Report on prevention and mitigation of freight train derailments
- for information -

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General

1. Study on derailment preventive measures which would lead to better impact assessment results (than the device (DDD) assessed by the Agency in 2009)

Specific to the Derailment Detection

2. Study on the impact of false alarms and the level of reliability that should be imposed for the derailment detection device (DDD)

3. Market research on products that meet the DDD provision in its current version (and/or in the version modified)

4. Study on the impact of automatic braking in tunnels/bridges

5. Additionally, amend the TSIs need to be revised in order to include the technical requirements of such devices... (DDD or modified) ...and the corresponding conformity assessment/verification procedures
Inputs to ERA’s report

- DNV Study (task 1)
- TF on Wagon Maintenance
- Other inputs

Agency’s Report on prevention and mitigation of freight train derailments
Review of DNV’s findings

The Agency

• Checked DNV’s methodology,
• Checked inputs and re-assessed DNV’s findings,
• Shared and discussed DNV’s reports in two workshops (May and September 2011):
  - Representatives from RISC, TDG/EC, NSA, NIB, RID experts, CEFIC, CER, EIM, ERFA, UIC, UIP, UIRR, UNIFE were invited.
• Received detailed comments from:
  - DK NSA, FI NSA, IT NSA, FR NIB, BE ECM, CER, CH FOT, RID WG TVT, UIC, Rail Cargo Austria, Knorr-Bremse

-> General agreement on the high quality of the DNV’s Study
The Agency

- Used relevant results from the DNV’s study, including answers to detailed comment received from interested parties,
- Complemented with other relevant inputs
- Answered to the questions raised in 2009 by the RISC and ITDG EC Committee (Slide 2) – in the light of the new findings
- Put in perspective short/medium/long term measures
- Recommended on the most efficient risk reduction actions
- Sent its draft report for consultation of associations
Consultation on ERA’s report

Consultation from 20/01/2012 to 06/02/2012 of representative associations:

- CER, EIM, ERFA, UIC, UIP, UIRR and UNIFE

- Two answers: UIRR, CER

-> General agreement on Agency’s conclusions including, detailed comments which support / do not affect the general conclusions
Main conclusions

Agency’s Report on prevention and mitigation of freight train derailments

Short Term

Medium term

Longer term

11 – 04 – 2012
13th RID Working Group on Tank and Vehicle Technology
N° 7
Short term

Priority to SMS and maintenance systems

1. **Priority is to make safety management system and maintenance system working better**

2. **More efficient measures than the derailment detection are immediately practicable**

3. **Derailment detection should be withdrawn from the RID**
Medium term

Voluntary approach for (additional) technical measures

1. The Agency recommends a voluntary approach concerning four (4) technical measures assessed as being efficient at EU level (WLID/WIM, PRC, BHD, BAM).

2. RUs & IMs must target efficient measures, as a result of:
   a) the implementation of their SMS,
   b) taking into account company and country specific situations

3. Priority is to make safety management system and maintenance system working better
1. Improving knowledge on derailments combined causes
   For example:  
   - Wheel/Rail interactions
   - Intervention limits concerning track quality

2. Prepare future developments in IT systems for safety data monitoring and data networking
   For example:  
   - Harmonised real-time monitoring (quality of wagon/track/train composition)
   - Harmonised safety-data exchanges (RUs, IMs & ECMs)

3. Study potential changes in freight fleet design (combined add-values for logistics and safety improvements)
   For example:  
   - Increased use of central-couplings
   - Wagons fitted with power supply and data transmission ...
Thank you for your attention