

## INLAND TRANSPORT COMMITTEE

Working Party on the Transport of  
Dangerous Goods

(Seventy-first session,  
Geneva, 5-9 November 2001)  
Item 3 (d) of the agenda

Proposal transmitted by the Government of France

## CHAPTERS 3.2 AND 5.3 OF THE RESTRUCTURED ADR

ORANGE-COLOURED PLATE MARKING FOR THE CARRIAGE  
OF RADIOACTIVE AND FISSILE MATERIAL

<b>Executive summary:</b>	This proposal is intended to extend and ensure consistency in the provisions of the restructured RID/ADR concerning the orange-coloured plate marking of transport units carrying radioactive and fissile material <u>in packages</u> .
<b>Action to be taken:</b>	<ul style="list-style-type: none"> <li>- Add a specific provision to paragraph 5.3.2.1 concerning the carriage of radioactive and fissile material <u>in packages</u>.</li> <li>- Add a new hazard identification number to paragraph 5.3.2.3.2 taking into account the special risks presented by uranium hexafluoride (UF<sub>6</sub>).</li> <li>- Bring into line column 20 of Table A of Chapter 3.2 of the restructured RID and ADR.</li> <li>- Bring paragraph 5.3.2.3.2 in coherence with new hazard identification numbers proposed in table A of Chapter 3.2.</li> </ul>
<b>Documents considered:</b>	Restructured RID/ADR.

**Introduction**

The competent French authority for the carriage of dangerous goods in accordance with the competent French authority for the carriage of radioactive and fissile material propose to expand the provisions of the restructured RID/ADR concerning the orange-coloured plate marking for transport units carrying radioactive and fissile material.

**Proposal for sub-section 5.3.2.1**

It is proposed to insert the following paragraph after paragraph 5.3.2.1.4 and to renumber the paragraphs which follow:

"5.3.2.1.5 For Class 7, if a hazard identification number is mentioned in Column (20) of Table A of Chapter 3.2, for not more than one of the material carried, the orange-coloured plates prescribed in 5.3.2.1.1 shall also bear the hazard identification number and the UN number of the concerned material, prescribed respectively in Columns (20) and (1) of Table A of Chapter 3.2.

For UN No. 2915, the consignments are exempted from this requirement, provided that the number of packages of this material is less than ten."

**Proposal for sub-section 5.3.2.3.2**

- Delete hazard identification numbers 72, 723, 73, 74, 75, 76, 78.
- Add hazard identification number X78 corresponding to a radioactive material, corrosive, reacting dangerously with water, as follows:

"X 78      corrosive radioactive material, which reacts dangerously with water."<sup>1</sup>

**Proposed amendment to Column (20) of Table A of Chapter 3.2 of the restructured RID/ADR**

UN No.	Name and description 3.1.2	Hazard identification number	Hazard identification number	Proposed amendment to the hazard identification number
(1)	(2)	<u>5.3.2.3 Restructured ADR (20)</u>	<u>5.3.2.3 Restructured RID (20)</u>	<u>5.3.2.3 for the restructured RID/ADR (20)</u>
2908	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - EMPTY PACKAGING	-	70	-
2909	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - ARTICLES MANUFACTURED FROM NATURAL URANIUM or DEPLETED URANIUM or NATURAL THORIUM	-	70	-
2910	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - LIMITED QUANTITY OF MATERIAL	-	70	-
2911	RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - INSTRUMENTS or ARTICLES	-	70	-
2912	RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-I), non-fissile or fissile-excepted	70	70	<b>70</b>
2913	RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECTS (SCO-I or SCO-II), non-fissile or fissile-excepted	-	70	<b>70</b>
2915	RADIOACTIVE MATERIAL, TYPE A PACKAGE, non-special form, non-fissile or fissile-excepted	-	70	<b>70</b>
2916	RADIOACTIVE MATERIAL, TYPE B(U) PACKAGE, non-fissile or fissile- excepted	-	70	<b>70</b>
2917	RADIOACTIVE MATERIAL, TYPE B(M) PACKAGE, non-fissile or fissile- excepted	-	70	<b>70</b>



UN No.	Name and description 3.1.2	Hazard identification number  5.3.2.3 <u>Restructured</u> <u>ADR</u> (20)	Hazard identification number  5.3.2.3 <u>Restructured</u> <u>RID</u> (20)	Proposed amendment to the hazard identification number 5.3.2.3 for the <u>restructured</u> <u>RID/ADR</u> (20)
(1)	(2)			
3333	RADIOACTIVE MATERIAL, TYPE A PACKAGE, SPECIAL FORM, FISSILE	-	70	70

### Justification

- The present provisions of the restructured RID/ADR only require orange-coloured plate markings with the hazard identification number and the UN number on means of transport for radioactive and fissile material in the case of carriage in tanks or in bulk. Means of transport carrying packages are not subject to this obligation.
- A comparison of Column (20) of Table A of Chapter 3.2 reveals inconsistencies between ADR and RID as regards the allocation of hazard identification numbers.
- For packages containing limited quantities of radioactive material in excepted packages (UN Nos. 2908, 2909, 2910, 2911), the orange-coloured plate marking is not relevant in view of the low level of risk of the consignments.
- Uranium hexafluoride (UF<sub>6</sub>) reacts dangerously with water to form hydrofluoric acid.

### Safety

The proposal to extend the obligation to carry orange-coloured plate marking with the hazard identification number and the UN number to transport units carrying radioactive and fissile material in packages is intended to facilitate information on existing dangers to the emergency services in the event of an accident. The generalized presence of the orange-coloured plate marking with the hazard identification number and the UN number in the case of packages containing radioactive and fissile material is justified for reasons of the safety of the emergency personnel who are thus in a position to identify the potential risks of the load from a distance.

### Feasibility

There is no technical difficulty in the implementation of this provision.

### Advantage

Rapid transmission from a distance of information concerning the identification of hazards. The proposed amendment may be applied to numerous consignments of packages containing radioactive material, carried individually, such as packages of new or used fuels for power reactors, radioactive source packages or packages of radiopharmaceuticals when carried in large numbers in the same transport unit.

**Disadvantages**

None.

**Transitional provisions**

None.

**Implementation**

Application to the 2003 edition of the restructured ADR.

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