

**Economic Commission for Europe**

**Inland Transport Committee**

6 August 2019

English

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

**Seventy-fifth session**

Geneva, 8-11 October 2019

Item 3 (a) of the provisional agenda

**Activities of other international organizations dealing with issues  
of interest to the Working Party:**

**International Institute of Refrigeration (IIR)**

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**IIR Sub-Commission “CERTÉ” Meeting Netherlands,  
Wageningen 24 to 25 April 2019**

**Transmitted by the International Institute of Refrigeration (IIR)**





**IIR Sub-Commission “CERTE” Meeting  
Netherlands, Wageningen 24<sup>th</sup> to 25<sup>th</sup> April 2019  
Approved Minutes**

## **1.0 Welcome and Presentation**

Mr Leo Lukasse welcomed the group to the Wageningen Food & Biobased Research

(WFBR) in Wageningen and the Chairman Mr Thomas Suquet welcomed the participants (25 in total from 12 test stations). The attendance list is given at the end of this document.

## **2.0 Approval of Agenda**

The proposed agenda revision 3 was adopted.

## **3.0 Apologies**

The secretary informed the participants that he had received apologies from the following:

- Mr Manfred Kreitmayer (Austria)
- Ms Silvia Minetto (Italy)
- Mr Kristian Dahl (Denmark)
- Mr Edo Wissink (Netherlands)

## **4.0 Representation from CERTE on the UN WP11 Meeting**

The chairman, Mr Thomas Suquet (France) indicated that he would be able to represent CERTE at the UN WP11 meeting in October 2019 and that we would continue with the tradition of the chairman being the representative at WP11.

## **5.0 Minutes of the CERTE Meeting in Munich 2018**

Minutes of the last CERTE meeting were approved on the 3<sup>rd</sup> July 2018 and were submitted to the 74<sup>th</sup> session of WP11 as an informal document (INF2).

## **6.0 Information**

### **6.1 IIR**

Mr Richard Lawton gave a brief outline on the IIR activities, which are summarised below:

- CERTE was still the most active of all the commissions
- ICR 2019 – 25<sup>th</sup> IIR International Congress of Refrigeration: 24<sup>th</sup> to 30<sup>th</sup> August 2019. Montreal, Canada <http://www.icr2019.org>

### **6.2 Transfrigoroute International**

Mr Joe Grealy, Mr Andre Stumpf and Mr Lionel Pourcheresse were representing Transfrigoroute International (TI) and the following issues were raised for discussion:

- There are currently 11 members of TI
- Would like to create a group on flammable refrigerants
- The next AGM is in Napoli on the 25<sup>th</sup> and 26<sup>th</sup> September 2019
- Urgent topics for CERTE to discuss
  - o Prototype approval

- Future of the TI multi temp software

### **6.3 CEN**

A short update was given by Mr Andreas Klotz (Germany) on the latest updates to the CEN standards.

CEN/TC 413 working group 1 has reached the final draft on EN17066 part 1; this will hopefully be published this year. Part 2 has reached the draft stage and will also hopefully be published this year. The next meeting for this group is on the 25<sup>th</sup> and 26<sup>th</sup> June in Cambridge.

The second working group is looking at cooling and heating, the first part of EN16440 was published in 2015 and they are currently finishing part 2 on eutectic systems.

CEN/TC 423 has been looking at temperature measuring devices and calibration. EN12830 was published last year with the temperature range extended from 80°C to -85°C. The next meeting is scheduled for the 18<sup>th</sup> June in Madrid and the second meeting on the 18<sup>th</sup> September in Munich.

### **6.4 ISO**

Mr Richard Lawton gave a brief outline of ISO activities: ISO1496-2 on container standards was published in October 2018 and the thermal test is in alignment with other existing standard like CEN and ATP.

ISO20854 on flammable refrigerants is approaching FDIS stage for voting and approval and should be published later this year; this could be used as the basis for other equipment but at the moment it is for just marine containers.

### **7.0 Information from UN WP11 Meeting October 2018**

In Mr Telmo Nobre's absence the chairman and secretary made the following comments in relation to the WP11 meeting:

- The 74<sup>th</sup> session consisted of 27 working documents and 15 informal documents
- The number of contracting parties to the ATP was 50

The 74<sup>th</sup> session saw thirteen proposals adopted. Adopted and rejected proposals are summarised below:

#### **Adopted**

Russia: Method for calculating uncertainty of the K-coefficient

Russia: Power performance of fan

UK & Germany: Panel vans

Spain: New subtitle

Germany: Effective heating capacity

Germany: Amend Annex 1, Appendix 2, Paragraph 4.3.4

Germany: Specification of calorimeter box

Italy: Editorial correction in English ATP

UK: Amendment to Model 12

Germany: Drop-in refrigerants

Spain: Correction of French ATP

UK: Panel vans (ATP Handbook)

Russia: Calculating uncertainty of the K-coefficient (ATP Handbook)

## Rejected/Amend for Next Year

Finland: Pulldown test  
 Russia: Annex 2, Appendix 1  
 UK: Airflow  
 Russia: Definitions for Annex 1  
 Russia: Heated equipment  
 Russia: Amendment to ATP  
 Switzerland: Dangerous goods in ATP  
 Germany: Validity of test reports  
 TI: Prototype units

The Inland Transport Committee (ITC) endorsed the decision of the Working Party on the Transport of Perishable Foodstuffs (WP.11) to increase the number of its sessions from two to three per biennium, and review this decision in two years.

The 75<sup>th</sup> meeting is currently scheduled for the 8<sup>th</sup> to 11<sup>th</sup> October 2019 and the deadline for submission of working documents is the 16<sup>th</sup> July 2019.

The Working Party elected Mr. T. Nobre (Portugal) as Chairman, Mr. K. de Putter (Netherlands) and Mr. J. M. Bonnal (France) as Vice-Chairmen for its seventy-fifth session in 2019.

Ms Alibech Mireias Diaz (WP11 secretary) informed the group that there would be two sessions in 2020; this had been agreed at the recent Inland Transport Committee meeting in February.

The 2-year cycle will start this year at the 75<sup>th</sup> session, as agreed, there can be proposals on the 77<sup>th</sup> session too. The general idea is to adopt at each session the proposals that are ready and postpone/improve proposals that have found some problems to be adopted and present them at a later session during the cycle, if possible. After the 77<sup>th</sup> session the 2-year cycle will end and all the amendments adopted at the 75<sup>th</sup>, 76<sup>th</sup> and 77<sup>th</sup> sessions will be notified for acceptance and once accepted will be part of the new version of ATP.

## 8.0 Discussions about ATP Implementation in the Field of Testing New Vehicles, Type Approvals and Certificates of Approval

Before discussing the document during the meeting the chairman made a comment on his attendance at last year's WP11 meeting. He suggested we work together more on proposals as it's difficult to get amendments adopted into the ATP.

Mr Andreas Klotz suggested the need to look at proposals at this meeting better and both Ms Alibech Mireles and Mr Kees de Putter made the point that this was a technical group between test stations and is there to aid the WP11 when technical issues arise.

### 8.1 Testing Methods

#### 8.1.1 References to Standards in ATP

No comments or discussions were raised.

#### 8.1.2 Minimal Insulated Foam Specification

Mr Nicolas Boudet (France) presented a proposal to add the foam specification to the model reports in ATP, this was a request made by some French body manufacturers.

Mr Andreas Klotz (Germany) asked what if we didn't have that information from the manufacturer, should we have to drill a hole in the body to check? He was of the opinion that we should not get involved with the manufacturing process.

Mr Kees de Putter (Netherlands) felt that we needed to know what insulation was in the panel but to check it from a test station point of view was unnecessary. Maybe we need to look at who fills this information in and make this clearer in the test reports.

There was no general consensus to the proposal and was not recommended for the next WP11 meeting.

### **8.1.3 Software Revision**

Mr Xining Wu (France) presented a proposal to add the software and firmware version into the ATP model 12 test report; this was discussed at last year's CERTE meeting. He also mentioned that they needed this for when they do part load testing.

Mr Andre Stumpf (TI) again mentioned that the software is being developed on a daily basis and that TI was against having the software and firmware versions on the test report.

Mr Richard Lawton (UK) felt that this was beyond the scope of ATP as we are only looking at the maximum capacity and that we don't do part load testing. There was also a comment about whether the software changes and would the manufacturer require a retest, if so then they wouldn't do this.

Mr Andreas Klotz (Germany) was still unsure how this would work or benefit ATP or help test a refrigeration system and agreed with the UK.

There was no consensus on this proposal and it was not recommended for the next WP11 meeting.

### **8.1.4 Kit Bodies and Integrated Insolation Bodies Certification**

No comments or discussions were raised.

### **8.1.5 Round Robin Tests**

Mr Thomas Suquet (France) presented a presentation on the round robin tests and how we could proceed with testing; there was also more testing added to the round robin which included the machine test and airflow test.

Mr Andreas Klotz (Germany) asked why this presentation was circulated to all the delegates prior to the meeting and several delegates asked about what equipment was to be used. It was also a question of test chamber space at each station and whether they had the capacity to conduct the tests.

It was also suggested that there should be an impartial organisation that would collect the test data and then present this at the next meeting.

The chairman asked who would want to participate and the following test stations replied affirmatively.

- France
- Spain
- Netherlands
- Croatia
- TUV Sud
- Prague
- Finland
- UK (in principle).

The chairman asked TI if they could collect the test data and they agreed that they would present the data after the round robin testing.

### **8.1.6 High Capacity Transport**

Mr Pekka Rantti (Finland) gave a brief presentation about the number of large vehicles that are currently in operation in Finland, this was just information for the CERTE group as the Finnish manufacturers are not happy about trying to add airflow requirements into ATP.

#### **8.1.6 Internal Airflow**

Mr Richard Lawton (UK) presented a revised proposal on the internal airflow requirements; this was taken from the CEN standard in order to try and harmonise all the testing standards. He stressed that it was ridiculous that we have no airflow requirement in ATP.

Several colleagues questioned the need to have an airflow requirement and were asking why there was a lower value for frozen mode.

TI was not in favour of this proposal on internal airflow and questioned whether there really was a problem.

Mr Leo Lukasse (Netherlands) asked that given that there was no requirement, why were we bothering to measure the airflow in the first place.

It was suggested that the UK should modify the original proposal and make it less restricted and should be presented at the next WP11 meeting.

#### **8.1.7 Airflow Pressure Reference**

There was a paper from France regarding the airflow pressure reference in model 12 of the ATP; this paper hadn't been circulated to the group prior to the meeting.

After a brief discussion it was pointed out that there was a translation issue and that this would need to be brought up at the next WP11 meeting in the form of a proposal.

#### **8.1.8 Single Exchanger Bi-Temperature Unit**

Mr Xining Wu (France) presented a proposal to test a single temperature unit with a fixed bulkhead and heat exchanger to condition the second compartment using the heat from the first compartment. A few colleagues could not understand how the system would work and TI questioned the need to promote this type of technology.

Mr Joe Grealy (TI) thought it strange that a system like this is not used in France and that they wished to put this into the ATP and would want to give credibility to this system.

Mr Andreas Klotz (Germany) pointed out that this wouldn't be approved due to food safety. Mr Thomas Suget (France) mentioned that the aim of the paper was not to try and add this to the ATP.

## **8.2 Contributions Concerning Test Report Utilisation, Type Examination Certificates, Marking Rules, ATP Plate of Conformity etc.**

### **8.2.1 Thermal calculation tool for dimensioning fridge unit powers to install in a isothermal body**

No comments or discussions were raised.

### **8.2.2 Testing of Prototype Equipment in ATP**

A proposal from TI on the testing of prototype equipment and the issuing of an ATP certificate was raised again for discussion after feedback from the last WP11 meeting.

The proposal is not intended for commercial purposes, the original way it was done in the past is not available to TI.

Mr Andreas Klotz (Germany) thought that the proposal needed to be more precise in the wording, the competent authority can't be responsible for the equipment. In principle they could deal with the proposal but there could be a need to check the equipment with a few tests.

TI thanked Andreas for his comments and would take this on board when submitting the proposal to WP11.

### **8.3 Other Matters**

#### **8.3.1 Definition of Autonomous**

Mr Nicolas Boudet (France) presented a paper on the definition of autonomous, whether something is self-contained or not self-contained as worded in the ATP itself.

It was felt that the proposal needed more work. The wording was only present in model 12 of ATP and perhaps it should be changed to independent or nonindependent which is used more frequently in ATP and look at a definition for this.

#### **8.3.2 K Value Conformity**

Mr Jure Thaler (Slovenia) presented a proposal on the measurement of uncertainty in conformity assessment decisions in ATP testing.

Mr Joe Grealy (TI) had sent the proposal to colleagues and they had some questions based on the risk and do we have to now talk between test stations and manufacturers more.

Mr Richard Lawton (UK) asked who the shared risk was between, test stations and manufacturer; we talk about contracting parties in ATP.

The Chairman felt that this was out of the scope of this meeting and would be more suited for WP11.

#### **8.3.3 K Coefficient Approval**

Mr Richard Lawton (UK) presented a proposal on lowering the K coefficient for normally insulated bodies. This would only effect new equipment and not existing and with a transitional period.

The chairman felt that this was more of an issue for WP11 to discuss rather than CERTE.

#### **8.3.4 Technical Issues with ATP Test Reports**

Mr Stefan Heuss (Germany) discussed the issue of test reports and the acceptance of them with other competent authorities and the constant difficulties with what should or shouldn't be in the test reports.

Mr Joe Grealy (TI) suggested that we could use another informal working group that was set up from last year WP11 meeting to look at this issue and try to harmonise all the information needed, this is affecting customers with delays in ATP certification.

Mr Leo Lukasse (Netherlands) had also agreed with Germany and that they had also had difficulties with test report acceptance with other competent authorities.

The Chairman felt that this was not an issue to be discussed at CERTE and was more for WP11. It was agreed that this other informal working group chaired by Mr Kees de Putter would look at trying to harmonise the models in ATP.

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## **9.0 Discussions about ATP Implementation in the Field of Retesting and the Renewal of In-Service Vehicles**

### **9.1 Testing of Fridge Unit (in service) with a Change of Refrigerants (drop in)**

No comments or discussions were raised.

## **9.2 Methodologies for Renewal of Certificates of Compliance**

### **9.2.1 Small Containers**

Mr Joe Grealy (TI) raised concerns about the latest Japanese and Korean standards on small packages and distribution and asked if this was something that test stations were keeping an eye on for the future.

It was agreed that we would ask WP11 if this was something that we should look at in the future.

### **9.2.2 Safety Factors and Ageing of Bodies**

No comments or discussions were raised.

## **9.3 Other Matters**

### **9.3.1 Secondary Supplier of Evaporators**

Mr Leo Lukasse (Netherlands) raised questions about secondary evaporators if the original fan was not available or not being manufactured anymore and the acceptance of a secondary fan in an ATP machine report.

Mr Andreas Klotz (Germany) liked the proposal but was unsure as to where it should be either in ATP or the handbook, Mr Stefan Heuss (Germany) felt that this would make more sense in the handbook.

The chairman felt it was a good proposal and we would recommend the proposal with a few modifications and the need to have a minimum test to confirm it was a satisfactory replacement.

### **9.3.2 Multi-Temperature Issues**

TI gave an update about their MT calculation tool and that they had verbally agreed transfer of the software to the IIR and would recommend a small working group to discuss MT equipment.

Mr Andreas Klotz (Germany) pointed out that there was an error in the software or the calculation was wrong.

Mr Richard Lawton (UK) commented that CEN was looking at MT so why have two groups looking at the same issues; it would be a bit confusing.

## **10.0 Temperature Recorders Annex 2 Appendix 1**

### **10.1 Consideration about Practices**

No comments or discussions were raised.

### **10.2 Application of 12830, 13485 and 13486 Standards, Initial Verifications and Periodic Reverifications**

No comments or discussions were raised.

### **10.3 Other matters**

No comments or discussions were raised.

## 11.0 Impact of Environmental Regulations and Considerations about Energy Efficiency

### 11.1 Evolution of Refrigerants (Regulation and Technical Developments)

No matters were raised for discussion.

### 11.2 Energy Efficiency (Energy Labels, Minimum Energy Performance Standards (MEPS))

No matters were raised for discussion.

### 11.3 Evolution of Foams (Legislative and Technical Developments)

No other matters were raised for discussion.

12

## 12.0 Recommendations from the IIR “Test Stations” to UN WP11 Meeting in October 2019

The following points were proposed for recommendation to WP11 later this year:

- Airflow reference (translation issue between French and English versions)
- Prototype testing
- Second supplier of evaporators

We would also ask WP11 if we should look at the Japanese and Korean standards currently being developed on small packages and distribution and whether this would need to be incorporated into ATP.

We asked Mr Kees de Putter (Netherlands) to look at all the models in ATP and try to harmonise them in his small working group from WP11.

The following points were not recommendation to WP11 later this year:

- Lamba proposal
- Software proposal
- Airflow (air changes)
- K Coefficient IN value

## 13.0 Sub-Commission Work Plans

The chairman had already discussed the Inter-comparison testing “Round Robin”. The minutes shall be approved by email and submitted as an informal document at the next WP11.

CERTE Recommendations	CERTE 2017 proposal		Adopted to ATP		CERTE 2018 proposal		Adopted to ATP	
	Yes	No	Yes	No	Yes	No	Yes	No
Minimal insulated foam specifications	-	-	-	-	X	-	-	X
Panel van calculation	-	-	-	-	X	-	X	-
Internal airflow	-	-	-	-	X	-	-	X
Measurement of k coefficient for fixed bulkheads	-	-	-	-	X	-	-	X
Testing of prototype equipment in ATP	-	-	-	-	X	-	-	X
Drop-in refrigerant for in-service equipment	-	-	-	-	X	-	X	-
Outside temperature of pull-down test of vehicles	-	-	-	-	X	-	-	X
Testing a range of equipment	-	-	-	-	X	-	-	-

Specification of calorimeter box	-	-	-	-	X	-	X	-
Measuring the effective heating capacity of a unit	-	-	-	-	X	-	X	-
Software revision	-	-	-	-	X	-	-	-
validity of test reports for mechanically refrigerated units	-	-	-	-	X	-	-	X
Liquefied Gas Systems	X	-	X	-	-	-	-	-
Drop-in refrigerant for new machines	X	-	X	-	-	-	-	-
Multi-compartment decals	X	-	X	-	-	-	-	-
Dividing walls (add fixed) add measurements to options	X	-	-	X	-	-	-	-
Dividing walls (add fixed) add measurements to options	X	-	X	-	-	-	-	-
Multi-compartment in-service inspections procedure	X	-	X	-	-	-	-	-
Modification of test reports	X	-	X	-	-	-	-	-
Calorimeter box requirements	-	X	-	-	-	-	-	-
Uncertainties	-	X	-	-	-	-	-	-

#### 14.0 Future Meetings

The proposed date for the next meeting was 5<sup>th</sup> and 6<sup>th</sup> February due to the extra WP11 meeting in 2020 in April. There is, at present, no venue for next year's meeting.

#### 15.0 Any Other Business

Mr Andre Stumpf emphasised the need to look at heating tests as there were at present only two test stations that are capable of -40°C.

## Attendance: List of Participants

Name	Surname	Country	Organisation	EmailAddress
Boudet	Nicolas	France	Cemafroid	nicolas.boudet@cemafroid.fr
Cuccato	Gianluca	Italy	CNR	gianluca.cuccato@itc.cnr.it
Grealy	Joe	Ireland	Transfrigoroute International	joseph.grealy@irco.com
Heuss Germany	Stefan	Germany	TÜV SÜD	stefan.heuss@tuev-sued.de
Klotz	Andreas	Germany	TÜV SÜD	andreas.klotz@tuev-sued.de
Lawton	Richard	UK	CRT	rlawton@crtech.co.uk
Lukasse	Leo	Netherlands	Wageningen Food & Biobased Research	leo.lukasse@wur.nl
Mannaerts	Rob	Belgium	VAS	rob.mannaerts@vias.be
Martínez-Val	Juan	Spain	Official ATP Test Station from Spain (FFII)	juan.mpiera@gmail.com
Miljenko	Jemic	Croatia	Centre for Vehicles of Croatia	Miljenko.jemic@cvh.hr
Mireles Diaz	Alibech	Switzerland	UNECE	Alibech.MirelesDiaz@unece.org
Mynott	Tobias	UK	CRT	tmynott@crtech.co.uk
Pourcheresse	Lionel	France	Transfrigoroute International	Lionel.Pourcheresse@carrier.utc.com
De Putter	Kees	Netherlands	RDW	kdeputter@rdw.nl
Pekka	Rantti	Finland	Natural Resources Institute Finland (Luke)	pekka.rantti@luke.fi
Rhodes	Chris	UK	CRT	crhodes@crtech.co.uk
Natasa	Sodja	Slovenia	Lotric Metrology Ltd	Natasa.sodja@lotric.si
Stumpf	Andre	France	Transfrigoroute International	andre.Stumpf@carrier.utc.com
Suquet	Thomas	France	Cemafroid	thomas.suquet@cemafroid.fr
Thaler	Jure	Slovenia	Lotric Metrology Ltd	jure.thaler@lotric.si
Tomasic	Ivan	Croatia	Centre for Vehicles of Croatia	ivan.tomasic@cvh.hr
Vavra	Peter	Czech Republic	Ingersoll Rand	petr_vavra@eu.irco.com
Wu	Xining	France	Cemafroid	xining.wu@cemafroid.fr
Zeller	Martin	Germany	Zeller DNV Germanischer Lloyd	martin.zeller@dnvgl.com
Zijlstra	Martin	Netherlands	Wageningen Food & Biobased Research	martin.zijlstra@wur.nl