

Economic and Social Council

Distr.: General 22 November 2022

Original: English

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Perishable Foodstuffs

Seventy-ninth session

Report of the Working Party on the Transport of Perishable Foodstuffs on its seventy-ninth session

held in Geneva on 25-28 October 2022



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I. Attendance

- 1. The seventy-ninth session of Working Party on the Transport of Perishable Foodstuffs of the United Nations Economic Commission for Europe was held from 25-28 October 2022 with Mr. K. de Putter (Netherlands) as Chair and Mr. J.M. Bonnal (France) as Vice-Chair.
- 2. Representatives of the following countries took part in the session: Austria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Italy, Kyrgyzstan, Luxembourg, Netherlands, Poland, Russian Federation, Slovenia, Spain, Türkiye, United Kingdom of Great Britain and Northern Ireland and United States of America.
- 3. The intergovernmental organization International Institute of Refrigeration (IIR) and the non-governmental organizations International Association of the Body and Trailer Building Industry (CLCCR) and Transfrigoroute International (TI) also took part in the session.

II. Adoption of the agenda (agenda item 1)

Documents: ECE/TRANS/WP.11/248

ECE/TRANS/WP.11/248/Add.1 Informal document INF.1 (Secretariat)

4. The provisional agenda (ECE/TRANS/WP.11/248 and -/Add.1) were adopted as amended by informal document INF.1 to take account of informal documents INF.1 to INF.10.

III. Activities of ECE bodies of interest to the Working Party (agenda item 2)

A. Inland Transport Committee

5. The Working Party noted paragraphs 114–116 from the report of the eighty-fourth session of the Inland Transport Committee (ITC), (22–25 February 2022) (ECE/TRANS/316).

B. Working Party on Agricultural Quality Standards

- 6. The activities of the Working Party on Agricultural Quality Standards (WP.7) of interest to WP.11 in the second semester of 2022 were:
 - Thirtieth session of the Specialized Section on Standardization of Meat (GE.11) 28–30 September 2022, Geneva, Switzerland;
 - Seventy-seventh session of the Working Party on Agricultural Quality Standards (WP.7) 15–17 November 2022, Geneva, Switzerland.
- 7. The latest UNECE tool to combat food loss and waste can be found at https://unece.org/trade/wp7/food-loss-and-waste
- 8. For more information on these and other activities, please visit WP.7 website at https://unece.org/trade/working-party-agricultural-quality-standards-wp7.

IV. Activities of other international organizations dealing with issues of interest to the Working Party (agenda item 3)

A. International Institute of Refrigeration (IIR)

Document Informal document INF.4 (International Institute of Refrigeration)

- 9. The Working Party was informed about the results of the meeting of the IIR sub-commission on refrigerated transport (CERTE) held by video conference on 17 May 2022.
- 10. The next CERTE meeting was scheduled for 18–19 April 2023.

B. Transfrigoroute International

Document Informal document INF.5 (Transfrigoroute International)

- 11. The representative of Transfrigoroute International informed the Working Party that for the year 2022, the situation for industries in transport refrigeration remained very complex due to the following factors:
 - On one hand, EU regulation was pushing very hard on transport decarbonization (Green Deal, Fit for 55, etc.), which was causing a strong demand for alternative power train vehicle and related technologies;
 - On the other hand, the lack of components plus financial difficulties was preventing the original equipment manufacturer (OEM) to deliver those expected vehicles and technologies.
- 12. More recently, the Ukrainian crisis was also having an impact, mainly due to a huge increase on energy cost (liquid fuel and gas) as well as shortages of some components and raw materials with the consequent price increases.
- 13. In conclusion, the transport refrigeration industry was facing major challenges and expectations to contribute to transport decarbonization and complying with new regulations related to refrigerants to render them more sustainable.
- 14. A face-to-face meeting was held in Brussels on 7 September 2022 with 10 experts from different organizations (TI-CCT, TÜV Süd, CRT and Cemafroid) in order to discuss transport decarbonization, development of alternative power train vehicle and alternative power sources for thermal appliances and the lack of clear rules in the ATP which currently does not consider the multiplicity of solutions to power thermal appliances.
- 15. The Working Party agreed to discuss the minutes of the meeting, also included in INF.5 section C, under agenda item 8 Scope of ATP.

C. Standardization organizations

16. Delegations participating in the work of standardization organizations were invited to inform the Working Party about progress on the development of standards dealing with transport under controlled temperatures and what impact these standards were expected to have on the ATP.

Documents Informal document INF.6 (Transfrigoroute International on behalf of

the ISO liaison representatives)

Informal document INF.7 (United Kingdom)

Informal document INF.8 (Germany)

EN Standards

1. CEN/TC 413 Working Group 2

- 17. Experts from Belgium, France, Germany, Italy, Ireland, Netherlands, and United Kingdom with informal participation of experts from other European Nations have had several virtual meetings during the last 6 months.
- 18. EN 16440 1:2015-01 Testing methodologies of cooling equipment for insulated means of transport Part 1: Mechanical refrigeration devices with forced air circulation evaporator with or without heating devices. The final version was published in January 2015.
- 19. Following additional part was still under consideration:
 - Part 2: Eutectic Systems: The current working draft is still under consideration with
 the view of sending the final version to a second CEN enquiry after the revision.
 Especially, the test provisions for cooling capacities and consumption for new
 equipment with eutectic systems as well equipment in daily operation sequences were
 adopted and revised.
 - Draft and project will be sent for a new ballot after the re-activation to finalize the draft version of prEN 16440-2 and CEN enquiry.
 - An additional part: Special requirements on multitemp systems: Was scheduled as a further project.

2. CEN/TC 413 Working Group 1

- 20. Experts from Belgium, Finland, France, Germany, Ireland, Italy, Netherlands and United Kingdom, with informal participation of experts from other European Nations have had several virtual meetings during the last 6 months.
- 21. The scope of the project committee will be a standard with the title: Insulated means of transport for temperature sensitive goods requirements and testing. The standard applies to thermally insulated means of transport used for temperature sensitive goods in order to limit the heat exchange due to external conditions. If certain temperatures have to be maintained, they could be additionally provided with a cooling and/or heating source. The current framework is taking into account inside temperatures between -30° C and $+25^{\circ}$ C and ambient conditions between -30° C and $+43^{\circ}$ C.
- 22. The standard is projected with the following parts:
 - prEN 17066 Part 1: Container Insulated means of transport for temperature sensitive goods Requirements and testing to define the terminology, the specific requirements, test provisions, dimensioning of insulated bodies including evaluation of k value. *Final version was published in October 2019*.
 - Part 2: Equipment Combination of insulated bodies and their cooling and/or heating devices including verification of cooling and heating capacities for long distance transport as well distribution. The current working draft would soon be sent in the next months for an additional CEN inquiry, looking for at least 5 participating nations.
 - Part 3: Small containers for multiple use with an internal volume not more than 2 m³
 - The special combination of smaller insulated bodies and their cooling and/or heating devices including verification of cooling and heating capacities. The current working draft would soon be sent in the next months for an additional CEN inquiry, looking for at least 5 participating nations.
 - An additional part: Special requirements on multitemp systems: Was scheduled as a further project.
- 23. New EN standard prEN 17893:2022 Thermal Road Vehicles Safety Standard for temperature-controlled systems using flammable refrigerants for the transport of goods Requirements. *The current working draft was at the first CEN inquiry*.

24. After inquiries are finished, the related working groups of CEN/TC 413 will take into account the results of votes and comments received on each draft, for consideration during the next meetings in December 2022/January 2023 for finalization.

3. Revision of EN 12830

25. EN 12830:2018-10 — Temperature recorders for the transport, storage and distribution of temperature sensitive goods — Tests, performance, suitability: *Final version was published in October 2018*.

4. Revision of EN 13485 and EN 13486

- prEN 13485:2022 Thermometers for measuring the ambient or internal temperature for the transport, storage and distribution of temperature sensitive goods Tests, performance, suitability: First CEN enquiry ended on 13 October 2022 with positive results.
- prEN 13486:2022 Temperature recorders and thermometers for measuring the ambient or internal temperature for the transport, storage and distribution of temperature sensitive goods Periodic verification: First CEN enquiry ended on 28 September 2022 with positive results.
- 26. The CEN/TC 423 working group will discuss and adopt the comments received to both drafts during the next meetings on 28–29 November 2022.

ISO Standards

- 27. The plenary meeting for TC104 in 2022 took place by teleconference on 20 October. During the meeting 13 resolutions were adopted which included election and re-election of committee members and a Creation of ISO TC 104 Ad Hoc Group Revitalization effort in ISO TC 104.
- 28. The work item for "ISO 1496-4: Non pressurised containers for dry bulk" will be completed in 2023. This is the first major update to the standard first created in 1991/4. The new thermal container standard "ISO 20854 Thermal Containers Safety standard for refrigerating systems using flammable refrigerants" is reportedly in use for new product development and feedback is expected during this process.
- 29. A European Work Item on a vehicle-based standard has also been adapted from this work (prEN 17893) Thermal Road Vehicles Safety Standard for temperature-controlled systems using flammable refrigerants for the transport of goods Requirements and risk analysis process. The SC2 Plenary will discuss early proposals to update and correct the tank container standard ISO 1496-3, and to continue to rationalise testing requirements with ISO 1496-1.
- 30. There is also a proposal for tank container variants of tank containers are catered for in this standard but no decision yet.

Other standardization activities of interest to WP.11

- 31. Information on Korean projects in ISO/TC 122 "Packaging". Two Korean projects within ISO/TC 122/ Working Group 16, "Temperature controlled product packaging", Convenorship: Korea are published:
 - ISO 22982-1:2021-03: Transport packaging Temperature-controlled transport packages for parcel shipping Part 1: General requirements.
 - ISO 22982-2:2021-03: Temperature controlled transport packages for parcel shipping
 Part 2: General specifications of testing

Liaison with ISO TC 315

- 32. The representative of Transfrigoroute International informed WP.11 of the latest updates from ISO TC 315, including:
 - (i) Next TC 315 Plenary and Working Group meetings will be held in November 29 December 2, 2022 (hybrid mode, Japan);
 - (ii) 04/2022 Call for definitions of the term "delivery";
 - (iii) Decision 07/2022 Approval of ISO/TC 315 Strategic Business Plan;
 - (iv) Decision 08/2022 Establishment of ISO/TC 315/WG 4 "Terminology":
 - ISO/TC 315/Working Group 4 will replace ISO/TC 315/AHG 2 Terminology.
 - Mr. Toshinori Nakamura is convenor of ISO/TC 315/ Working Group 4.
 - Call for experts for newly established ISO/TC 315/ Working Group 4 "Terminology".
 - Working Group 4 convenor is planning to hold the first Working Group meeting on 1 December 2022;
 - (v) 09/2022 New work item proposal from Korea; Temperature validation methods of temperature-controlled storages and road vehicles:

Scope

This document specifies the general terminology, requirements, procedures, and documentation for temperature validation that shall be used for temperature-controlled storages and road vehicles. This document does not intend to evaluate the safety and technology of storage and transportation equipment or facilities.

V. Status and implementation of the Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage (ATP) (agenda item 4)

A. Status of application of the Agreement

33. There have been no new accessions to ATP since the last session and the number of Contracting Parties remains at 52.

B. Status of amendments

34. There have not been new proposals of amendments notified to ATP Contracting Parties since the last session.

C. Test stations officially designated by the competent authorities of countries Parties to ATP

35. The current list of officially designated test stations appears at the following web link: https://unece.org/atp-competent-authorities-and-testing-stations

D. Exchange of information among Parties under Article 6 of ATP

- 36. At the seventy-seventh session, the WP.11 thanked the 25 countries that had provided data in response to the questionnaire on the implementation of ATP in 2020 and stressed that it was mandatory to have information from all ATP contracting parties and that it was a means of harmonizing implementation of the agreement.
- 37. The information received for the year 2021 was presented in ECE/TRANS/WP.11/2022/12. It was remarked that for this exercise, the number of Contracting Parties replying to the questionnaire decreased to 21.
- 38. At the request of the Working Party at its seventy-third session, the secretariat sent a letter to all contracting parties requesting them to fulfil their obligation under article 6 of ATP of replying to the annual questionnaire and to update the contact information for competent authorities and test stations. All the information received by the secretariat is included in the list of competent authorities and officially designated test stations at https://unece.org/atp-competent-authorities-and-testing-stations.

E. Exchange of good practices for better implementation of ATP

39. As no document had been submitted under this agenda sub-item, no discussion took place on this subject.

VI. Proposals of amendments to ATP (agenda item 5)

A Pending proposals

1. Proposal of amendments to paragraph 7.3.7 of Appendix 2 of Annex 1

Document: ECE/TRANS/WP.11/2022/5/Rev.1 (France)

40. As related document ECE/TRANS/WP.11/2022/14 was not adopted, the French delegation agreed to prepare a new revised version of the document for consideration at a future session.

2. Measurement of the thickness of insulating walls in equipment used for the transport of perishable foodstuffs

Document: ECE/TRANS/WP.11/2022/6/Rev.1 (France)

- 41. Some concerns were raised regarding current footnote 4 in Model 1A including the same information as the proposed amendment. It was clarified that information was not duplicated and that in the new proposal, more detailed information regarding thickness was provided and it was also specified who would be responsible for performing the measurements.
- 42. Other delegations believed that as the thickness was an indirect measurement, based on exterior and interior dimensions that was not always easy to calculate, information requested in the proposal might be superfluous.
- 43. The French delegation explained that the proposal was aimed at providing more control over the uncertainties in the thickness of the insulation as in certain cases the tolerance of the K coefficient might be exceeded.
- 44. The proposal was not adopted with objections to its adoption from Germany and United Kingdom.

3. Amendment to Annex 1, Appendix 4

Document: ECE/TRANS/WP.11/2022/9/Rev.1 (United Kingdom)

- 45. Some concerns were raised as to how the proposal would improve the inspection process, it was pointed out that if the proposal were to be adopted, some difficulties might raise during inspection of equipment with two compartments.
- 46. It was also noted that there was not a significant difference between the revised proposal and the one rejected at the previous session. The Working Party decided to submit to the CERTE consideration if the example given in the current ATP text was technically possible as there was no agreement among the experts that took the floor on that subject.
- 47. The proposal was not adopted with objection to its adoption from France.

4. Proposition of amendments to paragraph 7.3.7 of Appendix 2 of Annex 1

Document: ECE/TRANS/WP.11/2022/14 (France)

- 48. Several delegations pointed out that multi-temperature multi-compartment equipment should be tested in the worst-case scenario for dividing walls configuration and tested configurations, as reflected in the declaration of conformity, should be kept at all times with a small degree of freedom. Therefore, it was not necessary to require movable walls to be permanently fixed to the body of the equipment, as this could reduce the flexibility of using other technologies.
- 49. On the other hand, others considered that movable dividing walls should be kept in the equipment at all times and that nothing that was not declare as removable in the certificate could be removed.
- 50, The proposal was not adopted with objections to its adoption from Germany and Spain.

5. Proposition of amendments to paragraph 7.3.7 of Appendix 2 of Annex 1

Document: ECE/TRANS/WP.11/2022/15 (France)

- 51. Some delegations did not agree with the justification put forward in the proposal as it was introducing hygienic concerns very specific to the situation described in the document. They considered that hygienic requirements were a very important subject and should be introduced in the ATP in a general and organic way, probably in a separate annex.
- 52. The proposal was not adopted with objections to its adoption from Germany and Spain. The French delegation will present a revised proposal for consideration at a future session.

6. Introduction of type examination certificates as a means of establishing conformity of design and of tests carried out in accordance with ATP protocols

Document: (ECE/TRANS/WP.11/2022/13 (France)

- 53. It was not clear for some delegations which problems this proposal was intending to solve and some delegations were of the opinion that the new set of models for type certificates was duplicating information already contained in the test reports.
- 54. The proposal was put to the vote and rejected with two votes in favour (France and Luxembourg) and four votes against (Denmark, Germany, Spain and United Kingdom).
- 55. Given that some delegations still found some value on having two separate set of documents, it was proposed to create an informal working group to revise existing model test reports and to propose drafts for type certificates or any other relevant document concerning testing and approval of equipment.

- 56. The Working Party agreed with the creation of informal working group on documentation led by France and with the following mandate:
 - 1. Analyse the contents and formatting of existing Models 1 to 13.

Taking into account:

- the various tests on equipment, bodies and thermal units,
- the users of particular information in the different sections of the models 1 to 13.
- 2. Draft proposals for documents concerning testing and approval of equipment as appropriate.
- 3. Report the findings to WP.11 at its eightieth session and present proposals, if appropriate.
- 7. Amendments to the models of reports that define the specifications of equipment and tanks for the carriage of foodstuffs resulting from the need to take into account technological developments brought about by the use of new insulating material

Document: ECE/TRANS/WP.11/2020/4/Rev.4 (France)

- 57. The Working Party decided to refer the document to the informal working group on documentation for advice and to resume consideration of the proposal at a future session.
- 8. Amendment to model reports that define how to determine the effective refrigerating capacity of a refrigeration unit, in order to take into account the impact of different software versions on the performance of said units

Document: ECE/TRANS/WP.11/2021/6/Rev.1 (France)

- 58. The Working Party decided to refer the document to the informal working group on documentation for advice and to resume consideration of the proposal at a future session.
- 9. Proposal on declaration of conformity (Annex 1, Appendix 2 paragraph 7.3.6) and the dimensioning of Multi-Compartment, Multi-Temperature equipment (MTMC)

Document: ECE/TRANS/WP.11/2022/8/Rev.1 (Transfrigoroute International)

- 59. After some clarifications, the proposal was adopted with some changes (see annex II).
- 10. Proposed list of major components and their key characteristics

Document: ECE/TRANS/WP.11/2022/18 (Transfrigoroute International)

- 60. It was remarked that the list of major components should be periodically reviewed by the experts at CERTE, once included in the ATP. There were several delegations in favour of adding the list also at the end of Model 13.
- 61. The Italian delegation raised a question regarding the meaning of "Principal dimensions" and "Structural peculiarities of body" included in Table 3 of the proposal. Given that a satisfactory answer could not be given during the discussions, the Finnish delegation objected to the adoption of the proposal.
- 11. Revised amendment to the Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage related to provisions concerning testing stations and experts

Document: ECE/TRANS/WP.11/2022/21 (Russian Federation)

62. The Danish delegation with the support of the Polish delegation stated that for political reasons they were unable to discuss or vote in favour of the proposal from the Russian Federation (see full statement in annex I).

- 63. Some delegations stated that it was not clear from the proposal if it related to inservice inspections or to testing stations in general. It was also mentioned that some technical requirements needed to be revised in more detail and that a transitional provision should be also included in the proposal.
- 64. The Italian delegation expressed support for the proposal in principle but mentioned some concerns regarding the cost and the time that could take to implement it. Also, some concerns were raised regarding compliance with national regulations if the proposal were to be adopted.
- 65. The Russian Federation noted the comments and thanked the delegations that took the floor. A revised proposal will be presented for consideration at a future session.

12. Definitions of independence and autonomy of equipment

Documents: ECE/TRANS/WP.11/2020/1/Rev.3 (France)

ECE/TRANS/WP.11/2022/20, Proposal 1 (Netherlands on behalf of the

informal working group)

- 66. The French delegation mentioned that it agreed with the definitions for autonomy and independence put forward in document ECE/TRANS/WP.11/2022/20, proposal 1 and that these definitions should be considered before the ones proposed in document ECE/TRANS/WP.11/2020/1/Rev.3 of a more technical nature. Therefore, discussions first took place on the proposals in ECE/TRANS/WP.11/2022/20.
- 767 It was explained that the aim of both proposals was facilitating the certification of new equipment using alternative energy sources or a combination of them. The French delegation also remarked that the term autonomy is used in the French text of the ATP with two different meanings and therefore agreeing on a definition for autonomy would help clarify the French text.
- 68. Some delegates believed energy source type was not in the scope of the ATP and that the only requirement of importance was the temperature. Several energy sources already existed since the agreement first entered into force. Others considered that more time was needed to allow new technologies to be fully developed, before adding requirements concerning new equipment using alternative energy sources in the ATP.
- 69. As the definitions in ECE/TRANS/WP.11/2022/20 were not adopted, the French delegation postponed consideration of its document until an agreement can be reached on these definitions.

13. Amendment concerning the application of the controls to be carried out according to paragraph 4.3.4 of annex 1, appendix 2 of the ATP dated 1 June 2022

Document: ECE/TRANS/WP.11/2020/3/Rev.3 (France)

70. The French delegation withdrew its proposal as it was an alternative proposal to the one in document ECE/TRANS/WP.11/2022/16 (United Kingdom) which was adopted.

14. Amendment to Annex 1, Appendix 2, paragraph 3.2.6 and the ATP Handbook

Documents: ECE/TRANS/WP.11/2022/16 (United Kingdom)
Informal document INF.10 (United Kingdom)

- 71. There was general agreement in principle, to the inclusion of provisions in the ATP regarding airflow circulation in the body of the equipment. However, the representative from Transfrigoroute International considered that these provisions should be just recommendations considering that the conditions of transport could differ with every type of product, packaging used as well as how the load was distributed inside the equipment.
- 72. The proposal was adopted with some changes as reflected in informal document INF.10 (see annex II).

B New proposals

1. Amendment to Annex 1, Appendix 3

Document: ECE/TRANS/WP.11/2022/17 (United Kingdom)

73. Proposal was adopted (see annex II).

2. Correction of the definition of "equipment" in Annex 1 paragraph 7

Document: ECE/TRANS/WP.11/2022/19 (Netherlands)

- 74. There was general agreement that the definition of "Equipment" recently introduced in the ATP needed to be amended as it was lacking clarity which in turn could lead to confusion and even legal issues. On the other hand, the amended definition proposed in the document was not considered clear enough either.
- 75. The representative of Transfrigoroute International informed WP.11 that in Section C of informal document INF.5, two interpretations of the definition of equipment were given, namely:
 - Interpretation 1- Equipment = complete vehicle, including vehicle powertrain and associated energy storage + supportive structure (chassis) + insulated box + thermal appliance.
 - Interpretation 2- Equipment = supportive structure (chassis) + insulated box + thermal appliance.

With most experts favoring interpretation 2.

- 76. Some delegations were also of the opinion that as far as the ATP is concerned, the insulated body is the most important part and all the components that have an influence in the insulation should be part of the definition.
- 77. The German delegations also remarked that the term "equipment" was used in Article 2 of the ATP and in several paragraphs of Annex 1 in different contexts and with different meanings.
- 78. In light of the arguments that came forward during the discussion, the Dutch delegation withdrew the document with the view of revising the proposal and submit it for consideration at a future session.

3. Amendments to the ATP

Document:

ECE/TRANS/WP.11/2022/20 (Netherlands on behalf of the Informal Working Group on the improvement of the approval system for equipment and appliances)

79. Proposals 2, 3 and 4 were adopted (see annexes II and III)

VII. ATP Handbook (agenda item 6)

1. Amendment to paragraph 7.3.6 of Annex 1 Appendix 2 of the ATP Handbook: Calculation method of specific application cases using the multi-temperature equipment dimensioning tool

Document: ECE/TRANS/WP.11/2021/11/Rev.1 (France)

- 80. While WP.11 agreed in principle with the inclusion of a modified proposal in the ATP Handbook, it was considered that the explanations provided in the document were not sufficiently clear and that some terms used in text were not clearly defined.
- 81. The proposal was not adopted with objections to its adoption from Denmark, Germany and United Kingdom.

2. Amendments to paragraph 6 (c) (iii) of Appendix 1 to Annex 1 of the ATP Handbook: Rules to follow for the assembly of built-in units and/or equipped with deflectors and units under chassis or that can be offset

Document: ECE/TRANS/WP.11/2021/12/Rev.2 (France)

- 82. Some delegations were of the opinion that the ATP Handbook was intended to explain or clarify provisions in the ATP agreement and as such, could not find a reason to include the proposed comment in the Handbook as it was not related to any ATP provision.
- 83. It was recognized that the information contained in the proposal could be useful for some field applications and France was invited to consider drafting the document in a form of guidance or sharing of best practices document that could be published on the UNECE website after the approval of WP.11.
- 84. France decided to present a revised document at a future session.

3. Amendments to the comments to paragraph 4 of Annex 2, Appendix 1 of the ATP Handbook: Location of temperature measurement probes during transport

Document: ECE/TRANS/WP.11/2021/13/Rev.2 (France)

- 85. Although it was recognized that the existing text in the ATP Handbook was not covering all possible situations and that the drafting could be improved, the revised proposal presented by France was still considered not clear enough.
- 86. The German delegation informed the Working Party that they had an exchange of views with the French delegation but still considered that the existing text was incorrect. Other delegations raised questions concerning the placements of sensors and probes as the probability of damaging them during loading and unloading operations was not negligible if placed as the French proposal suggested.
- 87. France thanked all the delegations that took the floor and will review the proposal with the aim of submitting it for consideration at the next session, taking into account all the comments made.

4. Amendment to Annex 1, Appendix 2, paragraph 3.2.6 and the ATP Handbook

Documents: ECE/TRANS/WP.11/2022/16 (United Kingdom)

Informal document INF.10 (United Kingdom)

- 88. Proposal was adopted with some changes (see annex III).
- 89. The latest version of the ATP Handbook appears on the Transport Division website in English, French and Russian at the following link: https://unece.org/atp-handbook.

VIII. Reports of informal working groups (agenda item 7)

Document: Informal document INF.3 (Netherlands on behalf of the Informal

Working Group on the improvement of the approval system for

equipment and appliances)

- 90. The Chair of the informal working group informed WP.11 on the progress of work as reflected in informal document INF.3, adding that on some of the topics, they had proposals for amending the ATP as reflected in document ECE/TRANS/WP.11/2022/20.
- 91. WP.11 thanked the informal working group for the excellent work done as it facilitates discussions in plenary and improves the quality of the proposals of amendments to the ATP.

IX. Scope of ATP (agenda item 8)

Document Informal document INF.5, section C (Transfrigoroute International)

92. Due to time constrains the representative of Transfrigoroute International decided to postpone consideration of informal document INF.5, section C for the next session and informed the Working Party of his plan to circulate a survey about the scope of the ATP among Contracting Parties.

The ATP and the future

93. The road map for accession to and implementation of the ATP prepared by the EuroMed road, rail and urban transport project with inputs from the secretariat and the Chairs of WP.11 has been published and can be found at the UNECE website: https://unece.org/road-map-accession-and-implementation-atp.

X. Energy labelling, refrigerants and blowing agents (agenda item 9)

94. As no document had been submitted under this agenda item, no discussion took place on this subject.

XI. Programme of work (agenda item 10)

Dates of the eightieth session

- 95. The dates of 24-27 October 2023 (Tuesday to Friday) have been reserved for the eightieth session of WP.11. Deadline for submission of documents is 28 July 2023.
- 96. Regarding meeting arrangements, a member of the secretariat informed the Working Party that hybrid meetings support will be discontinued by the end of 2022 and that, as from 2023, all meetings are planned to be held in-person.

XII. Election of officers (agenda item 11)

- 97. The Working Party was informed that Mr. J. M. Bonnal (France) was not available to be re-elected as Vice-Chair for 2023.
- 98. France proposed Mr. Olivier Valet as candidate for the Vice-Chair position.
- 99. The Working Party elected Mr. K. de Putter (Netherlands) as Chair, and Mr. O. Valet (France) as Vice-Chair for its session in 2023 by acclamation. The Working Party thanked the officers and the secretariat for their work.

XIII. Other business (agenda item 12)

Document: Informal document INF.2 (IATA)

100. The Working Party authorised Ms. Maria Jitomirski, Manager of Special Cargo department, International Air Transport Association (IATA) to participate as an observer in the seventy-ninth session of the Working Party on the Transport of Perishable Foodstuffs.

Cycle of meetings

101. WP.11 decided to return to its usual cycle of one meeting per year and to increase the number of informal working groups, when relevant, to facilitate intersessional work. The Working Party thanked the ITC for the opportunity of testing a different cycle of meetings for the biennium 2021-2022.

Tributes

102. The Working Party thanked Mr. J. M. Bonnal (France) for his contributions to the activities of WP.11, specially for the excellent work done as Vice-Chair for the last 5 years and wished him all the best in his future endeavours.

XIV. Adoption of the report (agenda item 13)

- 103. The WP.11 adopted the report on its seventy-ninth session based on a draft prepared by the secretariat.
- 104. In accordance with the special procedures on decision-making for formal meetings with remote participation adopted by the Executive Committee (ECE/EX/2020/L.12), main decisions taken by WP.11 during the session were published and notified to all the permanent missions in Geneva (https://unece.org/silence-procedure). After publication, as no objections were received, decisions were deemed adopted.

Annex I

Full Government statement delivered during the seventyninth session of the Working Party on the Transport of Perishable Foodstuffs

Statement from Denmark at the start of the session

The representative of Denmark requested the floor at the start of the session and made the following statement:

"At the outset, allow me to express Denmark's full solidarity with Ukraine and the Ukrainian people. We condemn in the strongest possible terms Russia's acts of aggression against Ukraine, a grave violation of international law and the UN Charter. President Putin's unjustified and unprovoked attack undermines international peace and security. We deplore the loss of human life and suffering caused and demand that Russia immediately ceases these acts of aggression in the entire territory of Ukraine and fully complies with international law."

The United Kingdom was in support of the statement from Denmark.

Annex II

[Original: English and French]

Proposed amendments to the ATP

1. Annex 1, Appendix 2, section 8, MODEL No. 14

In Model No.14 insert a footnote after "Serial Number" under the sections "Insulated body" and "Host Unit". Footnote reads as follows:

"a Individual serial number or series of serial numbers."

(Reference document: ECE/TRANS/WP.11/2022/8/Rev.1, as amended)

2. Annex 1, Appendix 3, footnote 12

In footnote 12, replace "his signature" by "signature".

(Reference document: ECE/TRANS/WP.11/2022/17)

3. Annex 1, Appendix 2, paragraph 4.3.1(b)

Add a new paragraph at the end to read:

"If the compressor is driven by an auxiliary electrical power source, the test shall be carried out at the nominal electrical input parameter of the compressor as specified by the manufacturer."

(Reference document: ECE/TRANS/WP.11/2022/20)

4. Annex 1, Appendix 2, section 7.3.1

Replace "internal dividing walls" by "dividing walls".

(Reference document: ECE/TRANS/WP.11/2022/20)

5. Annex 1, Appendix 2, section 7.3.3

In the introductory sentence, replace the word "bulkheads" by "dividing walls" and in the body of the text, replace the word "bulkheads" by "dividing walls" (3 times).

(Reference document: ECE/TRANS/WP.11/2022/20)

6. Annex 1, Appendix 2, section 7.3.4

In the introductory sentence, replace "bulkheads" by "dividing walls" and in the body of the text, replace "bulkheads" by "dividing walls" (3 times).

(Reference document: ECE/TRANS/WP.11/2022/20)

7. Annex 1, Appendix 2, section 7.3.5

In the introductory sentence, replace "bulkheads" by "dividing walls"

(Reference document: ECE/TRANS/WP.11/2022/20)

8. Annex 1, Appendix 2, section 7.3.6

In the introductory sentence, replace "bulkheads" by "dividing walls" and in the body of the text, replace "bulkheads" by "dividing walls".

(Reference document: ECE/TRANS/WP.11/2022/20)

9. Annex 1, Appendix 2, section 7.3.7

In the heading and first paragraph, replace "internal dividing walls" by "dividing walls" (2 times).

(Reference document: ECE/TRANS/WP.11/2022/20)

10. Annex 1, Appendix 2, section 8, MODEL No. 14

Replace "bulkheads" by "dividing walls" (2 times).

(Reference document: ECE/TRANS/WP.11/2022/20)

11. Annex 1, Appendix 2

Insert a new paragraph 3.2.8 to read as follows:

"3.2.8 If the refrigerating appliance with all of its accessories has undergone separately, to the satisfaction of the competent authority, a test to determine the air circulation volume, the minimum required airflow in cooling mode for both mechanically refrigerated equipment and mechanically refrigerated and heated equipment with a forced ventilation system shall conform to the following formula⁷:

 $\dot{V}_L = N\!\cdot\!V$

Where minimum airflow rate \dot{V}_L is air changes per hour N, multiplied by the empty volume V.

Where N = 50

The air volume flow may be modulated in part load operation after reaching the set point temperature and if the temperature of the class is reached, the air flow needs not be continuous.

Where V exceeds $60 \text{ m}^3 \text{ V}_L$ may be limited to at least 3000 m^3 per hour for containers, wagons and lorries⁸.

Where V exceeds 100 m³ V_L may be limited to at least 5000 m³ per hour."

Footnotes 7 and 8 read as follows:

- "7 Applies to equipment manufactured after (DD MM YEAR)
- 8 Containers can be demountable bodies of lorries"

(Reference document: ECE/TRANS/WP.11/2022/16, as amended by informal document INF.10, as amended)

12. Annex 1, Appendix 2

Insert a new paragraph 3.4.9 to read:

"3.4.9 The equipment should comply with the airflow requirements in cooling mode prescribed in paragraph 3.2.8"

(Reference document: ECE/TRANS/WP.11/2022/16, as amended by informal document INF.10, as amended)

13. Annex 1, Appendix 2, paragraph 7.3.1

Add new indent at the end to read

"- The equipment should comply with the airflow requirements in cooling mode prescribed in paragraph 3.2.8."

(Reference document: ECE/TRANS/WP.11/2022/16, as amended by informal document INF.10, as amended)

14. Annex 1, Appendix 3,

Insert new section 7.2.6 in the Model form of Certificate of compliance to read:

"7.2.6 XX air changes/hour"

(Reference document: ECE/TRANS/WP.11/2022/16, as amended by informal document INF.10, as amended)

15. Annex 1, Appendix 3,

Insert a new footnote 11, after footnote 10, to read:

"11 Where XX is the number of air changes per hour calculated by dividing the total airflow of the circulation fans by the total internal volume of the equipment. In the case of multi-compartment equipment with movable bulkheads, the total airflow of the circulation fans has to be divided by the maximum internal volume of each compartment."

(Reference document: ECE/TRANS/WP.11/2022/16, as amended by informal document INF.10, as amended)

16. Annex 1, Appendix 3,

Renumber existing footnotes 11 to 15 as 12 to 16.

(Reference document: ECE/TRANS/WP.11/2022/16, as amended by informal document INF.10, as amended)

Annex. III

[Original: English and French]

Additions to the ATP Handbook

1. Annex 1, Appendix 2, section 1.2

In the table of "Method A", replace "bulkhead" by "dividing walls".

(Reference document: ECE/TRANS/WP.11/2022/20)

2. Annex 1, Appendix 2

Add a new comment after paragraph 3.2.8 to read as follows:

"Airflow is an essential parameter within temperature-controlled transport.

For frozen cargoes, airflow should be low to avoid desiccation but sufficient to remove heat entering through the insulated walls, supply air can deviate below the set temperature to remove heat without damaging the product. Chilled cargoes require higher airflow for good temperature distribution and also because the supply air temperature cannot be allowed to deviate significantly below the set temperature due to freezing or chilling damage. Some chilled cargoes are metabolically active and therefore require higher airflow to remove that heat.

Intermittent fan operation should not be used for sensitive cargo where close temperature distribution is required. Generally, start/stop operation of the unit when the evaporator fans/unit are allowed to cycle shall be used only for frozen goods transportation.

Table 1 **Examples of air flow requirements for temperature sensitive goods**

Type of goods	Temperature range [°C]	Sensitivity to humidity	Recommended air change rate[ac/h]
Hanging meat	-1/+1°C	Yes	50 –90
Chilled products	-1/+6°C	Yes	50 – 90
Frozen foods	<-18°C	No	40 - 60
Ice cream	<-20 °C	low	40 – 60

(Reference document: ECE/TRANS/WP.11/2022/16, as amended by informal document INF.10, as amended)

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