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Working Party on the Transport of Dangerous Goods

Joint Meeting of Experts on the Regulations annexed to the
European Agreement concerning the International Carriage
of Dangerous Goods by Inland Waterways (ADN)
(ADN Safety Committee)

Thirty-ninth session

Geneva, 24-28 January 2022

Report of the Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN Safety Committee) on its thirty-ninth session*

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I. Attendance

1. The Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee) held its thirty-ninth session in Geneva from 24 to 28 January 2022, with Mr. H. Langenberg (Netherlands) as Chair and Mr. B. Birkhuber (Austria) as Vice-Chair.
2. Representatives of the following countries took part in the work of the session: Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Luxembourg, Netherlands, Poland, Romania, Russian Federation, Slovakia and Switzerland.
3. The following intergovernmental organizations were represented: the Central Commission for the Navigation of the Rhine (CCNR), the Danube Commission, the European Commission and Transport Community.
4. The following non-governmental organizations were also represented: European Barge Union (EBU), European Bulk Oil Traders' Association (EBOTA), European Chemical Industry Council (Cefic), International Committee for the Prevention of Work Accidents in Inland Navigation (CIPA), European Skippers Organisation (ESO), Federation of European Tank Storage Associations (FETSA), FuelsEurope, International Dangerous Goods and Container Association (IDGCA) and Recommended ADN Classification Societies.

II. Organizational matters

5. The Safety Committee was informed that due to a combination of COVID-19 response measures and ongoing financial constraints triggered by the United Nations liquidity crisis, the number of meeting rooms available for hybrid meetings was still reduced to three parallel meetings per day with limited duration of the morning or afternoon hybrid meetings. ECE is planning to revert to normal business for the second half of the year. Taking into account those factors and the sanitary and travel restrictions still in force, and after consultation with the secretariat and conference services of the United Nations Office at Geneva, the officers of the Safety Committee agreed to adapt again the format of the thirty-ninth session (see informal document INF.10).
6. The Safety Committee noted the changes in the structure of the Sustainable Transport Division, moving the activities and tasks related to road safety management from the Dangerous Goods Section to the Vehicle Regulations and Transport Innovations Section.

III. Adoption of the agenda (agenda item 1)

Documents: ECE/TRANS/WP.15/AC.2/79 and Add.1

Informal document: INF.1 (Secretariat)

7. The Safety Committee adopted the agenda prepared by the secretariat, as amended by informal document INF.1 to take account of informal documents INF.2 to INF.23.

IV. Election of officers for 2022 (agenda item 2)

8. On the proposal of the representative of France and supported by the representative of Germany, the Safety Committee re-elected Mr. H. Langenberg (Netherlands) as Chair and Mr. B. Birkhuber (Austria) as vice-Chair, for its sessions in 2022.

V. Matters arising from the work of United Nations bodies or other organizations (agenda item 3)

A. Work of the ECE Executive Committee and the Inland Transport Committee

Informal document: INF.18 (Secretariat)

9. The Safety Committee was informed that the ECE Executive Committee (EXCOM) decided, at its session on 21 July 2021, to seek input from its subsidiary bodies on themes for high-level discussions (see document E/ECE/1500) and to report to the Commission at its autumn 2022 session, in particular on the development of effective and measurable solutions that promote a circular economy and a sustainable use of natural resources in view of the achievement of the goals of the 2030 Agenda for Sustainable Development. Delegations wishing to do so were invited to present information on that subject at the next session of the Safety Committee.

10. The Safety Committee noted that the annual session of the Inland Transport Committee (ITC) was scheduled to be held in Geneva from 22 to 25 February 2022. The session will mark its 75th anniversary and will focus on the subject of “connecting countries and driving sustainable mobility”. Further information and documentation such as transport digitalization and the implementation of the ITC Strategy until 2030 are available at: <https://unece.org/info/Transport/Inland-Transport-Committee/events/362658>.

B. Report from the Danube Commission

Informal document: INF.8 (Danube Commission)

11. The representative of the Danube Commission reported on the general trend in 2021 of the navigation on the Danube, in particular a decrease in the transportation by cruise passenger vessels due to the restrictions of the COVID-19 pandemic measures and a stabilization of the decline in 2020 of cargo vessels resulting in a reduced volume of dangerous goods transported.

12. On the proposal submitted to the previous session of the Safety Committee, the representative of the Danube Commission reported that an analysis was in progress about signalling on a vessel when pressure in cargo and membrane tanks is reduced. In this respect, a survey had been circulated to member states of the Danube Commission to gather further information on the subject. He announced that the result of the analysis would be concluded mid of 2022 and volunteered to inform the Safety Committee at its next session.

VI. Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (agenda item 4)

A. Status of ADN

13. The Safety Committee noted no new information on the status of the ADN and that the number of Contracting Parties to ADN remained at eighteen.

B. Special authorizations, derogations and equivalents

Document: ECE/TRANS/WP.15/AC.2/2022/19 (Netherlands)

Informal documents: INF.2 and INF.7 (Netherlands)

14. The representative of the Netherlands presented in official document ECE/TRANS/WP.15/AC.2/2022/19 and informal document INF.2 a special authorization on

the carriage in a tank vessel of UN 1288 SHALE OIL. The Safety Committee noted the information in informal document INF.7 on an additional request for a similar special authorization.

15. The representative of the Netherlands proposed to amend the entries in Table A of Chapter 3.2 and to insert new entries into Table C of Chapter 3.2 to allow in future such carriage of UN 1288 SHALE OIL in tank vessels. He underlined that the new entries in Table C were intended for commercial shale oil with low water content. Some concerns were raised on the use of the new entries for the transport of wash water considered as waste. Regarding the whole range of possible mixtures from low to high water content, the Safety Committee underlined that the assignment of shale oil mixtures to the proper entries in Table C was the responsibility of the consignor.

16. It was clarified that due to insufficient data, the new entries were assigned the highest safety requirements for the anti-explosion protection. The representative of FuelsEurope confirmed that the probability of the carriage of shale oil with high water content was very low due to economic reasons. He added that shale oil was traceable and easy to identify the origin of the shale oil deposit and producer.

17. The Safety Committee recommended the Administrative Committee to endorse the amendments proposed in document ECE/TRANS/WP.15/AC.2/2022/19 to be included in the 2023 edition of ADN (see annex I).

C. Interpretation of the Regulations annexed to ADN

1. Interpretation of 9.3.x.12.2

Document: ECE/TRANS/WP.15/AC.2/2022/10 (Recommended ADN Classification Societies)

18. The Safety Committee recalled the discussions at previous sessions on the interpretation of appropriate ventilation systems and agreed on the interpretation provided in document ECE/TRANS/WP.15/AC.2/2022/10 by the Recommended ADN Classification Societies. The interpretation reads as follows:

- "(a) Ventilation systems did not strictly mean active systems, it was therefore not necessary to install fans;
- (b) The class rules require a ventilation pipe for void spaces (openings could no longer be used and must be replaced by ventilation systems);
- (c) An opened hatch cover is an undefined opening (situation) with respect to stability calculations and cannot be consider as appropriate solution for ventilation of void spaces;
- (d) Two appropriately positioned ventilation openings with regard to stability requirement (e.g. ventilation hoods) per room are appropriate "ventilations systems";
- (e) A goose neck is an appropriate "ventilation system";
- (f) It is not necessary to install flame arresters in the ventilation openings of tank vessels of type N open with flame arresters and type N closed."

19. The Recommended ADN Classification Societies confirmed that, according to 9.3.3.20.4 of ADN, it is mandatory to install flame arresters in the ventilation openings on cofferdams but not on void spaces and clarified that "hatch cover" means small hatches as a common shipbuilding term.

20. The Safety Committee also agreed that there was no need to amend the current transitional provisions in 1.6.7.2.2.2 on ventilation systems in double hull spaces or double bottoms. It was decided to publish the interpretation in paragraph 18 above on the UNECE website.

2. The transport of Carbon Dioxide (CO₂) and required refrigerating system — ADN

Document: ECE/TRANS/WP.15/AC.2/2022/15 (EBU and ESO)

Informal document: INF.6 (EBU and ESO)

21. The Safety Committee welcomed the information in the documents submitted by EBU and ESO and the proposal to harmonize the conditions for the carriage of CO₂ with the transport requirements of other gases such ethylene or liquified natural gas. Following the discussion, the informal working group on substances was invited to consider in detail the proposal of adding remark 42 to UN No. 2187 (CO₂), meaning that no refrigerating system is required, as long as the holding time in relation to temperature elevation and boil off is sufficient and guaranteed. In addition, the informal working group on substances was invited to consider both remarks 39 and 42 with respect to a generic criterion under 3.2.4.3 for refrigerated gases.

22. The Safety Committee agreed to resume consideration of this subject at its next session based on the feedback by the informal working group on substances.

3. Flame arresters for degassing

Informal document: INF.14 (Netherlands)

23. The representative of the Netherlands announced their intention to perform a study on whether flame arresters that were not certified for withstanding a steady burning of 30 minutes or longer, but which can withstand detonations and deflagrations, were suitable to ensure the safety during the degassing operations. In this respect, the members of the Safety Committee were invited to send their comments to and share their knowledge on possible incidents with the Dutch delegation. The representative of the Netherlands volunteered to report back to the Safety Committee at its next session on the details received and to prepare a proposal for amendments accordingly.

4. Different lists of interpretations

Informal document: INF.15 (Germany)

24. Referring to the common discussions on interpretations of ADN provisions, the representative of Germany reported on an existing list of interpretations maintained by the Recommended ADN Classification Societies and the list of interpretations of ADN published on the UNECE website. The Safety Committee requested the Classification Societies to provide this list to the UNECE secretariat to be published on the UNECE website.

25. Regarding the criteria to publish interpretations on the UNECE website, the secretariat clarified that some interpretation issues were solved by a subsequent clarification amendment and others were published on the UNECE website upon the decision of the Safety Committee.

26. The Safety Committee noted some comments on possible unified interpretation text similar to those in the International Maritime Dangerous Goods (IMDG) code that are in general voluminous and, therefore, preferred to be cautious to avoid blowing up the size of the ADN. It was agreed that the ADN provisions shall be as concise and clear as possible. For the future, it was recommended that once consensus on an interpretation issue was reached the Safety Committee shall decide, on a case by case basis, to either amend the ADN provisions or to publish the interpretation on the UNECE website.

D. Training of experts

27. The Safety Committee noted that the informal working group on the training of experts did not meet in 2021 due to the sanitary restrictions. It also noted that the group intended to convene again in the spring 2022 for a two-days meeting in the tenth, twelfth or thirteenth week and for a further meeting in the autumn.

E. Matters related to classification societies

1. Update and revision of ADN 9.3.4 on topic collision energies

Informal documents: INF.9 (Recommended ADN Classification Societies)

28. The Safety Committee welcomed a presentation on updating the provisions in 9.3.4 of ADN on collision energies and the results of a research on typical collision scenarios including a risk assessment of possible explosions, heat radiation and intoxication. It was also shown that current ADN provisions for calculating the collision energy, could be updated by using more recent shipping statistics (2017). Delegates were invited to send their questions and comments to the Recommended ADN Classification Societies.

29. The representative of the Recommended ADN Classification Societies volunteered to prepare a proposal for consideration at next session of the Safety Committee.

2. List of classification societies

30. The Safety Committee noted no change in the list of classification societies recognised by ADN Contracting Parties which can be found at the following link: <https://unece.org/classification-societies>

VII. Proposals for amendments to the Regulations annexed to ADN (agenda item 5)

A. Work of the RID/ADR/ADN Joint Meeting

Document: ECE/TRANS/WP.15/AC.2/2022/20 (Secretariat)

Informal documents: INF.5 (Germany)
INF.11 and INF.12 (Secretariat)

31. The Safety Committee adopted the consolidated list of amendments in document ECE/TRANS/WP.15/AC.2/2022/20 relevant for ADN adopted by the RID/ADR/ADN Joint Meeting in 2020-2021 and by the Working Party on the Transport of Dangerous Goods (WP.15) for entry into force on 1 January 2023, with some changes (see annex I). It was clarified that the proposed change to the definition of filler only applied to the German version.

32. The Safety Committee also adopted the amendments relevant to ADN proposed in informal document INF.11 containing additional amendments adopted by WP.15 at its 110th session, including the amendments proposed by Germany in informal document INF.5 (see annexes I and II).

33. The Safety Committee decided that the proposed amendments in informal document INF.12 were not needed as these were relevant to chapters 6.2 and 6.8 of ADR but not to ADN.

34. As regards the harmonization amendments related to topics still under consideration by the RID/ADR/ADN Joint Meeting in March 2022 and by WP.15 at its 111th session, the Safety Committee agreed to consider them at its fortieth session.

B. Other proposals

1. Incoherence in the linguistic versions of ADN 9.1.0.40.2.5 (c) et 9.3.X.40.2.5 (c) on triggering devices

Document: ECE/TRANS/WP.15/AC.2/2022/2/Rev.1 (CCNR)

Informal document: INF.16 (CCNR)

35. The representative of CCNR clarified that the objective of the proposal was to align the different language versions of ADN and not to add additional construction requirements

for vessels. Some delegations were in favour of keeping the text of the ADN aligned with the European Standard on Technical Requirements for Inland Navigation vessels (ES-TRIN) to avoid a dis-harmonisation between both legal instruments.

36. It was also mentioned that the requirements could not be replaced by a reference to ES-TRIN as there were ADN Contracting Parties that were not members of the European Union and therefore not using ES-TRIN. The representative of CCNR offered to review the proposal and to submit a revised document for consideration at the next session of the Safety Committee.

2. Harmonization of the terminology used in ADN 2021 for “protective suit”, “protective equipment” and “personal protective equipment”

Document: ECE/TRANS/WP.15/AC.2/2022/3 (CCNR)

37. The Safety Committee adopted the amendments proposed in ECE/TRANS/WP.15/AC.2/2022/3 to align the terms of “protective suit”, “protective equipment” and “personal protective equipment” in the French, English and Russian versions of the ADN with those used in the German version (see annex I).

3. Amendments for entry into force on 1 January 2023: Safety adviser / Safety adviser for the transport of dangerous goods – Sub-section 1.8.3.17 of ADN

Document: ECE/TRANS/WP.15/AC.2/2022/5 (Germany)

38. The Safety Committee adopted the proposal to remove the content of 1.8.3.17 of ADN (see annex I).

4. Section 8.2.1 of ADN — Requirements concerning training of experts

Document: ECE/TRANS/WP.15/AC.2/2022/6 (Germany)

39. Recalling the discussions at previous sessions, the representative of Germany proposed in paragraphs 6 to 8 of document ECE/TRANS/WP.15/AC.2/2022/6 amendments to 8.2.1 of ADN to harmonize the examination procedures among Contracting Parties. A number of representatives raised concern on the six-month period for examinations and the feasibility of organizing at their national level recurrent examinations in such short periods to allow candidates who failed to retake the exam.

40. Following the discussion, the Safety Committee adopted the proposed amendments to Chapter 8.2 (see annex I). To address the concerns expressed, it was agreed to evaluate in the course of the next biennium the situation and experience of competent bodies in charge of the ADN training courses and examinations, in particular on their ability to organize the prescribed number of retakes, and to adapt the provisions, if necessary.

5. Harmonization of the terminology used in 1.9.3 (c), au 8.1.2.2 (f) et au 8.1.2.3 (s) of ADN 2021

Document: ECE/TRANS/WP.15/AC.2/2022/7 (CCNR)

41. The Safety Committee adopted the amendments proposed in document ECE/TRANS/WP.15/AC.2/2022/7 (see annex I). Some representatives raised concerns with the use of terms like “near by” or “in the immediate vicinity” that are not precisely defined and therefore open to interpretation. It was clarified that sometimes the use of such terms was necessary and that it was the responsibility of the Competent Authority to provide an interpretation considering environmental, political and social constrains. The representative of Belgium noted that there were other places in the ADN where the terminology “in the vicinity” was used and should be amended to “immediately adjacent”.

6. Proposed correction to ADN 9.3.4.3.1.2.2.1.3

Document: ECE/TRANS/WP.15/AC.2/2022/8 (CCNR)

42. The Safety Committee adopted the proposals in paragraphs 6 to 8 in document ECE/TRANS/WP.15/AC.2/2022/8 to amend 9.3.4.3.1.2.2.1.3 of ADN (see annex I).

7. Incoherence in the linguistic versions of 3.4.14 of ADN concerning “large containers”

Document: ECE/TRANS/WP.15/AC.2/2022/9 (CCNR)

43. The CCNR secretariat underlined that the wording “per transport unit, wagon or large container” (used in RID/ADR) were already included in 3.4.14 of ADN but there were discrepancies between the texts in the German version and the other language versions of the ADN.

44. The Safety Committee decided that this matter should be considered by the RID/ADR/ADN Joint Meeting at its forthcoming session in March 2022 based on a proposal by the Netherlands. Thus, it was agreed to resume discussion on the subject at the next Safety Committee session.

8. Certificate of approval and seagoing vessels

Document: ECE/TRANS/WP.15/AC.2/2022/13 (France)

45. The representative of France proposed to amend Chapter 1.16 to exempt seagoing vessels from the requirement to hold a certificate of approval for navigating on inland waterways, provided that such vessels were in possession of the relevant certificates applicable to maritime navigation. Some representatives were in favour of the proposed amendments, but most preferred to keep the requirement to ensure conformity of such vessels with the specific construction requirements of inland water vessel such as those on ventilations systems, double-hull, stability analysis, emissions, etc. It was also mentioned that a careful review of the existing ADN provisions on seagoing vessels should be conducted to avoid introducing contradictory requirements. The Safety Committee did not support the proposal.

9. Amendments for entry into force on 1 January 2023, update of the references to standards

Document: ECE/TRANS/WP.15/AC.2/2022/4 (Germany)

Informal document: INF.19 (Germany)

46. Some experts raised concern that they have not been in the position to check all references proposed in document ECE/TRANS/WP.15/AC.2/2022/4. The representative of EBU and ESO expressed her regret that the relevant standards to be included in the ADN were not available. The Safety Committee adopted the proposed amendments to update the references to standards together with some additional changes (see annex I).

47. Some references that were not adopted (in particular those listed in document ECE/TRANS/WP.15/AC.2/2022/4 under items 1.(j), 6. and 7.) and the question whether technical devices on board of vessels in service should be exchanged after a transitional period, will be further discussed at a meeting of interested delegates coordinated by Germany. The outcome of those discussions will be reflected in a working document, for future consideration by the Safety Committee, with proposals of amendments for the 2025 edition of ADN. The representative of France confirmed that standard NF M T60-103:1968, currently referenced, was still applicable.

48. The representative of FuelsEurope pointed out that in the classification criteria in 2.2.3.1.5 of ADN (flow-time), a reference is made to the Manual of Tests and Criteria, Part III, sub-section 32.4.3 which refers to tests included in ISO 2431:1984. In 3.2.4.2 of ADN (2.12 – Flow time) the existing reference to ISO 2431:1996 will be updated to ISO 2431:2019 following the proposal in point 2(a) of document ECE/TRANS/WP.15/AC.2/2022/4. The Safety Committee requested the secretariat to notify the UN Sub-Committee of Experts on the Transport of Dangerous Goods of this change in the ADN and to request whether an update of the reference to ISO 2431:1984 in the Manual of Tests and Criteria to ISO 2431:2019 was necessary, to avoid discrepancies in ADN requirements.

10. Reference to the provisions for degassing in 8.3.5

Document: ECE/TRANS/WP.15/AC.2/2022/17 (Netherlands)

49. The Safety Committee adopted the proposed amendments to 8.3.5, third indent of ADN (see annex I).

11. Fixed fire-extinguishing systems for physical protection – 9.1.0.40.2.16, 9.3.1.40.2.16, 9.3.2.40.2.16 and 9.3.3.40.2.16 of ADN

Document: ECE/TRANS/WP.15/AC.2/2022/21 (Germany)

50. The representative of the Russian Federation objected to insert in ADN the proposed reference to the corresponding provisions in ES-TRIN. The Safety Committee adopted the amendments proposed in the second option in paragraph 6 of ECE/TRANS/WP.15/AC.2/2022/21 (see annex I).

12. Language inconsistency in "3.2.3.1, column (20), remark 33, (n)" of ADN 2021

Informal document: INF.3 (CCNR)

51. The Safety Committee adopted the proposal to align the text used in 3.2.3.1, column (20), remark 33, (n) of ADN (see annex I).

13. Language inconsistency in 3.3.1 ADN, Special Provision 651

Informal document: INF.13 (CCNR)

52. The Safety Committee adopted the proposed amendment to special provision 651 in 3.3.1 of ADN (see annex I).

14. Dangerous goods which are not detectable with a toximeter

Informal document: INF.20 (Cefic, EBU and ESO)

53. Some experts supported in principle the proposal to extend the requirements of ADN so that some substances which cannot be measured with a toximeter can be determined by other measuring devices using the indirect methodology, i.e. through the determination of secondary products. The Safety Committee preferred to refer the proposal to informal working group on substances. It was agreed to resume discussion at the next session awaiting the feedback from the informal working group.

15. Provisions of cofferdams

Document: ECE/TRANS/WP.15/AC.2/2022/16 (EBU and ESO)

Informal documents: INF.17 and INF.22/Rev.1 (EBU and ESO)

54. Recalling the discussions at previous sessions, most representatives supported in principle the amendments proposed in document ECE/TRANS/WP.15/AC.2/2022/16 but raised some concerns and the need for clarifications. Following the discussion, the Safety Committee adopted by majority the proposed amendments in informal document INF.22/Rev.1 (see annex I).

C. Checking of amendments adopted at previous sessions

Document: ECE/ADN/2022/1 (Secretariat)

Informal document: INF.4 (Austria)

55. The Safety Committee adopted the amendments proposed in document ECE/ADN/2022/1 and informal document INF.4 with some additional editorial modifications (see annex I).

VIII. Reports of informal working groups (agenda item 6)

A. Report of the sixth meeting of the informal working group “loading on top of barges”

Document: ECE/TRANS/WP.15/AC.2/2022/18 (Netherlands)

56. The Safety Committee noted the outcome of the sixth meeting of the informal working group on loading on top in barges and welcomed the good progress done by the group at its meeting on 13-14 October 2021. It was agreed that:

(a) for the co-loading of the same cargo (i.e. dangerous goods with the same UN number and entry in Table C) the informal working group on substances should continue to develop a so-called “positive list” of a first set of relevant dangerous goods that could be loaded in a cargo tank in one or more batches. For the time being, new substances could be added on a case by case basis. It was underlined that there is still the need to develop a definition on what is considered “same cargo” as well as a procedure to add new substances to the positive list. The Chair of the informal working group on substances requested the Safety Committee to submit possible concerned substances in order to facilitate the work. The representative of Cefic offered to send a first list of possible substances to the Chair of the informal working group on substances.

(b) for the loading on top of different substances, the informal working group on loading on top should restrain, in the absence of other legal instruments on this subject, from further discussions. Referring to the request by Belgium at the previous session, the Safety Committee confirmed that it is possible to add inhibitors, additives and colourants to a cargo, although these kinds of additions are not considered loading on top as the quantities added are in the range of parts per million (ppm). The representative of FuelsEurope was invited to transmit a working document to the Safety Committee with the relevant paragraphs in the ADN allowing this.

57. The Safety Committee acknowledged the important work done by the informal working group on loading on top and confirmed that the group concluded its mandate. It was agreed that the need for a further mandate of an informal working group on the subjects under item II of document ECE/TRANS/WP.15/AC.2/2022/18 might be discussed in the future, if deemed necessary.

B. Minutes of the twenty-second meeting of the Group of ADN Recommended Classification Societies

Document: ECE/TRANS/WP.15/AC.2/2022/11 (Recommended ADN Classification Societies)

58. The Chair of the Group of Recommended ADN Classification Societies reported on the outcome of the group’s meeting of 20 October 2021. The Safety Committee noted some comments on the minutes and invited the group to continue, at the next meeting, the discussions on topics II.G (certification of pumps for zone 0) and III.A (transitional provisions) of document ECE/TRANS/WP.15/AC.2/2022/11. The representative of Belgium urged to conclude the discussion on III.C (electric propulsion systems and energy storage) and offered to prepare a proposal for consideration at the next meeting.

59. On topic II.F (compliance with standard EN ISO/IEC 17020) the Safety Committee had an extensive exchange of views on the differences between the certification of quality assurance systems and the accreditation of inspection bodies or classification societies, in particular on their impartiality/neutrality and the renewal of their certificates/accreditation. It was confirmed that, according to 1.15.3.8 of ADN, classification societies need to undergo a recurrent assessment by an accreditation body to maintain their status as Recommended ADN Classification Societies.

60. The Safety Committee recalled that the Recommended ADN Classification Societies have already been requested at multiple occasions to prepare a detailed document with their

views including the pros and cons of the accreditation process as well as a cost-benefit analysis. It was noted that the next meeting of the Group was scheduled to be held on 16 March 2022.

C. Oral report on the correspondence group on fumigated cargos

61. The representative of Germany informed the Safety Committee about the submission of documents for further consideration by the correspondence group on fumigated cargos. He reported on the positive outcome of discussions organized by EBU, ESO and the Netherlands with consignors of fumigated cargo and main operators/carriers on possible risks and measurement methods for the transport of fumigated cargos. The representative of the Netherlands underlined the importance of this matter and offered continued cooperation on this topic.

IX. Programme of work and calendar of meetings (agenda item 7)

62. The Safety Committee noted that its next session would be held in Geneva from 22-26 August 2022 and that the twenty-eighth session of the ADN Administrative Committee was scheduled to take place on 26 August 2022. The deadline for the submission of official documents for these sessions is 27 May 2022.

63. It was recalled that the Safety Committee, at its fortieth session, would only consider for adoption and entry into force on 1 January 2023, additional amendments and corrections to already adopted texts or proposals to ensure harmonization with the provisions of the 2023 editions of RID and ADR. All other proposals for amendments submitted for consideration to that session would be considered for entry into force on 1 January 2025.

X. Any other business (agenda item 8)

A. Terms of reference for the informal working group on certificates and other on-board documents in electronic format

Document: ECE/TRANS/WP.15/AC.2/2022/1 (CCNR)

64. The Safety Committee welcomed the draft terms of reference of the informal working group on certificates and other on-board documents in electronic format and agreed to establish the new group. The representative of the Netherlands volunteered to lead the work of the informal working group. The secretariat of CCNR offered to ensure the secretariat services to the new group.

B. Rules of Procedures for the ADN Safety Committee

Document: ECE/TRANS/WP.15/AC.2/2022/12 (Austria, Germany and the Netherlands)

65. The Safety Committee considered and adopted the Rules of Procedures for the ADN Safety Committee (see addendum 1 to the report). The Chair announced his intention to inform the ADN Administrative Committee and the Inland Transport Committee at their forthcoming sessions. It was noted that the secretariat of CCNR had participated in the drafting of the document and their contributions related to the activities performed by CCNR had been included.

C. Loading and unloading instructions — draft terms of reference for informal working group

Document: ECE/TRANS/WP.15/AC.2/2022/14 (Netherlands)

Informal document: INF.23 (Belgium)

66. The Safety Committee noted the draft terms of reference for informal working group on “loading and unloading instructions”. The representative of the Netherlands offered to lead the work and to organize a first meeting of the informal working group, in which the comments made by Belgium in informal document INF.23 will be discussed, tentatively in April 2022. The Safety Committee welcomed that offer.

D. Draft agenda for the twelfth meeting of the informal working group on substances

Informal document: INF.21 (Germany)

67. The representative of Germany presented the draft agenda for the twelfth meeting of the informal working group on substances. The Safety Committee noted some additions (e.g. refrigerated CO₂, remark “42” and UN 3550 COBALT DIHYDROXIDE) to the list of agenda items and endorsed the initiative by Germany to convene a virtual meeting to continue the important work of the group.

E. Spring-loaded low-pressure valve

68. The representative of EBU and ESO recalled the discussion of the Safety Committee at the January 2021 session on the installation of low-pressure valves or additional vacuum valves and the need to clarify the corresponding provisions of ADN. The representatives of Germany and the Netherlands offered to prepare a joint proposal for the next session.

XI. Adoption of the report (agenda item 9)

69. The Safety Committee adopted the report on its thirty-ninth session on the basis of a draft prepared by the secretariat.

Annex I

[Original: English and French]

Proposed amendments to the Regulations annexed to ADN for entry into force on 1 January 2023

Chapter 1.2

1.2.1 In the definitions for “Auto-ignition temperature”, “Deflagration”, “Detonation”, “Explosion”, “Explosive atmosphere” and “Temperature class”, replace “EN 13237:2011” with “EN 13237:2012”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

1.2.1 In the definition for “Equipment category” (three times) and “Equipment protection level”, replace “IEC 60079-0” by “IEC 60079-0:2017+Cor 1:2020”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

1.2.1 In the definition for “Electrical apparatus protected against water jets”, replace “IEC publication 60529” with “IEC Publication 60529:1989 + A1:1999 + A2:2013”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

1.2.1 In the definition for “Explosion group/subgroup”, replace “EN IEC 60079-0:2012” with “EN IEC 60079-0:2017+Cor 1:2020”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

1.2.1 In the definition for “Gas detection system”, replace “EN 50271:2010” by “EN 50271:2010 or EN 50271:2018”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

1.2.1 In the definitions for “Oxygen measuring system” and “Oxygen meter”, replace “IEC/EN 50104:2010” by “EN 50104:2019”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

1.2.1 In the definition for “Protective suit”, replace “EN 1149-5:2008” with “EN 1149-5:2018”. Amend the second sentence to read as follows: “The choice of an appropriate protective suit shall correspond to the dangers likely to arise.”.

(Reference documents: ECE/TRANS/WP.15/AC.2/2022/4 and ECE/TRANS/WP.15/AC.2/2022/3)

1.2.1 In the definition for “Types of protection”, under “Electrical equipment”:

Replace “IEC 60079-0:2014” by “IEC 60079-0:2017+Cor 1:2020”.

Replace “EEx (d)” by “EEx d” and replace “IEC 60079-1:2014” by “IEC 60079-1:2014 Cor 1:2018”.

Replace “EEx (e)” by “EEx e” and replace “IEC 60079-7:2016” by “IEC 60079-7:2016 A1:2017”.

Replace “EEx (ia)” by “EEx ia” and “EEx (ib)” by “EEx ib” and replace “IEC 60079-11:2012” by “IEC 60079-11:2011 Cor.:2012”.

Replace “EEx (m)” by “EEx m” and replace “IEC 60079-18:2014” by “IEC 60079-18:2014; A1:2017; Cor.:2018”.

Replace “EEx (p)” by “EEx p” and replace “IEC 60079-2:2015” by “IEC 60079-2:2014 Cor.:2015”.

Replace “EEx (q)” by “EEx q”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4 as amended)

Chapter 1.6

1.6.7.2.2.2 In the Table of general transitional provisions: Tank vessels, amend the transitional provision for “7.2.3.20.1, Ballast water Prohibition against filling cofferdams with water” to read as follows:

7.2.3.20.1	Prohibition against filling cofferdams not fitted out as service spaces, with water	<p style="text-align: center;">N.R.M. Renewal of the certificate of approval after 31 December 2038</p> <p>Until then, the following requirements apply on board vessels in service: Cofferdams, not fitted out as service spaces, may be filled with water during unloading to provide trim and to permit residue-free drainage as far as possible.</p>
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(Reference document: ECE/TRANS/WP.15/AC.2/2022/16 as amended by informal document INF.22/Rev.1)

1.6.7.2.2.2 In the Table of general transitional provisions: Tank vessels, insert the following transitional provisions:

1.2.1	Electrical apparatus protected against water jets IEC 60529:1989 + A1:1999 + A2:2013	N.R.M. from 1 January 2023
1.2.1	Explosion group IEC 60079-0:2017+ Cor 1:2020	N.R.M. from 1 January 2023
1.2.1	Gas detection system Test according to IEC/EN 60079-29-1:2016 and EN 50271:2010 or EN 50271:2018	N.R.M. from 1 January 2023 for vessels brought into service before 1 January 2019: Renewal of the certificate of approval after 31 December 2024
1.2.1	Oxygen measuring system Test according to standard EN 50104:2019	N.R.M. from 1 January 2023 Until that date, the oxygen measuring system must be checked in accordance with IEC/EN 50104:2010
1.2.1	Oxygen meter Test according to standard EN 50104:2019	N.R.M. from 1 January 2023 Until that date, the oxygen meter must be checked in accordance with IEC/EN 50104:2010
1.2.1	Protective suit Compliance with EN 1149-5:2018	N.R.M. from 1 January 2023
1.2.1	Types of protection, electrical equipment CEI 60079-0:2017+ Cor 1:2020	N.R.M. from 1 January 2023
1.2.1	Types of protection EEx d, IEC standard	N.R.M. from 1 January 2023
1.2.1	Types of protection EEx e, IEC standard	N.R.M. from 1 January 2023
1.2.1	Types of protection EEx m, IEC standard	N.R.M. from 1 January 2023
1.2.1	Types of protection EEx p, EEx q, IEC Standard	N.R.M. from 1 January 2023

8.1.6.2	EN ISO 10380:2012	N.R.M. from 1 January 2023
8.1.6.2	EN ISO 13765:2018	N.R.M. from 1 January 2023
9.1.0.53.4 (a)	EN 15869-1:2019	N.R.M. from 1 January 2023

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4 as amended)

1.6.8 Insert the following new transitional provision:

“1.6.8.3 Certificates of specific knowledge of ADN referred to in 8.2.2.8 issued before 1 January 2023 and which conform to the format laid down in ISO/IEC 7810:2003 shall remain valid until the expiry date indicated therein.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4 as amended)

Chapter 1.8

1.8.3.17 Delete and insert: “1.8.3.17 *(Deleted)*”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/5)

Chapter 1.9

1.9.3 (c) Replace “Emergency requirements regarding routing or parking” by “Emergency requirements regarding routing or berthing”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/7)

Chapter 3.2, Table A

For UN No. 1288, both entries, in column (8) insert “T”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/19)

Chapter 3.2, Table C

Add the following new entries:

UN No. or substance identification No.	Name and description	Class	Classification code	Packing group	Dangers	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the pressure relief valve/high velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20 °C	Type of sampling device	Pump room below deck permitted	Temperature class	Explosion group	Anti-explosion protection required	Equipment required	Number of cones/blue lights	Additional requirements/Remarks
(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	3.1.2	2.2	2.2	2.1.1.3	5.2.2 / 3.2.3.1	1.2.1 / 7.2.2.0.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	7.2.4.2.1	3.2.3.1	3.2.3.1 / 1.2.1	3.2.3.1 / 1.2.1	1.2.1	1.2.1 / 3.2.3.3	1.2.1 / 3.2.3.3	8.1.5	7.2.5	3.2.3.1
1288	SHALE OIL	3	F1	II	3+N3+C MR	N	2	3	3	45	97	0.92	3	yes	T3	II B ⁴⁾	yes	PP, EP, EX, TOX, A	1	14; 23
1288	SHALE OIL	3	F1	III	3+N3+C MR	N	2	3	3	45	97	0.92	3	yes	T3	II B ⁴⁾	yes	PP, EP, EX, TOX, A	0	14; 23

(Reference document: ECE/TRANS/WP.15/AC.2/2022/19)

Chapter 3.2

3.2.3.1, column (20), remark 33, paragraph (n) Amend subparagraph .1 to read as follows:

“.1 The addition date of the stabilizer and the duration of its effectiveness;”.

(Reference document: informal document INF.3)

3.2.3.3, column (18) and 3.2.4.3 J, column (18) Amendment does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/3)

3.2.4.2 In the Application form for special authorizations, under section 1.5.2:

In 2.12 “Flow time” replace “ISO 2431-1996” by “ISO 2431:2019”.

In 3.2 “Flash-point”, replace:

- “DIN 51755-1:1974” by “DIN 51755:1974-03”.
- “EN ISO 3679:2004” by “ISO 3679:2015”.
- “EN ISO 2592:2002” by “ISO 2592:2017”.

In 3.3 “Explosion limits”, replace “EN 1839:2012” by “EN 1839:2017”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

Chapter 3.3

SP 651 Amend to read as follows:

“651 Special provision V2 (1) of ADR does not apply if the net explosive mass per transport unit does not exceed 4 000 kg, provided that the net explosive mass per vehicle does not exceed 3 000 kg.”.

(Reference document: informal document INF.13)

Chapter 7.2

7.2.3.1.1 Amend to read as follows:

“7.2.3.1.1 The cofferdams shall be empty, as long as the adjacent cargo tanks are not empty. They shall be inspected before each filling and if not filled they shall be inspected frequently, at least once a week, in order to ascertain that they are dry (except for condensation water).”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/16 as amended by informal document INF.22/Rev.1)

7.2.3.1.6, second indent Amendment does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/3)

7.2.3.20.1 Amend the beginning to read as follows:

“7.2.3.20.1 Cofferdams fitted out as service spaces, and hold spaces containing insulated cargo tanks shall not be filled with water.

Cofferdams, not fitted out as service spaces, may be filled with water, provided that:

- (a) the adjacent cargo tanks are empty;
- (b) this has been taken into account in the intact and damage stability calculations; and
- (c) filling is not prohibited in column (20) of Table C of Chapter 3.2.

Double-hull spaces, double bottoms and hold spaces which do not contain insulated cargo tanks may be filled with ballast water provided:...”. Remainder unchanged.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/16 as amended by informal document INF.22/Rev.1)

7.2.4.16.8 In the first and second paragraphs, replace “the PP equipment referred to in 8.1.5” by “the PP protective equipment referred to in 8.1.5”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/3)

Chapter 8.1

8.1.2.2 (f) Replace “during a stay near to or within an onshore assigned zone” by “during a stay in the immediate vicinity of or within an onshore assigned zone”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/7)

8.1.2.3 (s) Replace “degassing or during a stay near to or within an onshore assigned zone” by “degassing during berthing or during a stay in the immediate vicinity of or within an onshore assigned zone”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/7)

8.1.5.1, PP Amendment does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/3)

8.1.6.2 In the first sentence, replace “EN 13765:2010-08” by “ISO 13765:2018” and “EN ISO 10380:2003-10” by “ISO 10380:2012”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

8.1.6.2 In the second sentence, replace “or table K.1 of standard EN 13765: 2010-08” by “or section 8 and annex K of standard EN 13765:2018 (routine tests)”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

8.1.6.2 In the second sentence, delete “or paragraph 7 of standard EN ISO 10380:2003-10”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

Chapter 8.2

8.2.2.3.1.1, Practical exercises Amendment does not apply to the English text.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/3)

8.2.2.3.3 Under “*Specialization course on gases*”, amend the description of “Prior training” to read as follows:

“Examination passed after “tank vessels” or combined “dry cargo vessels/tank vessels” ADN basic training”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/6)

8.2.2.3.3 Under “*Specialization course on chemicals*”, amend the description of “Prior training” to read as follows:

“Examination passed after “tank vessels” or combined “dry cargo vessels/tank vessels” ADN basic training”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/6)

8.2.2.7.1.1 Amend to read as follows:

“8.2.2.7.1.1 After basic training, an examination shall be taken within six months following the completion of such training. If a candidate fails the examination, he or she may retake it twice during this six-month period without attending another basic training course.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/6)

8.2.2.7.2.5 In the second paragraph, replace the last sentence that reads: “If the candidate obtains 44 but does not achieve 20 in one part, the part in question may be resat once.” by the following text:

“If a candidate fails the examination, he or she may retake it, fully or partially, twice during this six-month period without attending another specialization course. If the 44 marks are not achieved, the exam may be taken again in its entirety. If the candidate obtains 44 but does not achieve 20 in one part, only the part in question may be taken again.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/6)

8.2.2.8.2 Replace “ISO/IEC 7810:2003” by “ISO/IEC 7810:2019”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

Chapter 8.3

8.3.5, third indent Replace “in accordance with 7.2.3.7.6” by “in accordance with 7.2.3.7.1.6 or 7.2.3.7.2.6”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/17)

Chapter 9.1

9.1.0.40.2.16 Amend to read as follows:

“Permanently installed fire-extinguishing systems for protecting objects

- (a) Permanently installed fire-extinguishing systems for protecting objects are permitted for the protection of installations and equipment.

The action of the fire-extinguishing systems must be aimed directly at the objects to be protected. The range of action of fire-extinguishing systems may be limited in space by means of structural measures.

Permanently installed fire-extinguishing systems for protecting objects may already be structurally integrated into the objects concerned.

Permanently installed fire-extinguishing systems for protecting objects must be independent of the systems referred to in 9.1.0.40.2.2 to 9.1.0.40.2.16 in respect of their supply of extinguishing agent.

- (b) The following requirements apply to permanently installed fire-extinguishing systems for protecting objects:
- (i) 9.1.0.40.2.2, if the extinguishing agent used requires the range of action to be limited by structural measures;
 - (ii) 9.1.0.40.2.3 and 9.1.0.40.2.4;
 - (iii) 9.1.0.40.2.5 (b) and (c), in addition to the provisions of (c) of the present section;
 - (iv) 9.1.0.40.2.6, (a) to (e), and at each entrance to a room or in the immediate vicinity of an encapsulated object, a suitable sign for the fire-extinguishing system for physical protection must be prominently displayed;

- (v) 9.1.0.40.2.7 to 9.1.0.40.2.13;
- (vi) *Reserved*;
- (vii) 9.1.0.40.2.15, (b) to (e).

Only extinguishing agents suitable for extinguishing a fire on or in the object to be protected and which are mentioned in 9.1.0.40.2.1 may be used in permanently installed fire-extinguishing systems for protecting objects.

The competent authority may authorize exemptions concerning the extinguishing agent for permanently installed fire-extinguishing systems for protecting objects which are based on a fire protection concept.

- (c) Permanently installed fire-extinguishing systems for protecting objects must be capable of being triggered manually. Manual triggering must be possible in the immediate vicinity of the protected object. They may be triggered automatically if the triggering signal is emitted by two fire detectors with different means of detection. The triggering must occur without delay. If the fire-extinguishing system is intended to protect several spaces, it shall comprise a separate and clearly-marked triggering device for each space.

The activation of the fire-extinguishing system shall be displayed in the wheelhouse and at the entrance to the room in which the object to be protected is located. In the case of encapsulated objects, the display at the room entrance can be omitted if another display is attached to the object itself.

For manual activation, operating instructions in accordance with 9.1.0.40.2.5 (e) shall be displayed next to each triggering device, taking into account the location and nature of the object.

- (d) The type and place of installation of permanently installed fire-extinguishing systems for protecting objects shall be entered in the ship's certificate.
- (e) The provisions of this section do not apply to water spray systems in accordance with 9.3.1.28, 9.3.2.28 and 9.3.3.28.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/21 as amended)

9.1.0.53.4 (f) Replace “EN 15869-03:2010” with “EN 15869-1:2019”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/4)

Chapter 9.3

9.3.1.11.7, 9.3.2.11.9 and 9.3.3.11.8 Replace “wearing protective clothing” by “wearing personal protective equipment”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/3)

9.3.x.40.2.16 Amend to read as follows (x to be replaced by 1, 2 and 3 respectively):

“Permanently installed fire-extinguishing systems for protecting objects

- (a) Permanently installed fire-extinguishing systems for protecting objects are permitted for the protection of installations and equipment.

The action of the fire-extinguishing systems must be aimed directly at the objects to be protected. The range of action of fire-extinguishing systems may be limited in space by means of structural measures.

Permanently installed fire-extinguishing systems for protecting objects may already be structurally integrated into the objects concerned.

Permanently installed fire-extinguishing systems for protecting objects must be independent of the systems referred to in 9.3.x.40.2.2 to 9.3.x.40.2.16 in respect of their supply of extinguishing agent.

- (b) The following requirements apply to permanently installed fire-extinguishing systems for protecting objects:
- (i) 9.3.x.40.2.2, if the extinguishing agent used requires the range of action to be limited by structural measures;
 - (ii) 9.3.x.40.2.3 and 9.3.x.40.2.4;
 - (iii) 9.3.x.40.2.5 (b) and (c), in addition to the provisions of (c) of the present section;
 - (iv) 9.3.x.40.2.6, (a) to (e), and at each entrance to a room or in the immediate vicinity of an encapsulated object, a suitable sign for the fire-extinguishing system for physical protection must be prominently displayed;
 - (v) 9.3.x.40.2.7 to 9.3.x.40.2.13;
 - (vi) *Reserved*;
 - (vii) 9.3.x.40.2.15, (b) to (e).

Only extinguishing agents suitable for extinguishing a fire on or in the object to be protected and which are mentioned in 9.3.x.40.2.1 may be used in permanently installed fire-extinguishing systems for protecting objects.

The competent authority may authorize exemptions concerning the extinguishing agent for permanently installed fire-extinguishing systems for protecting objects which are based on a fire protection concept.

- (c) Permanently installed fire-extinguishing systems for protecting objects must be capable of being triggered manually. Manual triggering must be possible in the immediate vicinity of the protected object. They may be triggered automatically if the triggering signal is emitted by two fire detectors with different means of detection. The triggering must occur without delay. If the fire-extinguishing system is intended to protect several spaces, it shall comprise a separate and clearly-marked triggering device for each space.

The activation of the fire-extinguishing system shall be displayed in the wheelhouse and at the entrance to the room in which the object to be protected is located. In the case of encapsulated objects, the display at the room entrance can be omitted if another display is attached to the object itself.

For manual activation, operating instructions in accordance with 9.3.x.40.2.5 (e) shall be displayed next to each triggering device, taking into account the location and nature of the object.

- (d) The type and place of installation of permanently installed fire-extinguishing systems for protecting objects shall be entered in the ship's certificate.
- (e) The provisions of this section do not apply to water spray systems in accordance with 9.3.1.28, 9.3.2.28 and 9.3.3.28.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/21 as amended)

9.3.4.3.1.2.2.1.3 Replace the sentence “This corresponds to the vertical collision location “collision at deck level”.” by the following new text:

“This corresponds to the vertical collision location “collision above deck level”. Point P₂ is the point where the upper edge of the vertical part of the push barge or V-bow strikes the upper part of the wale plate. The area bordered by points P₁ and P₂ corresponds to the vertical collision location “collision at deck level”.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/8)

Document ECE/ADN/2022/1 adopted with the following modifications:**Chapter 3.2, Table A**

Replace existing amendment for UN No. 1950 by the following:

For UN No. 1950, “AEROSOLS, toxic, flammable, corrosive”, in column (10) insert “VE04”.

(Reference document: informal document INF.4)

Replace existing amendment for UN Nos. 3537, 3539, 3540, 3541 and 3542 by the following:

“For UN Nos. 3537, 3539, 3540, 3541 and 3542, in column (6) insert “802”.

Chapter 7.4

Replace “Chapter 7.4” by “Chapter 7.1” and reorder the amendments accordingly.

(Reference document: informal document INF.4)

Chapter 9.3

In the proposed amendments to 9.3.2.0 and 9.3.3.0, replace “Renumber the second paragraph of 9.3.2.0.1 (a) and 9.3.3.0.1 (a) as 9.3.2.0.1.2 and 9.3.3.0.1.2, respectively.” by:

“Renumber the second paragraph of 9.3.2.0.1 (a) and 9.3.3.0.1 (a) as 9.3.2.0.1.3 and 9.3.3.0.1.3, respectively.”

and insert:

“Renumber 9.3.2.0.1 (c) and 9.3.3.0.1 (c) as 9.3.2.0.1.2 and 9.3.3.0.1.2, respectively.”

(Reference document: informal document INF.4 as amended)

Document ECE/TRANS/WP.15/AC.2/2022/20 adopted with the following modifications:**Chapter 1.2**

1.2.1 Replace the following amendment:

“1.2.1 Delete the following definitions:

“ADR”, “ASTM”, “CGA”, “CIM”, “CMR”, “CSC”, “EN (standard)”, “IAEA”, “IBC”, “ICAO”, “IMO”, “ISO (standard)”, “MEGC”, “MEMU”, “RID”, “SADT”, “SAPT”, “UIC”, “UNECE”.”

By:

“1.2.1 Delete the following definitions:

“ADR”, “ASTM”, “CDNI”, “CEVNI”, “CGA”, “CIM”, “CMNI”, “CMR”, “CSC”, “EN (standard)”, “IAEA”, “IBC”, “ICAO”, “IMO”, “ISO (standard)”, “MEGC”, “MEMU”, “LEL”, “OTIF”, “RID”, “SADT”, “SAPT”, “SOLAS”, “STCW”, “UIC”, “UEL”, “UNECE”.”

(Reference document: informal document INF.5 as amended)

1.2.3 In the “**List of abbreviations**” add the following entries in alphabetical order:

C

“CDNI*****” means Convention on the Collection, Storage and Reception of Waste Generated during Navigation on the Rhine and Other Inland Waterways;

“CEVNI*****” means the UNECE European Code for Inland Waterways;

“CMNI*****” means the Convention on the Contract for the Carriage of Goods by Inland Waterway (Budapest, 22 June 2001).

G

“GESAMP” means the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (see 1.2.1);

I

“ICAO Technical Instructions” means the Technical Instructions for the Safe Transport of Dangerous Goods by Air, (see 1.2.1);

“IMSBC” see definition of "IMSBC Code" in 1.2.1;

L

“LEL”*: see Lower explosion limit (see 1.2.1);

O

“OTIF” means Intergovernmental Organisation for International Carriage by Rail (OTIF, Gryphenhübeliweg 30, CH-3006 Bern);

S

“SOLAS” means the International Convention for the Safety of Life at Sea, 1974, as amended;

“STCW” means the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended.

U

“UEL”*: see Upper explosion limit (see 1.2.1);

Footnotes ****, *****, *****, read as follows:

**** The acronym “CDNI” corresponds to the French term “Convention relative à la collecte, au dépôt et à la réception de déchets en navigation rhénane et intérieure”.

**** The acronym “CEVNI” corresponds to the French term “Code européen des voies de navigation intérieure”.

***** The acronym “CMNI” corresponds to the French term “Convention de Budapest relative au contrat de transport de marchandises en navigation intérieure”.

(Reference document: informal document INF.5 as amended)

Add the following amendments: *(Reference document: informal document INF.11)*

Introduction

Replace “www.unece.org/trans/danger/publi/adn/adn_e.html” by “<https://unece.org/about-adn>”.

Chapter 1.5

1.5.1.1 At the end, after “Contracting Parties”, insert a footnote 1 to read as follows:

¹ **Note by the Secretariat:** *The special agreements concluded under this Chapter may be consulted on the web site of the Secretariat of the United Nations Economic Commission for Europe (<https://unece.org/multilateral-agreements>).*

(Reference document: ECE/TRANS/WP.15/255)

Chapter 1.8

1.8.1.2.1 In footnote *, replace “(<http://www.unece.org/trans/danger/danger.html>)” by “(<https://unece.org/standardized-model-checklists>)”.

Chapter 3.2, Table A

Delete the proposed new entry.

Chapter 7.1

7.1.7.4.5 At the beginning of (a) and (b), replace “Thermal insulation” by “Vehicle, container, packaging or overpack with thermal insulation”. In (b), replace “with coolant system” by “and coolant system”.

(Reference document: ECE/TRANS/WP.15/255)

7.1.7.4.7 Insert the following text before the existing text:

“Insulated, refrigerated and mechanically refrigerated containers intended for the carriage of temperature controlled substances shall conform to the following conditions:

- (a) The overall heat transfer coefficient of an insulated container shall be not more than 0.4 W/m²/K;
- (b) The refrigerant used shall not be flammable; and
- (c) Where containers are provided with vents or ventilation valves care shall be taken to ensure that refrigeration is not impaired by the vents or ventilation valves.”

In the existing text, delete “or containers” (two times).

(Reference document: ECE/TRANS/WP.15/255)

Chapter 8.2

8.2.2.7.1.3 and 8.2.2.7.2.3 In footnote 1, replace “(http://www.unece.org/trans/danger/publi/adn/catalog_of_questions.html)” by “(<https://unece.org/catalogue-questions>)”.

Annex II

[Original: English and French]

Corrections to ECE/TRANS/301 (ADN 2021 publication) (Corrections not requiring acceptance by Contracting Parties)

Chapter 2.5

2.2.52.4, entry for "ISOPROPYL sec-BUTYL PEROXYDICARBONATE+DI-sec-BUTYL PEROXYDICARBONATE+DI-ISOPROPYL PEROXYDICARBONATE", column "Concentration" For $\leq 32 + \leq 15 - 18 \leq 12 - 15$ read $\leq 32 + \leq 15 - 18 + \leq 12 - 15$

(Reference document: informal document INF.11)
