



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

INF. 7

07/09/2021

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Joint Coordinating Group of Experts
(Video conference, 7 and 8 September 2021)

Agenda item 3: Review of and report on the list of priority items agreed at the previous meeting

2 a – Vehicle Authorisation process: responsibilities for conformity assessment (Notified Body for vehicles)

ITEM 4: 7.1.1 (NOTE)

Transmitted by European Union Agency for Railways

TWG 'Freight' Derailment Prevention/Detection (DDD)

Working Party meeting
7 September 2021 - Teams teleconference



TWG Freight – Derailment detection/prevention

- Proposal to amend TSI LOC&PAS and TSI WAG already finished and available in the Extranet space of the WP
- Derailment detection and prevention function are composed of the following three voluntary functions:
 - DPF (Derailment Prevention Function)
 - DDF (Derailment Detection Function)
 - DDAF (Derailment Detection and Actuation Function)
- Main characteristics of these functions can be summarized in the table below:

Function	Description	Impacted TSIs	Risk scenario defined	Additional information
DPF	Detects precursors to a derailment and sends a signal to driver's cab. The requirements for the driver cab once such signal is detected is described in TSI LOC&PAS	TSI WAG TSI LOC&PAS	None	Function shared between wagons and locomotive or fully contained in the locomotive
DDF	Detects derailment once it has started and sends a signal to driver's cab. The requirements for the driver cab once such signal is detected is described in TSI LOC&PAS	TSI WAG TSI LOC&PAS	None	Function shared between wagons and locomotive or fully contained in the locomotive
DDAF	Detects derailment once it has started and automatically activates a brake application without possibility of overriding.	TSI WAG	Yes: false derailment detections may lead to excessive compressive forces having the typical credible potential to cause a derailment	Function fully contained in the freight wagon

TWG Freight – Derailment detection/prevention

- Derailment detection/prevention are defined as basic design characteristics in both TSI LOC&PAS and TSI WAG. Its fitting or removal will trigger a version in ERATV.
- No changes brought to the OPE TSI
- Impact Assessment – Positive assessment of recommendation

Next steps:

- Recommendation to be discussed in detail on WP meeting of 26.10.2021

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