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Inland Transport Committee

**Working Party on the Transport of Perishable Foodstuffs**

Seventy-third session

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

held in Geneva from 10-13 October 2017

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## **I. Attendance**

1. The Working Party on the Transport of Perishable Foodstuffs (WP.11) held its seventy-third session from 10-13 October 2017 with Mr. T. Nobre (Portugal) as Chairman and Mr. E. Devin (France) and Mr. K. de Putter (Netherlands) as Vice-Chairmen.

2. Representatives of the following countries took part in the session: Croatia, Denmark, Finland, France, Germany, Italy, Luxembourg, Netherlands, Poland, Portugal, Russian Federation, Slovakia, Slovenia, Spain, Turkey, 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.11/236  
ECE/TRANS/WP.11/236/Add.1

*Informal document:* INF.1 (Secretariat)

4. The provisional agenda (ECE/TRANS/WP.11/236 and -/Add.1) were adopted as amended by informal document INF.1 to take account of informal documents INF.1 to INF.13.

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

### **A Inland Transport Committee**

5. The Working Party was informed about the results of the seventy-ninth session of the Inland Transport Committee (ITC) (21-24 February 2017) as reflected in its report (ECE/TRANS/270, paragraphs 96-98).

*Informal documents:* INF.2 and INF.3 and INF.12 (Secretariat)

6. The secretary of the ITC of the Sustainable Transport Division of the Economic Commission for Europe (UNECE), presented to the Working Party the draft strategy of the Inland Transport Committee. He recalled that the Committee had invited the Working Parties to send their comments and recommendations to the secretariat with a view to issuing a revised version to be considered by the Committee at its 2018 session.

7. In particular, the Committee invited the Working Parties to reflect on the issues identified in paragraph 46 of the draft strategy. With regard to the work of the Working Party on the Transport of Perishable Foodstuffs, the following questions might arise:

- How to facilitate the implementation of the Sustainable Development Goals of the United Nations (SDGs) of relevance to the work of the Working Party?
- How to facilitate the implementation of and accession to ATP?
- What were the expected changes regarding the transport of perishable foodstuffs by 2030, for example as far as the geographical application of ATP, vehicle emissions

and use of refrigerants with low Global Warming Potential (GWP). How could ATP and the work of the Working Party anticipate and adapt to such changes?

8. Several delegations mentioned that it is important for the Working Party to adjust its programme of work to take account of technical developments. The secretary of the ITC remarked that there was still concern at the level of the ITC regarding the unanimity rule in Article 18.4 of the ATP and the speed at which the amendments were adopted. It was also emphasised that it was critical for legal instruments under the purview of the ITC to remain relevant.

9. Regarding discussions on how to improve its method of work, the Working Party decided the following:

- To change Rule 35 of the Rules of Procedure of WP.11 to reflect the option of adopting proposals of amendments to the ATP and amendments to the ATP Handbook by consensus.
- To change the Rule 35 of the Rules of Procedure of WP.11 to eliminate, in session only, the unanimity rule for adopting proposals of amendments to the ATP. Denmark and the Russian Federation voted against the changes.
- To find new ways of compromising and negotiating with other contracting parties to increase the number of proposals of amendments adopted at each session.
- To examine best practices and draw lessons from the work of other Working Parties.
- To define clearly the scope of the ATP.
- To extend the next session of WP.11 to 5 days and hold a round table on Monday 8 October 2018 to discuss ways of improving the work of WP.11.

10. Regarding the ITC proposal to hold a round table discussion on the challenging aspects of organizing and carrying out the transportation of perishable foodstuffs and to research political, technical and legal solutions to issues that remain unresolved with the ATP Convention, it was clarified that this should be re-discussed at the next ITC session and the Working Party was invited to make comments and suggestions on how to organise this round table.

## **B. Working Party on Agricultural Quality Standards (WP.7)**

*Informal document:* INF.4 (Secretariat)

11. WP.11 was informed about the recent work of WP.7 on the development of commercial agricultural quality standards and on the activities of WP.7 of interest to WP.11, including:

- Workshop on Sustainable Meat Markets, Cross-border Trade and Eating Quality, 10-11 August 2017, Dublin, Ireland;
- Workshop on Cross-Border Trade of Meat and Electronic Certification, 19-21 September 2017, Nanjing, Tianjin, China;
- Twenty-sixth session of the Specialized Section on Standardization of Meat (GE.11) 6 November 2017, Palais des Nations, Geneva, Switzerland;
- Seventy-third session of the Working Party on Agricultural Quality Standards (WP.7), 6-8 November 2017, Palais des Nations, Geneva, Switzerland.

Further information can be found at the following link:  
<http://www.unece.org/trade/agr/welcome.html>.

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

##### **A. International Institute of Refrigeration (IIR)**

*Informal document:* INF.3 (IIR)

12. WP.11 was informed about the results of the meeting of the IIR sub-commission on refrigerated transport held in Madrid, Spain 26-27 April 2017. The sub-commission had given its support for proposals to WP.11 including:

- Liquefied gas systems,
- Drop-in refrigerant,
- Modification of test reports 9 & 11,
- Modification of test report dates,
- Harmonisation of test reports,
- Multi-temperature dimensioning according to section 7.3 of ATP,
- Multi-temperature certification and marking,
- Proposal for fixed bulkheads.

##### **B. Transfrigoroute International**

*Informal document:* INF.11 (Transfrigoroute International)

13. The representative from Transfrigoroute International (TI) informed WP.11 about the activities of TI in support of the refrigerated transport industry as reflected in informal document INF.11.

14. The Working Party took note of the points raised in INF.11, especially the ones regarding the lack of regulation for national, inter-urban and urban journeys, vehicle emissions and use of refrigerants with low Global Warming Potential (GWP).

##### **C. Standardization organizations**

###### **Report on CEN activities**

15. WP.11 was informed about the status of work on the development and revision of standards.

###### **(i) CEN/TC 413 WG 2**

16. Experts from France, Italy, United Kingdom and Germany with informal participation of experts from other European Nations had several meetings and working group meetings during the last 12 months.

17. 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.

18. Following additional parts will be under consideration:

- Part 2: Eutectic Systems: The actual working draft is still under consideration for the final version, especially the test provisions for cooling capacities and consumption for new equipment's with eutectic systems as well equipment's in daily operation sequences.
- Part 3: Transport refrigeration systems with dry ice: Started to consider the requirements for dry ice refrigeration devices.
- Part 4: Controlled gas refrigeration systems with direct evaporation: This part of should be rejected because there is no market for those.
- Part 5: Controlled gas refrigeration systems with indirect evaporation
- An additional part 6: Special requirements on multi-temperature systems – is scheduled as a further project.

**(ii) CEN/TC 413 WG 1**

19. Experts from France, Finland, Italy, Slovak Republic, United Kingdom and Germany with informal participation of experts from other European Nations had started the project in December 2011 followed by several meetings and working group meetings during the year.

20. 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 to the external conditions. If certain temperatures have to be maintained, they could be additionally provided with a cooling and/or heating source. The actual decisions are taking into account inside temperatures between – 30°C and + 25°C and ambient conditions between -30°C and +43°C.

21. The standard is projected with different parts as:

- 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.
- 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.
- Part 3: Small containers for multiple use with an internal volume not more than 2 m<sup>3</sup>
- An additional part: Special requirements on multi-temperature systems – is scheduled as a further project.

22. The actual project will be taken into consideration during the next meeting end of November 2017 in Berlin.

**(iii) Revision of EN 12830**

23. Revision of the EN 12830:1999 – Temperature recorders for the transport, storage and distribution of chilled, frozen, deep-frozen/quick-frozen food and ice cream – Tests, performance, suitability. The CEN/TC 423 PC Means of measuring and/or recording temperature in the cold chain is working on the adoption of the standard to the actual state of art on the market. Several meetings were held with experts from France, Germany, Italy Spain and others interested nations. The revision should take into account actual technical developments and requirements. The scope of the revised standard should be increased to the temperature range from – 80 to + 85°C for temperature sensitive goods in the cold chain. The draft version was published for commenting in August 2016. The received comments were discussed and adopted during the last meeting in Munich in September 2017. Final draft should be published by end of this year for inquiry.

24. Concerning thermal maritime insulated refrigerated containers, two ISO standards are being developed:

- (i) ISO 1496 PART II ISO/TC104/ SC2/ WG1 -Specification and testing — Thermal containers, with final review and publishing scheduled for March 2018 and including:
  - New container, effectively a K value of 0.3W/M<sup>2</sup>/°C.
  - K value testing is now the same as ATP testing.
  - New annex H showing optional generator backup.
  - Revised new annex I on ageing showing the deterioration of the insulation over time.
- (ii) ISO 20854-1 ISO/TC 104/ SC 2/ WG1 - Flammable refrigerants — Thermal containers, with final review and publishing scheduled for 2019. This standard includes a differentiation between the treatment of hazardous zones inside and outside the container and a differentiation on the treatment of A3 and A2L refrigerants.

## **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**

25. There have been no new accessions to ATP since the last session and the number of Contracting Parties remains at 50.

### **B. Status of amendments**

26. The amendments to ATP adopted by WP.11 at its seventy-first session in 2015, and contained in Annex I to the report of that session (ECE/TRANS/WP.11/233), (depository notification C.N.135.2016.TREATIES-XI.B.22), are deemed accepted as of 6 July 2017 (depository notification C.N.401.2017.TREATIES-XI.B.22), for entry into force on 6 January 2018.



27. Proposed amendments and corrections to the ATP adopted at the seventy-second session of WP.11 in 2016 (ECE/TRANS/WP.11/235, Annexes I and II) were notified to ATP Contracting Parties by the United Nations Treaty Section on 8 February 2017 (C.N.58.2017.TREATIES-XI.B.22 and C.N.54.2017.TREATIES-XI.B.22, respectively). Corrections were deemed accepted on 15 May 2017 (C.N.267.2017.TREATIES-XI.B.22).

28. On 30 March 2017, the Government of Germany, in accordance with Article 18 (2) (b) of the ATP, informed the Secretary-General that although it intended to accept the proposals, the conditions for such acceptance were not yet fulfilled (C.N.159.2017.TREATIES-XI.B.22). As a consequence, the amendments adopted at the 2016 session of WP.11 will be deemed accepted only if, before the expiry of a period of nine months following the initial notification period of six months, the Government of Germany does not notify an objection to the proposed amendments.

29. WP.11 was informed that the usual practice of notifying amendments after each meeting could not continue. In the future, a new series of amendments could be notified only after the previous series of amendments had been deemed accepted. This is to avoid introducing mistakes in the legal text of ATP.

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

30. WP.11 took note of the updated list of officially designated competent authorities and test stations that could also be found at the following web link: <http://www.unece.org/trans/main/wp11/teststationsnew.html>.

31. WP.11 stressed that if there were any doubts about the authenticity of ATP certificates, it was imperative to contact the relevant competent authority.

32. Even if the Working Party recognised that the competent authority of each Contracting Party is the one in charge of designating and accrediting test stations, it was necessary to have objective and uniform criteria for the accreditation.

33. It was decided to include in the 2017 questionnaire a question regarding the criteria used in each contracting party for the accreditation of testing stations in order to have an overall view of the process and identify best practices. With this information and in the framework of the CERTE meeting, guidelines will be developed to harmonise tests reports and facilitate their mutual recognition.

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

*Documents:* ECE/TRANS/WP.11/2017/1(Secretariat)  
ECE/TRANS/WP.11/2017/2 (Secretariat)

34. At the last session, the WP.11 thanked the 22 countries that had provided data in response to the questionnaire on the implementation of ATP in 2015 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. WP.11 took note of the responses to the additional question regarding implementation of the ATP.

35. WP.11 requested the secretariat to send a letter to all contracting parties stating that it was necessary that all contracting parties fulfilled their obligation under article 6 of ATP of replying to the annual questionnaire sent by the secretariat.

36. It was also remarked that the number of countries participating in WP.11 sessions was relatively low compared to the total number of contracting parties. It was suggested the

use of teleconference (or other virtual meeting tool) in order to facilitate the participation of countries that cannot travel due to lack of resources.

37. The new model with suggested changes as presented in document ECE/TRANS/WP.11/2017/2 was adopted. The following question will be included in the 2017 questionnaire: “What are the criteria/requirements used to accredit testing stations in your country?”.

## **E. Exchange of good practices for better implementation of ATP**

*Document:* ECE/TRANS/WP.11/2017/12 (Transfrigoroute International)

38. It was clarified that the scope of the document was only prototypes that needed to be tested on the road for different climatic conditions. The Working Party agreed that these situations can occur and it was suggested the use of derogations or special permits to cover these prototypes.

39. Transfrigoroute International offer to present a revised proposal at the next session including the necessary amendments to ATP.

*Document:* ECE/TRANS/WP.11/2017/13 (Transfrigoroute International)

40. It was noted that testing of series of equipment is under the responsibility of the competent authority of the country of manufacture. Some countries stated that requiring compliance with ISO 9000 for audits was not enough and that specific provisions for audits should be included in the ATP. The representative of France reminded the Working Party that a document containing a list of checks to be done in these audits was presented at the seventy-second session and that might be used as a basis for a new proposal.

41. Transfrigoroute International may present a revised proposal at the next session including the necessary amendments to ATP.

*Document:* ECE/TRANS/WP.11/2017/14 (Transfrigoroute International)

42. It was agreed that in the case of similar engines, the test station that issued the test report for the original engine, should issue an official document stating the equivalence between the new and original engines.

43. The issuance of this official document will be fine-tuned in the framework of the CERTE meeting.

*Document:* ECE/TRANS/WP.11/2017/15 (Transfrigoroute International)

44. It was clarified that the ATP certificate issued by the competent authority in the country of manufacture when the vehicle was exported to another country, was already valid for 6 months as of 6 January 2018 and it was therefore not necessary to discuss this document.

45. The representative of Finland informed the Working Party of an upcoming proposal to modify the 150 km rule for maritime transport of perishable foodstuffs. In order to gather information on current practices, a questionnaire will be circulated among contracting parties in 2018.

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

### A. Pending proposals

#### 1. Annex 1, Appendix 2, Model No. 9 and 11

*Document:* ECE/TRANS/WP.11/2017/10 (United Kingdom)

46. It was mentioned that although the general approach of WP.11 was to avoid the use of national standards as reference, it was necessary to keep the reference to ASHRAE standard as is covering existing gaps in the current ISO standard. After this clarification, the document was adopted as amended to include Models No. 5 and 7 (see annex I).

#### 2. Annex 1, Appendix 2, Model Test Reports

*Document:* ECE/TRANS/WP.11/2017/11 (United Kingdom)

47. The document was adopted (see annex I)

#### 3. Method for calculating uncertainty in the measurement of the coefficient K

*Documents:* ECE/TRANS/WP.11/2017/16 (Russian Federation)  
Informal document INF.6 (Secretariat)

#### 4. Definitions of terms for Appendix 1 to ATP

*Document:* ECE/TRANS/WP.11/2017/17 (Russian Federation)

#### 5. Amendments to Article 3, paragraph 1, ATP

*Document:* ECE/TRANS/WP.11/2017/20 (Russian Federation)

48. It was remarked that the translation into English and French of documents ECE/TRANS/WP.11/2017/16, ECE/TRANS/WP.11/2017/17 and ECE/TRANS/WP.11/2017/20 was late or not available and was impossible for delegations to discuss the proposals of amendments with their national experts. It was therefore decided to postpone consideration of the proposals for the next session. Delegations were encouraged to send the documents by the deadline to avoid these issues in the future. The secretariat is also working with the Documentation Section to improve the process of submission and translation of documents.

49. The representative of the Russian Federation presented the documents to the Working Party seeking general comments and suggestions. The secretariat was also requested to add the documents in all three languages to the google drive (<https://drive.google.com/drive/folders/0B99gSeDXsPxIQkVZTWdaRThCbWM>) to allow WP.11 members to make comments and suggestions. A revised version of the documents taking into account all the comments made will be presented at the next session.

50. Regarding document ECE/TRANS/WP.11/2017/20, some countries were of the view that reopening the discussion regarding Article 3, paragraph 1, the so-called “150 km rule”, was not pertinent due to the fact that possible problems could be avoided or resolved with proper food controls.

51. It was also pointed out that millions of containers used for the transport of perishable goods are moving around the world and requiring ATP certification for these containers would be logistically impossible to achieve. In addition, ISO standards for maritime containers are moving closer to ATP provisions and therefore there was no need to expand the scope of ATP to cover these containers.

52. The representative of the Russian Federation clarified that the purpose of the document was to achieve mutual recognition of ISO and ATP certifications, as there was no practical need of re-certifying containers that had been already certified using either ISO standards or ATP.

**6. Requirements for the consideration of a change of refrigerant (to an alternative benign retrofit refrigerant) for an approved, vapour-compression refrigeration unit**

*Document:* ECE/TRANS/WP.11/2017/23 (Transfrigoroute International)

53. After a few clarifications regarding the uncertainty limits and the tests that needed to be done if there is a change in the refrigerant used, the document was adopted as amended (see annex I)

**B. New Proposals**

**1. Certificate of Conformity for new equipment to be transferred to the country of establishment operator**

*Documents:* ECE/TRANS/WP.11/2017/4 (Netherlands)  
Informal document INF.9 (Netherlands)

54. It was emphasised that the Competent Authority of the country of manufacture is the one responsible for the issuance of certificates of compliance. It was also clarified that the Competent Authority could designate a competent body/entity to issue these certificates.

55. The proposal was not adopted. As some delegations remarked that the transfer of equipment among countries should be simplified, the Working Party decided to create an informal working group organised by the representative of the Netherlands with the following mandate:

*Discuss and develop proposals for an approval and certification system for equipment that is as efficient as possible, reduce the effort to receive and maintain approval/certificates and secure compliance of equipment by justified supervision and market surveillance.*

*The working group shall report its findings and proposals to WP.11.*

56. An invitation to all WP.11 members will be sent by the organizer of the informal working group.

**2. Methodology for the approval of a liquefied gas-refrigerating unit separately from the transport vehicle**

*Documents:* ECE/TRANS/WP.11/2017/5 and Corr.1 (France and the Netherlands)

57. After a few clarifications, the document was adopted as corrected in Corr.1 (see annex I).

**3. Proposal for additional requirements for the measurement of the K-coefficient of fixed bulkheads for multi-compartment equipment**

*Document:* ECE/TRANS/WP.11/2017/7 (France)

58. It was pointed out that the proposal had not taken into account the possible partial loss through the walls of the body for the compartment under consideration, resulting in lower thermal flow and lower K value, and that the methodology for calculating the K coefficient was not clearly developed.

59. The representative of the Russian Federation remarked that the translation of the document into Russian was poor which resulted in a number of technical errors, making it impossible for the Russian Federation to have a clear position on the proposed amendments. The secretariat was requested to reissue the document improving the translation into Russian.

60. The representative of France agreed to present a revised proposal at the next session taking into account comments made during the discussion.

**4. Proposal for the addition to Annex 1, appendix 2, paragraph 6.2, of a procedure for testing the effectiveness of multi-temperature mechanically refrigerated equipment in service**

*Documents:* ECE/TRANS/WP.11/2017/8 and Corr.1 (France)

The document was adopted as corrected in Corr.1 (see annex I).

61. The Working Party requested the French delegation to present a proposal for inclusion in the ATP Handbook at the next session, containing clarifications/explanations on the adopted procedure to facilitate its application.

**5. Annex 1, Appendix 2, 2.1.8, 2.2.9, 3.1.4, 3.2.3 and 3.3.4**

*Document:* ECE/TRANS/WP.11/2017/9 (United Kingdom)

62. Proposal contained in option 2 was adopted (see annex I)

63. Discussion on the proposals made in documents ECE/TRANS/WP.11/2017/18, ECE/TRANS/WP.11/2017/19 and ECE/TRANS/WP.11/2017/22, was postponed for the next session due to the reasons already explained in paragraphs 47 and 48 of the present report.

**6. Taking into account the uncertainty in the measurement of the coefficient K in its final value and the correction of a typo**

*Document:* (ECE/TRANS/WP.11/2017/18) (Russian Federation)

64. Part of the proposal concerning a typo in the Russian language version of ATP was adopted (see annex II).

**7. Taking into account of the power performance of the circulator fan**

*Document:* (ECE/TRANS/WP.11/2017/19) (Russian Federation)

**8. Editorial correction to ATP on wheel arches**

*Document:* (ECE/TRANS/WP.11/2017/21) (Russian Federation)

65. Proposal to correct a typo in the Russian language version of ATP was adopted (see annex II).

**9. Proposal of amendment to ATP to assign, at the stage of approving new equipment, a class to insulated equipment, refrigerated equipment, heated equipment and refrigerated and heated equipment**

*Document:* (ECE/TRANS/WP.11/2017/22) (Russian Federation)

**10. Corrigendum to ATP**

*Document:* Informal document INF.7 (Secretariat)

66. The document was adopted (see annex II).

**11. Proposal to amend annex 1, appendices 2 and 4: Multi-temperature equipment – certification and distinguishing mark**

*Documents:* ECE/TRANS/WP.11/2017/6 (France)  
Informal documents INF.8 (Netherlands) and INF.13 (France)

67. After several concerns expressed by the Working Party were addressed in a new proposal contained in informal document INF.13, the document as amended was adopted (see annex I).

68. It was decided to delete the reference to the calculation tool from Transfrigoroute International as several tools can be used for the same purpose and it would be cumbersome to list all of them in the ATP Handbook.

**12. Proposals on improving decision making and voting rules**

*Documents:* ECE/TRANS/WP.11/2015/10 (Belgium)  
ECE/TRANS/WP.11/2014/7 (Secretariat)  
Informal documents INF.10 (Netherlands)

69. It was decided to organise an informal working group led by the representative of Luxembourg with the following mandate:

*Identify and discuss topics that need attention to keep the ATP up to date.*

*Identify and discuss ways to further improve the functioning and effectiveness of WP.11.*

*Elaborate draft documents for discussion at a round table at the beginning of the seventy-fourth session of WP.11.*

*The documents shall be distributed by the secretariat. The deadline for submission of official documents shall be respected to allow for translation in the three official languages.*

70. An invitation to all WP.11 members will be sent by the organizer of the informal working group. Denmark, France, Italy, Luxembourg, Netherlands and Portugal expressed their intention to participate.

71. Other ways to increase the number of draft amendments adopted were identified as follows:

- (a) Authors of proposals should take the responsibility of negotiating with other contracting parties before finalising the proposals;
- (b) CERTE group might be given the mandate to act as an informal group to evaluate highly technical proposals;
- (c) Other informal groups might be created to deal with specific subjects;
- (d) Creation of an editorial committee to check documents for terminology and contents. The committee may also advice on the layout and length of the proposals.

## VII. ATP Handbook (agenda item 6)

### 1. Method for calculating uncertainty in the measurement of the coefficient K

*Document:* (ECE/TRANS/WP.11/2017/16) (Russian Federation)

72. Discussion on the proposal made in documents ECE/TRANS/WP.11/2017/16, was postponed for the next session due to the reasons already explained in paragraphs 47 and 48 of the present report.

## VIII. Scope of ATP (agenda item 7)

73. 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 <https://www.unece.org/index.php?id=45830>.

## IX. Energy labelling, refrigerants and blowing agents (agenda item 8)

74. The vice-chair recalled that regulations concerning F-Gas will imply an important phase down in Europe during 2018 (around 40% of the allocated quota) and it will require the Working Party to establish procedures for changes on the certificate of compliance due to refrigerant changes. This regulation will also have an impact worldwide.

## X. Programme of work and biennial evaluation (agenda item 9)

*Document:* ECE/TRANS/WP.11/2017/3 (Secretariat)

75. WP.11 adopted its performance assessment and lessons learned/areas needing improvement with the following changes:

Paragraph 7 should read as follows:

“7. At its seventy-second session in 2016, WP.11 adopted a total of 1 proposed amendment to the ATP which appear in annex I to the report of the session, ECE/TRANS/WP.11/235. The amendment can be considered editorial. The number of non-editorial amendments adopted during the biennium exceeded the 60% target (see annex I). WP.11 decided to keep this indicator of achievement at 60% as a target for the next biennium.”.

Paragraph 10 should read as follows:

“10. The target number of replies to the questionnaire on the implementation of the ATP was not met and it is therefore recommended that the target be kept for the next biennium. Some countries stated that they were not able to provide the data required because of their administrative structures. The Working Party is looking for ways of increasing the number of countries replying to the questionnaire.”.

76. WP.11 adopted its draft programme of work for 2018-2019 (see annex IV) as proposed.

77. WP.11 adopted its proposed evaluation for the 2018-2019 biennium (see annex V).

## **XI. Election of officers (agenda item 10)**

78. WP.11 elected Mr. Telmo Nobre (Portugal) as Chairman and Mr. Eric Devin (France) and Mr. Kees de Putter (Netherlands) as Vice-Chairmen for its seventy-fourth session in 2018. WP.11 thanked the officers and the secretariat for their work.

## **XII. Other business (agenda item 11)**

### **1. Dates of the seventy-fourth session**

79. The dates of 8-12 October 2018 (Tuesday to Friday) have been reserved for the seventy-fourth session of WP.11. The deadline for submission of documents is 17 July 2018.

### **2. Changes in the secretariat**

80. The Working Party noted that Ms. Olga Algayerova from Slovakia had been nominated by the Secretary-General as Executive Secretary of the Economic Commission for Europe, and that she had replaced Mr. Christian Fris Bach from 1 June 2017. The Working Party wished both of them all success in their new endeavours.

81. The Director of the Sustainable Transport Division, Ms Eva Molnar, retired on 30 June 2017 and her post was currently vacant pending the completion of the temporary replacement procedure and recruitment process. The Working Party thanked Ms. Molnar for her support over the past ten years and wished her a long and happy retirement.

82. The Working Party noted also that the chief of the Dangerous Goods and Special Cargoes section, will reach the mandatory age of retirement of 62 in November 2017. All delegations thanked Mr. Kervella for his lasting contributions to the work of WP.11 and wished him a long and happy retirement.

### **3. Tributes**

83. The Working Party was informed that Mr. Mosquera (Spain) retired in June 2017. WP.11 thanked Mr. Mosquera for his long-lasting contribution to the carriage of perishable foodstuff and wished him a long and happy retirement.

### **4. Changes to the Rules of Procedure of WP.11**

*Document:* Informal document INF.12 (Secretariat)

84. After some clarifications, the Working Party decided to modify Rule 35 of the Rules of Procedure of WP.11 to read as follows:

#### **“Rule 35**

- (a) Decisions concerning amendments to ATP shall be taken only in the presence of at least one third of the Contracting Parties. They shall chiefly be taken by consensus but in the absence of consensus, then by a majority of the full participants present and voting, provided that there are no more than three votes against the proposal;
- (b) Decisions concerning amendments to the ATP Handbook shall chiefly be taken by consensus but in the absence of consensus, then by a majority vote in favour, provided that there are no more than three votes against the proposal;
- (c) All other decisions shall chiefly be taken by consensus but in the absence of consensus, decisions shall be taken by a majority of the full participants present and voting.”.



**XIII. Adoption of the report (agenda item 12)**

85. The WP.11 is expected to adopt the report on its seventy-third session based on a draft prepared by the secretariat.

## Annex I

### Proposed amendments to the ATP

#### Proposal of amendment 1

1. **Annex 1, appendix 2, Model Nos., 5, 7, 9 and 11**

Under “Refrigerant Charge”, Replace “Refrigerant fluid: Nature” by “Refrigerant fluid: (ISO/ ASHRAE designation)<sup>a)</sup>”.

The footnote will read:

“<sup>a)</sup> If existing”

(Reference document: ECE/TRANS/WP.11/2017/10, as amended)

#### Proposal of amendment 2

2. **Annex 1, appendix 2, Model Test Reports 2 A, 2 B, 3, 4 A, 4 B, 4 C, 5, 6, 7, 8, 9, 10 and 11**

Replace “Done at: .....  
on .....

Testing Officer”

by “Done at: .....  
Date of test report .....

Testing Officer”.

(Reference document: ECE/TRANS/WP.11/2017/11)

#### Proposal of amendment 3

3. **Annex 1, appendix 2, section 4**

Add a new section 4.5 to read as follows:

“4.5 Procedure for testing mechanically refrigeration units if there is a change of refrigerants

##### 4.5.1 General principles

The test is in line with the procedure described in section 4, paragraphs 4.1 to 4.4 and based on a complete test of the refrigeration unit with one refrigerant, the reference refrigerant.

The refrigeration unit, its refrigeration circuit and the components of the refrigeration circuit shall not be different when using replacement refrigerants. Only very limited modifications are permitted that are:

- Modification and change of expansion device (type, setting);
- Exchange of the lubricant;
- Exchange of gaskets.

Making it a retrofit refrigerant, a replacement refrigerant must have thermo-physical and chemical properties similar to the reference refrigerant and shall result in a similar behaviour in the refrigeration circuit especially in terms of refrigerating capacities.

#### 4.5.2 Test procedure

Due to the similar behaviour of the retrofit and the reference refrigerants the number of tests necessary for a type approval can be reduced. In terms of refrigerating capacity the retrofit refrigerants must comply with a criterion of equivalence which allows an at maximum 10 % lower refrigerating capacity for the retrofit refrigerant when compared with the approved reference refrigerant.

The criterion of equivalence is defined by the formula:

$$\frac{Q_{retrof}-Q_{ref}}{Q_{ref}} \geq -0,10 \quad (1)$$

where:

$Q_{ref}$  is the refrigerating capacity of the unit tested with the reference refrigerant,

$Q_{retrof}$  is the refrigerating capacity of the unit tested with the retrofit refrigerant,

The number of tests and the evaluation of the retrofit refrigerants is based on the differences in test results when compared with the reference refrigerant. At least a test at the lowest and at the highest temperature of the respective temperature class in the mode of drive with the highest refrigerating capacities has to be carried out.

In the case of a range of refrigeration units the test program may be further reduced according to paragraph 4.5.3.

Dependent on the results of these tests further measurements may be necessary. Distinctions are made for the following cases:

- **Strict equivalence:** is the case when the difference between the refrigerating capacities of the retrofit refrigerant is lower than or equal to 10 % less at all tested temperatures of the respective temperature class when compared to the reference refrigerant. In the case of higher or up to 5 % lower refrigerating capacities, the refrigerating capacities of the reference refrigerant can be kept in the test report of the retrofit refrigerant. In the case of more than 5 % lower refrigerating capacities, the refrigerating capacities of the retrofit refrigerant may be calculated based on the test results.
- **Restricted equivalence:** is the case when at least at one tested temperature of the respective temperature class the difference between the refrigerating capacities of the retrofit refrigerant is less than or equal to 10 % lower when compared to the reference refrigerant. In this case a further measurement at an intermediate temperature as specified by the manufacturer is necessary in order to confirm the tendency of the deviation and to calculate the refrigerating capacities of the retrofit refrigerant based on the test results.

If the power consumption tested with the retrofit refrigerant deviates from the results obtained with the reference refrigerant, the data of power consumption shall be adjusted according to the measured values by means of calculation, as well in case of strict as in case of restricted equivalence.

#### 4.5.3 Test procedure for a range of refrigeration units

A range of refrigeration units describes a model range of a specific type of refrigeration units of different sizes and different refrigerating capacities but with the same setup of refrigeration circuit and same type of components of the refrigeration circuit.

In case of a range of refrigeration units a further reduction of tests is possible.

If at least two refrigeration units of the range including the units with the smallest and the highest refrigerating capacities tested with the retrofit refrigerant have been proven by the test procedure described in 4.5.2 to be equivalent to the results of the approved reference refrigerant, test reports for all other units of this range of refrigeration units may be established by calculating the refrigerating capacities based on the test reports of the refrigerating units operating with the reference refrigerant and based on this limited number of tests with the retrofit refrigerant.

The conformity of the tested refrigeration units and each other regarded refrigeration unit with the range of refrigeration units has to be confirmed by the manufacturer. In addition, the competent authority shall take adequate measures to verify that each regarded unit is in conformity to this range of refrigeration units.

#### 4.5.4 Test report

An addendum containing both, the test results of the retrofit refrigerant and the approved reference refrigerant, shall be added to the test report of the refrigeration unit operated by a retrofit refrigerant. All modifications of the refrigerating unit according to 4.5.1 have to be documented in this addendum.

In case the refrigerating capacities and maybe also the power consumption of the refrigeration unit containing the retrofit refrigerant have been established by calculation, the procedure of calculation has to be described in this addendum too.”.

*(Reference document: ECE/TRANS/WP.11/2017/23 as amended)*

### **Proposal of amendment 4**

#### **4. Annex 1, Appendix 2**

Add the following new paragraphs:

“3.1.7 If a refrigerating appliance of paragraph 3.1.3 (c) with all its accessories has undergone separately, to the satisfaction of the competent authority, the test in section 9 of this appendix to determine its effective refrigerating capacity at the prescribed reference temperatures, the transport equipment may be accepted as refrigerated equipment without undergoing an efficiency test if the effective refrigerating capacity of the appliance in continuous operation exceeds the heat loss through the walls for the class under consideration, multiplied by the factor 1,75.

3.1.8 If the refrigerating appliance is replaced by a unit of a different type, the competent authority may:

- (a) Require the equipment to undergo the determinations and verifications prescribed in paragraphs 3.1.3 to 3.1.5; or
- (b) Satisfy itself that the effective refrigerating capacity of the new refrigerating appliance is, at the temperature prescribed for equipment of the class concerned, at least equal to that of the unit replaced; or
- (c) Satisfy itself that the effective refrigerating capacity of the new refrigerating appliance meets the requirements of paragraph 3.1.7.

3.1.9 A refrigerating unit working with liquefied gas is regarded as being of the same type as the unit tested if:

- The same refrigerant is used;
- The evaporator has the same capacity;
- The regulation system has the same characteristics;

- The liquefied gas tank has the same design and its capacity is equal or upper to the capacity stated in the test report;

The diameters and the technology of the supply lines are identical.”.

(Reference document: ECE/TRANS/WP.11/2017/5)

## 5. Annex 1, Appendix 2

Add a new section 9 to read as follows:

### “9. PROCEDURE FOR MEASURING THE CAPACITY OF LIQUEFIED GAS UNITS AND DIMENSIONING THE EQUIPMENT THAT USES THESE UNITS

#### 9.1 Definitions

- A liquefied gas unit is composed of a tank containing liquefied gas, a regulating system, an interconnection system, a muffler if applicable and one or more evaporator;
- Primary evaporator: any minimal structure comprising a liquefied gas unit intended to absorb thermal capacity in an insulated compartment;
- Evaporator: any composition made up of primary evaporators located in an insulated compartment;
- Maximum nominal evaporator: any composition made up of primary evaporators located in one or more insulated compartments;
- Mono-temperature liquefied gas unit: liquefied gas unit made up of a liquefied gas tank connected to a single evaporator for regulating the temperature of a single insulated compartment;
- Multi-temperature liquefied gas unit : liquefied gas unit made up of a liquefied gas tank connected to at least two evaporators, each regulating the temperature of a single, distinct insulated compartment in the same multi-compartment equipment;
- Mono-temperature operation: operation of a mono- or multi-temperature liquefied gas unit in which a single evaporator is activated and maintains a single compartment in mono-compartment or multi-compartment equipment;
- Multi-temperature operation: operation of a multi-temperature liquefied gas unit with two or more activated evaporators that maintain two different temperatures in insulated compartments in multi-compartment equipment;
- Maximum nominal refrigerating capacity ( $P_{max-nom}$ ): the maximum specified refrigerating capacity set by the manufacturer of the liquefied gas unit;
- Nominal installed refrigeration capacity ( $P_{nom-ins}$ ): the maximum refrigeration capacity within the maximum nominal refrigerating capacity that can be provided by a given configuration of evaporators in a liquefied gas unit;
- Individual refrigerating capacity ( $P_{ind-evap}$ ): the maximum refrigerating capacity generated by each evaporator when the liquefied gas unit is operating as a mono-temperature unit;
- Effective refrigerating capacity ( $P_{eff-frozen-evap}$ ): the refrigerating capacity available to the lowest temperature evaporator when the liquefied gas unit is operating as described in paragraph 9.2.4.

## 9.2 Test procedure for liquefied gas units

### 9.2.1 General procedure

The test procedure shall be as specified in annex 1, appendix 2, section 4, of ATP, taking account of the following particularities.

The tests shall be conducted for the different primary evaporators. Each primary evaporator shall be tested on a separate calorimeter, if applicable, and placed in a temperature-controlled test cell.

For mono-temperature liquefied gas units, only the refrigeration capacity of the regulating unit with the maximum nominal capacity evaporator will be measured. A third temperature level is added in accordance with annex 1, appendix 2, para. 4 of ATP.

For multi-temperature liquefied gas units, the individual refrigerating capacity shall be measured for all primary evaporators, each operating in mono-temperature mode as specified in paragraph 9.2.3.

The refrigerating capacities are determined by using a liquefied gas tank provided by the manufacturer that allows a complete test to be carried out without intermediate refilling.

All the elements of the liquefied gas refrigeration unit shall be placed in a thermostatic enclosure maintained at an ambient temperature of  $30 \pm 0.5$  °C.

For each test, the following shall also be recorded:

The flow, temperature and pressure of the liquefied gas emerging from the tank in use;

The voltage, electrical current and total electrical consumption absorbed by the liquefied gas unit (i.e. fan...).

The gas flow is equal to the mean mass consumption of fluid throughout the test in question.

Except when determining the liquefied gas flow, each quantity shall be physically captured for a fixed period equal to or less than 10 seconds and each quantity shall be recorded for a fixed maximum period of 2 minutes, subject to the following:

Each temperature recorded at the air intake of the ventilated evaporator or each air temperature recorded inside the body of the non-ventilated evaporator shall comply with the expected class temperature  $\pm 1$  K.

If the electrical components of the liquefied gas unit can be fed by more than one electrical power supply, the tests shall be repeated accordingly.

If the tests show equivalent maximum nominal refrigerating capacities, regardless of the operating mode of the liquefied gas refrigeration unit, then the tests may be restricted to a single electrical power supply mode, taking into account the potential impact on the air flow expelled by the evaporators, where applicable. Equivalence is demonstrated if:

$$\frac{2 * |P_{nom-max,1} - P_{nom-max,2}|}{P_{nom-max,1} + P_{nom-max,2}} \leq 0,035$$

Where:

$P_{nom-max,1}^{\square}$  : The maximum nominal capacity of the liquefied gas unit for a given electrical power supply mode,

$P_{nom-max,2}^{\square}$  : The second maximum nominal capacity of the liquefied gas unit for a different electrical power supply mode.

### 9.2.2 Determination of the maximum nominal refrigerating capacity of the liquefied gas unit

The test shall be conducted at reference temperatures of -20 °C and 0 °C.

The nominal refrigerating capacity at -10 °C shall be calculated by linear interpolation of the capacities at -20 °C and 0 °C.

The maximum nominal refrigerating capacity of the regulating unit in mono-temperature operation shall be measured with the maximum nominal evaporator offered by the manufacturer. This evaporator is formed of the primary refrigeration evaporator(s).

The test shall be conducted with the unit operating at a single reference temperature, corresponding to the temperature of the air intake in the case of ventilated evaporators or the temperature of the air inside the body in the case of non-ventilated evaporators.

The maximum nominal refrigerating capacity shall be estimated at each level of temperature as follows:

A first test shall be carried out, for at least four hours, under control of the thermostat (of the refrigeration unit) to stabilize the heat transfer between the interior and exterior of the calorimeter box.

After re-filling of the tank (if needed), a second test shall be carried out for at least three hours for the measurement of the maximum nominal refrigerating capacity in which:

- (a) The set point of the liquefied gas unit shall be set to the chosen test temperature with a set point shift if necessary, in accordance with the instructions of the test sponsor;
- (b) The electrical power dissipated in the calorimeter box shall be adjusted throughout the test to ensure that the reference temperature remains constant.

The refrigerating capacity drift during this second test shall be lower than a rolling average of 5 % per hour and shall not exceed 10 % during the course of the test. If this is the case, the refrigeration capacity obtained corresponds to the minimum refrigeration capacity recorded during the course of the test.

Only for the measurement of the maximum nominal refrigerating capacity of the liquefied gas unit, a single additional test of one hour shall be conducted with the smallest tank sold with the unit to quantify the impact of its volume on the regulation of the refrigerating capacity. The new refrigerating capacity obtained shall not vary by more than 5 % from the lower value or compared to the value found with the tank used for the tests of three hours or more. Where the impact is greater, a restriction on the volume of the tank shall be included in the official test report.

### 9.2.3 Determination of the individual refrigerating capacity of each primary evaporator of a liquefied gas unit

The individual refrigerating capacity of each primary evaporator shall be measured in mono-temperature operation. The test shall be conducted at -20 C and 0 °C, as prescribed in paragraph 9.2.2.

The individual refrigerating capacity at -10 °C shall be calculated by linear interpolation of the capacities at -20 °C and 0 °C.

### 9.2.4 Determination of the remaining effective refrigerating capacity of a liquefied gas unit in multi-temperature operation at a reference heat load

Determination of the remaining effective capacity of a liquefied gas refrigeration unit requires the simultaneous use of two or three evaporators, as follows:

- For a two-compartment unit, the evaporators with the highest and lowest individual refrigerating capacities;
- For a unit with three or more compartments, the same evaporators as above and as many others as needed, with intermediate refrigerating capacity.

Setting of the reference heat load:

- The set points of all but one of the evaporators shall be set in such a way as to obtain an air intake temperature, or, if not applicable, an air temperature inside the body, of 0 °C;
- A heat load shall be applied to each calorimeter/ evaporator pair under control of the thermostat, except the one not selected;
- The heat load shall be equal to 20 % of the individual refrigerating capacity at -20 °C of each evaporator.

The effective capacity of the remaining evaporator shall be determined at an air intake temperature, or, if not applicable, an air temperature inside the body, of -20 °C.

Once the effective capacity of the remaining evaporator has been determined, the test shall be repeated after conducting a circular permutation of the temperature classes.

### **9.3 Refrigerating capacity of evaporators**

Refrigeration evaporators can be created on the basis of refrigeration capacity tests carried out on primary evaporators. The refrigeration capacity and liquefied gas consumption of the evaporators equal the arithmetic sum of the refrigeration capacity and of the liquefied gas consumption, respectively, of the primary evaporators within the limit of the maximum nominal refrigerating capacity and of the associated flow of liquefied gas.

### **9.4 Dimensioning and certification of refrigerated multi-temperature liquefied gas equipment**

The dimensioning and certification of refrigerated equipment using liquefied gas refrigeration units shall be carried out as prescribed in section 3.2.6 for mono-temperature equipment, with the following capacity equivalents:

$$P_{\text{nom-ins}} = P_{\text{eff}} \text{ (effective refrigerating capacity)}$$

or section 7.3 for multi-temperature refrigerating equipment, with the following capacity equivalents :

$$P_{\text{max-nom}} = P_{\text{nominal}}$$

In addition, the usable volume of liquefied gas tanks shall be such as to permit the liquefied gas unit to maintain the temperature for that class of equipment for a minimum of 12 hours.”.

*(Reference document: ECE/TRANS/WP.11/2017/5 as corrected by ECE/TRANS/WP.11/2017/5/Corr.1)*



**6. Annex 1, Appendix 2**

Add a new test report model to read as follows:

**“Model No. 13**

**TEST REPORT**

Prepared in conformity with the special provisions of the Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be used for such carriage (ATP)

Test Report No.....

Determination of the effective refrigeration capacity of a refrigeration unit in accordance with section 9 of ATP Annex 1, Appendix 2

Tests carried out from mm/dd/yyyy to mm/dd/yyyy

Approved testing station

Name: .....

Address: .....

Refrigerating unit presented by: .....

[(a declaration by the manufacturer shall be provided if the applicant is not the manufacturer)]

(a) Technical specifications of the unit:

- Make/Brand :
- Type designation :
- Type of liquefied gas :
- Serial number :

Date of manufacture (month/year):(The tested unit shall not have been built more than 1 year prior to ATP tests.)

Description:

.....  
 .....  
 .....

Regulating valve (if different types of fans are used repeat information below for each type)

- Make/Brand :
- Type :
- Serial number :

Tank (if different types of fans are used repeat information below for each type)

- Make/Brand :
- Type :
- Serial number:
- Capacity [l] :
- Gas pressure at tank outlet :
- Method of insulation :
- Material of inner tank :
- Material of outer tank :

Supply of liquefied gas : (internal pressure, pressure by heat exchanger, pump)<sup>1</sup>

Pressure regulator

Make/Brand :  
Type :  
Serial number :  
Gas pressure at pressure outlet :

Supply liquefied gas line (on the test bench)

Diameter :  
Length :  
Material :  
Number of connections :

Defrosting device (Electric / Combustion unit)<sup>1</sup>

Make/Brand :  
Type :  
Supply :  
Declared heating capacity :

Regulator

Make/Brand :  
Type :  
Hardware version :  
Software version :  
Serial number :  
Power supply :

Possibility for Multi-temperature operation : (yes/no)<sup>1</sup>

Number of compartments able to work in multi-temperatures:

**HEAT EXCHANGERS**

		<i>Condenser</i>	<i>Evaporator</i>
Make-Type			
Number of circuits			
Number of rows			
Number of blankets			
Number of tubes			
Fin pitch [mm]			
Tube : nature and diameter [mm]			
Total exchange surface [m <sup>2</sup> ]			
Face area [m <sup>2</sup> ]			
FANS	Make-Type		
	Number		
	Blade per fan		
	Diameter [mm]		
	Power [W]		
	Nominal speed [rpm]		
	Total nominal output airflow [m <sup>3</sup> /h] at a pressure of 0 Pa		
	Method of drive (Description direct current / alternative, frequency, etc.)		

(b) Test method and results:

Test method<sup>1</sup>: Heat balance method/enthalpy difference method

In a calorimeter box of mean surface area of = ..... m<sup>2</sup>

Measured value of the U-value of the calorimeter box fitted with the liquefied gas unit: ..... W/°C,

At a mean wall temperature: ..... °C.

In a transport equipment

Measured value of the U-value of the transport equipment fitted with the liquefied gas unit: ..... W/ °C,

At a mean wall temperature: ..... °C.

The formula employed for the correction of the U-value of the calorimeter box as a function of the mean wall temperature is:

.....  
 .....

Maximum errors of determination of:

U-value of the body: .....

Refrigerating capacity of the liquefied gas unit: .....

Mean air temperature at the tank outside: ..... °C								
Electric power supply: .....								
Liquefied gas consumption	Electrical consumption	Pressure at the tank outlet	Temperature of the liquid at the evaporator	External temperature	Internal temperature	Heating power	Evaporator air intake temperature	Useful refrigerating capacity
[kg/h]	[Vdc] and [A]	[bar abs]	[°C]	[°C]	[°C]	[W]	[°C]	[W]

Corrected cooling capacity [W]:

(c) Checks:

Temperature regulator: Setting ..... °C  
 Differential ..... °C

Functioning of the defrosting device<sup>1</sup>: satisfactory / unsatisfactory

Airflow volume leaving the evaporator:

Value measured: ..... m<sup>3</sup>/h  
 At a pressure of ..... Pa  
 At a temperature of ..... °C  
 At a rotation speed of ..... tr/min.

Minimum capacity tank: .....

(d) Remarks

.....  
 .....  
 .....

This test report is valid for a maximum duration of six years after the date of the end of the tests.

Done at: .....

On: .....

Testing officer

.....

<sup>1</sup> Delete where applicable.

<sup>2</sup> Value indicated by the manufacturer”.

(Reference document: ECE/TRANS/WP.11/2017/5)

## **Proposal of amendment 5**

### **7. Annex 1, appendix 2**

In paragraph 6.2, add a new subparagraph (iii) to read as follows and renumber existing subparagraphs (iii) and (iv) accordingly:

“(iii) Multi-compartment equipment

The test prescribed in (i) shall be conducted simultaneously for all compartments. During the tests, if the dividing walls are movable, they shall be positioned such that the volumes of the compartments correspond with the maximum refrigeration demand.

Measurements shall be taken until the warmest temperature measured by one of the two sensors located inside each compartment matches the class temperature.

For multi-compartment equipment whose compartment temperatures may be modified, a supplementary reversibility test shall then be conducted:

The temperatures of the compartments shall be selected in such a way that adjacent compartments are, to the extent possible, at different temperatures during the test. Certain compartments shall be brought to the class temperature (-20 °C) while others shall be at 0 °C. Once such temperatures are reached, the temperature settings shall be reversed for each compartment, thus bringing the compartments that were at 0 °C to -20 °C and those that were at -20 °C to 0 °C.

It is verified that compartments at 0 °C have a correct temperature regulation at 0 °C ± 3 °C for at least 10 minutes when the other compartments are at -20 °C. Subsequently, the settings for each of the compartments shall be reversed and the same verifications shall be conducted.

In the case of equipment fitted with a heating function, the tests shall begin after the efficiency test when the temperature is -20 °C. Without opening doors, the compartments whose settings had been set at 0 °C shall be warmed, while the other compartments are kept at a temperature of -20 °C. When the control criterion is met, the compartments' settings shall be reversed. There shall be no time limit to carry out these tests.

In the case of equipment without a heating function, it shall be permitted to open the doors of the compartments to expedite the temperature rise of the compartments in question.

The equipment shall be considered compliant if:

- For each compartment, the class temperature has been reached within the time limit shown in the table in (i). To define this time limit, the lowest (coldest) mean outside temperature shall be selected from the two sets of measurements taken with the two outside sensors; and

The additional tests mentioned in (iii), when required, are satisfactory.”.

*(Reference document: ECE/TRANS/WP.11/2017/8 as corrected by ECE/TRANS/WP.11/2017/8/Corr.1)*

### **Proposal of amendment 6**

**8. Annex 1, appendix 2, paragraphs 2.1.8, 2.2.9, 3.1.4, 3.2.3 and 3.3.4**

Amend to read as follows:

“The mean outside temperature and the mean inside temperature of the body shall each be read at least every 5 minutes.”.

*(Reference document: ECE/TRANS/WP.11/2017/9, proposal 2)*

### **Proposal of amendment 7**

**9. Annex 1, appendix 4**

Add the following text after the table:

"In the case of multi-compartment road equipment divided in two compartments the equipment mark shall consist in the distinguishing marks of each compartment (example: FRC-FRA) starting with the compartment located at the front or on the left side of the equipment;

In the case of other multi-compartment equipment the distinguishing mark shall be selected only for the highest ATP class, i.e. the class that permits the highest difference between inside and outside temperatures, and supplemented by the letter M (example: FRC-M).

This marking is mandatory for all equipment, which is built from 1 October 2020."

*(Reference documents: ECE/TRANS/WP.11/2017/6 and informal documents INF.8 and INF.13, as amended)*

**10. Annex 1, appendix 2**

Add the following text after the present text of 7.3.6:

"A declaration of conformity shall be provided in a supplementary document to the certificate of compliance issued by the competent authority of the country of manufacture. The document shall be based on information given by the manufacturer.

This document shall include at least:

- A sketch showing the actual compartment configuration and evaporator arrangement;
- Proof by calculation that the multi-compartment equipment meets the requirements of ATP for the user's intended degree of freedom with regards to compartment temperatures and compartment dimensions."

*(Reference documents: ECE/TRANS/WP.11/2017/6 and informal documents INF.8 and INF.13, as amended)*

## Annex II

### Corrections to the ATP

**1. Annex 1, appendix 2, paragraph 1.2**

In the Russian text of the ATP, replace ““*надколенные дуги*” (*nadkolyennye dugy*)” by “*колесные арки*” (*kolyesnye arki*)”. The correction does not apply to the English or French text.

(Reference document: ECE/TRANS/WP.11/2017/21)

**2. Annex 1, appendix 2, paragraph 2.3.1**

In the Russian text of the ATP, replace “is not below” by “is below”. The correction does not apply to the English or French text.

(Reference document: ECE/TRANS/WP.11/2017/18)

**3. Annex 1, appendix 2, paragraph 2.1.4**

For  $25\text{ °C} \pm 2\text{ K}$  read  $25\text{ °C} \pm 2\text{ °C}$

(Reference document: Informal document INF.7)

**4. Annex 1, appendix 2, paragraph 2.1.4**

For  $+20\text{ °C} \pm 0.5\text{ K}$  read  $+20\text{ °C} \pm 0.5\text{ °C}$

(Reference document: Informal document INF.7)

**5. Annex 1, appendix 2, paragraph 2.2.5**

For  $25\text{ °C} \pm 2\text{ K}$  read  $25\text{ °C} \pm 2\text{ °C}$

(Reference document: Informal document INF.7)

**6. Annex 1, appendix 2, paragraph 2.2.5**

For  $20\text{ °C} \pm 0.5\text{ K}$  read  $20\text{ °C} \pm 0.5\text{ °C}$

(Reference document: Informal document INF.7)

**7. Annex 1, appendix 2, paragraph 3.1.1**

For  $\pm 0.5\text{ K}$ , at  $+30\text{ °C}$  read  $\pm 0.5\text{ °C}$ , at  $+30\text{ °C}$

(Reference document: Informal document INF.7)

**8. Annex 1, appendix 2, paragraph 4.2.3 (i)**

For  $30\text{ °C} \pm 0.5\text{ K}$  read  $30\text{ °C} \pm 0.5\text{ °C}$

(Reference document: Informal document INF.7)

**9. Annex 1, appendix 2, paragraph 4.3.1 (a)**

For  $30\text{ °C} \pm 3\text{ K}$  read  $30\text{ °C} \pm 3\text{ °C}$

(Reference document: Informal document INF.7)

## **Annex III**

### **Additions to the ATP Handbook**

#### **1. Annex 1, appendix 2**

Add the following comment to paragraph 7.3.6:

*“Calculations in conformity with item 7.3.6 can be carried out using a calculation tool approved by the competent authority.”.*

*(Reference document: ECE/TRANS/WP.11/2017/6 and informal documents INF.8 and INF.13, as amended.)*



## Annex IV

### Outputs/activities to be delivered in the 2018–2019 biennium

#### Subprogramme: 02 Transport

#### Cluster 12 Transport of perishable foodstuffs

<i>Description of cluster (optional)</i>	<i>Expected accomplishments from this cluster</i>
<p>The main aims of the cluster are to:</p> <p>Initiate and pursue actions aimed at enhancing the preservation of the quality of perishable foodstuffs during their carriage, particularly in international transport;</p> <p>Promote the facilitation of international transport of perishable foodstuffs by harmonizing the relevant regulations and rules and the administrative procedures and documentation requirements to which this transport is subject;</p> <p>Develop and update the Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage (ATP), concluded in Geneva in 1970;</p> <p>Ensure harmonization of the ATP with other relevant legal instruments and standards on the transport of perishable foodstuffs developed in other fora;</p> <p>Main actions by the Sustainable Transport Division:</p> <ul style="list-style-type: none"> <li>- Act as secretariat to the Working Party on the Transport of Perishable Foodstuffs (WP.11);</li> <li>- Issue updated publications of the ATP (paper and internet) and ATP Handbook (internet only);</li> <li>- Organize activities, including workshops, aimed at enhancing implementation of the ATP and promoting accession by other States;</li> <li>- Cooperate with Governments and other actors (intergovernmental and non-governmental organizations) in the field of refrigerated transport</li> </ul>	<p>Enhanced and updated international requirements for the transport of perishable foodstuffs</p>

**Outputs/activities**

(a) *Meetings and related parliamentary documentation*

- 12.1 Working Party on the Transport of Perishable Foodstuffs (WP.11): seventy-fourth session (8-12 October 2018), seventy-fifth session (dates to be determined in 2018) (18 meetings).

Reports of the annual sessions of WP.11 (2); Series of documents concerning, *inter alia*, the following subjects: exchange of information on the implementation of the ATP; proposals of amendments to the ATP and its annexes; proposals for additions to the ATP Handbook; proposals on the possible extension of the scope of ATP; programme of work, biennial evaluation and work plan (2).

(b) *Publications and other information material*

- 12.2 2018-2019 issue of the publication of the ATP (1);  
12.3 Updates of the ATP Handbook on the Sustainable Transport Division website.

(c) *Technical cooperation*

- 12.4 Activities, including possible workshops, aimed at enhancing implementation of the ATP, promoting accession by countries in and outside the UNECE region, and at reducing the environmental impact of refrigerated transport;  
12.5 Cooperation with other organizations working in the field of refrigerated transport including the International Association of the Body and Trailer Building Industry, the International Institute of Refrigeration and Transfrigoroute International.

## Annex V

### Proposed evaluation for the 2018-2019 biennium

<i>Cluster</i>	<i>Expected accomplishments</i>	<i>Indicators of achievement</i>
Transport of perishable foodstuffs	Enhanced and updated international requirements for the transport of perishable foodstuffs	<p>(a) Percentage of total of non-editorial amendment proposals adopted by WP.11</p> <p>Performance measures: Estimate: 2016-2017: 60 % Target: 2018-2019: 60 %</p> <p>(b) Total number of Contracting Parties to the ATP</p> <p>Performance measures: Baseline: 2016-2017: 50 Target: 2018-2019: 52</p> <p>(c) Number of countries replying to the questionnaire on the implementation of the ATP</p> <p>Performance measures: Baseline: 2016-2017: 22 Target: 2018-2019: 24</p>