

OTIF



**ORGANISATION INTERGOUVERNEMENTALE POUR
LES TRANSPORTS INTERNATIONAUX FERROVIAIRES**

**ZWISCHENSTAATLICHE ORGANISATION FÜR DEN
INTERNATIONALEN EISENBAHNVERKEHR**

**INTERGOVERNMENTAL ORGANISATION FOR INTER-
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Subject: Information from the European Railway Agency

Introduction

1. Following a request of the European Commission (see OTIF/RID/CE/2009/INF.10) at the 47th session of the RID Committee of Experts, it was decided (see report OTIF/RID/CE/2009-A, paragraph 110) to add a permanent new item "Information from the European Railway Agency" in the following Agendas.
2. Hereinafter the Agency reports information which was either requested during the 50th session or having the potential to facilitate the coordination of works performed at EU and RID Committee of Experts levels. The selected information is the following:
 - Agency report on prevention and mitigation of freight train derailments,
 - Entities in Charge of Maintenance,
 - List of accidents notified to the Agency,
 - Texts concerning EU Railways legislation.

Information points

Agency report on prevention and mitigation of freight train derailments

3. Following a joint position of the Railway Interoperability and Safety Committee (RISC) and of the Inland Transport of Dangerous Goods Committee (ITDGC) stated in November 2009, the Agency was mandated by the European Commission to report on potential efficient actions to further prevent or mitigate the risks related to the freight train derailments at EU level.

For reasons of cost, only a limited number of copies of this document have been made. Delegates are asked to bring their own copies of documents to meetings. OTIF only has a small number of copies available.

4. After an extensive review of the existing measures for preventing or mitigating this risk in EU, the Agency has assessed the possibilities for further reducing the derailment risks at EU level.
5. The Agency considered that it was particularly important not to draw any conclusions which would recommend un-balanced new requirements to the railway freight transport in order not to shift un-controlled risks to the road mode. Therefore, the Agency carefully considered the current risk levels resulting from the railway freight transport in comparison with the road mode, including the risks relating to the transport of dangerous goods.
6. The Agency also considered the potential influence of the long term objectives expressed for the railway transport in the White Paper concerning the development of a Single European Transport Area.
7. As a result, the Agency believes that the most important actions for reducing the freight train derailment risks today, at EU level, are the following:
 - To improve the implementation of safety management systems under the responsibility of the Infrastructure Managers and the Railway Undertakings.
 - To improve the implementation of maintenance systems for freight wagons under the responsibility of the Entities in Charge of Maintenance.

There is no need to amend the current EU legislation for implementing these actions as the corresponding basic requirements have already been introduced in the EU legislation. However the Agency assessed that a better implementation of the current requirements by the responsible actors would significantly reduce the risks of freight train derailments, including the risks related to the transport of dangerous goods.

8. It is often a common reflex to try to reduce risks with technical measures (e.g. new safety device, new product design ...) while the basics of the safety management systems may not be fulfilled. This phenomenon should be avoided. Instead, it is the objective of safety management systems to identify the priority measures for safety improvements and developments at company level, such measures not necessarily corresponding to the adoption of a new technical measure.
9. Nevertheless, some technical measures have been assessed as efficient safety improvements at EU level, at short and medium term, as follows:
 - The use of Wheel Load Detectors & Wheel Impact Load Detectors for preventing the derailment causes in relation with wheel defects and with incorrect loading, over-loadings and skew loadings,
 - The use of Bearing Acoustic Monitoring for preventing bearing failures at an early stage,
 - The use of Bogie Hunting Detectors for preventing the derailment causes related to underperforming bogies,
 - The increased use of polyamide roller cages instead of brass roller cages for reducing number of axles ruptures due to hot boxes.
10. An important point needs to be clear at this stage. The technical measures listed above are some possible efficient improvements achievable in addition to existing measures. It does not mean that the measures already applied today are useless, on contrary they are contributing to the current level of safety. For example, the use of hot axle box detectors already contributes significantly to the prevention of derailments in the current railway system. This is the reason why a new measure consisting to use even more hot axle box detectors at EU level is not assessed as the best achievable improvement, hot axle box detectors being already ex-

tensively used in EU for achieving the current safety level.

11. Another point needs also to be clarified concerning the current implementation of the EVIC measure (European Visual Inspection Catalogue) by the sector. With the data currently available from the sector, the Agency has assessed that the EVIC measure is less efficient than the most promising improvements for reducing the risk of freight train derailments. After the publication of the report the Agency was informed that the costs to be considered for the implementation of EVIC measure are significantly lower than the initial evaluation reported by the Joint Sector Group. Therefore the Agency recommends the sector to pursue its analysis with reliable data and, depending on the results, potentially to re-consider its strategy concerning EVIC.
12. Nevertheless, the Agency considers that there is no reason to make one or another of the technical measures assessed in the present report mandatory at EU level. This is justified as follows:
 - It might be an unbalanced action towards the railway freight transport if we compare the level of safety achieved by the railway transport mode in comparison with the road transport mode,
 - The present report did not assess country specific or company specific improvements, therefore the Agency can only draw conclusions on EU harmonised measures,
 - If one of the measures listed above is already extensively applied in a country or by a company, the remaining room for improvement would be very low in this country or for this company,
 - The fact that the measures listed above have been assessed as cost-effective at EU level should be sufficient incentive for the concerned actors for evaluating their own potential safety improvements in using one or another of these measures, if it is relevant in their context.
 - The measures listed above should be considered at company level, together with any other potential measures which would be identified as the most efficient one through the correct implementation of the safety management system. In other words the correct use of safety management systems must target the most efficient risk reduction measures for each given Infrastructure Managers and Railway Undertakings under their respective responsibilities.
13. Concerning the question of the potential use of the derailment detection in the EU railway system, the Agency reiterates its recommendation issued in 2009. The derailment detection should not be introduced as a mandatory measure in RID. This recommendation is reinforced today at least for the two following reasons:
 - The present reports shows that there are other measures (organisational, operational and technical) immediately applicable which are more effective and more efficient for reducing the risks of freight train derailments at EU level, including the risks related to the transport of dangerous goods,
 - It would be a discriminating action to make the derailment detection mandatory at EU level, while other technical measures currently existing on the market are assessed as being more efficient for reducing the risk related to the transport of dangerous goods, and for reducing the risks related to the railway freight transport in general.

In addition the Agency would like to point out that dangerous goods wagons non-equipped with derailment detection should not be prevented to operate in countries which would recommend its use.

14. Finally, opportunities for the long term, have been identified for further reducing the occurrence of freight train derailments which also could help to achieve the railway objectives set out in the White Paper concerning the development of a Single European Transport Area.
15. These measures are not practicable today but some of them are already considered or should be considered in research projects. In this field the Agency recommends to further study and develop the identified measures in the relevant forum and to monitor the progress achieved within 3-5 years.
16. The development of the above conclusions have been supported by a detailed assessment of potential risk reduction measures carried out in the Study mandated by the Agency to Det Norske Veritas Ltd. (DNV) from which the reports have been made publicly available on the Agency web-site.
17. The Agency reviewed the findings reported by DNV and drawn its own conclusions taking into account the potential developments of the EU legislation and other additional information. In particular, the Agency took into account the available results from the Task Force on freight wagon maintenance established after the Viareggio accident.
18. During the whole process of development of the Agency's conclusions the Agency took great care of surveying all the interested parties through collections of relevant information and also offered regular information to these parties, in particular in organising two dedicated workshops in May and September 2011, as well as in regularly reporting information on the work progress in relevant meetings.
19. Doing so, the Agency regularly received comments from interested parties during the process of development of the present report which contributed to draw well-informed conclusions.

Entities in Charge of Maintenance

20. On the 10 May 2011 the Commission has adopted a the Regulation (EU) No 445/2011 on a system of certification of entities in charge of maintenance for freight wagons, amending Regulation (EC) No 653/2007.
21. The Agency is currently developing guidelines for assisting the concerned stakeholders in the correct implementation of the ECM regulation in EU. It is foreseen to include some indications concerning the dangerous goods transport in these guidelines.

List of accident investigations notified to the Agency by National Investigation Bodies

22. In accordance with article 19.1 of the Railway Safety Directive (RSD) the National Investigation Bodies (NIBs) are required to notify the Agency of each serious accident, to carry out an investigation and to provide the Agency with an investigation report within one year. In accordance with article 19.2 of RSD the NIBs may also decide to investigate other railway accidents or incidents of particular interest.
23. From 1 January 2011 to 31 December 2011 the NIBs have sent to the Agency:
 - 253 investigation notifications and
 - 289 investigation reports.

These notifications and reports concerned accidents and incidents occurred from 2006 onwards.

24. From 1 January 2012 to 20 April 2012 the NIBs have sent to the Agency:

- 80 investigation notifications and
- 79 investigation reports.

These notifications and reports concerned accidents and incidents occurred from 2007 onwards.

25. By 20 April 2012, the European Railway Agency has received in total 32 notifications or reports where dangerous goods trains, dangerous goods wagons, or the substance itself was involved, of which 2 concerned events occurred in 2011:

Date	Country	Location	link in ERADIS
21/09/11	DE	Bahnhof Bleicherode Ost; Strecke Halle – Hann Münden Nr. 6343	http://eradis.era.europa.eu/safety_docs/naib/view.aspx?id=2499
04/04/11	NO	Asper station	http://eradis.era.europa.eu/safety_docs/naib/view.aspx?id=2815

Texts concerning EU Railways (non exhaustive)

26. The following texts may have some relevance to the RID Committee. These texts have been published or have received a favourable opinion from the Railway Interoperability and Safety Committee (RISC).

(Published)

- Commission Decision of 23 April 2012 on the second set of common safety targets as regards the rail system (notified under document C(2012) 2084) (Text with EEA relevance) (2012/226/EU).
- Commission Decision of 22 November 2011 on criteria for the recognition of training centres involved in the training of train drivers, on criteria for the recognition of examiners of train drivers and on criteria for the organisation of examinations in accordance with Directive 2007/59/EC of the European Parliament and of the Council (notified under document C(2011) 7966) (Text with EEA relevance) (2011/765/EU).

(Favourable opinions)

- Texts on which favourable opinions were given have already been published.

In regards Interoperability

(Published)

- Commission Regulation (EU) No 328/2012 of 17 April 2012 amending Regulation (EC) No 62/2006 concerning the technical specification for interoperability relating to the telematic applications for freight subsystem of the trans-European conventional rail system (Text with EEA relevance).
- Commission Decision of 25 January 2012 on the technical specification for interoperability relating to the control-command and signalling subsystems of the trans-European rail system (notified under document C(2012) 172) (Text with EEA relevance) (2012/88/EU).
- Commission Implementing Decision of 4 October 2011 on the European register of authorised types of railway vehicles (notified under document C(2011) 6974) (Text with EEA relevance) (2011/665/EU).
- Commission Implementing Decision of 15 September 2011 on the common specifications of the register of railway infrastructure (notified under document C(2011) 6383) (Text with EEA relevance) (2011/633/EU).

(Favourable opinions)

- Draft Commission Decision concerning the technical specification for interoperability relating to the 'operation and traffic management' subsystem of the rail system in the European Union amending Decision 2007/756/EC.
- Draft Commission Decision amending Commission Decisions 2002/731/EC, 2002/732/EC, 2002/733/EC, 2002/735/EC and 2006/66/EC concerning technical specifications for interoperability ("omnibus part 1" on superseded TSIs).
- Draft Commission Decision amending Commission Decisions 2006/679/EC and 2006/860/EC concerning technical specifications for interoperability ("omnibus part 2" on CCS TSIs).
- Draft Commission Decision amending Commission Decisions 2006/861/EC, 2008/163/EC, 2008/164/EC, 2008/217/EC, 2008/231/EC, 2008/232/EC, 2008/284/EC, 2011/229/EU, 2011/274/EU, 2011/275/EU, 2011/291/EU and 2011/314/EU concerning technical specifications for interoperability ("omnibus part 3" on TSIs in force).

27. Corresponding recommendations from the Agency concerning these texts can be found on the Agency website.

Conclusion

28. The above information has been selected by the Agency in regards the potential links between the development of EU railway laws and provisions on Transport of Dangerous Goods. For the next "Information from the European Railway Agency" at the 52nd session the delegates are invited to propose topics of interest.
