No. 15121. AGREEMENT ON THE INTERNATIONAL CARRIAGE OF PERISHABLE FOODSTUFFS AND ON THE SPECIAL EQUIPMENT TO BE USED FOR SUCH CARRIAGE (ATP). CONCLUDED AT GENEVA ON 1 SEPTEMBER 1970[1]

ENTRY INTO FORCE of amendments to Annex 2 to the above-mentioned Agreement

The amendments were proposed by the Government of the United Kingdom of Great Britain and Northern Ireland and circulated by the Secretary-General on 13 February 1995. They came into force on 13 February 1996, in accordance with article 18 (6) of the Agreement.

Authentic texts of the amendments: English, French and Russian.

Registered ex officio *on 13 February 1996.*

[1] United Nations, *Treaty Series*, vol. 1028, p. 121; for subsequent actions, see references in Cumulative Indexes Nos. 17 to 21, as well as annex A in volumes 1272, 1299, 1300, 1314, 1347, 1369, 1403, 1424, 1438, 1487, 1498, 1505, 1512, 1540, 1579, 1601, 1607, 1658, 1670, 1684, 1723, 1724, 1727, 1730, 1762, 1775, 1844 and 1885.

N° 15121. ACCORD RELATIF AUX TRANSPORTS INTERNATIONAUX DE DENRÉES PÉRISSABLES ET AUX ENGINS SPÉCIAUX À UTILISER POUR CES TRANSPORTS (ATP). CONCLU À GENÈVE LE 1er SEPTEMBRE 1970[1]

ENTRÉE EN VIGUEUR d'amendements à l'Annexe 2 de l'Accord susmentionné

Les amendements avaient été proposés par le Gouvernement du Royaume-Uni de Grande-Bretagne et d'Irlande du Nord et diffusés par le Secrétaire général le 13 février 1995. Ils sont entrés en vigueur le 13 février 1996, conformément au paragraphe 6 de l'article 18 de l'Accord.

Textes authentiques des amendements : anglais, français et russe.

Enregistré d'office le 13 février 1996.

[1] Nations Unies, *Recueil des Traités*, vol. 1028, p. 121; pour les faits ultérieurs, voir les références données dans les Index cumulatifs nos 17 à 21, ainsi que l'annexe A des volumes 1272, 1299, 1300, 1314, 1347, 1369, 1403, 1424, 1438, 1487, 1498, 1505, 1512, 1540, 1579, 1601, 1607, 1658, 1670, 1684, 1723, 1724, 1727, 1730, 1762, 1775, 1844 et 1885.

ANNEX 2, APPENDIX 2, TO ATP

PROCEDURE FOR THE SAMPLING AND MEASUREMENT OF TEMPERATURE FOR CARRIAGE OF CHILLED, FROZEN AND QUICK-FROZEN PERISHABLE FOODSTUFFS

A. GENERAL CONSIDERATIONS

1. Inspection and measurement of temperatures stipulated in Annexes 2 and 3 should be carried out so that the foodstuffs are not exposed to conditions detrimental to the safety or quality of the foodstuffs. Measuring of food temperatures should be carried out in a refrigerated environment, and with the minimum delays and minimum disruption of transport operations.

2. Inspection and measurement procedures, as referred to in paragraph 1, shall preferably be carried out at the point of loading or unloading. These procedures should not normally be carried out during transport, unless serious doubt exists about the conformity of the temperatures of the foodstuffs stipulated in Annexes 2 and 3.

3. Where possible, the inspection should take account of information provided by temperature monitoring devices during the journey before selecting those loads of perishable foodstuffs for sampling and measurement procedures. Progression to temperature measurement of the food should only be undertaken where there is reasonable doubt of the temperature control during carriage.

4. Where loads have been selected, a non-destructive measurement (between-case or between-pack) should at first be used. Only where the results of the non-destructive measurement do not conform with the temperatures laid down in Annexes 2 or 3 (taking into account allowable tolerances) are destructive measurements to be carried out. Where consignments or cases have been opened for inspection, but no further action has been taken, they should be resealed giving the time, date, place of inspection, and the official stamp of the inspection authority.

B. SAMPLING

5. The types of package selected for temperature measurement shall be such that their temperature is representative of the warmest point of the consignment.

6. Where it is necessary to select samples during transport whilst the consignment is loaded, two samples should be taken from the top and bottom of the consignment adjacent to the opening edge of each door or pair of doors.

7. Where samples are taken during unloading of the consignment, four samples should be chosen from any of the following locations:

- top and bottom of the consignment adjacent to the opening edge of the doors;

- top rear corners of the consignment (ie furthest away from the refrigeration unit);

- centre of the consignment;

- centre of the front surface of the consignment (ie closest to the refrigeration unit);

- top or bottom corners of the front surface of the consignment (ie closest to the return air intake of the refrigeration unit).

8. In the case of chilled foods in Annex 3, samples should also be taken from the coldest location to ensure that freezing has not occurred during transportation.

C. TEMPERATURE MEASUREMENT OF PERISHABLE FOODSTUFFS

9. The temperature measuring probe should be precooled to as close to the product temperature as possible before measurement.

I. Chilled foods

10. Non-destructive measurement. Measurement between-case or between-pack should be made with a probe with a flat head, which gives a good surface contact, low thermal mass, and high thermal conductivity. When placing the probe between the cases or food packs, there should be sufficient pressure to give a good thermal contact, and sufficient length of probe inserted to minimise conductivity errors.

11. Destructive measurement. A probe with a rigid, robust stem and sharpened point should be used, made from a material which is easy to clean and disinfect. The probe should be inserted into the centre of the food pack, and the temperature noted when a steady reading is reached.

II. Frozen and quick-frozen foods

12. Non-destructive measurement. Same as paragraph 10.

13. Destructive measurement. Temperature probes are not designed to penetrate frozen foods. Therefore it is necessary to make a hole in the product in which to insert the probe. The hole is made by a precooled product penetration instrument, which is a sharp pointed metallic instrument such as an ice punch, hand drill or an auger. The diameter of the hole should provide a close fit to that of the probe. The depth to which the probe is inserted will depend on the type of product:

(i) where product dimensions allow, insert the probe to a depth of 2.5 cm from the surface of the product;

(ii) where (i) is not possible because of the size of the product, the probe should be inserted to a minimum depth from the surface of 3 to 4 times the diameter of the probe;

(iii) it is not possible or practical to make a hole in certain foods because of their size or composition, eg diced vegetables. In these cases, the internal temperature of the food package should be determined by insertion of a suitable

sharp-stemmed probe to the centre of the pack to measure the temperature in contact with the food.

After inserting the probe, the temperature should be read when it has reached a steady value.

D. GENERAL SPECIFICATIONS FOR THE MEASURING SYSTEM

14. The measuring system (probe and read-out) used in determining temperature shall meet the following specifications:

(i) the response time should achieve 90% of the difference between the initial and final reading within three minutes;

*(ii) the system must have an accuracy of ± 0.5°C within the measurement range -20°C to +30°C;

*(iii) the measuring accuracy must not change by more than 0.3°C during operation in the ambient temperature range -20°C +30°C;

(iv) the display resolution of the instrument should be 0.1°C;

*(v) the accuracy of the system should be checked at regular intervals;

(vi) the system should have a current certificate of calibration from an approved institution;

(vii) the electrical components of the system should be protected against undesirable effects due to condensation of moisture;

(viii) the system should be robust and shock proof.

E. ALLOWABLE TOLERANCES IN THE MEASUREMENT OF TEMPERATURE

15. Certain tolerances should be allowed in the interpretation of temperature measurements:

(i) operational - in the case of frozen and quick-frozen foods, a brief rise of up to 3°C on the temperature permitted in Annex 2 is allowed for the surface temperature of the food.

(ii) methodology - non-destructive measurement can give up to a maximum of 2°C difference in the reading compared to the true product temperature measurement, especially with the thickness of cardboard in case packaging. This tolerance does not apply to the destructive measurement of temperature.