
Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

**Joint Meeting of the RID Committee of Experts and the
Working Party on the Transport of Dangerous Goods**
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Item 4 of the provisional agenda

Harmonization with the United Nations

recommendations on the Transport of Dangerous Goods

Proposal by Romania, IRU and UIC to complete the amendments included in the working documents ECE/TRANS/WP.15/AC.1/2017/26 and OTIF/RID/RC/2017/26

This proposal concerns the use of the concepts of risk and hazard

Introduction

1. Romania, IRU and UIC have examined the working documents ECE/TRANS/WP.15/AC.1/2017/26 and OTIF/RID/RC/2017/26. These documents aim primarily at applying the Recommendations of the UN by replacing the term of “risk” with that of “hazard”, but also at partially harmonising the use of these concepts in the different language versions – DE, EN and FR.

2. The amendments proposed by these documents involve the majority of the occurrences of the terms of risk and hazard identified by the document 2017/INF.16 presented during the meeting in March 2017. However, a number of occurrences were not handled, although they would deserve attention. The relevant occurrences have been collated in the document 2017/INF.4/Add1 attached to the present document, with proposed amendments and comments justifying such modifications. The occurrences identified in document 2017/INF.16 but not revealing any anomalies have been removed, and so have not been repeated in this annex.

3. Document 2017/INF.4/Add1 presents the occurrences that need to be handled in the ADN, ADR and RID regulations in their current DE, EN and FR versions. The excerpts from the regulations are numbered from 1 to 82 to make it possible to identify them easily in the table with the precise reference to the regulation. The amendments are proposed in the relevant language DE, EN or FR. If a version is not affected by an amendment, it is labelled with the note “nonconcerned”.

4. The terms of “risk” and “hazard” are currently not identified either by the ADN, ADR and RID regulations or by the UN Recommendations on the Transport of Dangerous Goods – (UN Model Regulations). The definitions maintained in the present document are those proposed in the report presented by the IATA¹ to the Sub-Committee of Experts in 2016.

¹ Relationship between concepts of hazard and risk. Transmitted by the International Air Transport Association (IATA). Document ST/SG/AC.10/C.3/2016/16 (Original: English). Sub-Committee of Experts on

These are concepts, with an available report, based on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), in paragraph 1.1.2.6.2.:

- The term “hazard” generally refers to the inherent properties of a substance or article that has the potential to do harm to persons, property or the environment and
- The term “risk” refers to the likelihood that that harm may occur.

The definition of the term of “risk” is essentially that proposed in the “Generic Guideline for the Calculation of Risk inherent in the Carriage of Dangerous Goods by Rail”, referred to in the ADR and RID regulations².

The standard ISO 31000 “Risk management – Principles and guidelines” proposes various definitions that are more or less similar or specialised. This standard is currently the subject of a revision project that is suggesting a new definition for the term of “risk”: “the effect of uncertainty on objectives”. This more global definition widens the field of application of the term of risk to include additional fields other than industrial safety, but it is not appropriate with regard to safety in the transport of dangerous goods.

5. The occurrences of the term of “risk” in Chapter 1.10 relating to security provisions raise questions about the vocabulary commonly used in this field. The relevant occurrences are identified in the excerpts from the text in lines 10 to 16 of the table contained in document 2017/INF.4/Add1. The expressions used in the versions DE, EN and FR are “gefährliche Güter mit hohem Gefahrenpotenzial”, “high consequence dangerous goods” and “marchandises dangereuses à haut risque” respectively. The versions EN and FR originate from the United Nations Model Regulations.

These semantic differences do not appear to have any significant impact with regard to the application of the regulations but, given the development of risk assessments in the interests of safety, it is reasonable to fear that in the long term such differences will promote variances in the approaches for identifying hazards and for analysing risks. In the field of security, the basic concepts that are habitually used are rather those of “threat” and “vulnerability”, so security risks correspond by analogy to the product of threat x vulnerability.

The EN definition “high consequence” has been adapted, but it would be preferable to substitute the FR concept currently in use with the phrase “haut potentiel de dommage”. With regard to the DE version, the expression “hohem Schadenpotenzial” would probably be more appropriate. The FR modification would certainly require a measure in advance at the Sub-Committee on TDG at the United Nations. It would also be necessary to take into account the impact of such amendments on the existing documentation implemented under the international regulations.

6. Several occurrences of the terms of “risk” and “hazard” originate in regulations other than those that are directly applicable to the transport of dangerous goods. Two cases have been identified:

- (a) Chapter 9.2 of the ADR. The concepts of “risques d’incendie” (FR), “Feuergefahren” (DE) and “fire risks” (EN) are those contained in the DE, EN and FR versions of Regulation No. 34 of the United Nations Economic Commission for Europe (UNECE) – Uniform provisions concerning the approval of vehicles with regard to the prevention of fire risks.

TDG. 49th session. Geneva, 27 June-6 July 2016. Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals.

² “Generic Guideline for the Calculation of Risk inherent in the Carriage of Dangerous Goods by Rail”. This guide is referred to respectively in Points 1.9.3 and 1.9.4 of the RID and ADR regulations.

(b) Chapter 9.3 of the ADN. The concept of “explosionsgefährdeten Bereichen” in the DE version and those of “zones presenting an explosion risk” and “zones à risque d’explosion” in the EN and FR versions respectively have a similar meaning. In order to maintain coherence with these regulations, it is proposed to not modify the DE text.³

7. The working documents ECE/TRANS/WP.15/AC.1/2017/26 and OTIF/RID/RC/2017/26 do not deal with the consequences of the proposed amendments on the written instructions (5.4.3). The useful adaptations will certainly be handled by the modal instances in charge of the ADN, the ADR and the RID respectively. The document 2017/INF.4/Add1 proposes amendments in this regard from line 27 to line 34.

Proposals

8. The proposed amendments are the subject of the document 2017/INF.4/Add1. They have been submitted to the Joint Meeting for adoption. The DE, EN or FR versions that are not affected by a given amendment have been explicitly identified with the note “nonconcerned”.

9. Provisions concerning security (1.10). The proposal of amendments presented in lines 10 to 16 of document 2017/INF.4/Add1 has been submitted to the Joint Meeting for an advisory opinion with the aim of adopting, if applicable, the relevant versions of Chapter 1.4 of the United Nations Model Regulations and, in light of the consequences, Chapters 1.10 of the ADN, ADR and RID regulations.

10. Definition of the terms of hazard and risk in 1.2.1. “Definitions” of the ADN, ADR and RID regulations, in reference to the paragraph 1.1.2.6.2 of GHS, under the proviso that it is not necessary to do the same for the UN Model Regulations in advance.

³ For example, these concepts match those of the Directive 1999/92/EC of the European Parliament and of the Council of 16 December 1999 on minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres (15th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC).