INTERNATIONAL RAILWAY SOLUTION

IRS 40471-3 - Ed. 4

4th edition: January 2025
Version: Translated
Original version: German

Inspections of dangerous goods consignments





IRS to be classified in volumes of UIC:

IV - Operating

Complete reference in case of citation:

IRS-40471-3:2025, Ed4: Inspections of dangerous goods consignments

Approbation date:

13th of March 2024

With effect from:

1st of January 2025

Application recommended to:

All members of the International Union of Railways

Warning

No part of this publication may be copied, reproduced or distributed by any means whatsoever, including electronic, except for private and individual use, without the express permission of the International Union of Railways (UIC). The same applies for translation, adaptation or transformation, arrangement or reproduction by any method or procedure whatsoever. The sole exceptions - noting the author's name and the source - are "analyses and brief quotations justified by the critical, argumentative, educational, scientific or informative nature of the publication into which they are incorporated".

(Articles L 122-4 and L122-5 of the French Intellectual Property Code).

© International Union of Railways (UIC) - Paris, 2025

Published by the International Union of Railways (UIC) 16 rue Jean Rey, 75015 Paris - France, January 2025 Dépôt Légal January 2025

ISBN 978-2-7461-3441-6





CONTENTS

Fore	word		1
Exe	cutive su	mmary	3
Field	d of applic	cation	4
Refe	erence do	ocuments	5
Abbı	reviations	s and Symbols	6
		General Application	
1 –	Purpose	9	8
2 –	Applicat	ion	9
3 –	Manage	ement	10
4 –	General	provisions	11
5 –	Inspecti	ons	12
6 –	Final pro	ovisions	16
App	endix A:	Quality Assurance System (QAS)	17
	A.1 –Ge	eneral	17
	A.2 –Qu	uality control (inspections)	19
	A.3 –Fa	ults, fault catalogue	20
	A.4 –As	sessment of faults	20
	A.5 –RI	D reports	20
Арре	endix B:	RID Report	22
Арре	endix C:	Appendix 1 to the RID Report	23
Арре	endix D:	Assessment of the quality of inspections carried out by RUs	24
Appe	endix E:	Definition of faults classes used in the IRS	27



Appendix F:	Sample sizes	28
Appendix G:	Collation of quality results	29
Regulatory lis	sting	30



5 - Inspections

The carrier accepting dangerous goods for carriage at the point of departure shall check the following:

5.1 – That the goods are authorised for carriage under the terms of the *RID* or under the terms of a temporary derogation in accordance with *RID*, section 1.5.1.

To this end, the information entered on the transport document must be compared with that on the list of dangerous goods (see *RID*, *chapter 3.2*, *Table A*) or with the temporary derogation, in order to check on compliance; the information in question is as follows:

- The hazard identification number, if an orange-coloured plate is affixed in accordance with *RID/ADR 5.3.2.1* or *RID, 5.4.1.1.9*;
- The UN number, which must be preceded by the letters "UN";
- The proper shipping name of the substance or article, to which the technical name must be added in brackets insofar as *special provisions 274, 318 or 398 of RID, chapter 3.3* apply;
- For substances or articles in class 1, the classification code contained in *RID*, *chapter 3.2*, *table A*, *column 3b*. If label model numbers other than 1, 1.4, 1.5, 1.6, 13 and 15 are contained in *RID*, *chapter 3.2*, *Table A*, *column 5*, these shall be indicated in parentheses after the classification code:
- For class 7 radioactive substances, the class 7 number;
- For lithium batteries with UN numbers 3090, 3091, 3480 and 3481, the class 9 number;
- For other substances or articles, the label model numbers contained in *RID*, *chapter 3.2*, *Table A*, *column 5*, with the exception of the shunting label complying with specimen 13. If several label model numbers are indicated, the numbers following the first number shall be indicated in parentheses. Regarding substances and articles for which there is no label model in *RID*, *chapter 3.2*, *Table A*, *column 5*, the class specified in *column 3a* shall be indicated instead;
- The packaging group, if any, assigned to the substance and contained in *RID*, *chapter 3.2*, *Table A*, *column 4*, which may be preceded by the letters "PG" or the initials of the words "packaging group" in the languages used in accordance with *RID*, *5.4.1.4.1*.

Additionally, it must be checked that the number and description of the packages are indicated in accordance with *RID*, *5.4.1.1.1* e).



For consignments conveyed under the terms of a temporary derogation in accordance with *RID*, 1.5.1, the transport document must specify that carriage is taking place under the terms of such a derogation, e.g. "Carriage agreed under the terms of 1.5.1 RID (RID 1/2021)".

5.2 – That a cross is placed in the "RID" box on the transport document as provided for under *RID*. *5.4.1.4.1* and:

- That the appendices to the carriage document specified in the *RID* are enclosed (agreement from the relevant authority with the conditions of carriage for certain articles and substances in classes 1, 4.1 and 5.2; and that information is provided on measures required of the carrier for class 7 substances) and that the equipment prescribed in the instructions in writing is in the driver's cab;
- That for carriage of dangerous goods in a transport chain involving a section by sea or air, the transport document contains the indication "Carriage in accordance with 1.1.4.2.1" and the document mentioned in the footnote referring to *RID*, 5.4.1.1.7 is added where necessary;
- For the carriage of dangerous goods in piggyback transport, the transport document contains the indication "Carriage in accordance with 1.1.4.4";
- That for class 1 goods, the total net mass, in kg, of explosive contents for each substance or article bearing a different UN Number and the total net mass, in kg, of explosive contents for all substances and articles covered by the transport document are indicated;
- That for the carriage of military consignments to which derogations apply, the transport document contains the indication "Military consignment";
- That for the carriage of fireworks with the UN numbers 0333, 0334, 0335, 0336 and 0337, the indication "Classification of fireworks by the competent authority of XX with the firework reference XX/YYZZZZ" is indicated in the transport document;
- That for the carriage of environmentally hazardous substances meeting the criteria of *RID*, 2.2.9.1.10 the transport document contains the indication "Environmentally hazardous" or "Marine pollutant/Environmentally hazardous".



- **5.3** That for the following empty, uncleaned transport units:
- Tank wagons,
- Portable tanks,
- Tank containers,
- MEGCs,
- Wagons and containers for carriage in bulk,
- Receptacles containing gas with a capacity of more than 1 000 litres,
- Battery wagons as well as wagons with empty and uncleaned removable tanks,
- Tank vehicles, vehicles with demountable tanks, battery vehicles and vehicles for bulk goods.

The information specified in *RID*, *5.4.1.1.6* in connection with *RID*, *5.4.1.1.1* is indicated in the transport document.

- **5.4** That for class 2 refrigerated, liquefied gas (hazard identification numbers 22, 223 and 225) carried in tank wagons, portable tanks or tank containers, the mandatory entry is made in the carriage document of the actual end of the holding time (see *RID*, 5.4.1.2.2 d).
- **5.5** That wagons and loads do not have any obvious defects:
- for tanks, special care should be paid to any leakage, crack, missing parts or any impediment to their proper functioning; fold-down panels shall be secured against any untimely opening or loss.
- for tank wagons, battery wagons, wagons with demountable tanks, portable tanks, tank containers and MEGCs, the date specified for the next test shall not have expired.
- **5.6** That the prescribed placarding affixed corresponds to the information in the transport document and that any shunting labels have been affixed on:
- Large containers, swap bodies, MEGCs, tank containers, tanks swap-body or portable tanks,
- Wagons for bulk goods, tank wagons, battery wagons, wagons with demountable tanks and wagons carrying packages only,
- Tank vehicles, vehicles with demountable tanks and battery vehicles,

and that the placarding affixed corresponds to the information in the transport document.

That the mark in *RID*, 5.3.3 has been affixed to:

- Tank wagons, tank containers, portable tanks,
- Special wagons or large containers,



- Specially equipped wagons or large containers.

Applicable to those containing a substance that is carried or handed over for carriage in a liquid state at or above 100 °C or in a solid state at or above 240 °C.

That the mark in RID. 5.3.6 has been affixed to:

- wagons, large containers, tank containers, portable tanks and MEGCs

containing environmentally hazardous substances meeting the criteria of RID, 2.2.9.1.10.

For the carriage of class 2 liquefied gases, refrigerated liquefied gases or dissolved gases, tank wagons shall be marked with an orange band (see *RID*, *5.3.5*).

- 5.7 That the following wagons bear an orange-coloured plate in accordance with RID, 5.3.2
- Tank wagons, battery wagons, wagons with filled or empty demountable tanks which have not been cleaned, degassed or decontaminated,
- Tank containers (tank swap bodies), portable tanks and MEGCs which have been filled and emptied, but not cleaned, degassed or decontaminated,
- Wagons for bulk goods, large containers and small containers for bulk goods, which have been filled and emptied, but not cleaned or decontaminated,
- Tank vehicles, vehicles with demountable tanks and battery vehicles filled or empty but not cleaned, degassed or decontaminated,
- Wagons and containers carrying packaged radioactive materials bearing a single UN number used exclusively for this purpose with no other dangerous goods.

Moreover, that the hazard identification numbers and the UN numbers used for this identification tally with the information in the transport document.

- **5.8** That for carriage of class 2 gases in tank wagons, the proper shipping name of the gas being carried (information in the transport document) corresponds to one of the proper shipping names given on the tank wagon itself or on panels (wagon panel, fold down panel) and that the applicable load limits are stated.
- **5.9** That wagons are not overloaded with regard to the weight specified in the transport document.
- **5.10** That tank wagons conveying class 2 gases are not overfilled with regard to the weight specified in the transport document in accordance with *RID*, *5.4.1.2.2 c*).

In order to perform the checks described in points 5.5 - page 14 to 5.8 - page 15 above, the wagon inspector shall walk along both sides of the wagons.



Warning

No part of this publication may be copied, reproduced or distributed by any means whatsoever, including electronic, except for private and individual use, without the express permission of the International Union of Railways (UIC). The same applies for translation, adaptation or transformation, arrangement or reproduction by any method or procedure whatsoever. The sole exceptions - noting the author's name and the source - are "analyses and brief quotations justified by the critical, argumentative, educational, scientific or informative nature of the publication into which they are incorporated". (Articles L 122-4 and L122-5 of the French Intellectual Property Code).

© International Union of Railways (UIC) - Paris, 2025

Published by the International Union of Railways (UIC) 16 rue Jean Rey, 75015 Paris - France, January 2025 Dépôt Légal January 2025

ISBN 978-2-7461-3441-6

