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Working Party on the Transport
of Perishable Foodstuffs

REPORT OF THE WORKING PARTY ON ITS SIXTY-FIRST SESSION
(31 October-3 November 2005)

Addendum 1

Amendments to the ATP adopted at the sixtieth and sixty-first sessions

The secretariat reproduces below the text of the draft amendments to the Agreement on the International Carriage of Perishable Foodstuffs and on the Special Equipment to be Used for such Carriage (ATP) as adopted by the Working Party at its sixtieth and sixty-first sessions.

* * *

Article 2 Delete the last sentence.

Annex 1

Paragraph 1. Replace “characterized” with “specified”(twice).

After “than 0.40 W/m².K”, replace “;” with “and by” and “walls” with “side-walls”.

Delete:

“This second condition is, however, not required for transport equipment designed prior to the date of entry into force of this amendment^{3/} and built before that date or during a period of three years following that date.”.

Delete the footnote:

“ 3/ *The date of entry into force of this amendment is 15 May 1991.*”.

Paragraph 2. Delete: “with the aid of appropriate refrigerants and fittings”.

Replace “Such equipment shall comprise one or more compartments,” with “If such equipment includes one or more compartments,”.

Replace “paragraph 34” with “paragraph 3.1.3”.

In the last sentence, replace “coefficient of equipment” with “coefficient of refrigerated equipment”.

Paragraph 3. Read the text between brackets as follows: “(fitted with either a mechanical compressor, or an "absorption" device, etc.)”.

Second sentence, replace “the temperature inside the empty body” with “the temperature T_i inside the empty body”.

Replace “value t_i” with “inside temperature T_i” (twice) and “t_i” with “T_i” in paragraph 3.

Paragraph 4. Read as follows:

“Heated equipment. Insulated equipment, which is capable of raising the inside temperature of the empty body to, and thereafter maintaining it for not less than 12 hours without renewal of supply at, a practically constant value of not less than + 12 °C when the mean outside temperature, as indicated below:

-10 °C in the case of class A heated equipment;

-20 °C in the case of class B heated equipment.

Heat producing appliances shall have a capacity in conformity with the provisions of annex 1, appendix 2, paragraphs 3.3.1 to 3.3.5.

The K coefficient of equipment of class B shall in every case be equal to or less than 0.40 W/m².K.”.

Paragraph 5. To be deleted.

Annex 1, Appendix 1

Paragraph 1. Read (a) as follows:

“(a) before equipment enters into service;”.

After (c), replace “paragraphs 29 and 49” with “sections 6 and 7”.

Paragraph 2. (To be moved under new paragraph 6).

Paragraph 3. Renumber as paragraph 2.

Paragraph 4. Renumber as paragraph 3 and amend as follows:

- “4. A certificate of compliance with the standards shall be issued by the competent authority of the country in which the equipment is to be registered or recorded. This certificate shall conform to the model reproduced in appendix 3 to this annex.

The certificate of compliance, or a certified true photographic copy thereof, shall be carried on the equipment during carriage to be produced whenever so required by control authorities. However, if a certification plate, as reproduced in appendix 3 to this annex, is fixed to the equipment, the certification plate of compliance shall be recognized as equivalent to a certificate of compliance. Certification plates of compliance shall be removed as soon as the equipment ceases to conform to the standards laid down in this annex.

In the case of equipment transferred to another country, which is a Contracting Party to ATP, it shall be accompanied by the following documents so that the competent authority of the country in which the equipment is to be registered or recorded can issue a certificate of compliance:

- (a) in all cases, the test report - of the equipment itself or, in the case of serially produced equipment, of the reference equipment;
- (b) in all cases, the certificate of compliance issued by the competent authority of the country of manufacture or, for equipment in service, the competent authority of the country of registration. This certificate will be treated as a provisional certificate valid, if necessary, for three months;
- (c) in the case of serially produced equipment, the technical specification of the equipment to be certified (this specification must cover the same items as the descriptive pages concerning the equipment which appears in the test report).

In the case of equipment transferred after it has been in use, the equipment may be subject to a visual inspection to confirm its identity before the competent authority of the country, in which it is to be registered or recorded, issues a certificate of compliance.”

Paragraph 5. Renumber as paragraph 4.

Paragraph 6. Renumber as paragraph 5.

Insert a new paragraph 6 (existing paragraph 2) with the following changes:

(a) Second sentence to be read: "If the unit tested meets class specification, the resulting test report shall be regarded as a Type Approval Certificate."

(c) (ii) Replace "inside ventilation appliances shall be comparable;" with "inside circulating fans shall be comparable;"

(c) (iii) (b) amend to read:

"(b) insulated equipment to which is complete in every detail but minus its mechanical refrigeration unit which will be fitted at a later date. The resulting aperture will be filled, during the measurement of the K coefficient, with close fitting panels of the same overall thickness and type of insulation as is fitted to the front wall. In which case:

- the conditions set out in (i) above shall be satisfied; and
- the effective refrigerating capacity of the mechanical refrigeration unit fitted to insulated reference equipment shall be as defined in annex 1, appendix 2, paragraph 3.2.6."

Insert a new (d) as follows:

"(d) Modifications causing a reduction in the volume of the insulating material which are additional to the components stated in the manufacturer's original type approval test report shall be allowed if they meet the following three conditions:

- the equivalent volume of accumulated insulating material of all components is less than 1/100th of the total volume of insulating material in the insulated unit;
- the minimum thickness of the remaining insulating material in terms of the components is 20 mm or more;
- are fitted by the body manufacturer."

Renumber existing (d) as (e).

Annex 1, Appendix 2

Renumber subtitle "A" as "1".

Paragraph 1. Renumber as 1.1 and amend to read:

"1.1 K coefficient. The overall heat transfer coefficient (K coefficient) of the special equipment is defined by the following formula:

$$K = \frac{W}{S \cdot \Delta T}$$

where W is either the heating power or the cooling capacity, as the case may be, required to maintain a constant absolute temperature difference ΔT between the mean inside temperature T_i and the mean outside temperature T_e , during continuous operation, when the mean outside temperature T_e is constant for a body of mean surface area S .”.

Paragraph 2. Renumber as 1.2 and read the last sentence as follows:

“In determining the two surface areas S_i and S_e , structural peculiarities and surface irregularities of the body, such as chamfers, wheel-arches and similar features, shall be taken into account and shall be noted under the appropriate heading in test reports; however, if the body is covered with corrugated sheet metal the area considered shall be that of the plane surface occupied, not that of the developed corrugated surface.”.

Insert a new subtitle to read: “**Temperature measuring points**”.

Paragraph 3. Renumber as 1.3 and replace “ (θ_i) ” with “ (T_i) ”.

Paragraph 4. Renumber as 1.4 and replace “ (θ_e) ” with “ (T_e) ”.

(a) At the end, insert “and”.

Paragraph 5. Renumber as 1.5 and replace “ (θ_i) ” with “ (T_i) ” and “ (θ_e) ” with “ (T_e) ”.

Insert a new paragraph 1.6 (existing paragraph 11) to read:

“1.6 Temperature measuring instruments protected against radiation shall be placed inside and outside the body at the points specified in paragraphs 1.3 and 1.4 of this appendix.”.

Insert a new subtitle to read: “**Steady state period and duration of test**”.

Paragraph 6. Renumber as 1.7 and replace “°C” with “K” (three times), “thermal capacity” with “heating power or cooling capacity” (twice) and “internal and external temperatures” with “inside and outside temperatures”.

Renumber subtitle “**B**” as “**2**”.

Renumber subtitle (a) as “2.1”.

Paragraph 7. Renumber as 2.1.1 and replace “Insulating capacity” with “K coefficient”.

Paragraph 8. (Moved under 2.1.4, second indent to be deleted).

Paragraph 9. (Moved under 2.1.5, first sentence to be deleted).

Insert a new subtitle to read: “**Test Method**”.

Paragraph 10. Renumber as 2.1.2 and replace “applied” with “used” (twice), “(resistors and the like)” with “(resistors etc.)”, “an air blower” with “fans”, “all interval surfaces” with “all inside surfaces”, “in paragraph 3” with “in paragraph 1.3” and “2 °C” with “2 K”.

Insert a new paragraph 2.1.3 (existing paragraph 54 (e)) to read:

“2.1.3 Heat quantity: The heat dissipated by the electrical resistance fan heaters shall not exceed a flow of $1\text{W}/\text{cm}^2$ and the heater units shall be protected by a casing of low emissivity.

The electrical energy consumption shall be determined with an accuracy of $\pm 0.5\%$.”

Paragraph 11. (Moved under 1.6).

Insert a new subtitle to read: “**Test procedure**”.

Insert a new paragraph 2.1.4 (first indent of existing paragraph 8) to read:

“2.1.4 Whatever the method employed, the mean temperature of the insulated chamber shall throughout the test be kept uniform, and constant in compliance with paragraph 1.7 of this appendix, to within ± 0.5 K, at a level such that the temperature difference between the inside of the body and the insulated chamber is $25\text{ }^{\circ}\text{C} \pm 2$ K, the average temperature of the walls of the body being maintained at $+ 20\text{ }^{\circ}\text{C} \pm 0.5$ K.”.

Insert a new paragraph 2.1.5 (second sentence of existing paragraph 9) to read:

“2.1.5 During the test, whether by the internal cooling method or by the internal heating method, the mass of air in the chamber shall be made to circulate continuously so that its speed of movement of the air 10 cm from the walls is maintained at between 1 and 2 metres/second.”.

Paragraph 12. Renumber as 2.1.6.

Paragraph 13. Renumber as 2.1.7 and replace “ $2\text{ }^{\circ}\text{C}$ ” with “ 2 K”.

Paragraph 14. Renumber as 2.1.8.

Paragraph 15. To be deleted.

Renumber subtitle (b) as “2.2”.

Paragraph 16. Renumber as 2.2.1.

Paragraph 17. Renumber as 2.2.2 and replace “Insulating capacity” with “K coefficients” and “tested” with “measured”.

Paragraph 18. (Moved under 2.2.5, second indent to be deleted).

Paragraph 19. (Moved under 2.2.6).

Insert a new subtitle to read: “**Test method**”.

Paragraph 20. Renumber as 2.2.3 and amend to read:

“2.2.3 An electrical heating appliance (resistors, etc.) shall be placed inside the tank. If the tank has several compartments, an electrical heating appliance shall be placed in each compartment. The electrical heating appliances shall be fitted with fans with a delivery rate sufficient to ensure that the difference between the maximum temperature and the minimum temperature inside each compartment does not exceed 3 K when continuous operation has been established. If the tank comprises several compartments, the difference between the mean temperature in the coldest compartment and the mean temperature in the warmest compartment shall not exceed 2 K, the temperatures being measured as specified in paragraph 2.2.4 of this appendix.”.

Paragraph 21. Renumber as 2.2.4.

Insert a new subtitle to read: “**Test procedure**”.

Insert a new paragraph 2.2.5 (first indent of existing paragraph 18) to read:

“2.2.5 Throughout the test, the mean temperature of the insulated chamber shall be kept uniform, and constant in compliance with paragraph 1.7 of this appendix, at a level such that the difference in temperature between the inside of the tank and that of the insulated chamber is not less than $25\text{ }^{\circ}\text{C} \pm 2\text{ K}$, with the average temperature of the tank walls being maintained at $+ 20\text{ }^{\circ}\text{C} \pm 0.5\text{ K}$.”.

Insert a new paragraph 2.2.6 (existing paragraph 19) to read:

“2.2.6 The mass of air in the chamber shall be made to circulate continuously so that the speed of movement of the air 10 cm from the walls is maintained at between 1 and 2 metres/second.”.

Paragraph 22. Renumber as 2.2.7.

Paragraph 23. Renumber as 2.2.8 and replace “ $2\text{ }^{\circ}\text{C}$ ” with “ 2 K ”.

Paragraph 24. Renumber as 2.2.9.

Paragraph 25. To be deleted.

Renumber subtitle (c) as “2.3”.

Paragraph 26. Renumber subtitle (i) as “2.3.1” and amend to read as follows:

“2.3.1 Verification of the K coefficient

Where the purpose of the tests is not to determine the K coefficient but simply to verify that it is below a certain limit, the tests carried out as described in paragraphs 2.1.1. to 2.2.9 of this appendix may be stopped as soon as the measurements made show that the K coefficient meets the requirements.”.

Paragraph 27. Renumber subtitle (ii) as “2.3.2” (with the text of the existing paragraph 27).

Delete the subtitle (iii).

Paragraph 28. To be deleted.

Paragraph 29. (Moved under section 6).

Paragraph 30. To be deleted.

Renumber subtitle “C.” as “3.” and replace “**EFFICIENCY**” with “**EFFECTIVENESS**”.

Paragraph 31. To be deleted.

Renumber “**Refrigerated equipment**” as subtitle “3.1”.

Paragraph 32. Renumber as 3.1.1 and amend to read:
“3.1.1 The empty equipment shall be placed in an insulated chamber whose mean temperature shall be kept uniform, and constant to within ± 0.5 K, at + 30 °C. The mass of air in of the chamber shall be made to circulate as described in paragraph 2.1.5 of this appendix.”.

Paragraph 33. Renumber as 3.1.2 and replace “in paragraphs 3 and 4” with “in paragraphs 1.3 and 1.4”.
Insert a new subtitle to read: “**Test procedure**”.

Paragraph 34. Renumber as 3.1.3.
Insert a new subtitle to read: “**Provisions common to all types of refrigerated equipment**”.

Paragraph 35. Renumber as 3.1.4.

Paragraph 36. Renumber as 3.1.5 and delete the last sentence.
Insert a new subtitle to read: “**Criterion of satisfaction**”.
Insert a new paragraph 3.1.6 (last sentence of existing paragraph 36).
Renumber “**Mechanically refrigerated equipment**” as subtitle “3.2”.
Insert a new subtitle to read: “**Test method**”.

Paragraph 37. Renumber as 3.2.1 and replace “in paragraphs 32 and 33” with “in paragraphs 3.1.1 and 3.1.2”.
Insert a new subtitle to read: “**Test procedure**”.

Paragraph 38. Renumber as 3.2.2.

Paragraph 39. Renumber as 3.2.3.

Paragraph 40. Renumber as 3.2.4 and delete the last sentence.
Insert a new subtitle to read: “**Criterion of satisfaction**”.
Insert a new paragraph 3.2.5 (last sentence of existing paragraph 40 and replace “(if any) of” with “with any”).

Paragraph 41. Renumber as 3.2.6.

Paragraph 42. Renumber as 3.2.7 and replace “in paragraphs 37 to 40” with “in paragraphs 3.2.1 to 3.2.4”, and replace also “of paragraph 41” with “of paragraph 3.2.6”.
Renumber “**Heated equipment**” as subtitle “3.3”.
Insert a new subtitle to read: “**Test method**”.

Paragraph 43. Renumber as 3.3.1 and replace “in paragraph 9” with “in paragraph 2.1.5”.

Paragraph 44. Renumber as 3.3.2 and replace “paragraphs 3 and 4” with “paragraphs 1.3 and 1.4”.
Insert a new subtitle to read: “**Test procedure**”.

Paragraph 45. Renumber as 3.3.3.

Paragraph 46. Renumber as 3.3.4.

Paragraph 47. Renumber as 3.3.5 and amend to read:

“3.3.5 The test shall be continued for 12 hours after the difference between the mean inside temperature and the mean outside temperature of the body has reached the level corresponding to the conditions prescribed for the class to which the equipment is presumed to belong. In the case of new equipment, the above temperature difference shall be increased by 35 per cent.”.

Insert a new subtitle to read: “**Criterion of satisfaction**”.

Insert a new paragraph 3.3.6 (last sentence of existing paragraph 47).

Delete the subtitle “**Test reports**”.

Paragraph 48. To be deleted.

Paragraph 49. (Moved under section 6).

Paragraph 50. To be deleted.

Renumber subtitle “**D.**” as “**4.**”.

Insert a new subtitle to read: “**4.1 General principles**”.

Paragraph 51. Renumber as 4.1.1 and amend to read:

“4.1.1 When attached to either a calorimeter box or the insulated body of a unit of transport equipment, and operating continuously, this capacity is:

$$W_o = W_j + U \cdot \Delta T$$

where

U is the heat leakage of the calorimeter box or insulated body, Watts/°C.

ΔT is the difference between the mean inside temperature T_i and the mean outside temperature T_e of the calorimeter or insulated body (K),

W_j is the heat dissipated by the fan heater unit to maintain each temperature difference in equilibrium.”.

Insert a new subtitle to read: “**4.2 Test method**”.

Paragraph 52. Renumber as 4.2.1 and amend to read:

“4.2.1 The refrigeration unit is either fitted to a calorimeter box, or the insulated body of a unit of transport equipment.

In each case, the heat leakage is measured at a single mean wall temperature prior to the capacity test. An arithmetical correction factor, based upon the experience of the testing station, is made to take into account the average temperature of the walls at each thermal equilibrium during the determination of the effective refrigerating capacity.

It is preferable to use a calibrated calorimeter box to obtain maximum accuracy.

Measurements and procedure shall be as described in paragraphs 1.1 to 2.1.8 above; however, it is sufficient to measure U the heat leakage only, the value of this coefficient being defined by the following relationship:

$$U = \frac{W}{\Delta T_m}$$

where:

W is the heating power (in watts) dissipated by the internal heater and fans;

ΔT_m is the difference between the mean internal temperature T_i and the mean external temperature T_e ;

U is the heat flow per degree of difference between the air temperature inside and outside the calorimeter box or unit of transport equipment measured with the refrigeration unit fitted.

The calorimeter box or unit of transport equipment is placed in a test chamber. If a calorimeter box is used, $U \cdot \Delta T$ should be not more than 35% of the total heat flow W_o .

The calorimeter box or unit of transport equipment shall be heavily insulated.”.

Paragraph 53. (Moved under 4.3.2).

Paragraph 54. Renumber as 4.2.2 and amend the beginning to read:

“4.2.2 Instrumentation

Test stations shall be equipped with instruments to measure the U value to an accuracy of $\pm 5\%$. Heat transfer through air leakage should not exceed 5% of the total heat transfer through the calorimeter box or through the insulated body of the unit of transport equipment. The refrigerating capacity shall be determined with an accuracy of $\pm 5\%$.

The instrumentation of the calorimeter box or unit of transport equipment shall conform to paragraphs 4 1.3 and 1.4 above. The following are to be measured:

(a)...

(d) ... with a pressure regulator.”;

(e) (to be moved under 2.1.3 and remainder unchanged).

Paragraph 55. Renumber as 4.2.3 and amend to read:

“4.2.3 Test conditions

- (i) The average air temperature at the inlet(s) to the refrigeration unit shall be maintained at $30\text{ }^{\circ}\text{C} \pm 0.5\text{ K}$.
The maximum difference between the temperatures at the warmest and at the coldest points shall not exceed 2 K.
- (ii) Inside the calorimeter box or the insulated body of the unit of transport equipment (at the air inlet to the evaporator): there shall be three levels of temperature between $-25\text{ }^{\circ}\text{C}$ and $+12\text{ }^{\circ}\text{C}$ depending on the characteristics of the unit, one temperature level being at the minimum prescribed for the class requested by the manufacturer with a tolerance of $\pm 1\text{ K}$.

The mean inside temperature shall be maintained within a tolerance of $\pm 0.5\text{ K}$. During the measurement of refrigerating capacity, the heat dissipated within the calorimeter box or the insulated body of the unit of transport equipment shall be maintained at a constant level with a tolerance of $\pm 1\%$.

When presenting a refrigeration unit for test, the manufacturer shall supply:

- Documents describing the unit to be tested;
- A technical document outlining the parameters that are most important to the functioning of the unit and specifying their allowable range;
- The characteristics of the equipment series tested; and
- A statement as to which prime mover(s) shall be used during testing.”.

Renumber subtitle: “56. **Test procedure**” as “4.3”.

Paragraph 56. Renumber as 4.3.1 and amend as follows:

- (a) Replace “ $3\text{ }^{\circ}\text{C}$ ” with “3 K” and amend the last sentence to read: “It shall then be lowered by 5 K below the lower limit class temperature;”;
- (b) Third indent: replace “power output,” with “capacity, with” and “in paragraph 55” with “in paragraph 4.2.3”;

Sixth indent: replace “for each” with “accordingly”.

The last sentence of paragraph 56 is moved as first sentence under 4.3.2 and amended as follows:

“4.3.2 The same procedure shall be followed for the enthalpy method described below, but in this case the heat power dissipated by the evaporator fans at each temperature level shall also be measured.

(the following is from existing paragraph 53 as amended)

“This method may, alternatively, be used to test reference equipment. In this case, the effective refrigerating capacity is measured by multiplying the mass flow (m) of the refrigerant liquid by the difference in enthalpy between the refrigerant vapour leaving the unit (h_o) and the liquid at the inlet to the unit (h_i).

To obtain the effective refrigerating capacity, the heat generated by the evaporator fans (W_f) is deducted. It is difficult to measure W_f if the evaporator fans are driven by an external motor, in this particular case the enthalpy method is not recommended. When the fans are driven by internal electric motors, the electrical power is measured by appropriate instruments with an accuracy of $\pm 3\%$, with refrigerant flow measurement being accurate to $\pm 5\%$.

The heat balance is given by the formula:

$$W_o = (h_o - h_i) m - W_f.$$

Appropriate methods are described in standards ISO 971, BS 3122, DIN, NEN, etc. An electric heater is placed inside the equipment in order to obtain the thermal equilibrium.”.

Paragraph 57. Renumber as 4.3.3 and amend to read as follows:

“4.3.3 Precautions

As the tests for effective refrigerating capacity are carried out with the thermostat of the refrigeration unit disconnected, the following precautions shall be observed:

if the equipment has a hot gas injection system, it shall be inoperative during the test;

with automatic controls of the refrigeration unit which unload individual cylinders (to tune the capacity of the refrigeration unit to motor output) the test shall be carried out with the number of cylinders appropriate for the temperature.”.

Paragraph 58. Renumber as 4.3.4 and amend (ii) to read as follows:

“(ii) the rate of air circulation is that specified by the manufacturer.

If the air circulation of a refrigeration unit’s evaporator fans are to be measured, methods capable of measuring the total delivery volume shall be used. Use of one of the relevant existing standards, i.e. BS 848, ISO 5801, AMCA 210-85, DIN 24163, NFE 36101, NF X10.102, DIN 4796 is recommended;”.

Insert a new subtitle to read: “**4.4 Test result**”.

Paragraph 59. Renumber as 4.4.1 and amend to read:

“4.4.1 The refrigeration capacity for ATP purposes is that relating to the mean temperature at the inlet(s) of the evaporator. The temperature measuring instruments shall be protected against radiation.”.

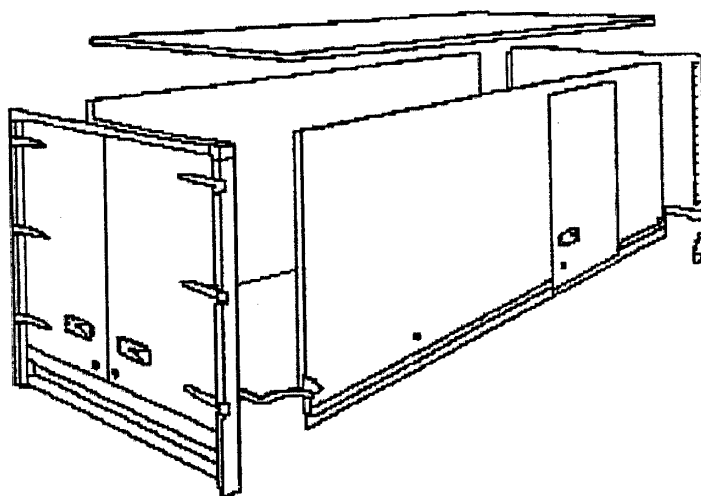
Add a new section 5 as follows:

“5. KIT BODIES

5.1 Definitions

For the purposes of this part:

- (a) Kit body: means the constituent parts of an insulated body consisting as a minimum of those parts of importance to the overall heat transfer: side walls, a roof, a floor, a front end and a rear end, as well as all their means of connection. The major parts of a kit body are delivered in non-assembled form. The rear frame and door(s), if any, shall be supplied fully assembled and operable. Side door(s), if any, shall be built into the side walls and be fully operable;



- (b) Body: means a kit body that has been assembled in accordance with the manufacturer's instructions and which is in conformity with the type that has been tested and approved by a designated testing station;
- (c) Manufacturer: means the organization that has design and production responsibility for the kit and to which the type-approval certificate has been issued. This organization shall deliver the certificate of compliance and have its manufacturing facilities in a country which is a Contracting Party to ATP;
- (d) Assembler: means the organization that has assembled the kit body in accordance with the manufacturer's instructions. This organization shall have its manufacturing/assembly facilities in a country which is a Contracting Party to ATP.

5.2 Manufacturer's obligations

Prior to supplying kits to assemblers, the manufacturer shall have a body assembled from a kit ATP type-approved in an ATP testing station. An ATP type-approval test certificate for a particular kit remains valid for 6 years or 100 kits. After 6 years or after 100 kits a new ATP type-approval test is to be carried out.

The manufacturer shall ensure that the kit delivered corresponds to the type tested and that the inside surface area does not vary by more than +/-20% of the surface area of the type tested.

The manufacturer shall attest that the assembler has the competence to assemble the kit in accordance with the manufacturer's instructions. The manufacturer shall conduct audits at least every 18 months, to verify the continued competence of the assembler.

The manufacturer shall supply at least all parts as used in the ATP type-approval test.

The manufacturer shall provide the assembler with a parts list corresponding to the kit delivered. The parts list shall bear the kit serial number. The manufacturer shall provide detailed assembly instructions with each kit. These instructions shall include the principal internal dimensions of length, height and width.

The manufacturer shall supply evidence to the assembler that the constituent parts of the kit are in conformity with the parts used in the construction that has been tested and approved by the approved testing station.

The manufacturer shall, in addition to Annex 1, Appendix 1, paragraph 5 [*paragraph 6 in the existing ATP*], deliver a filled-in type plate installed on the kit. The type plate shall state the kit serial number and kit production date.

The manufacturer's instructions shall provide details on at least the following:

- The assembly sequence;
- The attachment of the floor to the vehicle;
- The fixing of the refrigeration unit, if applicable; and
- Details on the handling and use of all those components contributing to the heat transfer. This includes the adhesive(s).

The manufacturer shall keep a record relating kit serial numbers and the assemblers to which the kits were supplied.

The manufacturer shall complete the Declaration of compliance of the kit body with the ATP type-approval test report (Model No. 11).

5.3 Assembler's obligations

Before assembly of the first kit, the assembler shall be in possession of a certificate issued by the kit manufacturer attesting his competence in relation to the type of kit to be assembled. The original type plate installed by the manufacturer shall not be removed by the assembler.

The assembler shall ensure that the manufacturer's instructions are fully adhered to and that an appropriate quality management system is practised.

The assembler shall complete the Declaration of compliance for a body assembled from a kit (Model No. 12).

5.4 Approval process

Bodies may be sold in the name of the manufacturer and/or of the assembler. However, it shall be possible to identify the manufacturer from the documentation and from the type

plate. If it is not possible to identify the manufacturer, the body shall be considered as a new type and must be submitted for test by an approved testing station. The subsequent re-testing renders the original type-approval test invalid and the manufacturer no longer bears any responsibility in relation to the body.

The type-approval certificate issued to the manufacturer by the approved testing station shall only remain valid, if:

- The kit supplied contains at least all those parts as used in the ATP type-approval test;
- The manufacturer's assembly instructions have been fully complied with; and
- Any additional equipment affecting the overall heat transfer was present at the time of the original type-approval test.

Where this requirement is not fully complied with, a new ATP type-approval test shall be conducted.

In addition to the normal documentation required under the ATP Agreement for an individual ATP approval certificate, the following shall be supplied to the competent authority:

- A test report;
- A declaration by the manufacturer of compliance of the kit body with the ATP type-approval test report (Model No. 11);
- A declaration of conformity for a body assembled from a kit, completed by the assembler (Model No. 12); and
- A copy of the certificate issued by the manufacturer attesting the competence of the assembler to assemble the kit for which approval is being sought (Model No. 13).

Declarations shall be in at least one language of ATP.

The competent ATP Authority may verify each equipment by applying sections 6 and 7 [existing paragraphs 29 and 49], prior to issuing an ATP certificate."

Insert a new title to read as follows:

“6. CHECKING THE INSULATING CAPACITY OF EQUIPMENT IN SERVICE”.

Insert the text of existing paragraph 29 amended to read as follows:

“For the purpose of checking the insulating capacity of each piece of equipment in service as prescribed in appendix 1, paragraphs 1 (b) and 1 (c), to this annex, the competent authorities may:

Apply the methods described in paragraphs 2.1.1 to 2.3.2 of this appendix; or

Appoint experts to assess the fitness of the equipment for retention in one or other of the

categories of insulated equipment. These experts shall take the following particulars into account and shall base their conclusions on information as indicated below.

6.1 General examination of the equipment

This examination shall take the form of an inspection of the equipment to determine the following:

- (i) the general design of the insulating sheathing;
- (ii) the method of application of insulation;
- (iii) the nature and condition of the walls;
- (iv) the condition of the insulated compartment;
- (v) the thickness of the walls;

and to make all appropriate observations concerning the effective insulating capacity of the equipment. For this purpose the experts may cause parts of the equipment to be dismantled and require all documents they may need to consult (plans, test reports, specifications, invoices, etc.) to be placed at their disposal.

6.2 Examination for air-tightness (not applicable to tank equipment)

The inspection shall be made by an observer stationed inside the equipment, which shall be placed in a brightly-illuminated area. Any method yielding more accurate results may be used.

6.3 Decisions

- (i) If the conclusions regarding the general condition of the body are favourable, the equipment may be kept in service as insulated equipment of its initial class for a further period of not more than three years. If the conclusions of the expert or experts are not acceptable, the equipment may be kept in service only following a satisfactory measurement of K coefficient according to the procedure described in paragraphs 2.1.1 to 2.3.2 of this appendix; it may then be kept in service for a further period of six years.
- (ii) In the case of heavily insulated equipment, if the conclusions of an expert or experts show the body to be unsuitable for keeping in service in its initial class but suitable for continuing in service as normally insulated equipment, then the body may be kept in service in an appropriate class for a further three years. In this case, the distinguishing marks (as in appendix 4 of this annex) shall be changed appropriately.
- (iii) If the equipment consists of units of serially-produced equipment of a particular type satisfying the requirements of appendix I, paragraph 6, to this annex and belonging to one owner, then in addition to an inspection of each unit of equipment the K coefficient of not less than 1% of the number of units involved, may be measured in conformity with the provisions of sections 2.1, 2.2 and 2.3 of this appendix. If the results of the examinations and measurements are acceptable, all the equipment in question may be kept in service as insulating equipment of its initial class for a further period of six years.”.

Insert a new title to read as follows:

“7. VERIFYING THE EFFECTIVENESS OF THERMAL APPLIANCES OF EQUIPMENT IN SERVICE”.

Insert the text of existing paragraph 49 amended to read as follows:

“To verify as prescribed in appendix 1, paragraphs 1 (b) and 1 (c), to this annex the effectiveness of the thermal appliance of each item of refrigerated, mechanically refrigerated or heated equipment in service, the competent authorities may:

Apply the methods described in sections 3.1, 3.2 and 3.3 of this appendix; or

Appoint experts to apply the following provisions:

7.1 Refrigerated equipment other than equipment with fixed eutectic accumulators

It shall be verified that the inside temperature of the empty equipment, previously brought to the outside temperature, can be brought to the limit temperature of the class to which the equipment belongs, as prescribed in this annex, and maintained below the said limit temperature for a period t

$$\text{such that } t \geq \frac{12\Delta T}{\Delta T'} \quad \text{in which}$$

ΔT is the difference between + 30 °C and the said limit temperature, and

$\Delta T'$ is the difference between the mean outside temperature during the test and the class limit temperature, the outside temperature being not lower than + 15 °C.

If the results are acceptable, the equipment may be kept in service as refrigerated equipment of its initial class for a further period of not more than three years.

7.2 Mechanically refrigerated equipment

Checks shall be made to ensure that, when the outside temperature is not lower than + 15 °C, the inside temperature of the empty equipment, which has been previously equalized to that outside, can be reduced to the required class temperature within a maximum period of 6 hours:

In the case of equipment in classes A, B or C, to the minimum temperature, as prescribed in this annex;

In the case of equipment in classes D, E or F, to the limit temperature, as prescribed in this annex.

If the results are acceptable, the equipment may be kept in service as mechanically refrigerated equipment of its initial class for a further period of not more than three years.

7.3 Heated equipment

It shall be verified that the difference between the inside temperature of the equipment and the outside temperature which governs the class to which the equipment belongs as

prescribed in this annex (a difference of 22 K in the case of class A and of 32 K in the case of class B) can be achieved and be maintained for not less than 12 hours. If the results are acceptable, the equipment may be kept in service as heated equipment of its initial class for a further period of not more than three years.

7.4 Provisions common to refrigerated, mechanically refrigerated and heated equipment

- (i) If the results are not acceptable, refrigerated, mechanically refrigerated or heated equipment may be kept in service in its initial class only if it passes at a testing station the tests described in sections 3.1, 3.2 and 3.3 of this appendix; it may then be kept in service in its initial class for a further period of six years.
- (ii) If the equipment consists of units of serially-produced refrigerated, mechanically refrigerated or heated equipment of a particular type satisfying the requirements of appendix 1, paragraph 6, to this annex and belonging to one owner, then in addition to an inspection of the thermal appliances to ensure that their general condition appears to be satisfactory, the effectiveness of the cooling or heating appliances of not less than 1% of the number of units may be determined at a testing station in conformity with the provisions of sections 3.1, 3.2 and 3.3 of this appendix. If the results of the examinations and of the determination of effectiveness are acceptable, all the equipment in question may be kept in service in its initial class for a further period of six years.”.

Paragraph 60. Renumber as 8. and amended to read as follows:

“8. TEST REPORTS

A test report of the type appropriate to the equipment tested shall be drawn up for each test in conformity with one or other of the models 1 to 13 hereunder.”.

MODEL No. 1 A

Footnote 1, replace “*paras 29 to 49*” with “*sections 6 to 7*”.

MODEL No. 1 B

Footnote 1, replace “*paras 29 to 49*” with “*sections 6 to 7*”.

MODEL No. 2 A

First sentence, replace “paragraphs 7 or 15” with “ sub-section 2.1”.

Replace “ θ ” with “T”.

Last sentence, replace “annex 1, appendix 1, paragraph 2 (a)” with “annex 1, appendix 1, paragraph 6 (a)”.

MODEL No. 2 B

First sentence, replace “paragraphs 16 or 25” with “ sub-section 2.2”.

Replace “ θ ” with “T”.

Last sentence, replace “annex 1, appendix 1, paragraph 2 (a)” with “annex 1, appendix 1, paragraph 6 (a)”.

MODEL No. 3

First sentence, replace “paragraph 29” with “ section 6”.

MODEL No. 4 A

First sentence, replace “paragraphs 32 to 36” with “ sub-section 3.1” and “except 34 (b) and 34 (c)” with “except 3.1.3 (b) and 3.1.3 (c)”.

Last sentence, replace “annex 1, appendix 1, paragraph 2 (a)” with “annex 1, appendix 1, paragraph 6 (a)”.

MODEL No. 4 B

First sentence, replace “paragraphs 32 to 36” with “ sub-section 3.1” and “except 34 (a) and 34 (c)” with “except 3.1.3 (a) and 3.1.3 (c)”.

Last sentence, replace “annex 1, appendix 1, paragraph 2 (a)” with “annex 1, appendix 1, paragraph 6 (a)”.

MODEL No. 4 C

First sentence, replace “paragraphs 32 to 36” with “ sub-section 3.1” and “except 34 (a) and 34 (b)” with “except 3.1.3 (a) and 3.1.3 (b)”.

Last sentence, replace “annex 1, appendix 1, paragraph 2 (a)” with “annex 1, appendix 1, paragraph 6 (a)”.

MODEL No. 5

First sentence, replace “paragraphs 37 to 40” with “ sub-section 3.2”.

Last sentence, replace “annex 1, appendix 1, paragraph 2 (a)” with “annex 1, appendix 1, paragraph 6 (a)”.

MODEL No. 6

First sentence, replace “paragraphs 43 to 47” with “ sub-section 3.3”.

Last sentence, replace “annex 1, appendix 1, paragraph 2 (a)” with “annex 1, appendix 1, paragraph 6 (a)”.

MODEL No. 7

First sentence, replace “paragraph 49 (a)” with “ sub-section 7.1”.

MODEL No. 8

First sentence, replace “paragraph 49 (b)” with “ sub-section 7.2”.

MODEL No. 9

First sentence, replace “paragraph 49 (c)” with “ sub-section 7.3”.

MODEL No. 10

Second sentence, replace “paragraphs 51 to 59” with “section 4”.

Add new models 11 to 13 as follows:

“MODEL No. 11

Declaration by the manufacturer of compliance of the kit body
with the ATP type-approval test report

Manufacturer’s name and address

Type of equipment (lorry, semi-trailer, trailer, container, etc.)

Kit body serial number

Date of manufacture of the kit body

Internal dimensions of the body that was ATP type-approval tested (mm):

length, width, height

External dimensions of the body that was ATP type-approval tested (mm):

length, width, height

Thickness of insulation (mm): side wall, roof, floor
front end, rear end, door

Name of testing station and ATP type-approval test report number

K-value W/m²K (according to the ATP type-approval test report)

Date of ATP type-approval test report

The manufacturer certifies that all parts supplied within this kit body conform to the parts as used in the body that was ATP type-approval tested and approved.

Signature of manufacturer

Manufacturer’s stamp

Name

Function in company

Date

MODEL No. 12

Declaration of conformity for a body assembled from a kit

Manufacturer's name and address

.....

Type of equipment(lorry, semi-trailer, trailer, container, etc.)

Kit body serial number

Date of manufacture of the kit body

Internal dimensions (mm): length, width, height

External dimensions (mm): length, width....., height

Thickness of insulation (mm): side wall, roof..... floor

front end, rear end,door.....

Name of testing station and ATP type-approval test report number

.....

K-value W/m²K (according to the ATP type-approval test report)

Date of the ATP type-approval test report

Assembler's name and address

.....

Assembler's identification of body (if any)

The assembler certifies that for the above body the manufacturer's instructions have been strictly adhered to and that no modifications to the body have been carried out.

Signature of assembler

Assembler's stamp

Name

Function in company

Date

Model No. 13

Certificate attesting the competence of an assembler to assemble
a specific ATP kit body

We, the undersigned ATP kit body manufacturer, hereby attest that (name of company or individual)
.....
.....
has successfully completed a course on the assembly of ATP kit body (type/model No.)
.....

The company/individual stated above has satisfied us of their/his competence to assemble this kit professionally and according to our instructions. This company/individual is therefore approved as a qualified assembler for the ATP kit body referenced above.

Signature of manufacturer

Manufacturer's stamp

Name

Function in company

Date ”

Annex 1, Appendix 3

Amend title A to read:

“A. FORM OF CERTIFICATE FOR INSULATED, REFRIGERATED, MECHANICALLY REFRIGERATED OR HEATED EQUIPMENT USED FOR THE INTERNATIONAL CARRIAGE OF PERISHABLE FOODSTUFFS BY LAND”

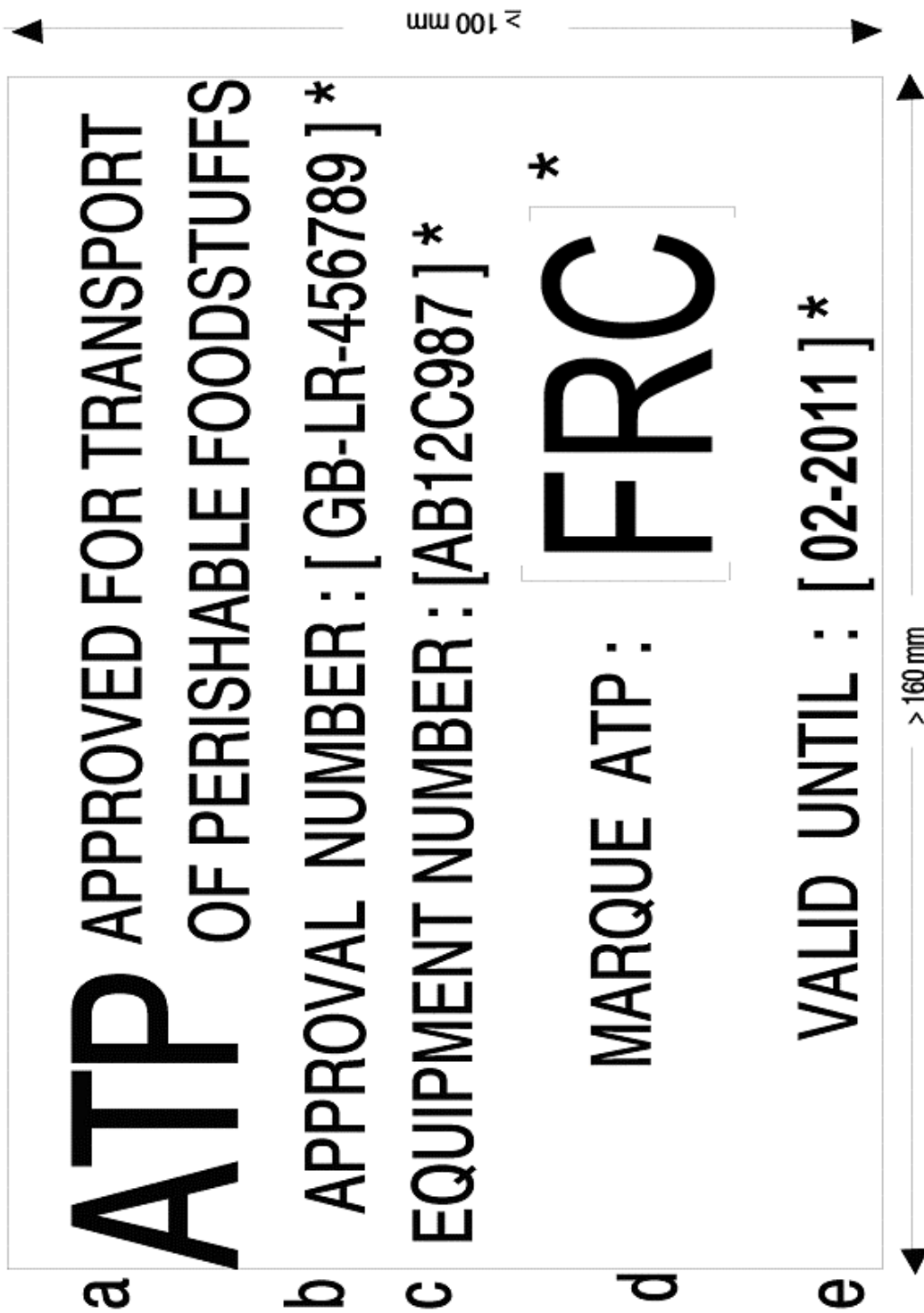
Footnote 3, replace “*paragraph 42*” with “*paragraph 3.2.7*”.

Amend title B to read:

“B. CERTIFICATION PLATE OF COMPLIANCE OF THE EQUIPMENT, AS PROVIDED FOR IN ANNEX 1, APPENDIX 1, PARAGRAPH 3”

Model of certification plate:

Replace with the following:



* The particulars in square brackets are given by way of example

Annex 1, Appendix 4

First sentence, replace “paragraph 5” with “paragraph 4”.

Delete the following:

“Class B mechanically refrigerated equipment with normal
Insulation FNB^{1/}

Class C mechanically refrigerated equipment with normal
insulation FNC^{1/}

Class E mechanically refrigerated equipment with normal
insulation FNE^{1/}

Class F mechanically refrigerated equipment with normal
insulation FNF^{1/2/}

Delete the footnote: “^{1/} See transitional provisions in paragraph 5 of this annex.”

Last sentence, replace “RNA 5-1974” by “FRC 02-2011”, then in the last line: “2=month (February)” and “2011 = year”.

Annex 2, Appendix 1

Amend to read:

“Monitoring of air temperatures for transport of perishable foodstuffs quick-frozen

The transport equipment must be fitted with a suitable recording instrument to monitor, at frequent and regular intervals, the air temperatures to which quick-frozen foodstuffs intended for human consumption are subjected.

The measuring instrument must be certified by an accredited body and the documentation must be available for the approval of the competent ATP authorities.

The measuring instruments must comply with standards EN 12830 (Temperature recorders for the transport, storage and distribution of chilled, frozen, deep-frozen/quick-frozen food and ice cream - Tests, performance, suitability) and EN 13486 (Temperature recorders and thermometers for the transport, storage and distribution of chilled, frozen, deep-frozen/quick-frozen food and ice cream - Periodic verification).

Temperature recordings obtained in this manner must be dated and stored by the operator for at least one year or longer, according to the nature of the food.

Measuring instruments shall comply with the provisions of this Appendix one year after the date of entry into force of the above provision. Measuring instruments already installed, but which do not conform to the above standard, before this date can continue to be used until 31 December 2009.”
