Report of the informal working group on the Approval System

Transmitted by the Government of the Netherlands on behalf of the informal working group

I. General

1. The informal working group met on six occasions of which five virtual (23 January, 13 February, 6 March, 27 March and 13 July) and one F2F in Brussels (7 September).

2. After the spring of 2023 the sessions were interrupted as it was felt that at that moment no further progress could be made and no new items being brought forward.

3. The UNECE has opened two meeting locations on the UNECE wiki space. In the future documents will be shared on this wiki to prevent sending files by mail. As a result the name of this informal working group has been shortened to "Approval System".

II. Electric drive and continuous cooling.

4. Although an attempt was made to resolve the questions concerning electrification with more detailed definitions of independent, non-independent and autonomous, this proved not to be the way forward. It was concluded that the guarantee of continuous cooling because of the supply of electricity was the key question.

5. As electricity to drive the system can be produced by a vast array of sources it is impossible to dictate just one source of electricity such as a battery. It was said that it is up to the user of the equipment to take care that sufficient power would be available during the transport operation. On the other hand, this feels uncomfortable as some guarantees would be welcomed that equipment have at least a minimum of energy readily available.

6. It was acknowledged that the electrically thermal unit, but without the source of electricity, could already be approved by the testing station based on 4.3.1.(b) of Annex 1, Appendix 2. However it may the best way to introduced a third module for electrical supply in dimensioning equipment (check if the parts supply enough energy/heat for the demand). An additional module may be foreseen for the inverter conversing AC-DC and the correct voltage for the unit as required.

7. It was decided to work on a Guidance Document to be placed on the UNECE website to explain about the electrical energy supply and the expectation for use, but also testing and approval of equipment. (See also informal document INF.12 containing the draft guidance)
III. X-marking of equipment

8. It was noted that there are differences between the French and English language versions of the ATP in Annex 1, Appendix 4 (English exhaustive list/French open) and the other related provisions.

9. The purpose of the marking was discussed. It was recalled that the treaty on border crossing did not mention this particular marking in detail and that it was very doubtful if enforcers would be aware of the additional marking and its meaning. In the light of all the uncertainties and discussions it was suggested and supported by most experts to delete this marking completely as the pro’s did not outweigh the cons. However some participants could not support this as they saw an additional value for the users.

10. When electric vehicles will be introduced "drive by vehicle engine" will probably disappear but a different meaning may be given that something additional need to be done to energize.

IV. Temperature recorders

11. Some experts were of the opinion that the temperature recorder is mandatory for all FRC approved equipment as they may at one time carry deep-frozen products, while others require this only when deep-freeze products are carried. The last interpretation is based because the requirements for temperature recorders are placed in Annex 2 and not in Annex 1 (construction). It was also said that no free position was available on the ATP certificate to mention the recorder and test report if fitted.

12. It was recalled that the Netherlands forwarded document 2021/19 to extend the use of temperature recorder to all food stuffs under the Annex 2 and 3 of the ATP, as they are all a thread to the public health when perished. It was said that before this would be possible a number of issues needed to be resolved such as cost, and periodical validation of the recorder.

13. Based on the discussion the following was noted:

   • Periodic verification of the temperature recorder required a check of the whole system, not just the temperature sensors. Sending the system of to an accredited laboratory is therefore not achievable as parts are integrated in the body.
   • In most (but not all) countries the validation is carried out by experts that also do the checks on equipment. Although they have to apply to quality requirements in many cases they are not accredited.

The periodicity is one or two years as given in EN 13486. In most cases it was 1 year applied at the same time as a leak-test/inspection based on F gas regulation in the European Union (EU).

14. A concern was raised concerning the interpretations of the temperature readings in practice, in particular concerning door openings. When doors open the air temperature rises very quickly but the actual temperature of the goods take more time. It is a misinterpretation that goods are no longer acceptable at spikes in the air temperature. To prevent, this vehicles with a maximum payload lower than 7 tons are exempted in Italy for having a temperature recorder.

15. It was also mentioned that the standard EN 13486 is up for a review shortly.

V. Translation problems

16. To reduce translation problems at the United Nations it was suggested to develop a Glossary with terms that were incorrectly translated. It was suggested to include a short description of each term beside the correct term in French, English and Russian. More languages may be added later on in the process.
It proved not possible to come to conclusions on such a list before the October 2023 session of the Working Party on the Transport of Perishable Foodstuffs (WP.11).

VI. Restructuring Annex 1 of the ATP.

Before it was suggested that a restructuring of Annex 1 would improve the reading but also the possibility to adapt the ATP to new technologies. It was said that it would be a long process of several years before it is mature enough. To improve the change to adopt it was decided to use the current intentions of the regulation as a starting point and make modifications as felt necessary in the process.

A first draft was presented with a division in the following chapters:

*Annex 1*
1. Scope and applicability (Structure, Scope, Exemptions, Definitions, Transitional measures)
2. Use requirements (complementing Art 1-5 of the agreement).
3. Construction requirements
4. Approval of equipment (checks for conformity, performance of checks, approval of equipment, Type-approval)
5. Checks on equipment (overview of the various test in Annex 1. Appendix 1)
6. Marking of equipment
7. Supervision of production

*Annex 1, Appendix 1*
1. For each check, inspection or test, a short procedure (regulation) is foreseen, an information document (applicant) and test report (testing station/expert).

For some chapters and sections, such as "use" or "Exemptions" there is nothing included for the moment. However, it is expected that these new sections help further development of the regulation.

VII. Efficiency test of non-independent units.

A number of years ago an additional test was introduced for units of which the compressor is driven by the vehicle engine. At idle speed temperature should be able to be maintained. A transitional measure was foreseen, in such a way that only new equipment constructed for a certain date need to comply.

The expert of Italy remarked that they had performed a number of tests and that the performance of the unit was in some cases not possible. The basic problem is the starting temperature of the insulated body and the ambient temperature. If the insulated body is at ambient temperature at the beginning of the test, the unit has to give an extra performance once the inside air temperature was reached, as heat is still coming out of the walls. It was advised to bring this to the WP.11 meeting as an official document.

VIII. Environmental concerns

WP.11 is charged by the Inland Transport Committee (ITC) to take measures to reduce the carbon for print of transport. A short list was presented for a discussion offering interesting insights. One was to challenge manufacturers of insulating material and body manufacturers to develop further by lowering the K value in the future, and propose a greater vehicle width and height to allow for thicker insulation. It was also said that the proper use of equipment is an important factor (correct set temperature/door openings) and
that a guidance document on the proper use of equipment could be envisaged on the UNECE website for the ATP.

IX. Mandate

24. WP.11 is requested to extend the mandate of the informal working group for another year.