

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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**Harmonization with the United Nations Recommendations
on the Transport of Dangerous Goods**

Harmonization of requirements between RID/ADR and IMDG-Code/UN Model Regulations in respect of structural serviceability of large containers

Transmitted by the European Chemical Industry Council (CEFIC)

Introduction

1. This document aims to highlight the different scope of specific requirements according to the UN Model Regulations sub-section 7.1.3.3.1 (b) applicable for transport units when used for the carriage of explosive substances and articles of Class 1 only, as adopted in IMDG-Code section 7.1.2, versus requirements for structurally serviceable large containers outlined in RID/ADR 7.1.4, applicable for all dangerous goods classes.

Discussion

2. Large containers in service to carry dangerous goods are subject to the International Convention for Safe Containers (CSC) 1972, as amended, alternatively to the relevant UIC¹ leaflets, as specified in the general provisions of RID/ADR 7.1.3, requiring structural safety approval and additionally recurring inspections to ensure continued safe conditions.

3. Furthermore, when presented for carriage at the loading site the container has to be examined to ensure it is structurally serviceable. According to the definition in RID/ADR 7.1.4 and 7.3.1.13 “structurally serviceable” means that the container is free from major defects in its primary structural components, e.g. top and bottom side rails, top and bottom end rails, door sill and header, floor cross-members, corner posts and corner fittings.

4. In RID/ADR, in the IMDG-Code, section 7.1.2, and in the UN Model Regulations, sub-section 7.1.3.3.1 (b), in line with the CSC and related guiding technical reference-documents published by UIC, COA², IICL³ or ICS⁴, “major defects” are defined as dents or bends, cracks or breaks in structural members that affect the integrity of the container; improper or inadmissible splices in rails, door sill and header or corner post; door hinges and

¹ Union Internationale des Chemins de Fer (UIC)

² Container Owners Association (COA)

³ Institute of International Container Lessors (IICL)

⁴ International Chamber of Shipping (ICS)

hardware that are seized, twisted, broken, missing or otherwise inoperative; non-closing gaskets and seals; any distortion of the overall configuration great enough to prevent proper alignment of handling equipment, mounting and securing on a chassis or vehicle.

5. The IMDG-Code, based on the UN Model Regulations, limits the application of such general qualitative requirements on structural serviceability, however, along with additional quantified criteria specifically for dents or bends in structural members (categorized as major defects when greater than 19 mm in depth, regardless of length) to the carriage of explosive substances and articles of Class 1 only. On the other hand, RID/ADR 7.1.4, in its general provisions, postulates the qualitative requirements including the specifically quantified criteria to be applied for the carriage of all dangerous goods classes.

6. Due to the impact of strong mechanical forces on the containers at sea voyage, including multiple handling and stacking, higher technical integrity standards have been defined in the IMDG-Code especially for the carriage of substances and articles of Class 1. In road and rail transport such mechanical forces are not as strong as in maritime transport and the containers are not carried in stacked form. Therefore, specific requirements on structural serviceability of large containers in service for the carriage of substances and articles of Class 1 adopted for a generalized application on land transport of all dangerous goods classes, as currently provided by RID/ADR, has to be questioned.

7. Large containers are designed and constructed for multimodal use and for global exchange of goods. Their design and approval follow international ISO standards as well as other international agreements such as CSC and related guiding technical reference-documents published by international institutions within the container industry. Differences in the modal transport regulations with respect to the specific requirements for structurally serviceable containers means a significant burden in international trade regarding the use and interchange of containers.

Proposal

8. With regard to harmonized transport regulations, CEFIC is of the opinion that the application of quantified requirements for dents or bends in primary structural components of large containers, specified in RID/ADR section 7.1.4, should be adapted to the scope of comparable requirements in the IMDG-Code section 7.1.2, based on the UN Model Regulations sub-section 7.1.3.3.1 (b), stipulated for the carriage of explosive substances and articles of Class 1.

9. Therefore, CEFIC proposes to consider amendment of RID/ADR section 7.1.4 to read as follows:

7.1.4 A large container may be presented for carriage only if it is structurally serviceable.

“Structurally serviceable” means that the container is free from major defects in its structural components, e.g. top and bottom side rails, top and bottom end rails, door sill and header, floor cross-members, corner posts and corner fittings. “Major defects” are dents or bends ~~in structural members~~ (for the carriage of explosive substances and articles of Class 1: dents or bends greater than 19 mm in depth, regardless of length) or cracks or breaks in structural members that affect the integrity of the container; more than ...
