

ATP – AGREEMENT. REFRIGERATION AND FOODSTUFFS – ENERGY CONSUMPTION

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Abstract: ATP is the multi-lateral agreement between Signatory Countries (Contracting Parties) for overland cross border carriage of perishable foodstuffs. It ensures that vehicles used for this carriage meet agreed international standards.

Keywords: perishable foodstuffs, refrigeration, transport vehicles, railway wagons, sea containers.

It is illegal to transport perishable foodstuffs across international boundaries between countries that are signatories to the agreement unless the vehicle has an ATP certificate.

The countries that are signatories to the ATP agreement are listed below: Albania, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Kazakhstan, Latvia, Lithuania, Luxembourg, Monaco, Montenegro, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, The former Yugoslav Republic of Macedonia, United Kingdom, United States of America, Uzbekistan.

There are no national requirements for vehicles to meet ATP standards for the delivery of frozen foodstuffs within the UK.

The specialist equipment used for the carriage of perishable goods must comply with the appropriate standards of insulation and refrigeration as defined in the Agreement. Each standard which may be insulated only, a combination of insulated with refrigeration, insulated with heating, or insulated with refrigeration plus heating is defined by a Classification.

In short there are two Classifications for insulated equipment, six for total loss refrigerated, twelve for mechanical refrigerated and three for heated equipment. The most used Classifications are insulated and insulated mechanically refrigerated.

Each ATP Certificate issued states the Classification to which the equipment is approved.

Many vehicles and trailers built for the carriage of perishable goods are Type Approved to the required standards and come with certification. The Type Approval certification lasts for 6 years.

After 6 years it is possible to renew the certification for periods of 3 years by having an in service 'K coefficient' test at an approved ATP 'Designated Station' authorized by any country that is a signatory to the agreement. A list of authorized centers is available at: www.unece.org/trans/main/wp11/teststations

If you have a vehicle fitted with equipment that does not have an ATP certificate and no Type Approvals have been issued then the only option to obtain a certificate by having a 'one off' test at an approved test center.



Fig. 1. Types of bodies in good condition



Fig. 2. Examples of defects

If the vehicle refrigeration equipment is not Type Approved then it is possible to obtain a Certificate by having an in service ‘one off’ test which is carried out at an authorized Designated Station’. Whilst this test is specialized it is possible to carry out a few simple checks in order to help ensure that the vehicle is in the best possible condition to undergo the test.

- Vehicles must be in generally good condition;
- Doors and seals should be examined to ensure that daylight cannot be seen from inside the unit when the doors are closed;
- Door seals must be in good condition;

- There must be no holes in the bodywork;
- All repairs must be carried out with correct materials;
- The unit must obtain to its Class temperature within 6 hours.

The vehicle can attend a Designated Station or be tested at the owners site whatever the more convenient for the owner.

In order to ensure the best performance of the refrigeration equipment maintenance should be carried out at regular intervals. This should comprise of:

- Refrigerated unit servicing;
- Temperature control thermostat calibration check;
- Thermostat and temperature recorder calibration check;
- Inspection of the bodywork for holes/damage. This should be promptly repaired with the correct materials to ensure that insulation deterioration due to moisture ingress is kept to a minimum;
- Inspection of door operation and seal condition to prevent the ingress of dust, moisture and undesirable odours, as well as air leakage/temperature loss.

Before loading:

- It is recommended a pre-trip inspection procedure of the equipment is carried out;
- The Unit should be clean and free from odour;
- Verify the defrosting process has been completed;
- Ensure the refrigeration unit is set to the correct temperature for the load;
- Ensure the Unit is pre-cooled to the correct temperature.

During loading:

- Do not run the refrigeration unit;
- Load the unit as quickly as possible. If loading is interrupted ensure the door is closed and the refrigeration unit is run until loading can recommence;
- Temperature and condition of the load should be noted on the loading sheet. Be sure to specifically note any broken packaging, peculiar odours or evidence of mould;
- The unit should be loaded per shippers instructions to industry standards allowing adequate airflow between packages.

During the journey:

- Run the refrigeration unit continuously. There may be instances when it is not possible to run the unit, such as on a ferry or in a noise abatement area. If the refrigeration unit must be switched off ensure the vehicle is parked in shade;
- If the refrigeration unit has to be switched off note the thermostat setting before and after;
- Always monitor the indicated temperature, alarm lamps and defrost operation.



Fig. 3. Example of ATP certificate

At time a lot of foodstuffs will be loosed during transport and storage, and then there is not enough quality and safety.

Table 1. Foodstuffs losses

Foodstuffs Looses		
	Developed countries	Not so much developed countries
Food looses	10%	28%
Losses of fruit and vegetables	15%	40%
Loss of perishable foods through a lack of refrigeration	9%	23%

Implementation of ATP-agreement assures a better quality of foodstuffs and environmental protection.

References:

1. ATP guide
2. www.unece.org/trans/main/wp11/atp.html