



Organisation intergouvernementale pour les transports internationaux ferroviaires
Zwischenstaatliche Organisation für den internationalen Eisenbahnverkehr
Intergovernmental Organisation for International Carriage by Rail

OTIF/RID/CE/GTP/2022-A

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**TO THE MEMBER STATES AND ASSOCIATE MEMBERS OF OTIF
AND TO REGIONAL ORGANISATIONS WHICH HAVE ACCEDED TO COTIF**

**Final report of the 14th session of the RID Committee of Experts'
standing working group
(Berne/hybrid, 23 and 24 May 2022)**

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ITEM 1: Approval of the agenda

Document: [RID-22004-CE-GTP14](#) (Secretariat)

Informal document: [INF.1](#) (Secretariat)

1. The provisional agenda set out in calling notice RID-22004-CE-GTP14 dated 23 March 2022 was adopted, together with informal document INF.1, which listed the documents available for each agenda item.

ITEM 2: Presence

2. The following RID Contracting States took part in the work of the 14th session of the standing working group (see also Annex II):

Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Italy, Latvia, Luxembourg, Netherlands, Norway, Poland, Spain, Sweden, Switzerland, **Türkiye** and United Kingdom.

The European Union (European Commission and the European Union Agency for Railways (ERA)) were also represented.

The following non-governmental international organisations were represented: the European Chemical Industry Council (**Cefic**), the International Union of Railways (UIC), the International Union of Wagon Keepers (UIP) and the International Union of Combined Road-Rail Transport Companies (UIRR).

3. At the 6th session of the standing working group, Ms Caroline Bailleux (Belgium) was elected as Chair until further notice. At the 10th session, Mr Othmar Krammer (Austria) was elected as Deputy Chair until further notice.

ITEM 3: Approval of the corrections and additions proposed by the Secretariat that have to be made to the draft notification texts

Documents: [\[OTIF/RID/NOT/2023\]](#) (Secretariat)
[OTIF/RID/CE/GTP/2022/8](#) (Secretariat)
[OTIF/RID/CE/GTP/2022/7](#) (Secretariat)

Informal documents: [INF.2](#) (Secretariat)
[INF.6](#) (Secretariat)

4. The working group examined all the texts in document [OTIF/RID/NOT/2023] that were not marked in grey, which were primarily texts adopted by the last RID/ADR/ADN Joint Meeting (Berne, 14 to 18 March 2022).
5. It also checked whether the texts in document 2022/8, which were adopted by the 111th session of WP.15 (Geneva, 9 to 13 May 2022), could also be carried over into RID. This included an examination of the Secretariat's document 2022/7 and informal document INF.2.
6. Lastly, it considered informal document INF.6, which contained further necessary editorial corrections and additions to document [OTIF/RID/NOT/2023] identified by the Secretariat for the German and French versions.
7. The working group adopted all the amendments listed in the documents referred to (see Annex I). This did not include the amendment to 1.10.4 contained in document 2022/8, which was discussed separately on the basis of informal documents INF.5 and INF.9 (see paragraphs 20 to 22).

8. The working group noted that the revised versions of standards EN 12245 and EN 14912 and amendment A1 to standard EN 13094:2020 had not been published during the meeting, but would be published by 8 June 2022. The working group adopted the draft amendments to refer to these standards in RID 2023, provided that the standards concerned were actually published before this date. If not, the relevant amendments would not be included in the notification texts to be communicated to the Contracting States in July 2022 for entry into force on 1 January 2023.

ITEM 4: Interpretation of RID

9. No documents were submitted for this agenda item.

ITEM 5: Proposals to amend RID

A. Pending issues

Updating the NHM codes in Table B of Chapter 3.2

Document: [OTIF/RID/CE/GTP/2022/1](#) (UIC)

10. The working group adopted document 2022/1 (see Annex I). This document contained the NHM codes for the new entries to be included in Table B and the corrections to be included in Table B to ensure consistency with the Harmonized Goods List (NHM).

Marking of tanks intended for the carriage of compressed, liquefied or dissolved gases and equipped with safety valves

Document: [OTIF/RID/CE/GTP/2022/3/Corr.1](#) (Secretariat)

11. In document 2022/3/Corr.1, the Secretariat proposed that the safety valve mark adopted by the RID/ADR/ADN Joint Meeting should also be affixed to tank-wagons fitted with safety valves on a voluntary basis. At the same time, the Secretariat proposed to include a transitional measure allowing the retrospective marking of tank-wagons as part of the next intermediate inspection or the next periodic inspection. The working group adopted these amendments (see Annex I).

Reference to standard EN 14841 in the Notes to RID 1.4.3.3 and 1.4.3.7.1.

Document: [OTIF/RID/CE/GTP/2022/2](#) (Secretariat)

12. Document 2022/2 reflected a proposal by the RID/ADR/ADN Joint Meeting's working group on standards also to refer in the Notes to RID 1.4.3.3 and RID 1.4.3.7.1 to standard EN 14841, which was still to be published and which contains guidelines for filling and emptying tank-wagons with LPG.
13. The representative of the United Kingdom pointed out that in various places in the draft standard, the terms "ADR" (foreword, 5.2.1.11, 5.2.3.7 and bibliography) and "tank-vehicle" (5.2.1.11) were mentioned, although according to its title, the standard only applied to tank-wagons. The representative of UIP criticised the fact that information from the checklists referred to in 1.4.3.3 and 1.4.3.7.1 had not been included in the standard. Furthermore, representatives of the railways and EIGA had not been involved in the standardisation work.
14. The working group decided **not to take a decision on including** a reference to this standard in RID until it had been published. Irrespective of this, this standard could also be applied on a voluntary basis without its being referenced in RID. The Secretariat was asked to report the outcome of the discussion to the Joint Meeting's working group on standards.

Adaptation of point 5 of IRS 40471-3 (inspections to be carried out on consignments of dangerous goods) to the amendments to RID expected to enter into force on 1 January 2023

Documents: [OTIF/RID/CE/GTP/2022/4](#) and [OTIF/RID/CE/GTP/2022/4/Add.1](#) (UIC)

15. The working group noted documents 2022/4 and 2022/4/Add.1, which provided information on the intended amendments to bring IRS 40471-3, Section 5, into line with the 2023 edition of RID. In footnote 11 (future footnote 17) to 1.4.2.2.1, it decided to refer to the version of IRS 40471-3 applicable from 1 January 2023 (see Annex I).

Special provision TT 4 in RID 6.8.4 (d)

Document: [OTIF/RID/CE/GTP/2022/5](#) (Secretariat)

16. As the RID/ADR/ADN Joint Meeting's working group on tanks had established that there was no safety need for the inspection required under TT 4, document 2022/5 contained a proposal to delete special provision TT 4, which is assigned to six fluorinated substances of Class 8 and which requires tanks to be inspected for corrosion resistance between two periodic inspections.
17. The representative of Belgium criticised the fact that there was no information on why special provision TT 4 was prescribed in RID, but not in ADR. She pointed out that the passivation or neutralisation of the tank material by chemical reaction described in 6.7.2.2 (b) was not mentioned in 6.8.2.1.9. While the last sub-paragraph of 6.8.2.4.3 provided for a visual inspection of the protective lining as part of the intermediate inspection in order to prevent corrosion of the tank material, if special provision TT 4 were deleted, tanks that were not fitted with a protective lining would no longer be inspected for corrosion resistance.
18. The representative of the United Kingdom explained that as part of the inspection of the tank material for compatibility with the substances to be carried, it was necessary to check that there was no reaction. The representative of UIP explained that in rail transport, only very few tank-wagons were affected. During the discussions in the RID/ADR/ADN Joint Meeting's working group on tanks, no tank experts had been able to say why this inspection was necessary.
19. Following the discussion, the working group agreed to delete special provision TT 4 (see Annex I).

Simplification and harmonisation of 1.10.4

Informal documents: [INF.5](#) (Norway and Sweden)
[INF.9](#) (United Kingdom)

20. In line with a decision of the 111th session of WP.15 (see document 2022/8), Norway and Sweden proposed to delete the first sentence of 1.10.4. In addition, the two delegations also proposed to delete the second sentence of 1.10.4. Both amendments were justified by explaining that 1.1.3.6.3, which is referred to in 1.10.4, would only apply in RID in the context of 1.1.3.1 (c), which already provided for complete exemption from all the provisions of RID.
21. In contrast, in informal document INF.9, the representative of the United Kingdom was of the view that 1.10.4 only referred to 1.1.3.6.3, but not to 1.1.3.1 (c). She reminded the meeting that the exemption for the appointment of a dangerous goods safety adviser also referred to the quantity limits in 1.1.3.6.3. Deleting the two sentences in 1.10.4 would mean that relaxations from the security provisions would no longer be possible at all in RID, while in ADR they were permitted below the quantity limits stipulated in 1.1.3.6.3.

22. The working group agreed with the United Kingdom's view and adopted the wording proposed in informal document INF.9 to adapt the first sentence of 1.10.4 and the proposed transitional measure (see Annex I).

B. New proposals

Requirements for wagons equipped with digital automatic coupling “DAC” or requirements for these coupling systems

Document: [OTIF/RID/CE/GTP/2022/6](#) (UIP)

Informal document: [INF.7](#) (ERA)

23. In his proposal contained in document 2022/6, in connection with the forthcoming introduction of digital automatic coupling “DAC” in European rail freight transport, the representative of UIP also wished to introduce the requirements of RID into the work on the technical specifications for these coupling systems in good time.
24. He explained that the “Scharfenberg” central coupling system had been chosen for European rail freight transport, which eliminated or significantly reduced the risk of slippage in the vertical direction by safely catching the two halves of the coupling. In combination with setting the vertical forces to be absorbed at 150 kN and the energy absorption capacity of 130 kJ, climbing was not expected, even in accidents at impact speeds of more than 12 km/h. These elements – safe catching, locking and fixing of wagons in accident scenarios with impact shocks > 12 km/h – should also supplement the requirement for a minimum energy absorption of 130 kJ for automatic coupling devices already contained in special provision TE 22.
25. Owing to the ongoing work in ERA's topical working group to amend the WAG TSI, LOC&PAS TSI and TAF TSI by including technical requirements for standardised “DAC” systems, the representatives of ERA recommended that UIP's request should not be adopted at this stage. In order that the requirements of dangerous goods legislation could be taken into account when revising the TSIs, the representatives of ERA proposed to organise a bilateral workshop, in which RID experts and participants from ERA's topical working group should discuss the use of digital automatic coupling in the context of the carriage of dangerous goods. Two possible dates for this workshop were proposed: 5 October 2022 and 12 October 2022. ERA would announce the date finally chosen at a later stage.
26. The Chair pointed out that the amendments to the TSIs were scheduled for 2025. In order for corresponding amendments to be made to the 2025 edition of RID as well, the final amendment text would have to be available for the meeting of the standing working group, which was due to take place in November 2023.
27. The representative of UIC pointed out that use of the new automatic central coupling systems represented a significant change to the European railway system. In reply to his question as to whether a risk analysis had been carried out with regard to using these systems, the representative of ERA said that such an analysis had been carried out. He clarified that as part of the EU-Rail research programme, the EDDP project had two main objectives: firstly, the technical specifications for the “DAC” systems would be defined and secondly, a risk analysis would be carried out within the framework of work package 8.

Comments on document OTIF/RID/RC/2021/34/Rev.1

Document: [INF.3](#) (UIP)

28. In informal document INF.3, the representative of UIP repeated a comment made orally at the last RID/ADR/ADN Joint Meeting concerning the explanations in document OTIF/RID/RC/2021/34/Rev.1 on the amendments that would enter into force on 1 January 2023 concerning the testing/inspection and approval of tanks. In particular, this explanatory guide would not address the many years of experience in connection with the mutual recognition of experts for the testing/inspection of the tanks of tank-wagons. There was also no indication that the newly introduced entry into service verifications were not required for tank-wagons that had been approved by the European Union Agency for Railways (ERA).
29. **Although the explanatory guide might benefit from clarification, it was noted that the text adopted for RID 2023 was clear and did not need to be modified.** The representative of UIP was asked to prepare a proposal for the RID/ADR/ADN Joint Meeting in September 2022 to deal with any inaccuracies in the guide, if he still considered it necessary.

Extra-large tank-containers

Informal document: [INF.4](#) (UIP)

30. The representative of UIP informed the working group of the current status of the implementation of new provisions for extra-large tank-containers in the regulations, drawing particular attention to the inclusion of the new definition of extra-large tank-containers and the provisions concerning the design of dome covers and the minimum wall thickness in the 2023 editions of RID and ADR. However, he also referred to some open points with regard to the strength of extra-large tank-containers and measures to reduce the extent of damage in the event of an impact or overriding of buffers.
31. The representative of UIP pointed out that in contrast to conventional tank-containers and portable tanks, which had to be designed for acceleration values of 2g, extra-large tank-containers were designed for acceleration values of 3g, but this fact and the associated operational requirements were not reflected in the regulations. It would have to be considered whether a new class should be defined in RID for tank-containers suitable for hump shunting. This new category of tank-containers should also be taken into account when revising standard EN 12663-2 (Railway applications – Structural requirements of railway vehicle bodies – Part 2: Freight wagons).
32. The second open point concerned measures to reduce the extent of damage in the event of an impact or the overriding of buffers, which, for tank-wagons, were set out in special provisions TE 22 and TE 25. As the measures applicable to tank-wagons could not be implemented in container transport, the need for compensatory measures should be reviewed. In so doing, the intention of the Joint Coordinating Group of Experts (JCGE) only to formulate protective aims in RID and the development of provisions concerning digital automatic coupling “DAC” should be taken into account.
33. The Chair pointed out that the two open points should be discussed at the next meeting of the Joint Coordinating Group of Experts (JCGE) (Berne, 6 September 2022) and at the next meeting of the working group on tank and vehicle technology. She encouraged delegations to think about proposed solutions and to submit corresponding proposals to the two groups.
34. The representative of **Cefic** said he would prepare an informal document for the next meeting of the working group on tank and vehicle technology, in which experience with operating extra-large tank-containers over the last six years would be described, including experience with hump shunting.

35. At the suggestion of the Secretariat, the working group agreed to hold the next meeting of the working group on tank and vehicle technology on 21 and 22 November 2022 under the chairmanship of Mr Rainer Kogelheide (UIP). Following this meeting, the 15th session of the RID Committee of Experts' standing working group will be held from 23 to 25 November 2022.

ITEM 6: Harmonisation of RID and SMGS Annex 2

36. No documents were submitted for this agenda item.

ITEM 7: Information from the European Union Agency for Railways (ERA)

Informal document: [INF.8](#) (ERA)

37. The standing working group noted the information contained in informal document INF.8 submitted by ERA.

ITEM 8: Any other business

Arabic translation of ADR 2023

Document: [OTIF/RID/CE/GTP/2022/8](#) (Secretariat)

38. The Secretariat referred to paragraphs 12 and 13 of document 2022/8, which reported that an Arabic translation of ADR 2023 might be funded by the resources allocated to EuroMed projects. The Secretariat asked the representative of the European Commission whether an Arabic translation of RID could also be financed under the EuroMed projects. This would undoubtedly lead to a better acceptance of RID in the Arabic-speaking Mediterranean countries.
39. The representative of the European Commission said he would look into this and report back to the next meeting of the working group.

Closure of the session

40. The Secretariat explained that for the 57th session of the RID Committee of Experts (Berne, 24 May 2022), it would prepare document OTIF/RID/CE/2022/1, which would contain all the corrections and additions to be made to document [OTIF/RID/NOT/2023] in accordance with the decisions of the 14th session of the standing working group. This document, together with the draft notification texts (document [OTIF/RID/NOT/2023]) would form the basis for the final adoption of the 2023 amendments to RID.

Thanks

41. The Chair thanked the Secretariat for the good preparation of the meeting. She thanked the interpreters for their important contribution to the successful running of the meeting. Lastly, she thanked the plenary for its active participation.
42. The Deputy Chair thanked the Chair for her efficient management of the meeting, which had made his tasks as Deputy Chair manageable.

Next session

43. The 15th session of the RID Committee of Experts' standing working group will provisionally be held from 23 to 25 November 2022. The meeting of the standing working group will be preceded by a meeting of the working group on tank and vehicle technology on 21 and 22 November 2022. The deadline for the submission of documents to the meeting of the standing working group is **7 October 2022**.

Texts adopted by the 14th session of the RID Committee of Experts' standing working group

Corrections to document [OTIF/RID/NOT/2023]

Chapter 1.6

1.6.2.21 Replace "EN 14912:2015" by:

"EN 14912:2005".

[Reference document: OTIF/RID/CE/GTP/2022/8]

Chapter 1.8

1.8.6.3.1 In paragraph (f), replace "quality management system" by:

"quality system".

[Reference document: OTIF/RID/CE/GTP/2022/8]

Chapter 1.10

1.10.4 Delete the amendment.

[Reference documents: OTIF/RID/CE/GTP/2022/8 + informal document INF.5, as amended by informal document INF.9]

Chapter 2.2

2.2.41.4 [The correction in the German version does not apply to the English text.]

Chapter 3.2

Table B

For the entry "COBALT DIHYDROXIDE POWDER, containing not less than 10% respirable particles", in column "NHM Code", replace "???????" by:

"290377".

[Reference document: OTIF/RID/CE/GTP/2022/1]

Chapter 4.1

4.1.4.1

P 200 In paragraph (11), replace "EN 1439:[2022]" by:

"EN 1439:2021".

[Reference document: OTIF/RID/CE/GTP/2022/8]

In paragraph (11), in the title of standard "EN 1439:2021", before "LPG cylinders", insert:

"transportable refillable".

[Reference document: OTIF/RID/CE/GTP/2022/8]

In paragraph (12) 2.1, in the second indent, replace "EN 1439:[2022]" by "EN 1439:2021".

[Reference document: OTIF/RID/CE/GTP/2022/8]

In paragraph (12) 3.4, in the third indent, delete the square brackets.

[Reference document: OTIF/RID/CE/GTP/2022/8]

In paragraph (13) 3.4, delete the square brackets.

[Reference document: OTIF/RID/CE/GTP/2022/8]

4.1.6.15 In the first sentence, replace "Table 1" by:

"Table 4.1.6.15.1".

[Reference document: OTIF/RID/CE/GTP/2022/8]

Chapter 6.2

6.2.1.3.1 [The correction in the German version does not apply to the English text.]

6.2.1.3.2 [The correction in the German version does not apply to the English text.]

6.2.4.1 In the table, under "**for design and construction of pressure receptacles or pressure receptacle shells**", in the sixth, eighth, sixteenth and eighteenth indent, delete the square brackets.

[Reference document: OTIF/RID/CE/GTP/2022/8]

In the table, under "**for design and construction of closures**", in the eleventh and twelfth indent, delete the square brackets.

[Reference document: OTIF/RID/CE/GTP/2022/8]

In the table, under "**for design and construction of closures**", in the last indent, delete the row for standard "EN 13799:[2022]".

[Reference document: OTIF/RID/CE/GTP/2022/8]

6.2.4.2 In the fourteenth, fifteenth, eighteenth and nineteenth indent, delete the square brackets.

[Reference document: OTIF/RID/CE/GTP/2022/8]

Chapter 6.5

6.5.1.1.2 [The correction in the German version does not apply to the English text.]

Chapter 6.8

6.8.2.2.4 [The correction in the French version does not apply to the English text.]

6.8.2.6.1 Delete the amendments in the first and second indent.

[Reference document: OTIF/RID/CE/GTP/2022/8]

In the fourth and fifth indent, delete the square brackets.

[Reference document: OTIF/RID/CE/GTP/2022/8]

In the last indent, delete the row for standard "EN 13799:[2022]".

[Reference document: OTIF/RID/CE/GTP/2022/8]

6.8.3.2.9 [The corrections in the German version do not apply to the English text.]

6.8.3.2.9.1 In the first sub-paragraph, in the last sentence, replace "6.7.3.8.1" by:

"6.7.3.8.1.1".

Delete the Note.

[Reference document: OTIF/RID/CE/GTP/2022/8]

6.8.3.2.9.6.4 In the right-hand column, in the first sentence, replace "with a capacity of less than 3000 litres" by:

"with a capacity of not more than 3000 litres".

[Reference documents: informal document INF.2 + OTIF/RID/CE/GTP/2022/8]

6.8.3.2.9.6.7 Amend the text in the left-hand column as follows:

"The marks shall be displayed on both sides of tank-wagons."

[Reference document: OTIF/RID/CE/GTP/2022/3/Corr.1]

In the right-hand column, in the second sentence, replace "with a capacity of less than 3000 litres" by:

"with a capacity of not more than 3000 litres".

[Reference documents: informal document INF.2 + OTIF/RID/CE/GTP/2022/8]

6.8.4 (d)

TT 4 Delete the amendment.

Chapter 6.9

6.9.2.3.4 [The correction in the French version does not apply to the English text.]

Additions to document [OTIF/RID/NOT/2023]

Chapter 1.4

1.4.2.2.1 In footnote 17 (current footnote **11**), replace "1 January 2021" by:

"1 January 2023".

[Reference document: OTIF/RID/CE/GTP/2022/4, as amended]

Chapter 1.6

1.6.1 Insert a new transitional measure **1.6.1.53** to read as follows:

"1.6.1.53 High consequence dangerous goods of Class 1 carried in packages in a wagon or large container in quantities not exceeding those of 1.1.3.6.3 which, in accordance with 1.10.4 in force until 31 December 2022, could be carried without applying the requirements of Chapter 1.10 may still be carried without applying the requirements of Chapter 1.10 until 31 December 2024."

[Reference document: informal document INF.9]

1.6.3 Insert the following new transitional provision **1.6.3.60**:

"1.6.3.60 Tank-wagons that are already fitted with safety valves meeting the requirements of 6.8.3.2.9 as applicable from 1 January 2023 do not need to display the marks in accordance with 6.8.3.2.9.6 until the next intermediate or periodic inspection after 31 December 2023."

[Reference document: OTIF/RID/CE/GTP/2022/3/Corr.1]

Chapter 1.8

1.8.5.4 In the model report on occurrences during the carriage of dangerous goods, in section 6 "Dangerous goods involved", footnote (3), add a new number to read as follows:

"18 Extra-large tank-container".

[Reference document: OTIF/RID/CE/GTP/2022/7 + OTIF/RID/CE/GTP/2022/8]

Chapter 1.10

1.10.4 Amend the first sentence to read as follows:

"The provisions of 1.10.1, 1.10.2 and 1.10.3 do not apply when the quantities carried in packages in a wagon or large container do not exceed those referred to in 1.1.3.6.3, except for high consequence dangerous goods of Class 1 (in accordance with 1.10.3.1) and except for UN numbers 2910 and 2911 if the activity level exceeds the A₂ value."

[Reference documents: OTIF/RID/CE/GTP/2022/8 + informal document INF.5, as amended by informal document INF.9]

Chapter 3.2

Table A

For UN numbers 1052, 1786, 1790 (all entries), 2817 (packing group II), 3421 (packing group II) and 3471 (packing group II), in column (13), delete:

"TT4".

[Reference document: OTIF/RID/CE/GTP/2022/5]

Table B

In the first set of amendments, insert the following:

Name and description	UN No.	Amendment
Acetylene tetrabromide: see	2504	Amend the NHM Code in column (4) to read as follows: "29034+".
AIRCRAFT HYDRAULIC POWER UNIT FUEL TANK (containing a mixture of anhydrous hydrazine and methylhydrazine) (M86 fuel)	3165	Amend the NHM Code in column (4) to read as follows: "880730".
ALLYL BROMIDE	1099	Amend the NHM Code in column (4) to read as follows: "29036+".
ALLYL IODIDE	1723	Amend the NHM Code in column (4) to read as follows: "29036+".
AMINOPYRIDINES (o-, m-, p-)	2671	Amend the NHM Code in column (4) to read as follows: "29333+".
BOOSTERS WITH DETONATOR	0225	Amend the NHM Code in column (4) to read as follows: "3603+0".
BOOSTERS WITH DETONATOR	0268	Amend the NHM Code in column (4) to read as follows: "3603+0".
BOOSTERS without detonator	0042	Amend the NHM Code in column (4) to read as follows: "3603+0".
BOOSTERS without detonator	0283	Amend the NHM Code in column (4) to read as follows: "3603+0".
1-BROMOBUTANE	1126	Amend the NHM Code in column (4) to read as follows: "29036+".
2-BROMOBUTANE	2339	Amend the NHM Code in column (4) to read as follows: "29036+".
BROMOFORM	2515	Amend the NHM Code in column (4) to read as follows: "29036+".
1-BROMO-3-METHYLBUTANE	2341	Amend the NHM Code in column (4) to read as follows: "29036+".

Name and description	UN No.	Amendment
BROMOMETHYLPROPANES	2342	Amend the NHM Code in column (4) to read as follows: "29036+".
2-BROMOPENTANE	2343	Amend the NHM Code in column (4) to read as follows: "29036+".
BROMOPROPANES	2344	Amend the NHM Code in column (4) to read as follows: "29036+".
3-BROMOPROPYNE	2345	Amend the NHM Code in column (4) to read as follows: "29036+".
n-Butyl bromide: see	1126	Amend the NHM Code in column (4) to read as follows: "29036+".
CAMPHOR OIL	1130	Amend the NHM Code in column (4) to read as follows: "151560".
CARBON TETRABROMIDE	2516	Amend the NHM Code in column (4) to read as follows: "29036+".
CHARGES, SHAPED, FLEXIBLE, LINEAR	0237	Amend the NHM Code in column (4) to read as follows: "3603+0".
CHARGES, SHAPED, FLEXIBLE, LINEAR	0288	Amend the NHM Code in column (4) to read as follows: "3603+0".
2-CHLOROPYRIDINE	2822	Amend the NHM Code in column (4) to read as follows: "29333+".
COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	0382	Amend the NHM Code in column (4) to read as follows: "3603+0".
COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	0383	Amend the NHM Code in column (4) to read as follows: "3603+0".
COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	0384	Amend the NHM Code in column (4) to read as follows: "3603+0".
COMPONENTS, EXPLOSIVE TRAIN, N.O.S.	0461	Amend the NHM Code in column (4) to read as follows: "3603+0".
CORD, DETONATING, flexible	0065	Amend the NHM Code in column (4) to read as follows: "3603+0".
CORD, DETONATING, flexible	0289	Amend the NHM Code in column (4) to read as follows: "3603+0".
CORD, DETONATING, metal clad	0102	Amend the NHM Code in column (4) to read as follows: "3603+0".
CORD (FUSE), DETONATING, metal clad	0290	Amend the NHM Code in column (4) to read as follows: "3603+0".

Name and description	UN No.	Amendment
CORD, IGNITER	0066	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	0360	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	0361	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	0500	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATORS, ELECTRIC for blasting	0030	Amend the NHM Code in column (4) to read as follows: "360360".
DETONATORS, ELECTRIC for blasting	0255	Amend the NHM Code in column (4) to read as follows: "360360".
DETONATORS, ELECTRIC for blasting	0456	Amend the NHM Code in column (4) to read as follows: "360360".
DETONATORS, ELECTRONIC programmable for blasting	0511	Amend the NHM Code in column (4) to read as follows: "360360".
DETONATORS, ELECTRONIC programmable for blasting	0512	Amend the NHM Code in column (4) to read as follows: "360360".
DETONATORS, ELECTRONIC programmable for blasting	0513	Amend the NHM Code in column (4) to read as follows: "360360".
DETONATORS FOR AMMUNI- TION	0073	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATORS FOR AMMUNI- TION	0364	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATORS FOR AMMUNI- TION	0365	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATORS FOR AMMUNI- TION	0366	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATORS, NON-ELECTRIC for blasting	0029	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATORS, NON-ELECTRIC for blasting	0267	Amend the NHM Code in column (4) to read as follows: "3603+0".
DETONATORS, NON-ELECTRIC for blasting	0455	Amend the NHM Code in column (4) to read as follows: "3603+0".
DEUTERIUM, COMPRESSED	1957	Amend the NHM Code in column (4) to read as follows: "2845++".

Name and description	UN No.	Amendment
DIBROMOMETHANE	2664	Amend the NHM Code in column (4) to read as follows: "29036+".
1,1-DIFLUOROETHANE	1030	Amend the NHM Code in column (4) to read as follows: "29034+".
1,1-DIFLUOROETHYLENE	1959	Amend the NHM Code in column (4) to read as follows: "29034+".
DIFLUOROMETHANE	3252	Amend the NHM Code in column (4) to read as follows: "29034+".
ETHYL BROMIDE	1891	Amend the NHM Code in column (4) to read as follows: "29036+".
ETHYLENE DIBROMIDE	1605	Amend the NHM Code in column (4) to read as follows: "290362".
ETHYL FLUORIDE	2453	Amend the NHM Code in column (4) to read as follows: "29034+".
1-ETHYLPIPERIDINE	2386	Amend the NHM Code in column (4) to read as follows: "29333+".
FUSE, DETONATING, metal clad	0102	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUSE, DETONATING, metal clad	0290	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUSE, DETONATING, MILD EFFECT, metal clad	0104	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUSE, IGNITER, tubular, metal clad	0103	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUSE, NON-DETONATING	0101	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUSE, SAFETY	0105	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, DETONATING	0106	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, DETONATING	0107	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, DETONATING	0257	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, DETONATING	0367	Amend the NHM Code in column (4) to read as follows: "3603+0".

Name and description	UN No.	Amendment
FUZES, DETONATING with protective features	0408	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, DETONATING with protective features	0409	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, DETONATING with protective features	0410	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, IGNITING	0316	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, IGNITING	0317	Amend the NHM Code in column (4) to read as follows: "3603+0".
FUZES, IGNITING	0368	Amend the NHM Code in column (4) to read as follows: "3603+0".
GENETICALLY MODIFIED MICROORGANISMS	3245	Amend the NHM Code in column (4) to read as follows: "300249".
HEPTAFLUOROPROPANE	3296	Amend the NHM Code in column (4) to read as follows: "29034+".
HEXAFLUOROETHANE	2193	Amend the NHM Code in column (4) to read as follows: "29034+".
HEXAFLUOROPROPYLENE	1858	Amend the NHM Code in column (4) to read as follows: "29034+".
IGNITERS	0121	Amend the NHM Code in column (4) to read as follows: "3603+0".
IGNITERS	0314	Amend the NHM Code in column (4) to read as follows: "3603+0".
IGNITERS	0315	Amend the NHM Code in column (4) to read as follows: "3603+0".
IGNITERS	0325	Amend the NHM Code in column (4) to read as follows: "3603+0".
IGNITERS	0454	Amend the NHM Code in column (4) to read as follows: "3603+0".
2-IODOBUTANE	2390	Amend the NHM Code in column (4) to read as follows: "29036+".
IODOMETHYLPROPANES	2391	Amend the NHM Code in column (4) to read as follows: "29036+".
IODOPROPANES	2392	Amend the NHM Code in column (4) to read as follows: "29036+".

Name and description	UN No.	Amendment
LIGHTERS, FUSE	0131	Amend the NHM Code in column (4) to read as follows: "3603+0".
METHYL BROMIDE AND ETHYLENE DIBROMIDE MIXTURE, LIQUID	1647	Amend the NHM Code in column (4) to read as follows: "29036+".
METHYL BROMIDE with not more than 2% chloropicrin	1062	Amend the NHM Code in column (4) to read as follows: "29036+".
2-METHYL-5-ETHYLPYRIDINE	2300	Amend the NHM Code in column (4) to read as follows: "29333+".
METHYL FLUORIDE	2454	Amend the NHM Code in column (4) to read as follows: "29036+".
METHYL IODIDE	2644	Amend the NHM Code in column (4) to read as follows: "29036+".
1-METHYLPYRIDINE	2399	Amend the NHM Code in column (4) to read as follows: "29333+".
Methyl pyridines: see	2313	Amend the NHM Code in column (4) to read as follows: "29333+".
Mixture F1: see	1078	Amend the NHM Code in column (4) to read as follows: "38276+".
Mixture F2: see	1078	Amend the NHM Code in column (4) to read as follows: "38276+".
Mixture F3: see	1078	Amend the NHM Code in column (4) to read as follows: "38276+".
OCTAFLUOROBUT-2-ENE	2422	Amend the NHM Code in column (4) to read as follows: "29034+".
OCTAFLUOROPROPANE	2424	Amend the NHM Code in column (4) to read as follows: "29034+".
PENTAFLUOROETHANE	3220	Amend the NHM Code in column (4) to read as follows: "29034+".
PICOLINES	2313	Amend the NHM Code in column (4) to read as follows: "29333+".
PRIMERS, CAP TYPE	0044	Amend the NHM Code in column (4) to read as follows: "3603+0".
PRIMERS, CAP TYPE	0377	Amend the NHM Code in column (4) to read as follows: "3603+0".
PRIMERS, CAP TYPE	0378	Amend the NHM Code in column (4) to read as follows: "3603+0".

Name and description	UN No.	Amendment
PRIMERS, TUBULAR	0319	Amend the NHM Code in column (4) to read as follows: "3603+0".
PRIMERS, TUBULAR	0320	Amend the NHM Code in column (4) to read as follows: "3603+0".
PRIMERS, TUBULAR	0376	Amend the NHM Code in column (4) to read as follows: "3603+0".
REFRIGERANT GAS R 1132a	1959	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 116	2193	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 1216	1858	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 125	3220	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 1318	2422	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 134a	3159	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 14	1982	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 143a	2035	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 152a	1030	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 161	2453	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 218	2424	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 227	3296	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 23	1984	Amend the NHM Code in column (4) to read as follows: "2903++".
REFRIGERANT GAS R 32	3252	Amend the NHM Code in column (4) to read as follows: "29034+".
REFRIGERANT GAS R 41	2454	Amend the NHM Code in column (4) to read as follows: "29036+".

Name and description	UN No.	Amendment
REFRIGERANT GAS, N.O.S.	1078	Amend the NHM Code in column (4) to read as follows: "38276+".
RELEASE DEVICES, EXPLOSIVE	0173	Amend the NHM Code in column (4) to read as follows: "3603+0".
TETRABROMOETHANE	2504	Amend the NHM Code in column (4) to read as follows: "29034+".
1,1,1,2-TETRAFLUOROETHANE	3159	Amend the NHM Code in column (4) to read as follows: "29034+".
TETRAFLUOROETHYLENE, STABILIZED	1081	Amend the NHM Code in column (4) to read as follows: "29034+".
TETRAFLUOROMETHANE	1982	Amend the NHM Code in column (4) to read as follows: "29034+".
1,2,3,6-TETRAHYDROPYRIDINE	2410	Amend the NHM Code in column (4) to read as follows: "29333+".
TOXINS, EXTRACTED FROM LIVING SOURCES, LIQUID, N.O.S.	3172	Amend the NHM Code in column (4) to read as follows: "30024+".
TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S.	3462	Amend the NHM Code in column (4) to read as follows: "30024+".
1,1,1-TRIFLUOROETHANE	2035	Amend the NHM Code in column (4) to read as follows: "29034+".
TRIFLUOROMETHANE	1984	Amend the NHM Code in column (4) to read as follows: "2903++".
TRIFLUOROMETHANE, REFRIGERATED LIQUID	3136	Amend the NHM Code in column (4) to read as follows: "29034+".
VINYL BROMIDE, STABILIZED	1085	Amend the NHM Code in column (4) to read as follows: "29034+".
VINYL FLUORIDE, STABILIZED	1860	Amend the NHM Code in column (4) to read as follows: "29034+".
VINYLPYRIDINES, STABILIZED	3073	Amend the NHM Code in column (4) to read as follows: "29333+".
ZIRCONIUM, DRY, finished sheets, strip or coiled wire	2009	Amend the NHM Code in column (4) to read as follows: "8109++".
ZIRCONIUM, DRY, coiled wire, finished metal sheets, strip (thinner than 254 microns but not thinner than 18 microns)	2858	Amend the NHM Code in column (4) to read as follows: "8109++".

Name and description	UN No.	Amendment
ZIRCONIUM POWDER, DRY	2008	Amend the NHM Code in column (4) to read as follows: "8109++".
ZIRCONIUM POWDER, WETTED with not less than 25% water	1358	Amend the NHM Code in column (4) to read as follows: "8109++".
ZIRCONIUM SCRAP	1932	Amend the NHM Code in column (4) to read as follows: "8109++".
ZIRCONIUM SUSPENDED IN A FLAMMABLE LIQUID	1308	Amend the NHM Code in column (4) to read as follows: "8109++".

[Reference document: OTIF/RID/CE/GTP/2022/1]

Chapter 5.4

5.4.2

In footnote 12, amend the following:

- In the first sentence, replace "(Amendment 39-18)" by:
"(Amendment 40-20)".

[Reference document: OTIF/RID/CE/GTP/2022/8]

- In 5.4.2.1.2, delete the commas after "Packages" and after "requirements".

[Reference document: OTIF/RID/CE/GTP/2022/8]

- In 5.4.2.1.4, delete the comma after "loaded".

[Reference document: OTIF/RID/CE/GTP/2022/8]

- In 5.4.2.1.6, delete the comma after "class 1".
- In 5.4.2.1.7, delete the comma after "labelled".

[Reference document: OTIF/RID/CE/GTP/2022/8]

- In 5.4.2.1.9, add a comma after "(of the IMDG Code)".

[Reference document: OTIF/RID/CE/GTP/2022/8]

- In 5.4.2.2, at the end of the first sentence, delete:
"one to the other".

[Reference document: OTIF/RID/CE/GTP/2022/8]

Chapter 6.5

6.5.1.1.3 [The amendment in the German version does not apply to the English text.]

6.5.2.2.4 [The amendments in the German version do not apply to the English text.]

6.5.4.2 [The amendment in the German version does not apply to the English text.]

Chapter 6.8

6.8.4 (d) Amend special provision TT 4 to read as follows:

"TT 4 (deleted)".

[Reference document: OTIF/RID/CE/GTP/2022/5]

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