take into account the time required to put on the market autonomous onboard power supply systems to supply electronic detectors (see minutes of the last meeting, paragraphs 18 and 19).
- 7. Unlike mechanical detectors, electronic detectors will be able to differentiate between real derailments and shocks that occur for other reasons, such as infrastructure defects or obstacles on the rails. It may therefore be assumed that false alarms will no longer be a problem. The automatic and immediate triggering of brakes on the derailed wagon is the best way to mitigate the consequences of a derailment, as opposed to activation by the train driver after receiving an alarm. Some delay in transmitting such an alarm seems unavoidable and the driver will need further time to interpret it correctly.
- 8. If the WG insists on only considering detectors that alert the driver (prior to triggering the brakes if the driver does not react within a defined elapsed time), more time may be needed to develop an interoperable communication system able to transmit a derailment alarm.

Document OTIF/RID/CE/GTDD/2016/2 (ERA)

Draft final report § 9:

- 9. The working group should clarify the interpretation of the note in RID 7.1.1 which allows currently available technology to be used. Which "participants" are supposed to ensure that "the requirements for the authorisation for placing into service of such wagon are met"? The carrier (railway undertaking)? The tank-wagon operator (keeper)? The infrastructure manager?
- Is it incumbent on the railway undertaking to request authorisation to use the mechanical DDD by applying the COMMISSION IMPLEMENTING REGULATION (EU) No 402/2013 of 30 April 2013 on the common safety method for risk evaluation and assessment and repealing Regulation (EC) No 352/2009?
- 11. Who is the "proposer" according to the definition in Article 3 § 11 of the above Regulation?
 - The railway undertaking (a)? For a tank-wagon operator who has invested voluntarily in mechanical DDD, does this mean that he will be restricted to railway undertakings that have successfully passed the procedure and are allowed to carry wagons that are equipped with DDD?
 - The manufacturer of the device (c)?
 - The keeper (contracting entity) (c)?
- 12. Does the introduction of a mechanical DDD constitute a "significant change" according to Article 4 of the above Regulation? This type of detector has been in use for nearly 20 years on train compositions which comply with operational requirements such as the right brake setting of the train depending on its composition and weight. Introducing harmonised requirements with regard to the safe operation of vehicles equipped with mechanical detectors will reduce the risk in the case of rare functional failures (false alarm).
- 13. As a consequence, application of the above Regulation does not seem to be appropriate.

Draft final report § 10:

- 14. The WG seems to share the opinion that the following issues should be regulated:
 - The operation of vehicles equipped with DDD (see above),
 - The information regarding the presence in the train of wagons equipped with DDD,
 - The training of railway personnel, with the emphasis on how to react appropriately in case of false alarms.
- 15. The WG did not come to the conclusion that the technical requirements applicable to mechanical DDD as defined in UIC leaflet 541 08 needed to be changed.
- 16. The Chairman therefore suggests defining the requirements applicable to the mechanical DDD in the revised TSI as follows:
 - Take over the technical requirements from UIC leaflet 541-08 without modification,
 - Set requirements for the safe operation of vehicles equipped with mechanical detectors,
 - Set requirements for the training of the railway personnel involved,
 - Set requirements for clear communication concerning the presence of a DDD on a train.
 - Consider Appendix 9 to the General Contract of Use (GCU), Annex 1, Code 3.3.6 DET (derailment detector). Appendix 9 deals with "Technical conditions for wagon transfers between railway undertakings".
- 17. No further requirements should be considered.