Carriage in bulk

Transmitted by the Government of the United Kingdom¹, ²

Summary

Executive summary: This document presents text for adoption in the 2015 revisions of RID and ADR concerning the carriage of dangerous goods in bulk following consideration of the report of the informal working group on carriage in bulk discussed at the March 2012 session. The assignment of the proposed new codes against entries in Table A were presented in informal documents INF.43 and INF.44 also at the March 2012 session. The codes have been reduced to three VV/VW codes, plus additional provisions. The amendments to Chapter 7.3 of ADR and Chapter 7.3 of RID based on the conclusions of the working group and further discussion at the last Joint Meeting session are presented as Annexes A and B to this paper respectively. A consolidated version of Chapter 7.3 of ADR/RID is presented in informal document INF.4.

Action to be taken: Consideration and adoption of the proposed amendments to Chapters 7.3 in both RID and ADR.

¹ In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106, ECE/TRANS/2010/8, programme activity 02.7 (c)).
² Circulated by the Intergovernmental Organisation for International Carriage by Rail (OTIF) under the symbol OTIF/RID/RC/2012/28.
Introduction

1. The results of the second meeting of the informal working group on carriage in bulk held on 6th and 7th February 2012 were presented to the March 2012 session of the RID/ADR/ADN Joint Meeting in informal document INF.17, supported by informal documents INF.43 and INF.44. The terms of reference agreed at the March 2011 Joint Meeting were as follows;

   “(a) The working group shall conduct a comprehensive review of the existing special provisions for the transport of dangerous goods in bulk contained within section 7.3.3 of RID/ADR/ADN. The general provisions for all carriage in bulk contained in 7.3.1 shall be considered alongside these special provisions when undertaking this review.

   The review will aim to streamline, update and improve the clarity of these special provisions to ensure they are fit for purpose and necessary for the safe transport in bulk of the UN entries they are allocated to.

   (b) The working group shall also conduct a review of where carriage in bulk is already permitted in RID/ADR/ADN using the United Nations BK system contained in 7.3.2 of RID/ADR/ADN.

   This review will consider if any contradiction occurs between the allocation of BK codes and the requirements of 7.3.3.”.

Discussion

2. The Joint Meeting welcomed the results of the work by the informal working group (see paragraphs 52 to 59 of ECE/TRANS/WP.15/AC.1/126) and approved in principle the new framework proposed by the group. As several delegations wished to have more time to discuss the group’s conclusions at national level and to check the correlation between the proposed provisions with the substances involved, it was agreed that the United Kingdom would submit a formal proposal at the next session of the Joint Meeting.

3. In the meantime, as the informal group had formulated its conclusions primarily for ADR, it was agreed that the United Kingdom would also submit a text presented for inclusion into RID to the RID Committee of Experts working group on tank and vehicle technology for comment. In that paper it was proposed to simply refer to closed wagons and not additionally to moveable roof wagons as the definition of the former in 1.2.1 includes wagons with a moveable roof.

4. As reflected in the discussions at the Joint Meeting, the question arose as to whether the requirement of carriage as a wagon load or a full load (AP7) should apply to rail transport when it applied to road transport. The working group on tank and vehicle technology remitted this question to Union Internationale des Chemins de fer (UIC) that has subsequently advised the United Kingdom delegation that UIC considers that the AP7 is not necessary in 7.3.3.2.4, 7.3.3.2.5 and 7.3.3.2.6 as proposed in the document since all loads will be full in rail transport. AP7 in the RID text has thus been deleted. The working group on tank and vehicle technology made no other comment on the proposals.

5. The Joint Meeting endorsed the working group recommendation that there was no specific logical reason to continue preventing the use of sheeted small containers in bulk.
transport in general. The Joint Meeting also endorsed the working group recommendation that closed vehicles and closed containers should be permitted for carriage in bulk even if in some circumstances it would be necessary to provide openings to allow for the exchange of vapours when they are present. Both of these decisions were anticipated in the texts presented in informal document INF.17 and are carried through to the current proposals.

6. On the question of whether the carriage in pieces requirement (AP3) for UN No. 1405 and UN No. 2844 should apply to all substances in Class 4.3 (excluding carriage in powder or granular form) the Joint Meeting considered that this should remain open for consideration at its September session. This text is thus retained in square brackets.

7. When text is presented within square brackets in 7.3.3 in both annexes A and B this is to indicate that the Joint Meeting needs to make a decision on whether the specific UN numbers should be referenced in the text of 7.3.3 or if the relevant Additional Provision (AP) should be assigned to the specific UN numbers in column 17 of Table A instead.

8. The representative of Romania indicated that he would remit the proposal in informal document INF.35 to the revised text to be submitted by the United Kingdom and this has now been included, together with a proposal for a consequential amendment to CV/CW 36.

9. Delegations that had indicated that further consultations at the national level were desirable were requested to submit their comments in writing before the next session. No such comments have been communicated to the United Kingdom delegation for inclusion in this proposal.

Conclusion

10. It is the view of the delegation of the United Kingdom that, subject to decision as indicated in paragraph 6 and 7 above, the texts shown as Annex A and Annex B, together with the consequential amendments indicated, can now be formally adopted for inclusion in the 2015 revisions of both RID and ADR.
Annex A

Proposed amendments for Chapter 7.3 of ADR

Explanation

Important note: When text is presented within [ ] in 7.3.3 this is to indicate that the Joint Meeting needs to make a decision on whether the specific UN numbers should be referenced in the text of 7.3.3 or if the relevant Additional Provision (AP) should be assigned to the specific UN numbers in column 17 of Table A instead.

The complete text of Chapter 7.3 is provided in informal document INF.4.

7.3.1.1 (a) Insert “or a reference to a specific paragraph” after “identified by the code BK”.

7.3.1.1 (b) Insert “or a reference to a specific paragraph” after “identified by the code VV”.

7.3.1.4 and 7.3.1.6 At the beginning, replace “Bulk solids” with “Substances”.

7.3.3 Amend to read as follows:

“7.3.3 Additional Provisions for carriage in bulk when the provisions of 7.3.1.1 (b) are applied

7.3.3.1 The codes VV1, VV2 and VV13 in column (17) of Table A of Chapter 3.2 have the following meanings:

VV1 Carriage in bulk in sheeted vehicles, sheeted containers or sheeted bulk containers is permitted;

VV2 Carriage in bulk in closed vehicles, closed containers or closed bulk containers is permitted;

VV13 Carriage in bulk is permitted in specially equipped vehicles or containers in accordance with standards specified by the competent authority of the country of origin. If the country of origin is not a contracting party to ADR, the conditions laid down shall be recognized by the competent authority of the first country contracting party to ADR reached by the consignment.

7.3.3.2 When the VV bulk codes are used the following additional provisions shall apply:

7.3.3.2.1 Goods of Class 4.1

AP1 [For UN1334] vehicles and containers shall have a metal body and where fitted the sheet shall be non-combustible.

AP2 [For UN3175] closed vehicles and closed containers shall have adequate ventilation.

7.3.3.2.2 Goods of Class 4.2

AP1 Vehicles and containers shall have a metal body and where fitted the sheet shall be non-combustible.

7.3.3.2.3 Goods of Class 4.3

AP3 [[For UN 1405 and UN 2844] sheeted vehicles and sheeted containers shall be used only when the substance is in pieces (not in powder, granular, dust or ashes form).]
(Comment from the working group: We are not certain it is necessary to introduce this as a general requirement for all substances in Class 4.3.)

AP4 Closed vehicles and closed containers shall be equipped with hermetically closed openings used for loading and unloading to prevent the exit of gas and exclude the ingress of moisture.

AP5 The cargo doors of the closed vehicles or closed containers shall be marked with the following in letters not less than 25 mm high:

<table>
<thead>
<tr>
<th>EN</th>
<th>FR</th>
</tr>
</thead>
</table>
| “WARNING
CLOSED MEANS OF CONTAINMENT
NO VENTILATION
OPEN WITH CAUTION” | “ATTENTION
MOYEN DE RETENTION FERMÉ
NON VENTILÉ
OUVRIR AVEC PRÉCAUTION” |

This shall be in a language considered appropriate by the consignor.

7.3.3.2.4 Goods of Class 5.1

AP6 If the vehicle or container is made of wood or other combustible material an impermeable surfacing resistant to combustion or a coating of sodium silicate or similar substance shall be provided. Sheeting shall also be impermeable and non-combustible.

AP7 Carriage shall only be as a full load.

7.3.3.2.5 Goods of Class 6.1

AP7 Carriage shall only be as a full load.

7.3.3.2.6 Goods of Class 8

AP7 [Except for UN 2794, UN 2795, UN 2800, UN 3028] carriage shall only be as a full load.

AP8 [For UN 2794, UN 2795, UN 2800, UN 3028] the design of the load compartment of vehicles or containers shall take account of any residual currents and impacts from the batteries.

The load compartments of vehicles of containers shall be of steel resistant to the corrosive substances contained in the batteries. Less resistant steels may be used when there is a sufficiently great wall thickness or a plastics lining/layer resistant to the corrosive substances. The load compartments of vehicles or containers shall not be loaded above the top of their walls.

Carriage is also permitted in small plastics containers which shall be capable of withstanding, when fully loaded, a drop from a height of 0.8m on to a hard surface at -18 °C, without breakage.

7.3.3.2.7 Goods of Class 9

AP7 [For UN 2211 and UN 3314] closed vehicles and closed containers shall have adequate ventilation.

AP9 [For UN 2315, UN 3151, UN 3152, UN 3432] carriage is permitted for solids (substances or mixtures, such as preparations or wastes) containing on average not more than 1 000 mg/kg of substance to which this UN number is assigned. At no point of the load shall the concentration of this substance or these substances be higher than 10 000 mg/kg.”.
Consequential Amendments

Chapter 1.2

1.2.1 In the definition for “Carriage in bulk” replace “in vehicles or containers” by “in vehicles, containers or bulk containers”.

Chapter 3.2

Amend the explanation for column 17, Table A, as follows (new text underlined):

“Contains the alphanumeric code(s), starting with letters “VV” [or “AP”], of the applicable special provisions for carriage in bulk. These are listed in 7.3.3. If no code or a reference to a specific paragraph is given, carriage in bulk is not permitted. General and additional provisions concerning the carriage in bulk are to be found in Chapters 7.1 and 7.3.”.

For UN 2912: Delete “VV16” in column 17 and add “see 4.1.9.2.3” in columns 10 and 17.

For UN 2913: Delete “VV17” in column 17 and add “see 4.1.9.2.3” in columns 10 and 17.

For all UN numbers having an existing VV code:

Amend the references to VV codes in column (17), Table A, in accordance with the principles in informal document INF.5.

Section 7.5.11

In CV36 between the words “WARNING” and “NO VENTILATION” insert the words “CLOSED MEANS OF CONTAINMENT” thus:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>“WARNING CLOSED MEANS OF CONTAINMENT NO VENTILATION OPEN WITH CAUTION”</td>
<td>“ATTENTION MOYEN DE RETENTION FERMÉ NON VENTILÉ OUVRIR AVEC PRECAUTION”</td>
</tr>
</tbody>
</table>
Annex B

Proposed amendments for Chapter 7.3 of RID

Explanation

Important note: When text is presented within [ ] in 7.3.3 this is to indicate that the Joint Meeting needs to make a decision on whether the specific UN numbers should be referenced in the text of 7.3.3 or if the relevant Additional Provision (AP) should be assigned to the specific UN numbers in column 17 of Table A instead.

The complete text of Chapter 7.3 is provided in informal document INF.4.

7.3.1.1(a) Insert “or a reference to a specific paragraph” after “identified by the code BK”.

7.3.1.1(b) Insert “or a reference to a specific paragraph” after “identified by the code VW”.

7.3.1.4 and 7.3.1.6 At the beginning, replace “Bulk solids” with “Substances”.

7.3.3 Amend to read as follows:

“7.3.3 Additional provisions for carriage in bulk when the provisions of 7.3.1.1 (b) are applied

7.3.3.1 The codes VW1, VW2 and VW13 in column (17) of Table A of Chapter 3.2 have the following meanings:

VW 1 Carriage in bulk in sheeted wagons, sheeted containers or sheeted bulk containers is permitted.

VW 2 Carriage in bulk in closed wagons, closed containers or closed bulk containers is permitted.

VW 13 Carriage in bulk is permitted in specially equipped wagons or large containers in accordance with standards specified by the competent authority of the country of origin. If the country of origin is not an RID Contracting State, the conditions laid down shall be recognized by the competent authority of the first RID Contracting State reached by the consignment.

7.3.3.2 When the VW bulk codes are used the following additional provisions shall apply:

7.3.3.2.1 Goods of Class 4.1

AP1 [For UN1334] Wagons and containers shall have a metal body and where fitted the sheet shall be non-combustible.

AP2 [For UN3175] Closed wagons and closed containers shall have adequate ventilation.

7.3.3.2.2 Goods of Class 4.2

AP1 Wagons and containers shall have a metal body and where fitted the sheet shall be non-combustible.

7.3.3.2.3 Goods of Class 4.3

AP3 [For UN 1405 and UN 2844] Sheeted wagons and sheeted containers shall be used only when the substance is in pieces (not in powder, granular, dust or ashes form).]
(Comment from the working group: We are not certain it is necessary to introduce this as a general requirement for all substances in Class 4.3.)

AP4 Closed wagons and closed containers shall be equipped with hermetically closed openings used for loading and unloading to prevent the exit of gas and exclude the ingress of moisture.

AP5 The cargo doors of the closed wagons or closed containers shall be marked with the following in letters not less than 25 mm high:

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</tr>
<tr>
<td><strong>NO VENTILATION</strong></td>
<td><strong>NON VENTILÉ</strong></td>
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This shall be in a language considered appropriate by the consignor.

7.3.3.2.4 **Goods of Class 5.1**

AP6 If the wagon or container is made of wood or other combustible material an impermeable surfacing resistant to combustion or a coating of sodium silicate or similar substance shall be provided. Sheeting shall also be impermeable and non-combustible.

AP7 Carriage shall only be as a wagon load or a full load.

7.3.3.2.5 **Goods of Class 6.1**

AP7 Carriage shall only be as a wagon load or a full load.

7.3.3.2.6 **Goods of Class 8**

AP8 [For UN 2794, UN 2795, UN 2800, UN 3028] the design of the load compartment of wagons or containers shall take account of any residual currents and impacts from the batteries.

The load compartments of wagons or containers shall be of steel resistant to the corrosive substances contained in the batteries. Less resistant steels may be used when there is a sufficiently great wall thickness or a plastics lining/layer resistant to the corrosive substances. The load compartments of wagons or containers shall not be loaded above the top of their walls.

Carriage is also permitted in small plastics containers which shall be capable of withstanding, when fully loaded, a drop from a height of 0.8m on to a hard surface at -18°C, without breakage.

7.3.3.2.7 **Goods of Class 9**

AP2 [For UN 2211 and UN 3314] closed wagons and closed containers shall have adequate ventilation.

AP9 [For UN 2315, UN 3151, UN 3152, UN 3432] carriage is permitted for solids (substances or mixtures, such as preparations or wastes) containing on average not more than 1000 mg/kg of substance to which this UN number is assigned. At no point of the load shall the concentration of this substance or these substances be higher than 10000 mg/kg.”.
Consequential Amendments

Chapter 1.2

1.2.1 In the definition for “Carriage in bulk” replace “in wagons or containers” by “in wagons, containers or bulk containers”.

Chapter 3.2

Amend the explanation for column 17, Table A, as follows (new text underlined):

“Contains the alphanumeric code(s), starting with letters “VW” [or “AP”], of the applicable special provisions for carriage in bulk. These are listed in 7.3.3. If no code or a reference to a specific paragraph is given, carriage in bulk is not permitted. General and additional provisions concerning the carriage in bulk are to be found in Chapters 7.1 and 7.3.”.

For UN 2912: Delete ‘VW16’ in column 17 and add ‘see 4.1.9.2.3’ to columns 10 and 17.

For UN 2913: Delete ‘VW17’ in column 17 and add ‘see 4.1.9.2.3’ to columns 10 and 17.

For all UN numbers having an existing VW code:

Amend the references to VW codes in column (17), Table A, in accordance with the principles in informal document INF.5.

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