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Guidelines from the European Union Agency for Railways concerning the use of derailment detectors¹

Introduction

In accordance with the analysis of the RID Committee of Experts working group on Derailment Detection and the Annex II of [OTIF/RID/CE/GTDD/2016-A](#), adopted as final report by RID Committee of Experts Standing working group (see paragraph 35 of [OTIF/RID/CE/GTP/2016-A](#)), the Agency prepared the present guidelines corresponding to the action referred to in paragraph 19, bullet 8 of the final report.

These guidelines are addressed to the parties [already using or](#) interested in the use of derailment detection devices before Technical Specifications for Interoperability relating to the safe and interoperable use of derailment detectors are developed by the Agency.

Important notice:

The guidelines reported hereinafter are consistent with the final report adopted by RID the Committee of Experts Standing working group and the legal framework applicable to users, and notably the following points:

- there is no legal requirement to use, or not to use, derailment detectors on any type of freight wagons, this situation is qualified as 'voluntary use'.
- the safe and interoperable –voluntary- use of derailment detectors is under the full and entire responsibility of the users²,
- the note in RID section 7.1.1. is applicable and will remain unchanged in RID 2017,
*“NOTE: Wagons are allowed to be equipped with detection devices which indicate or react to the occurrence of a derailment, provided that the requirements for the authorisation for placing into service of such wagons are met.
The requirements for placing into service of wagons cannot prohibit or impose the use of such detection devices. The circulation of wagons shall not be restricted on the grounds of the presence or lack of such devices.”*
- under certain circumstances, the users of derailment detectors must be aware that risks linked to high longitudinal compressive forces may take place with the use of certain types of detectors.

¹ (also presented at the 7th RID Standing Working Group, Prague, 22-24 November 2016 under the document references CE_GTP_2016-INF_11_E_Guidelines_derailment_detectors.pdf)

² [“the users are in accordance with Art 4 par 1 d\) the Railway Undertakings who have to coordinate with the Infrastructure Managers for the safe operation of wagons equipped with derailment detectors. All actors of art. 4 RSD must implement the necessary risk control measures, where appropriate in cooperation with other actors.”](#)

Therefore potential users of derailment detection devices and interested parties should consider the following guidelines.

Guidelines concerning the users of derailment detectors and interested parties:

- 1) The present guidelines shall be implemented without prejudice to the applicable legislation.
- 2) Any user of wagons equipped with derailment detectors should be informed of the conditions of use of such wagons, as normally reported in the technical file of the wagons, including the information concerning the description, limits of use, and maintenance requirements of (fitted) derailment detectors. If this information is not present, the technical file of the wagon should be updated in accordance with the applicable requirements for placing on the market of wagons.
- 3) In accordance with the CSM on risk evaluation and assessment ([Commission implementing Regulation \(EU\) No 402/2013 of 30 April 2013 on the common safety method for risk evaluation and assessment amended by Commission implementing Regulation \(EU\) No 2015/1136 of 13 July 2013](#)) and considering the risks which may take place, railway undertakings and infrastructure managers should decide if the use of such device in train compositions is introducing significant ~~risks~~ change in the context of their operations.

If they decide that significant risks should be considered, they should define mitigating actions in order to comply with the CSM on risk evaluation and assessment for controlling the identified risks to an acceptable level, and ensure that an independent safety assessment by a CSM Assessment Body is performed³.

- 4) In any case (significant or non-significant ~~risks~~ change identified) railway undertakings using derailment detectors in their train compositions should:
 - a. include in their safety management system all the necessary specific procedures/rules applicable in case of use of wagons fitted with derailment detectors, including information to drivers, and necessary trainings
 - b. inform the infrastructure managers of the network(s) on which they operate of the use of derailment detectors in their train compositions and, if required by the infrastructure managers, under its coordination, adapt their emergency response where necessary,
 - c. consider informing their National Safety Authority of ~~the all major changes which may affect the validity of their safety certificates to their safety management system~~ in relation with the use of derailment detectors,
 - d. they should register and share information concerning any false alarm of the derailment detectors in the Safety Alerts IT tool and share information with the concerned IM and NSA.

³ [Art. 6 of Common safety method for risk evaluation and assessment](#)

- 5) ~~When informed by railway undertakings on the use of derailment detectors in trains~~In any case, infrastructure managers should:
- implement the point 3) above,
 - include in their safety management system all the necessary specific procedures/rules applicable to control identified risks at an acceptable level, and amend their network statement, if necessary,
 - inform their National Safety Authority ~~of the~~whenever substantial changes are made in relation with the use of derailment detectors by railway undertakings on their network.
- 6) Through supervision activities, the National Safety Authorities should ensure that railway undertakings using derailment detectors in their trains and infrastructure managers, when trains equipped with derailment detectors circulate on their network, have ~~effectively adapted their respective safety management systems to~~ maintained at least the safety level performance of their operations.
- 7) The Agency invites OTIF to consider the need for transposing these guidelines to non-EU MS in the context of international transport.

Other information to be considered by potential users of derailment detectors or interested parties

In addition to the annex II of document [OTIF/RID/CE/GTDD/2016-A](#), the Agency believes that the following documents should be taken into consideration by potential users of derailment detectors and interested parties when implementing the above guidelines:

- [OTIF/RID/CE/GTDD/2015/9](#) Initial review of ERA's 2012 conclusions on the derailment detection in the light of Dr Bing dissertation
- Dr Daniel Bing, Derailment detection in rail freight transport – Analysis of influences on longitudinal train dynamics, ISBN: 978-3-87154-520-7, October 2014
- [Agency Final Report on Freight Train Derailments](#) – 24/04/2012