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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)

Fortieth session
Geneva, 22-26 August 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 fortieth 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 fortieth session in Geneva from 22 to 26 August 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, 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 Union, and the Transport Community.
4. The following non-governmental organizations were also represented: European Barge Union (EBU), European Chemical Industry Council (Cefic), European Skippers Organisation (ESO), Federation of European Tank Storage Associations (FETSA), FuelsEurope, Grain and Feed Trade Association (GAFTA), International Committee for the Prevention of Work Accidents in Inland Navigation (CIPA), International dangerous goods and containers association (IDGCA) and Recommended ADN Classification Societies.

II. Organizational matters

Informal document: INF.4 (Secretariat)

5. The session was held in a hybrid format, with the possibility of participating online or in person, following the format described in informal document INF.4. Following the impact of the COVID-19 pandemic, the United Nations Office in Geneva would like to return back to “Business as Usual”. Therefore, the Safety Committee sessions in 2023 will be organized as in-person meetings only.

III. Adoption of the agenda (agenda item 1)

Documents: ECE/TRANS/WP.15/AC.2/81 and Add.1

Informal document: INF.1 (Secretariat)

6. 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.22.

IV. Matters arising from the work of United Nations bodies or other organizations (agenda item 2)

A. Work of the Inland Transport Committee

7. The Safety Committee was informed that the eighty-fourth session of the Inland Transport Committee (ITC) was held in Geneva from 22-25 February 2022 (see report ECE/TRANS/316). It noted with interest the continued work on the implementation of the ITC strategy until 2030 including the next steps set out in document ECE/TRANS/2022/3.
8. The Safety Committee also noted that the secretariat has been invited to report regularly to ITC on aspects related to the Sustainable Development Goals (SDGs), in particular on circular economy and the sustainable use of natural resources. It was recommended that delegates add in the justification part of their future proposals the interlinkage to circular economy and the sustainable use of natural resources, when applicable.

V. Implementation of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (agenda item 3)

A. Status of ADN

9. 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

1. Special authorization concerning UN No. 1977, NITROGEN, REFRIGERATED, LIQUID

Document: ECE/ADN/2022/4 (Belgium)

10. The representative of Belgium presented a proposal to amend Table C of Chapter 3.2 of the ADN based on a special authorization on the carriage in a tank vessel of UN No. 1977, NITROGEN, REFRIGERATED, LIQUID granted for two vessels as reflected in annex II of document ECE/ADN/2022/4. The representative of the Netherlands confirmed that the Dutch authority had agreed with the special authorization for the carriage of UN 1977 in tank vessels on inland waterways of Flanders in Belgium and the Netherlands.

11. The representative of France suggested some editorial changes to the proposed amendment to avoid the asterics. The representative of Germany indicated that some of the safety recommendations listed in annex I of document ECE/ADN/2022/4 needed to be addressed in part 7 of the ADN. The representative of Austria added that some consequential amendments were also necessary in Chapter 3.2.

12. As the amendments would be included in the 2025 edition of ADN, the Safety Committee agreed to resume discussion of this subject at its next session. The representatives of Belgium and the Netherlands were invited to submit a revised document and to take account of the comments received.

2. Project for crew reduced vessels

Document: ECE/TRANS/WP.15/AC.2/2022/47 (Belgium)

Informal documents: INF.2 and INF.3 (Belgium)

13. Referring to document ECE/TRANS/WP.15/AC.2/2022/47, the Safety Committee welcomed a presentation on a joint project of the independent ship management company SEAFAR and the German shipping and logistics company HGK-Shipping on crew reduced vessels for the possible future transport of dangerous goods by inland waterways. The Safety Committee noted some concerns and requests for clarifications on:

(a) the responsibilities and liabilities of such innovative inland navigation vessels of the different levels of operation (i.e. crew supported navigation, crew reduced navigation and unmanned navigation) in the case of an incident or accident;

(b) the reduction of crew members and the redistribution of the different tasks and responsibilities;

(c) the different innovative technologies used for the different levels of automation in the navigation in particular on the remote control, assistance system, communication, artificial intelligence, etc.;

(d) on how the level of safety will be enhanced through such innovative technologies for the transport of dangerous goods.

14. The representative of Belgium referred to informal document INF.3 on a corresponding risk analysis. The representative of Luxembourg suggested to supplement future documentation with statistic data on and lessons learned from incidents of vessels

using such innovative technologies. The representative of Austria raised concern on the long time period needed for the development of new provisions on crew reduced vessels.

15. The Safety Committee considered it as an important and innovative step forward to the inland navigation but agreed it premature to already establish an informal working group to discuss possible amendments to the Regulations annexed to the ADN. It preferred to wait for the outcome of such discussions in other inland navigation bodies, such as CCNR and CESNI, including the decisions of competent authorities. The Safety Committee invited the Belgian delegation to table a document for a future session taking into account the conclusions of the discussion in CCNR and CESNI.

C. Interpretation of the Regulations annexed to ADN

1. Lists of interpretations of the classification societies

Document: ECE/TRANS/WP.15/AC.2/2022/29 (Recommended ADN Classification Societies)

16. The Safety Committee agreed in principle on the interpretation to transitional provision 1.6.7.2.2.2 proposed in paragraph 3 and agreed on the interpretations to 9.3.2.11.8 and 9.3.4.1.1 proposed in paragraphs 4 and 5 of document ECE/TRANS/WP.15/AC.2/2022/29 with some corrections. It was agreed that the best way forward was to amend the provisions in 1.6.7.2.2.2 for 9.3.X.40.2 for entry into force on 1 January 2025. The representative of the Recommended ADN Classification Societies volunteered to prepare for the next session in January 2023, a proposal for amendments to the Regulations annexed to the ADN. The secretariat was requested to publish the following interpretations from paragraph 4 and 5 as amended on UNECE website:

“9.3.2.11.8

In 9.3.2.11.8 the situation with independent tanks is mentioned. In this case additional reinforcements as prescribed in 9.3.2.11.7 are no more necessary as the requirements of the distance of 80 cm are already met.

9.3.4.1.1

In 9.3.4.1.1 it is mentioned that the maximum allowable tank capacity may exceed the values as given in 9.3.x.11.1, and the minimum distances given in 9.3.1.11.2(a) and 9.3.2.11.7 may be deviated from provided the requirements of 9.3.4 are being complied with. The calculations as mentioned in 9.3.4.1.1 may be used for all ship sizes.”

17. The Safety Committee welcomed the offer by the Recommended ADN Classification Societies to prepare jointly with the input by Germany and the Netherlands a comprehensive list of interpretations that the Classification Societies discussed in the past and to submit them for discussion at the next session. A proposal to add references to the interpretations in the relevant parts of the ADN or to add interpretations as footnotes would also be discussed.

2. Supervision of loading and unloading operations from the shore

Document: ECE/TRANS/WP.15/AC.2/2022/49 (Netherlands)

18 The Safety Committee welcomed the information in document ECE/TRANS/WP.15/AC.2/2022/49 on the interpretation of 8.6.3 on the supervision during loading and unloading operations on board and on shore. It was noted that during such operations about ninety percent of incidents were related to the manifold and a good communication between the operators on board and on shore has the utmost importance. On the need to review the provisions in ADN on the supervision of the area of three meters surrounding the manifold, the Safety Committee noted some reservations as follows:

(a) a broader field of vision of the supervision area would not necessarily result in a better quality of the supervision (even if new technologies such as surveillance drones are used);

(b) an amendment to the supervision area of three meter radius would have a legal impact and might raise responsibility and liability issues, including data protection issues.

19. The Safety Committee agreed that an amendment of the current provisions was premature and preferred to focus on possible prevention measures, such as a review of the current checklist. The representative of the Netherlands offered to consider presenting at the next session more detailed information on the incidents that could have been mitigated with the expansion of the supervision area and possible way forward.

3. Transitional provisions for gas detectors

Informal documents: INF.5 and INF.5/Add.1 (EBU and ESO)

20. Some delegations supported in principle the proposal to amend the outdated transitional provision of 1.6.7.2.2.2 on the use of gas detectors in tank vessels. Others questioned the procedure and wondered what follow-up measures have been taken since 2020 when such cases have been noticed. In the view of further discussions, it was underlined to differentiate between structural parts of the vessel, which might require longer transitional periods and mobile equipment. Furthermore, the reference to standards used for the approval need to be verified for each case. The Safety Committee took note that the transitional provisions in the European Standard laying down Technical Requirements for Inland Navigation vessels (ES-TRIN) last for a twenty-year period.

21. The Safety Committee agreed to resume discussion on the subject at its next session on the basis of an official document by EBU/ESO, including a detailed justification.

4. Transport of carbon dioxide (CO₂), refrigerated, liquid

Informal document: INF.18 (EBU and ESO)

22. Following the endorsement by the informal working group on substances (see paragraph 62 below), the Safety Committee supported in principle the amendments to Table C and remark 42 for UN No. 2187 as proposed in informal document INF.18. The Safety Committee agreed to resume consideration at its next session based on an official document by EBU/ESO.

D. Training of experts

Document: ECE/TRANS/WP.15/AC.2/2022/34 (CCNR)

23. The Safety Committee welcomed the report of the twenty-second meeting of the informal working group on the training of experts (ECE/TRANS/WP.15/AC.2/2022/34).

24. It was noted that the revision of the catalogue of questions in accordance with the provisions of the 2023 edition of ADN continued, that the revised catalogue was expected to be adopted by the informal working group at its next meeting (20-22 September 2022) and that it would be submitted to the Safety Committee at its forty-first session (January 2023).

25. On the general issues on the catalogue of questions, some delegates expressed their preference to extend the duration of tests from sixty to seventy-five minutes.

26. The option of distance learning and the integration of e-learning concepts for practical exercises, the Safety Committee was informed that these issues would also be considered by the RID/ADR/ADN Joint Meeting at its autumn 2022 session (informal document INF.4 of the autumn 2022 session).

27. The Safety Committee agreed to resume discussion on the remaining issues at its next session taking into account the guidance by the RID/ADR/ADN Joint Meeting.

E. Matters related to classification societies

1. Establishment of a technical working group

Informal document: INF.8 (Recommended ADN Classification Societies)

28. The Safety Committee recalled that the initial purpose of the regular meetings of the Classification Societies was to exchange experiences and not necessarily to deal with technical matters upon the request by the Committee. Some delegates were of the opinion that the term of “technical matters” was too broad and needed to be specified (e.g. onboard/onshore issues). Others questioned whether the new group would have a permanent or temporary mandate.

29. The Safety Committee agreed on the need to discuss from time to time technical matters in detail and that all members of the Safety Committee should have the possibility to participate in such discussions. It was also agreed to more carefully consider in future sessions of the Safety Committee the option to refer technical matters to the Classification Societies. It was considered premature to establish at the current time a new technical working group. Delegates were invited to send further ideas to the representative of the Recommended ADN Classification Societies, taking into account the current practice of establishing, if necessary, a new informal working group on a case by case basis.

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>

VI. Proposals for amendments to the Regulations annexed to ADN (agenda item 4)

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

1. Amendments for the 2023 version of the ADN

Documents: ECE/TRANS/WP.15/AC.2/2022/44 (Secretariat)
ECE/TRANS/WP.15/AC.2/2022/36 (CCNR)

31. Referring to the work of the RID/ADR/ADN Joint Meeting at its spring 2022 session (ECE/TRANS/WP.15/AC.1/164) and the outcome of the Working Party on the Transport of Dangerous Goods (WP.15) at its 111th session in May 2022, the Safety Committee adopted, for entry into force on 1 January 2023, the amendments deemed necessary for harmonization with RID and ADR proposed in document ECE/TRANS/WP.15/AC.2/2022/44 (see annex I).

32. Following the discussion on the corrections to the German version proposed in document ECE/TRANS/WP.15/AC.2/2022/36, the representative of CCNR withdrew the proposal and preferred to defer consideration of the definition of receptacle to the forthcoming RID/ADR/ADN Joint Meeting in September and to consult the Intergovernmental Organisation for International Carriage by Rail (OTIF) secretariat about the issue raised on the wording of “carriage in bulk”.

2. Changes to Table B

Document: ECE/TRANS/WP.15/AC.2/2022/23 (Secretariat)

33. The Safety Committee took note of the changes to be made to Table B of Chapter 3.2 in the 2023 edition of ADN.

3. Definition of “inspection body”

Document: ECE/TRANS/WP.15/AC.2/2022/25 (Secretariat)

34. Following the outcome of an informal lunchtime meeting to clarify the definition of inspection body in the French and English versions of ADN, the Safety Committee decided to come back to this issue at a future session once a careful study had been conducted. The representatives of France, Germany and the Netherlands volunteered to prepare a comprehensive proposal.

4. Corrections to previously adopted amendments (ECE/ADN/61)

Informal documents: INF.6 (Germany)
INF.15 (Secretariat)
INF.20 (Belgium)

35. The Safety Committee adopted the proposed corrections to ECE/ADN/61 in informal documents INF.6, INF.15 and in proposal 2 of informal document INF.20 related to errors or omissions of consequential amendments, as amended (see annex II). It considered that such errors or omissions should be corrected as soon as the corresponding amendments entered into force and suggested that the Administrative Committee should call for the correction procedure to begin as soon as the amendments would be deemed to be accepted (in principle, on 1 October 2022).

36. Referring to the consolidated list of amendments to ADN adopted for entry into force on 1 January 2023 (ECE/ADN/61) which was notified to the ADN Contracting Parties on 1 July 2022, the Safety Committee recommended that the ADN Administrative Committee adopt the proposed additional amendments for entry into force on 1 January 2023 resulting from the present session to bring ADN into line with other international agreements on the carriage of dangerous goods, as well as corrections. These amendments and corrections will be presented in documents ECE/ADN/61/Add.1 and ECE/ADN/61/Corr.1, respectively.

B. Other proposals

1. 5.4.1.1.3 of ADN: Information in the transport document — Special provisions for wastes

Document: ECE/TRANS/WP.15/AC.2/2022/28 (Germany)

37. The Safety Committee adopted the proposed amendment to 5.4.1.1.3 (see annex III).

2. Section 1.2.1 of ADN, “Definitions”

Document: ECE/TRANS/WP.15/AC.2/2022/30 (Germany)

38. The Safety Committee adopted the amendment proposed in document ECE/TRANS/WP.15/AC.2/2022/30 (see annex III).

3. 1.6.7.2 of ADN — Transitional provisions

Document: ECE/TRANS/WP.15/AC.2/2022/31 (Germany)

39. The Safety Committee adopted the proposed amendments to remove the transitional provisions the transitional provisions in 1.6.7.2 of ADN for entry into force on 1 January 2025 (see annex III).

4. Section 3.2.3 of ADN, Table C — Typographical errors in UN Nos. 1268 and 3256

Document: ECE/TRANS/WP.15/AC.2/2022/32 and Corr.1 (Germany)

40. The Safety Committee preferred to refer the proposed corrections to the informal working group on substances for advice and to resume consideration at a further session.

5. Section 6.1.4 — Railway vehicles to be transported, adaptation to the German version

Document: ECE/TRANS/WP.15/AC.2/2022/33 (Germany)

41. Following a reservation raised by the representative of Belgium, the Safety Committee agreed to come back to this subject at the next session.

6. Inconsistency between the language versions in 9.1.0.40.2.5 (c) and 9.3.X.40.2.5 (c) of ADN concerning triggering devices

Document: ECE/TRANS/WP.15/AC.2/2022/37 (CCNR)

42. The Safety Committee adopted the corrections to the English and French versions of 9.1.0.40.2.5 (c) and 9.3.x.40.2.5 (c) (see annex IV). The secretariat was requested to verify whether the Russian version needed to be corrected too.

7. Corrections to ADN 2021 English version

Document: ECE/TRANS/WP.15/AC.2/2022/38 (Recommended ADN Classification Societies)

43. The Safety Committee adopted the correction to the English version of 9.1.0.35 proposed in ECE/TRANS/WP.15/AC.2/2022/38 as amended (see annex IV).

8. Deflagration, detonation and steady burning

Document: ECE/TRANS/WP.15/AC.2/2022/39 (Recommended ADN Classification Societies)

44. The Safety Committee adopted the amendments in proposals 1 and 2 in document ECE/TRANS/WP.15/AC.2/2022/39 to clarify the inconsistencies in 1.2.1, 3.2.3.1 (column 16) and 9.3.2.22.4 (b) with effect from 1 January 2025 (see annex III).

9. Carriage in containers — 7.1.1.18 of ADN

Document: ECE/TRANS/WP.15/AC.2/2022/27 (Germany)

45. Following the discussion on the proposal to align the titles in 7.1.1.18 in the French, English and Russian versions of the ADN with those used in the German version, the Safety Committee agreed to resume consideration of this subject at the next session. The representatives of Germany and the Netherlands offered to come up with a new document to take account of the comments received.

10. Degassing of inland waterway tank vessels at a reception facility — spring loaded low-pressure valve

Document: ECE/TRANS/WP.15/AC.2/2022/40 (Germany and the Netherlands)

46. Recalling the discussions at previous sessions on the provisions on degassing of vessels at reception facilities, the Safety Committee adopted the amendments proposed in paragraphs 4 to 9 of document ECE/TRANS/WP.15/AC.2/2022/40 as amended (see annex III).

11. Proposed correction reference to the requirements of Chapter 30 and section 1 of annex 8 of the ES-TRIN

Document: ECE/TRANS/WP.15/AC.2/2022/41 (CCNR)

Informal document: INF.10 (CCNR)

47. The Safety Committee noted some concerns on different possible dates of application of the corrections proposed in document ECE/TRANS/WP.15/AC.2/2022/41 and informal document INF.10. Most delegates who took the floor preferred to go forward with an amendments with effect on 1 January 2025. Others suggested to refer to ES-TRIN similarly than to referenced standards in 1.1.5 as ES-TRIN was dealing with provisions on the

construction of new vessels and not on transport. It was also suggested adding to the ES-TRIN references the date of the corresponding ES-TRIN version.

48. The amendments proposed in document ECE/TRANS/WP.15/AC.2/2022/41 as modified by informal document INF.10 were adopted for entry into force on 1 January 2025 (see annex III).

49. Finally, the Safety Committee agreed to resume consideration at its next session on how to deal with references to ES-TRIN in the Regulations annexed to the ADN. The Chair concluded that this was a recurrent discussion and offered to prepare a discussion document on the possible options.

12. Proposed correction to ADN 8.1.2.3 (v)

Document: ECE/TRANS/WP.15/AC.2/2022/35 (CCNR)

50. The Safety Committee noted the proposed corrections to the German version of ADN 8.1.2.3 (v) but preferred to also verify the text in other official languages. The representatives of Belgium, the Netherlands and CCNR offered to jointly prepare a new document for the next session.

13. 7.2.4.22 of ADN: Opening of openings

Documents: ECE/TRANS/WP.15/AC.2/2022/43 and Corr.1 (Germany)

Informal document: INF.19 (Belgium)

51. The delegates who took the floor highly appreciated the work done by Germany on the proposed paragraphs 9 to 13 in document ECE/TRANS/WP.15/AC.2/2022/43 to clarify the current provisions in Chapter 7.2 of ADN on opening of openings on vessels. The Safety Committee noted general support for the initiative and also welcomed the general remarks in informal document INF.19. The Chair invited all members of the Safety Committee to send, by mid of September at the latest, their written comments on the proposal to the German delegate (ref-g16@bmdv.bund.de). The representative of Germany volunteered to come back at the next session with a new document, taking into account the comments received.

52. Some delegates were of the opinion that the proposed amendments needed to be checked in a broader context to avoid conflicts with other provisions such as on training and examination of experts as well as on vessel crews or operation in part 8 of ADN. Other delegates pointed out that, while a revision of these requirements was underway, it would be a good opportunity to try reducing the number of moments that tanks containing dangerous goods would be opened. It was agreed to go forward in a multistage approach and that the verification of possible contradictions of the provisions in other parts of ADN would be done in a further step. Others commented that transitional provisions needed to be added separately. The Chair suggested discussing at the next session the possibility of setting up a new informal working group to further work on these tasks.

14. Flame arresters for degassing

Document: ECE/TRANS/WP.15/AC.2/2022/45 (Netherlands)

53. Referring to the discussion on opening of openings under item 13 above, the Safety Committee agreed to defer consideration of the proposed amendments to 7.2.3.7.1.3 to its next session.

15. Mixing up of roles within 5.4.1.1.6.5 of the Regulations annexed to ADN

Document: ECE/TRANS/WP.15/AC.2/2022/48 (Belgium)

54. Most delegates who took the floor expressed their view that the general provisions in the Regulations annexed to ADN and the Convention on the collection, deposit and reception of waste produced during navigation on the Rhine and inland waterways (CDNI) were clear and that there was no conflict in the roles of master and consignor. The Safety Committee did not support the proposed amendments. It was noted that in the case of an empty journey of a vessel does not fall within the scope of application of the Budapest Convention on the

Contract for the Carriage of Goods by Inland Waterway (CMNI), as in such a case no freight contract exists.

16. Mention of oil seeds, crushed seeds and seedcake in Table B

Informal document: INF.7 (Austria)

55. Since special provision 800 was already listed in Table A for UN No. 3175, the Safety Committee adopted the proposal by Austria to also add in Table B of ADN a new entry for “Oil seeds, crushed seeds and seedcakes containing vegetable oil, treated with solvents, not subject to spontaneous combustion”. It was recalled that Table B is mostly a research tool and not legally binding.

17. In 1.6.7.2.2, correction of the transitional provisions relating to 8.1.2.3

Document: ECE/TRANS/WP.15/AC.2/2022/26 (Austria)

Informal document: INF.21 (Austria, Germany and the Netherlands)

56. The Safety Committee supported in principle the amendments to the transitional provisions in 1.6.7.2.2.2 as proposed in informal document INF.21, with some additional changes in column 3. The Safety Committee adopted the proposal in informal document INF.21 as amended (see annex III).

18. Alternative propulsion systems/fuels in inland navigation: identifying necessary adjustments in the ADN

Informal document: INF.9 (EBU)

57. The Safety Committee welcomed the information by EBU and their suggestion to work in the near future on possible amendments to the ADN to allow alternative propulsion systems and alternative fuels on inland navigation vessels taking into account various technologies currently being researched, including fuel cell propulsion (“green” hydrogen, methanol), diesel-electric or purely electric propulsion systems. The Safety Committee recalled its discussions at the most recent sessions on alternative propulsion systems. It noted full support and agreed that these initiatives will contribute to ongoing discussion on circular economy and the sustainable development goals of the United Nations.

58. On the procedural process, the Safety Committee agreed that the current provisions in 1.5.3 already allow to go forward with derogations on a trial basis and recommended parties to restrain in these cases from the possible process of multilateral agreements.

59. The Safety Committee recommended to have at its next session a more detailed exchange of views on the status of discussions at other regulatory organisations (CESNI, CCNR, etc.) on the different innovative technologies appropriate for the propulsion of inland navigation vessels. In this respect, it preferred to defer to a future session the establishing of a new informal working group on this subject.

19. Various corrections to ADN 2021 (Tables A and C)

Informal document: INF.11 (Germany)

60. The Safety Committee adopted the corrections proposed in informal document INF.11 to Tables A and C in the Regulations annexed to the ADN, as amended (see annex IV) as well as proposed editorial corrections.

20. Report on the 12th meeting of the informal working group on substances

Informal documents: INF.12 (Germany)
INF.18 (EBU/ESO)

61. The Safety Committee welcomed the report in informal document INF.12 of the informal working group on substances and encouraged the group to go forward with the approaches proposed in items B, D, E, I, K, L and O and adopted the proposal to complete the new entry to Table A in item Q (see annex I). It also agreed in principle on the amendments proposed in the document (items A, F, G, J, M and N). On items C and H, the

Recommended ADN Classification Societies were asked to add the questions concerned on the agenda of their next meeting.

62. On informal document INF.18 on the carriage of carbon dioxide (see paragraph 22 above), the Safety Committee endorsed the group's recommendations in paragraph 67 of informal document INF.12.

63. The Safety Committee adopted the amendment to UN No. 3550 proposed in paragraph 69 of informal document INF.12. It was agreed to resume consideration of the remaining amendments at its next session in January 2023 on the basis of an official document.

VII. Reports of informal working groups (agenda item 5)

A. Minutes of meeting of the twenty-third meeting of the Group of Recommended ADN Classification Societies

Document: ECE/TRANS/WP.15/AC.2/2022/22 (Recommended ADN Classification Societies)

64. The Safety Committee welcomed the outcome of the twenty-third meeting of the Group of Recommended ADN Classification Societies. It also noted that the group intended to meet again in Zagreb on 26 October 2022. The representative of EBU/ESO urged the group to conclude their discussion on high velocity valves related to higher temperatures (more than 60 °C). The representative of Cefic offered to inform the group on the ongoing approval process of such valves in Germany.

65. On paragraph 5 of report ECE/TRANS/WP.15/AC.2/2022/22 the representative of Germany underlined that, according to the Regulations annexed to ADN (1.16.3.2, seventh indent), it is mandatory to mention a non-compliance in the inspection report and that it is up to the competent authority issuing the Certificate of Approval to decide about the appropriate follow-up action, i.e., no certificate or only provisional certificate (1.16.1.2.2, 1.16.1.3.1 ADN). On the need for accreditation in paragraph 9 of the report, the representatives of Belgium and France commented and referred to standard ISO 17020.

B. Correspondence group on fumigated cargo

Document: ECE/TRANS/WP.15/AC.2/2022/42 (Germany)
Informal document: INF.16 (Netherlands)

66. The Safety Committee noted the preliminary work results of the correspondence group on fumigated cargo and endorsed the measures listed in document ECE/TRANS/WP.15/AC.2/2022/42. It acknowledged the complexity of this subject and suggested adding the consideration of asphyxiating gases released by the fumigated cargo.

67. The Safety Committee invited the correspondence group to continue its deliberations on a proposal on best possible options forward taking into account the comments received for consideration at its next session in January 2023. The Chair suggested the group to also include a draft of the terms of reference for an informal working group.

C. Report of the first meeting of the informal working group on loading and unloading instructions

Informal document: INF.13 (Netherlands)

68. The Safety Committee noted the outcome of the first meeting of the informal working group on loading and unloading instructions and endorsed the points of views described in paragraphs 6 to 8 in informal document INF.13. It encouraged the group to resume its work on a first draft of instructions for a more detailed discussion at the next session.

D. Report on the first meeting of the informal working group on certificates and other shipboard documents in electronic form

Informal document: INF.14 (Netherlands)

69. The Safety Committee welcomed the report on the first meeting of the informal working group and noted that the group would need further meetings to discuss the data formats for the documents necessary for dematerialization (listed in the annex in informal document INF.14). It was noted that the group would also follow the discussion on the development of telematics under discussion at the RID/ADR/ADN Joint Meeting and on the implementation process of the Regulation (EU) 2020/1056 on electronic Freight Transport Information (eFTI). The Safety Committee encouraged the group to continue its work and to report back at its next session.

VIII. Programme of work and calendar of meetings (agenda item 6)

70. The Safety Committee noted that its next session would be held in Geneva from 23-27 January 2023 and that the twenty-ninth session of the ADN Administrative Committee was scheduled to take place on 27 January 2023. Delegates were reminded that both sessions would be organized as in-person meetings only. The deadline for the submission of official documents for these sessions is 28 October 2022.

71. It was recalled that the Safety Committee, at its forty-first session, would resume its consideration of proposals for amendments submitted for entry into force on 1 January 2025.

IX. Any other business (agenda item 7)

A. Revision of 9.3.4 of ADN

Informal document: INF.22 (TNO)

72. The Safety Committee welcomed the presentation on a project related to the possible use of tank vessels of more than 1000 m³ and the future revision of the provisions in 9.3.4. As a summary of the research study, the representative of TNO announced that more detailed results would be published soon in three different reports and he concluded with the following recommendations:

(a) The statistics of collision energy have evolved over time (2005-2017) and need to be updated;

(b) The tank size limit of maximum 1000 m³ is appropriate, but derogations were possible for special cargos such as liquefied natural gas, liquefied hydrogen, based on a quantitative risk analysis;

(c) Crashworthiness calculation methods need to be adjusted (e.g. friction, GL criterion, additional height for type G vessels as well as tank failure and separate energy calculations).

73. The representative of the Recommended ADN Classification Societies offered to work on a first set of amendments to 9.3.4 for submission to the Safety Committee at the next session.

74. The representative of TNO confirmed that the value of 1 per cent lethality in the presentation was only a choice and that the possible doubling of tank size needed to be foreseen already in the design of the vessel concerned. He added that the risk analysis tool is applicable to all type of vessels, including type G ones. Further questions on the presentation can be sent by email (lex.vredeveltdt@tno.nl).

75. The representative of Austria acknowledged that, according to the new statistics presented by TNO, the average collision energy has increased in the last decades and that the

probability of a tank rupture on a vessel with cargo tanks of up to 380 m³ has therefore also increased. He proposed that the Safety Committee should consider if there might be a need to revise the Regulations annexed to the ADN to take into account the higher risks and higher collision energies. He offered to submit a discussion document for the next session.

B. Rules of Procedures for the ADN Safety Committee, proposal of corrections

Document: ECE/TRANS/WP.15/AC.2/2022/24 (Secretariat)

76. The Safety Committee agreed on the changes proposed in ECE/TRANS/WP.15/AC.2/2022/24 to its Rules of Procedure contained in ECE/TRANS/WP.15/AC.2/80/Add.1 and requested the secretariat to publish a revision of such document to include the agreed changes and to submit them to WP.15 for information and ITC for adoption at their next sessions.

C. Informal working group on crew reduced and unmanned vessels carrying dangerous goods

Document: ECE/TRANS/WP.15/AC.2/2022/46 and Corr.1 (Belgium)

77. Recalling the decision of the Safety Committee on the project for crew reduced vessels (see para. 15 under agenda item 3.b above) the representative of Belgium withdrew his proposal.

D. Update of references to standards in the Manual of Tests and Criteria

Informal document: INF.17 (Secretariat)

78. The Safety Committee noted the work progress made the secretariat on the update of references to multiple standards in the Manual of Tests and Criteria.

E. Tributes to Mrs. Kräh (Cefic) and Mr. Overveld (EBU/ESO)

79. The Safety Committee was informed that Mrs. Dr. Kräh (Cefic) would be soon assuming new responsibilities and would no longer attend the meetings of the informal working group on substances. The Committee acknowledged her contributions to the group's work over the last twelve years and wished her good success in her future activities.

80. Learning that Mr. René Overveld (EBU/ESO) will retire soon and will no longer attend future sessions, the Safety Committee thanked him for his contributions to the activities of the Committee for more than twenty years and wished him a long and happy retirement.

X. Adoption of the report (agenda item 8)

81. The Safety Committee adopted the report on its fortieth 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

(see ECE/ADN/61/Add.1)

Annex II

[Original: English and French]

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

(see ECE/ADN/61/Corr.1)

Annex III

[Original: English and French]

**Proposed amendments to the Regulations annexed to ADN
for entry into force on 1 January 2025****Chapter 1.2**

1.2.1 In the definition for *Autonomous protection systems*, replace “deflagration safe vacuum valves” by “vacuum relief valves, pressure relief valves”

(Reference document: ECE/TRANS/WP.15/AC.2/2022/39)

1.2.1 Delete the definition for *Supply installation (bunkering system)*.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/30)

Chapter 1.4

1.4.2.2.1 (i) After “carriage, unloading” insert “, degassing”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/40)

1.4.3.8.1 (b) Replace “there is a flame arrester in the piping” by “there are flame arresters in all the piping”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/40)

Chapter 1.6

1.6.7.2.1.1 In the Table of general transitional provisions: Dry cargo, delete the following transitional provisions:

| Paragraphs | Subject |
|--|---|
| 8.6.1.1 8.6.1.2 | Changes to certificate of approval |
| 9.1.0.12.1 | Ventilation of holds |
| 9.1.0.12.3 | Ventilation of service spaces |
| 9.1.0.17.2 | Gas-tight openings facing holds |
| 9.1.0.17.3 | Entrances and openings in the protected area |
| 9.1.0.32.2 | Open ends of the air pipes not less than 0.50 m above the open deck |
| 9.1.0.34.1 | Position of exhaust pipes |
| 9.1.0.35 | Stripping pumps in the protected area |
| 9.1.0.40.1 | Fire extinguishers, two pumps, etc. |
| 9.1.0.41 in conjunction with 7.1.3.41 | Fire and naked light |
| 9.2.0.34.1 | Position of exhaust pipes |
| 9.2.0.41 in conjunction with 7.1.3.41 | Fire and naked light |

(Reference document: ECE/TRANS/WP.15/AC.2/2022/31)

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

| Paragraphs | Subject |
|--|--|
| 7.2.4.22.3 | Sampling from other openings |
| 8.6.1.3 8.6.1.4 | Change to certificate of approval |
| 9.3.3.11.4 | Shut-off devices of the loading and unloading piping in the cargo tank from which they come |
| 9.3.1.11.8 9.3.3.11.9 | Dimensions of openings for access to spaces within the cargo area |
| 9.3.2.12.1 9.3.3.12.1 | Ventilation openings in hold spaces |
| 9.3.1.12.2 9.3.3.12.2 | Ventilation systems in double-hull spaces and double bottoms |
| 9.3.1.12.3 9.3.2.12.3 9.3.3.12.3 | Height above the deck of the air intake for service spaces located below deck |
| 9.3.3.17.5 (b), (c) | Approval of shaft passages and displaying of instructions |
| 9.3.1.17.6 9.3.3.17.6 | Pumproom below deck |
| 9.3.2.20.2 9.3.3.20.2 | Intake valve |
| 9.3.3.20.2 | Filling of cofferdams with pump |
| 9.3.2.20.2 9.3.3.20.2 | Filling of cofferdams within 30 minutes |
| 9.3.3.21.1 (b) | Liquid level gauge |
| 9.3.3.21.1 (g) | Sampling opening |
| 9.3.1.21.3 9.3.2.21.3 9.3.3.21.3 | Marking on each level gauge of all permissible maximum filling levels of cargo tanks |
| 9.3.1.21.4 9.3.2.21.4 9.3.3.21.4 | Level alarm device independent from the liquid-level gauge |
| 9.3.1.21.5 (a) 9.3.2.21.5 (a) 9.3.3.21.5 (a) | Socket close to the shore connections of the loading and unloading piping and switching off of vessel's pump |
| 9.3.1.21.7 9.3.2.21.7 9.3.3.21.7 | Vacuum or overpressure alarms in cargo tanks for the carriage of substances <u>without</u> remark 5 in column (20) of Table C of Chapter 3.2 |
| 9.3.1.21.7 9.3.2.21.7 9.3.3.21.7 | Temperature alarms in cargo tanks |
| 9.3.1.22.4 | Prevention of spark-formation by closure devices |
| 9.3.1.22.3 9.3.2.22.4 (a) 9.3.3.22.4 (a) | Position of exhaust outlets of pressure relief valves/high velocity vent valves above the deck |
| 9.3.2.22.4 (a) 9.3.3.22.4 (e) | Set pressure of relief valve/high-velocity vent valve |

| Paragraphs | Subject |
|--|---|
| 9.3.2.25.1 9.3.3.25.1 | Shutdown of cargo pumps |
| 9.3.2.25.8 (a) | Ballasting suction pipes located within the cargo area but outside the cargo tanks |
| 9.3.2.25.9 9.3.3.25.9 | Loading and unloading flow |
| 9.3.3.25.12 | 9.3.3.25.1 (a) and (c), 9.3.3.25.2 (e), 9.3.3.25.3 and 9.3.3.25.4 (a) are not applicable for Type N open with the exception of Type N open carrying corrosive substances (see Chapter 3.2, Table C, column (5), hazard 8) |
| 9.3.1.31.5 9.3.2.31.5 9.3.3.31.5 | Temperature in the engine room |
| 9.3.3.34.1 | Exhaust pipes |
| 9.3.3.35.3 | Suction pipes for ballasting located within the cargo area but outside the cargo tanks |
| 9.3.1.35.4 | Stripping installation of the pump-room outside the pump-room |
| 9.3.1.40.1 9.3.2.40.1 9.3.3.40.1 | Fire extinguishing systems, two pumps, etc. |
| 9.3.1.51 (b) 9.3.2.51 (b) 9.3.3.51 (b) | Surface temperature of outer parts of engines and of their air inlets and exhaust ducts |
| 9.3.1.60 9.3.2.60 9.3.3.60 | A spring-loaded non-return valve shall be fitted. The water shall meet the quality of drinking water on board. |

(Reference document: ECE/TRANS/WP.15/AC.2/2022/31)

1.6.7.2.2.2 Amend the transitional provisions for 8.1.2.3 (r), (s), (t), (v) and 8.1.2.3 (u) to read as follows:

| | | |
|-------------------------------|--|--|
| 8.1.2.3 (r), (s), (u), (v) | Documents which must be carried on board | <p>N.R.M. from 1 January 2019</p> <p>Renewal of the certificate of approval after 31 December 2020</p> <p>Until that date, in addition to the documents required in accordance with 1.1.4.6, the following documents are required:</p> <p>(a) A list of the machinery, appliances or other electrical equipment located in the cargo area, including the following particulars: Machinery or appliance, location, type of protection, type of explosion protection, testing body and approval number;</p> <p>(b) A list of or general plan indicating the electrical equipment located outside the cargo area which may be operated during loading, unloading or degassing.</p> <p>The documents listed above shall bear the stamp of the competent authority issuing the certificate of approval.</p> |
|-------------------------------|--|--|

| | | |
|-------------|---|--|
| 8.1.2.3 (t) | Documents which must be carried on board Plan with classification of zones | N.R.M. from 1 January 2019 Renewal of the certificate of approval after 31 December 2034 Until that date, in addition to the documents required in accordance with 1.1.4.6 a plan indicating the boundaries of the cargo area and the location of the electrical equipment installed in that area is required. This plan shall bear the stamp of the competent authority issuing the certificate of approval. |
|-------------|---|--|

(Reference documents: ECE/TRANS/WP.15/AC.2/2022/26 and informal document INF.21 as amended)

1.6.7.2.2.5 Delete and insert “(Deleted)”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/31)

Chapter 3.2

3.2.3.1 In Column (16) delete: “(flame arresters, vacuum relief valves, pressure relief valves/high velocity vent valves and devices for safe pressure relief of cargo tanks with integrated flame arrester plate stack)”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/39)

Chapter 5.4

5.4.1.1.3 Replace “5.4.1.1.1 (a) to (d) and (k)” by “5.4.1.1.1 (a) to (d)”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/28)

Chapter 7.1

7.1.3.31 In the second indent of the first paragraph, replace “Annex 8, Section 1” by “Section II, Chapter 1, and Section III, Chapter 2”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/41 as amended by informal document INF.10)

Chapter 7.2

7.2.3.7.2.3 Amend as follows:

In the second paragraph, replace “a permanently installed or portable spring-loaded low-pressure valve” by “an additional permanently installed or portable vacuum valve in accordance with 9.3.2.62 or 9.3.3.62”. Delete the second sentence that reads: “This low-pressure valve shall be so installed that under normal working conditions the vacuum valve is not activated.”

Amend the first sentence of the third paragraph to read as follows:

“If explosion protection is required in column (17) of Table C of Chapter 3.2 then all piping connected between the degassing vessel and the reception facility shall be equipped with an appropriate flame arrester.”

(Reference document: ECE/TRANS/WP.15/AC.2/2022/40 as amended)

7.2.3.31.1 In the second indent of the first paragraph, replace “Annex 8, Section 1” by “Section II, Chapter 1, and Section III, Chapter 2”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/41 as amended by informal document INF.10)

Chapter 8.6

8.6.4 Replace question 6.2 by the following:

| | | | |
|---------|---|-----|-------------|
| 6.2 (a) | Is the air inlet for equalization of pressure in the cargo tank part of a closed system or is it equipped with an additional vacuum valve on board of the vessel? | O** | |
| 6.2 (b) | Is the air inlet for equalization of pressure in the cargo tank part of a closed system or is it equipped with an additional vacuum valve on shore? | | O**, *** |

Add a new Table note *** to read as follows:

“*** Only applicable if air inlet is in piping of the shore-based reception facility.”

(Reference document: ECE/TRANS/WP.15/AC.2/2022/40)

Chapter 9.1

9.1.0.31.1 Replace “Annex 8, Section 1” by “Section II, Chapter 1, and Section III, Chapter 2”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/41 as amended by informal document INF.10)

Chapter 9.3

9.3.1.31.1 and 9.3.2.31.1 In the last sentence, replace “Annex 8, Section 1” by “Section II, Chapter 1, and Section III, Chapter 2”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/41 as amended by informal document INF.10)

9.3.1.62 Delete and insert “9.3.1.62 (Deleted)”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/40)

9.3.2.22.4 (b) Amend the first indent to read as follows:

“- At the connection to each cargo tank, the venting piping shall be equipped with a flame arrester capable of withstanding a detonation and the vacuum valve shall be equipped with a flame arrester capable of withstanding a deflagration; and”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/39)

9.3.2.62 and 9.3.3.62 Amend to read as follows:

“9.3.x.62 Additional vacuum valve for degassing to reception facilities

An opening in the loading and unloading piping or in the venting piping, used at reception facilities to take in ambient air to prevent exceedance of the maximum permissible vacuum (see 7.2.3.7.2.3), shall be fitted with an additional portable vacuum valve or an additional permanently installed vacuum valve. When the intake of ambient air is done with a hose ending shoreside, the open end of the hose shall be equipped with such a valve in the same manner.

The trigger pressure of the additional vacuum valve shall be adjusted so that under normal working conditions the vacuum valve referred to in 9.3.x.22.4 is not activated during degassing.

If the vessel’s substance list according to 1.16.1.2.5 contains substances for which explosion protection is required in column (17) of Table C of Chapter 3.2, the valve shall be fitted with a flame arrester capable of withstanding a deflagration. When the vessel is not degassing to a reception facility, the permanently installed valve or the opening to which a portable valve is connected shall be closed with a blind flange.

NOTE: 7.2.4.22.1 applies for the opening of this opening.”.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/40)

Annex IV

[Original: English and French]

Proposed corrections to the Regulations annexed to ADN (Corrections requiring acceptance by Contracting Parties)

1. **Chapter 3.2, Table A, UN No. 1950, AEROSOLS, toxic, in column (6)**
Insert 802
(Reference document: informal document INF.11)
2. **Chapter 3.2, Table A, UN No. 1950, AEROSOLS, toxic, corrosive, in column (6)**
Insert 802
(Reference document: informal document INF.11)
3. **Chapter 3.2, Table A, UN No. 1950, AEROSOLS, toxic, flammable, in column (6)**
Insert 802
(Reference document: informal document INF.11)
4. **Chapter 3.2, Table A, UN No. 1950, AEROSOLS, toxic, flammable, corrosive, in column (6)**
Insert 802
(Reference document: informal document INF.11)
5. **Chapter 3.2, Table A, UN No. 1950, AEROSOLS, toxic, oxidizing, in column (6)**
Insert 802
(Reference document: informal document INF.11)
6. **Chapter 3.2, Table A, UN No. 1950, AEROSOLS, toxic, oxidizing, corrosive, in column (6)**
Insert 802
(Reference document: informal document INF.11)
7. **Chapter 3.2, Table A, UN No. 2211, POLYMERIC BEEDS, EXPANDABLE, evolving flammable vapour, packing group III, in column (9)**
For PP, EX, EP, A read PP, EP, EX, A
(Reference document: informal document INF.11)
8. **Chapter 3.2, Table A, UN No. 3426, ACRYLAMIDE SOLUTION, packing group III, in column (6)**
Insert 802
(Reference document: informal document INF.11)
9. **Chapter 3.2, Table A, UN No. 3473, FUEL CELL CARTRIDGES or FUEL CELL CARTRIDGES CONTAINED IN EQUIPMENT or FUEL CELL CARTRIDGES PACKED WITH EQUIPMENT containing flammable liquids, in column (12)**
Insert 1
(Reference document: informal document INF.11)

10. **Chapter 3.2, Table A, UN No. 3488, TOXIC BY INHALATION LIQUID, FLAMMABLE, CORROSIVE, N.O.S. with an LC₅₀ lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC₅₀, packing group I, in column (6)**

Insert 802

(Reference document: informal document INF.11)

11. **Chapter 3.2, Table A, UN No. 3490, TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an LC₅₀ lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC₅₀, packing group I, in column (6)**

Insert 802

(Reference document: informal document INF.11)

12. **Chapter 3.2, Table A, UN No. 3491, TOXIC BY INHALATION LIQUID, WATER-REACTIVE, FLAMMABLE, N.O.S. with an LC₅₀ lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC₅₀, in column (6)**

Insert 802

(Reference document: informal document INF.11)

13. **Chapter 3.2, Table A, UN No. 3494, PETROLEUM SOUR CRUDE OIL, FLAMMABLE; TOXIC, packing groups I, II and III, in column (6)**

Insert 802

(Reference document: informal document INF.11)

14. **Chapter 3.2, Table C, UN No. 1663, NITROPHENOLS, both entries for packing group III, in column (2)**

For NITROPHENOLE read NITROPHENOLE, MOLTEN

(Reference document: informal document INF.11)

15. **Chapter 3.2, Table C, UN No. 2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., both entries for packing group III, in column (20)**

For 34 read 34; 44

(Reference document: informal document INF.11)

16. **Chapter 9.1, 9.1.0.40.2.5 (c)**

For Triggering devices shall be so installed that they can be activated in the event of a fire and so that the risk of their breakdown in the event of a fire or an explosion in the space to be protected is reduced as far as possible.

Read Triggering devices shall be so installed that they can be activated also in the event of a fire, and that the required quantity of extinguishing agent can still be provided in the space to be protected in the event of a fire or of damage caused by a fire or an explosion.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/37)

17. **Chapter 9.3, 9.3.1.40.2.5 (c), 9.3.2.40.2.5 (c) and 9.3.3.40.2.5 (c)**

For Triggering devices shall be so installed that they can be activated in the event of a fire and so that the risk of their breakdown in the event of a fire or an explosion in the space to be protected is reduced as far as possible.

Read Triggering devices shall be so installed that they can be activated also in the event of a fire, and that the required quantity of extinguishing agent can still be provided in the space to be protected in the event of a fire or of damage caused by a fire or an explosion.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/37)

Annex V

[Original: English and French]

Corrections to ECE/TRANS/301 (ADN 2021 publication)

(Corrections not requiring acceptance by Contracting Parties)

Chapter 9.1, 9.1.0.35

For existing text substitute:

“9.1.0.35 Bilge system

The bilge pumps intended for the holds shall be located in the protected area. This requirement shall not apply when draining is effected by eductors.

(Reference document: ECE/TRANS/WP.15/AC.2/2022/38 as amended)
