Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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Information concerning risk evaluation procedures in the context of transport of dangerous goods by rail

Transmitted by the European Union (European Railway Agency (ERA))

- 1. Several documents have been transmitted to the Joint Meeting concerning the risk evaluation procedures in the context of dangerous goods. Some of these documents concern current practices in the railway sector.
- 2. ERA recognises that it is very important to identify the current practices, as it was undertaken by Germany (see ECE/TRANS/WP.15/AC.1/2013/13), however it is also particularly important to clearly identify what is currently applicable as existing legislative framework and what has to be considered as good practices or research developments.
- 3. Within EU Railway legislative framework the following acts regulate the process of risk assessment as well as the related safety targets and indicators:
 - Commission Regulation (EC) 352/2009 on Common Safety Methods on risk evaluation and assessment;
 - Commission Directive 2009/149/EC amending the Railway Safety Directive as regards Common Safety Indicators (CSIs) and common methods to calculate accident costs:
 - Commission Decision 2012/226/EU of 23 April 2012 on the second set of common safety targets (CSTs) as regards the rail system.

This framework establishes mandatory risk assessment and evaluation methods and safety level objectives (targets) as well as a compulsory monitoring of achieved safety levels (indicators) in EU Member States.

- 4. The general objective of this regulatory framework is to develop the railway safety in a harmonized and mutually-recognised manner within EU. In accordance with the Railway Safety Directive scope, this framework is also applicable to the management of risks involved in the transport of dangerous by rail.
- 5. While since 2009 Regulation (EC) 352/2009 was only applicable to the technical changes, from 1st July 2012 it is also mandatory applicable to any significant changes to the railway system, including operational and organisational changes.
- 6. Besides the legislative framework in force other initiatives are existing or under developments:

Railways:



- (a) Legislative developments:
 - Following a request from the European Commission, ERA has proposed a
 way forward concerning the development of explicit harmonised risk
 acceptance criteria for failures of functions of technical systems (2013 –
 published on ERA website);
- (b) Recognised Good practices:
 - Generic guideline for the calculation of risk inherent in the carriage of dangerous goods by rail (adopted in 2005 at the 42nd session of the RID Committee of Experts);
- (c) Study
 - Risk acceptance criteria for technical systems (2010 DNV study report for ERA);
 - Study of past accidents linked to the transport of dangerous goods on European marshalling yards (2012 – French Study "Étude de l'accidentologie liée au transport de marchandises dangereuses sur les sites européens de triages des wagons" – see also ECE/TRANS/WP.15/AC.1/2013/INF 27);

Note: The marshalling yards and sidings are also part of the railway system, and covered by the EU legislation listed in point 3.

Roads:

- (d) Recognised Good practices:
 - General Guideline for the Calculation of Risks in the Transport of Dangerous Goods by Road (adopted in 2008, 84th and 85th sessions of WP15);

Inland modes:

- (e) Study:
 - The German initiative on the International survey of implementation of chapter 1.9 of RID/ADR/ADN by users of risk evaluation procedures in the field of dangerous goods (see ECE/TRANS/WP.15/AC.1/2013/13);
 - Harmonised Risk Acceptance Criteria for Transport of Dangerous Goods (on-going Commission feasibility study, also referred to in ECE/TRANS/WP.15/AC.1/2013/INF 27);
 - Proposal from France and the UNECE secretariat on Accident database (ECE/TRANS/WP.15/AC.1/2013/INF 28).
- 7. ERA welcomes the various initiatives which may contribute at increasing the use of risk-based decision-making and the quality of current risk assessment and evaluation practices. However these initiatives should remain compatible with the concerned existing legislation applicable to EU Railways.
- 8. It is also necessary to improve the harmonisation concerning risk evaluation and assessment between the modes of transport, in order to avoid uncontrolled risk shifting.
- 9. Therefore, ERA considers that it is necessary to better coordinate the different actions as they might have an impact on the current implementation of the existing EU Railway legislation concerning the risk evaluation and assessment and on potential future legislative developments.

10. In order to contribute to these objectives, ERA proposes to organise a two days' workshop on 'Risk assessment and acceptance criteria as a support to decision-making in the context of dangerous goods transport' in autumn 2013.

The following discussion topics are proposed:

- Risk Assessment Methods;
- Risk Acceptance Criteria;
- Use of RAM and RAC in a decision-making process;
- Data-bases and reporting systems enabling the use of risk assessments;
- Reconciliation of local and global safety levels objectives;
- Use of harmonised RAM and RAC for all inland transport modes.
- 11. As the above topics are complex and would require sufficient time for discussion, it is foreseen that the proposed workshop will be the first of a series, and ERA should regularly welcome similar workshops on risk evaluation and assessment in the coming years.
- 12. Interested countries / organisations are invited to propose their contributions (presentations, position papers, suggestions for the agenda...) to these workshops to the ERA representative.
- 13. ERA will report the outcome of this work at a forthcoming Joint Meeting.

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