

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

29 February 2016

Bern, 14–18 March 2016

Item 5 (b) of the provisional agenda

**Proposals for amendment to RID/ADR/ADN:
new proposals**

Modification of document ECE/TRANS/WP.15/AC.1/2016/14 concerning the orange-coloured plate marking required under 5.3.2 for the carriage of radioactive material

Transmitted by the Government of France

Summary

- Executive summary:** This document slightly modifies the proposal in ECE/TRANS/WP.15/ AC.1/2016/14 intended to introduce into ADR, ADN and RID the requirement to mark the orange-coloured plates for all carriage of packaged radioactive material where the load corresponds to a single UN number (with no other dangerous goods), whether under exclusive use or not.
- Decision to be taken:** Amendment to 5.3.2.1.4, 5.3.2.1.6 and 5.3.2.2.1 of ADR and ADN, and 5.3.2.1.1 of RID.

Introduction

1. As indicated in document ECE/TRANS/WP.15/AC.1/2016/14, in the event of an accident occurring during the carriage of radioactive material, the appropriate measures to be taken by the emergency services, whether in the form of safety areas, individual protection for those involved or extinguishers, depend greatly on the type of material being transported. It is therefore vital that the emergency services should have rapid access to detailed information on the load. That is why the Government of France proposes to introduce into ADR, ADN and RID the requirement to mark the orange-coloured plates for all carriage of packaged radioactive material where the load corresponds to a single UN number (with no other dangerous goods), whether under exclusive use or not.
2. After having analysed the comments elicited by document ECE/TRANS/WP.15/AC.1/2016/14, the Government of France proposes a slight modification of this proposal to take into account cases where radioactive material is carried along with others dangerous goods in quantity below 1.1.3.6 thresholds.
3. Dangerous goods in quantity below 1.1.3.6 thresholds can be carried in a vehicle without any orange-coloured plate (see 1.1.3.6.2). Therefore, it is accepted that, in case of an accident, emergency services can intervene without knowing that these dangerous goods are present. It is then logical to not take into account the presence of dangerous goods in

quantity below 1.1.3.6 thresholds to determine whether orange-coloured plate have to be marked. Proposal was modified in that way.

4. As an example, gammagraphy devices (UN number 2916) used for industrial applications are often carried along with their depleted uranium collimator. This collimator is a radioactive material with UN number 2910 (category 4 of 1.1.3.6.3). As the quantity of radioactive substances in the collimator is below 1.1.3.6 thresholds, a vehicle carrying only the collimator does not need any orange-coloured plate. With the modified proposal, the presence of the collimator would not influence the marking of the orange-coloured plate, which would be UN number 2916. This is relevant from a safety point of view as the risks associated with collimators are insignificant in comparison with the risks associated with gammagraphy devices.

5. Finally, it is proposed to modify ADR 5.3.2.1.6 to extend the possibility to not display side orange-coloured plates to vehicles submitted to 5.3.2.1.4 because they carry a radioactive substance with other dangerous goods in quantity below 1.1.3.6 thresholds.

Proposal

Text with amendments highlighted

ADR and ADN:

5.3.2.1.4 When a hazard identification number is indicated in Column (20) of Table A of Chapter 3.2, transport units and containers carrying unpackaged solids or articles, or packaged radioactive material with a single UN number **where the transport unit or container does not at any time during carriage contain other dangerous goods in quantity above thresholds in 1.1.3.6, ~~required to be carried under exclusive use and no other dangerous goods~~** shall in addition display on the sides of each transport unit or container, clearly visible and parallel to the longitudinal axis of the vehicle, orange-coloured plates identical with those prescribed in 5.3.2.1.1. These orange-coloured plates shall bear the hazard identification number and the UN number prescribed respectively in Columns (20) and (1) of table A of Chapter 3.2 for each of the substances carried in bulk in the transport unit or in the container or for the packaged radioactive material **~~when required to be carried under exclusive use~~** in the transport unit or in the container.

5.3.2.1.6 For transport units carrying only one dangerous substance and no non-dangerous substance, **or carrying packaged radioactive material with a single UN number possibly along with other dangerous goods in quantity below thresholds in 1.1.3.6,** the orange-coloured plates prescribed in 5.3.2.1.2, 5.3.2.1.4 and 5.3.2.1.5 shall not be necessary provided that those displayed at the front and rear in accordance with 5.3.2.1.1 bear the hazard identification number and the UN number for that substance prescribed respectively in Columns (20) and (1) of Table A of Chapter 3.2.

- 5.3.2.2.1 Third paragraph
- When reduced dimensions of orange-coloured plates are used for packaged radioactive material ~~carried under exclusive use~~, only the UN number is required and the size of the digits stipulated in 5.3.2.2.2 may be reduced to 65 mm in height and 10 mm in stroke thickness.

RID:

- 5.3.2.1.1 A rectangular, orange-coloured plate conforming to 5.3.2.2.1, and so as to be clearly visible, shall be affixed on each side of a
- tank-wagon,
 - battery-wagon,
 - wagon with demountable tanks,
 - tank-container,
 - MEGC,
 - portable tank,
 - wagon for carriage in bulk,
 - small or large container for carriage in bulk,
 - wagons and containers carrying packaged radioactive material with a single UN number ~~under exclusive use and no other dangerous goods~~ where the wagon or container does not at any time during carriage contain other dangerous goods in quantity above thresholds in 1.1.3.6,
- used for the carriage of goods for which a hazard identification number is given in column (20) of Table A of Chapter 3.2.

Justification

- Safety:** The proposed amendment is intended to improve the safety of the carriage of radioactive material by allowing the emergency services to take more appropriate measures in the case of an accident.
- Feasibility:** All carriers of radioactive material are concerned by the proposed amendment. However, the cost to carriers will be limited. The proposal may require them to purchase a set of orange-coloured plates.
- Enforceability:** The application of the amendment could be monitored through inspections of conveyances carrying radioactive material.