

**Economic Commission for Europe**

**Inland Transport Committee**

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

**24 June 2015**

**Seventy-first session**

Geneva, 6-9 October 2015

Item 3 (a) of the provisional agenda

**Activities of other international organizations**

**dealing with issues of interest to the Working Party**

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**Report of the IIR CERTE subcommission meeting  
(Castelo Branco, Portugal, 21-22 April 2015)**

**Transmitted by the International Institute of Refrigeration**



**IIR Sub-Commission “CERTE” Meeting  
Portugal, Castelo Branco 21<sup>st</sup> to 22<sup>nd</sup> April 2014  
Approved Minutes**

### **1.0 Welcome and Presentation**

The mayor welcomed the group to Castelo Branco and wished us a successful meeting. The Chairman Mr Eric Devin welcomed the participants (18 in total from 8 test stations). The attendance list is given at the end of this document.

### **2.0 Approval of Agenda**

The proposed agenda was adopted without any additional amendments.

### **3.0 Apologies**

The chairman informed the participants that he had received the following apologies:

- Mr Manfred Kreitmayer (Austria)
- Mr Hanspeter Raschle (Germany)
- Mr Bernard Schrempf (Germany)
- Mr Kristian Dahl (Denmark)
- Mr Konstantin Chatzidakis (Greece)
- Mr Emmanouel Rogdakis (Greece)
- Mr Popovic (Serbia)
- Mr Emanuel Godal (Slovakia)
- Mr Peter Manas (Slovakia)
- Mr Vladimir Markech (Slovakia)
- Mr Jozef Pillar (Slovakia)
- Mr Eduardo Muñoz (Spain)
- Mr Geron Johansson (Sweden)
- Mr Christopher Smith (UNECE)
- Mr Didier Coulomb (IIR)

The chairman had invited Morocco to attend but they were unable to do so.

#### **4.0 Updating of the terms of reference (TOR) for the CERTE D2 – Sub Commission.**

The terms of reference for the Sub-Commission has been updated and approved by the IIR; this was the first since 2004. The original name of the Sub-Commission was “Test Engineers Group”, the latest name “D2 CERTE on test stations” had been changed to what we are more commonly known as “CERTE” as of March 2015.

The following comments were made:

Ms Kress (Germany): we should be called the test engineers meeting.

Mr De Putter (Netherlands): what is the purpose of the meeting is it to discuss technical papers.

Mr Devin (France): we have only just updated the terms of reference, perhaps we can propose to make changes to the IIR.

#### **5.0 Representation from CERTE on the UN WP11 meeting**

The chairman, Mr Eric Devin (France) indicated that he would be able to represent CERTE at the UN WP11 meeting in October 2015 if so requested. There was general agreement to this proposal.

#### **6.0 Minutes of the CERTE Meeting in Padua 2014 and Amendments**

Minutes of the last CERTE meeting were approved on the 8<sup>th</sup> July 2014 and were submitted to the 70<sup>th</sup> session of WP11 as an informal document (INF5).

#### **7.0 Information**

##### **7.1 IIR**

Didier Coulomb was unable to attend; Richard Lawton president of D2 gave a brief outline on the IIR activities:

- CERTE was still the most active of all the commissions
- F-Gas regulations
- ICR 2015 - 24th IIR International Congress of Refrigeration (16<sup>th</sup> to 22<sup>nd</sup> August 2015. Yokohama, Japan)

## **7.2 Transfrigoroute International**

Mr Grealy was representing Transfrigoroute International (TI) and the following topics were discussed:

### **1) Implementation of F- Gases**

The revised regulation which comes into effect in 2015 has presented both the manufacturers and transports with different technical and financial challenges in the coming years.

Transporters need to find commercially acceptable and technically sound solutions for their existing equipment.

The next few years should be very interesting in how the regulations are applied in each country.

### **2) NRMM Non-Road Mechanical Machines**

Euro 6 has significantly improved the emissions from the diesel engines of trucks, a new set of standards that have been proposed which will harmonise EU (euro) and UD (tier) regulations for engines.

Small engines below 15kW such as used by refrigeration systems are not yet covered but the authorities are beginning to suggest their inclusion. The challenge facing the transport refrigeration industry is to find, test and approve suitable engines with more modern, high pressure common rail injection technology which will meet these limits and fit in the space provided under the current weights and dimensions regulations for semi-trailers.

### **3) Weights and dimensions.**

The recent review of the EU directive on weights and dimensions did not yield any good news for TI or its operating members. However, there have been concessions for aerodynamic components for trailers.

In the meantime TI vowed to continue its work on energy related issues.

The annual conference will be in Amsterdam and marks TI's 60<sup>th</sup> year, it extends an invite to IIR members.

## **7.3 CEN**

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

EN16440 part 1 has been published and currently part 2 is being worked on.

EN12830 is currently still being revised under CEN423; current technology that wasn't in the original standard is being reviewed.

The following comments were made:

Mr De Putter (Netherlands): What are the intentions with regards to the new CEN standard, there appears to be a section on markings?

Mr Stumpf (Carrier): There is currently no representation from the Netherlands and encouraged more countries to join CEN.

Mr Klotz (Germany): The markings are there for a technical reason, it's not an official marking.

Mr Devin (France): normally when there are markings they are there for a reason, we need to be clearer when discussing the standard. CEN is a more open when discussing new technology, but it can't replace ATP as this is mandatory.

Mr Nobre (Portugal): the ATP is not just in Europe.

Mr Grealy (TI): the CEN standard is there for the manufacturers, it's better to have a standard for the industry than to have nothing.

Mr Devin (France): maybe in the future the CEN standard can become an ISO standard. Maybe this can be discussed at the next WP11 meeting.

Mr Nobre (Portugal): expressed concern that the CEN standard could be the end of ATP.

Mr Devin (Portugal): We need to compare the CEN standard with ATP; Mr Klotz said it was not possible to finish in time for WP11 this year.

## **8.0 Information from UN WP 11 Meeting October 2013**

The chairman Mr Telmo Nobre was in attendance, he made the following comments:

- The 70<sup>th</sup> session consisted of 23 working documents and 9 informal documents.
- 48 contracting parties.
- Heated equipment was the biggest amendment to ATP.

The 70<sup>th</sup> session saw six proposals adopted. Adopted and rejected proposals are summarised below:

## Adopted

Netherlands:	Correction to text (Annex 1, paragraph 1)
UK:	Airflow (Annex 1, appendix 2, 3.2.6)
Russia:	Heated equipment (Annex1, appendix 1, 2, 3 and 4)
Finland:	Correction to text (Annex 1, appendix 2, paragraph 8.3.1)
Finland:	Correction to text (Annex 1, appendix 2, paragraph 8.3.2)
France & UK:	Correction to standards (4.3.2 and 4.3.4 ii)

## Rejected

Russia:	Definition of perishable foodstuffs
Germany:	K values of in-service vehicles (amend)
Netherlands:	More information from manufacturers (amend)
UK:	Measurement of internal panel vans (amend)
France:	Re-certification of 6 and 9 year-old small vans
France:	Retesting of multi-compartment equipment
France:	Proposal on testing liquefied gas systems
Portugal:	Distinguishing marks for multi-compartment vehicles
Germany:	Distinguishing marks for multi-compartment vehicles
France:	Distinguishing marks for multi-compartment vehicles
Russia:	Combining annexes 2 and 3
France:	Validity of certificates
Secretariat:	Corrections to ATP
France:	Extend scope of ATP to national

The 71<sup>st</sup> meeting is currently scheduled for the 6<sup>th</sup> to 9<sup>th</sup> October 2015.

The main priority for the next meeting would be to discuss and finalise the multi-compartment decals and in-service testing.

There was also a topic on the voting rules which will be discussed at the next meeting.

Mr Devin (France) commented that the recommendations from the CERTE meeting were not being recognised at the WP11 meeting with only 37% of proposals discussed during CERTE adopted at the last meeting.

## **9.0 Discussions about ATP implementation in the field of testing new vehicles, type approvals and certification**

### **9.1 Testing methods**

#### **9.1.1 References to standards in ATP**

No other matters were raised for discussion.

#### **9.1.2 Inclusion of definitions in the Annex 1 of ATP**

Mr De Putter (Netherlands) discussed whether there was a need for us to incorporate definitions into the ATP agreement.

It was agreed that TI would contribute towards some of the definitions for a proposal for the next WP11 meeting.

#### **9.1.3 External surface area measurement of panel vans**

The UK presented a paper on the external surface area measurements of panel vans, without the test report. It was hoped that that a solution could be agreed about what information was required on the test report to support the proposal at the next WP11 meeting.

After several minutes of deliberation over what was required in the test report, it was suggested that the UK prepare a new proposal with amendments to the test report.

The solution was to refer to the diagrams in the handbook.

#### **9.1.4 Supply of information on equipment to be tested**

Mr De Putter (Netherlands) discussed whether there was a need for more information to be supplied to test stations.

The chairman asked the test stations whether there was a problem with the current information already supplied, all were in agreement that this wasn't a problem.

### **9.1.5 Duration of the efficiency test of mechanical refrigeration equipment**

Mr Rossi (Italy) presented a proposal to lower the 12 hours currently specified when carrying out a combined test.

The following comments were made:

Mr Nobre (Portugal): 12 hours was there for a reason.

Mr Devin (France) there is no recommendation from CERTE to support this change; we need more evidence to support the proposal.

### **9.1.6 Multi-compartment and multi-temperature**

Mr De Putter (Netherlands) presented a proposal to include definitions to describe multi-temperature, multi-compartment units and also open the door to new technology.

It was suggested that we solve the classification before looking at this proposal.

### **9.1.7 K Values for fixed multi-temperature units**

Mr Rossi (Italy) presented a proposal to allow fixed multi-compartment vehicles to be approved (for example: a small panel van has a fixed bulkhead where the front compartment has thicker walls than the rear compartment thus allowing the front compartment to achieve 0.4 and the rear 0.6), at present this isn't allowed under ATP rules.

It was suggested that a proposal be submitted to the next CERTE meeting.

### **9.1.8 Information for use of multi-temperature multi-compartment**

Mr De Putter (Netherlands) presented a proposal on the classification markings for multi-compartment / multi-temperature (MTMC) equipment, during discussions at a previous WP11 meeting there was a need for more information when inspected or loaded. It was proposed that in all cases MTMC's are equipped with an additional plate next to the manufacturing plate, giving a schematic overview of the equipment with its components.

The following comments were made:

Mr Stumpf (TI): to have more information so that people can use MTMC's properly is only a good thing, we need tools to help people.

Ms Kress (Germany): if there are more than two compartments this could present a problem.

Mr Devin (France): this proposal is very clever; this seems to be a step in the right direction.

Mr Nobre (Portugal): try not to complicate things, keep it simple and use the existing ATP plate dimensions.

Mr Grealy (TI): it has always been the stance of TI that it should be a simple marking.

It was recommended that a proposal be submitted for the next WP11 meeting.

### **9.1.8 Independent ATP test for liquefied gas units**

There was a paper submitted by Mr DE Putter (Netherlands) regarding the need for an independent test for liquefied gas systems, at present it is only allowed to do a combined test.

Further to this discussion there was a presentation by Mr Suquet (France) regarding this matter. It was concluded that more work needed to be done on this proposal in order to submit it to WP11, perhaps an informal document could be submitted for this year's WP11 and a proposal for the next CERTE meeting.

### **9.1.9 Kit bodies and integrated insulation bodies certification**

No other matters were raised for discussion.

### **9.1.10 Air flow**

On March 19<sup>th</sup> 2015 a proposal of amendment to the ATP was circulated. See depositary notification C.N.181.2015.TREATIES-XI.B.22, <http://www.unece.org/fileadmin/DAM/trans/doc/2015/wp11/CN.181.2015-Eng.pdf>. One part of the proposals was an amendment to annex 1 appendix 2 paragraph 3.2.6.

A proposal by Mr Rantti (Finland) was put forward stating that in Finland the maximum height of the vehicle is 4.4 meters. This means that inside height of the body could be something like 3.15 m. If internal length is 13.4 m and width 2.5 m, volume is 105.5 m<sup>3</sup>. Multiplied by 60 the airflow requirement would be 6330 m<sup>3</sup>/h.

It was suggested that Finland would vote against this amendment in New York, thus all the proposals would likely be rejected.

There was a brief presentation by Mr Stumpf on behalf of Carrier looking at their entire fleet.

The following comments were made:

Mr Stumpf (TI): Carrier have analysed the new airflow requirements on their entire fleet, they do not have a problems with the 60 air changes. Maybe we need to in future modify the requirements looking at a lower air flow in frozen mode.

Mr Lawton (United Kingdom): maybe we need to look at how containers work, in chilled mode they run on high speed fans and in frozen mode low speed.

Mr Devin (France): maybe we need to prepare an amendment for the next WP11.

Mr Nobre (Portugal): typically if a country rejects one of the proposals in New York as the amendments are presented together, al are rejected.

#### **9.1.11 Minor and limited modifications to insulated bodies**

On 31 December 2013 proposals of amendments to the ATP were circulated. See depositary notification C.N.1049.2013.TREATIES-XI.B.22 <http://www.unece.org/fileadmin/DAM/trans/doc/depnots/CN.1049.2013-Eng.pdf> . After communication from Germany, the approval of the proposals was postponed and the deadline for objection from Germany was the 31<sup>st</sup> March 2015. So at the moment it is unclear whether the proposals are accepted and going to enter into force. If the proposals are not accepted, this paper shall be omitted.

The purpose of the proposed amendment (31 Dec 2013) is to increase the possibilities of modifying insulated bodies without having new K value tests. However the proposed text still leaves gaps or even increases possibilities for interpretation and might put some manufacturers in different countries at a disadvantage.

A proposal by Mr Rantti (Finland) was presented In order to avoid such situations; some details of the proposal should be clarified. In particular, the term “total volume of the insulating material” needs to be clearly defined.

After a brief discussion it was agreed that a proposal should be submitted for the ATP handbook at the next WP11 meeting.

#### **9.1.12 Uncertainties and metrology aspects included in annexe 1 appendix 2**

No other matters were raised for discussion.

### 9.1.13 Exchange of information about accreditation according ISO17025 standard, peer assessment and inter-comparison

Mr Devin (France) asked each ATP test station whether they were accredited to ISO17025; the following responses were submitted.

United Kingdom:	Approved by the DVSA.
Belgium:	No accreditation and no plans to get ISO17025.
Italy:	There are only two test stations that are accredited.
Czech Republic:	Accredited for some of the procedures.
Germany (TUV):	Accredited in line with test standards, Mr Klotz asked why we are still bringing this subject up with regards to ISO17025.
France:	It's a mandatory requirement in France to be accredited to ISO17025.
Portugal:	Accredited to ISO17025, Mr Nobre pointed out that in all his 17 years of testing no one has asked to see their accreditation, only the calibration certificates.
Finland:	accredited to ISO17025 by the Finnish accreditation service FINAS.
Germany (KIST):	no accreditation.
Netherlands:	no accreditation but there are control measures in place.
Spain:	accredited to ISO17025.

It was commented by TI that they would just like consistency between each test station.

Mr De Putter (Netherlands) pointed out that he thought accreditation was a "magic" word and there was a difference of opinion concerning this subject.

Mr Devin (France) disputed this fact and said it was confirmation that testing procedures were being followed.

It was agreed at the last CERTE meeting that a round robin would be organised between each test station to compare results. It was agreed that Mr Raschle (Germany) would write a test procedure; unfortunately he was not present that this meeting.

Mr Stumpf (TI): it was CERTE's choice on what type of vehicle they required.

Mr Klotz (Germany) suggested that we use an older truck due to the effects of aging and that we should split the cost between all the test stations taking part.

The following test stations agreed to take part:

United Kingdom, Italy, Czech Republic, Germany (TUV), Finland, Portugal and Spain.

### **9.1.14 Testing of refrigeration units with new (drop in) refrigerants**

No other matters were raised for discussion

## **9.2 Contributions concerning test report utilisation, type examination certificates, marking rules, ATP plate of conformity etc.**

### **9.2.1 Better clarification of X- marking**

Mr Rossi (Italy) presented a paper concerning the clarification of the X marking on ATP decals. The use of the X additional mark is evident in most cases, but there are some areas of ambiguity; we found some examples of the same equipment with different application of the letter X. The typical cases that could lead to ambiguity are battery driven vehicles and refrigeration equipment with external condensing unit. It is obviously necessary to have a harmonised way of classifying these types of vehicles.

In order to avoid different interpretations concerning the application of the X mark, it will be better to complete, if necessary, the list of the cases reported in Annex 1, Appendix 4 and to add into the handbook examples of possible ambiguous cases.

It was suggested that Italy modify the informal document submitted by France (Inf6 2012) for the next WP11 meeting.

### **9.2.2 Thermal calculation tool for dimensioning fridge unit powers to install in an isothermal body**

Transfrigoroute International presented the calculation tool; and indicated that Thermo King would continue to fund improvements to the software and was also in favour of future development.

The TI tool can be downloaded from the following link:

<http://www.transfrigo.com/en/403.html?nc=1>

Login: Transfrigoroute / Password: member

Accessing the tool is free but it is necessary to sign up in order to download the tool and also get updates as and when available.

It was suggest that users need to familiarise themselves with the tool and its features. Any feedback would be welcomed and should be sent to either Mr Joe Grealy or Mr Andre Stumpf.

There was another presentation by Mr Suquet (France), Cemafruid had developed another tool. There were two options available: the first was to help the customer / body builder and the second to help the competent authority.

The following comments were made:

Mr Klotz (Germany): what was the point of this software tool?

Mr Lawton (United Kingdom): is the French version of the software available?

Mr Grealy (TI): who is this tool designed for?

Mr Devin (France): we needed the tool to help the datafrig database for the French ATP system and the software is available. The tool was designed for Cemafruid; the original TI tool had bugs which wasn't acceptable.

Mr Nobre (Portugal): we only need one tool, we need to stop fighting each other and work from the same page. It was requested by WP11 that TI would develop a tool.

Mr Grealy (TI): Cemafruid helped develop the TI tool, there were issues but they have been largely fixed, and the tool was requested by the industry at a cost of €40K. We are a very small industry and want to play by the same rules and avoid conflict.

Mr Devin (France): the tool is the same as TI's; the approval of the software is in the hands of WP11.

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

### **10.1 Methodologies for renewal of certificates of compliance**

#### **10.1.1 Refrigerant fluid conversion on in-service transport refrigeration equipment**

If we consider that the new refrigerants will be different, what do we do with regards to the ATP documents? Mr Stumpf (TI) welcomed the opinions of the experts at the meeting.

The following comments were made:

Mr Devin (France): how can we ensure traceability? We need to make sure it's the same test report.

Mr Stumpf (TI): It was his personal view that there would be a short term solution with a drop in replacement R452A; the next step would be looking at natural refrigerants.

Mr Devin (France): we needed to put this into the working plan regarding information on drop in replacements.

Mr Klotz (Germany): what would we do with equipment outside of Europe as F-Gas is only an EU directive?

It was suggested that TI present an informal document on this subject.

#### **10.1.2 6 and 9-year ATP retesting method for non-independent mechanically refrigerated equipment**

France gave a paper and presentation concerning the above. This had been discussed and edited at the last WP11 meeting but was still not adopted.

The document was discussed and edited during the meeting; a new proposal will be circulated before being submitted to the next WP11 meeting.

#### **10.1.3 6 and 9-year ATP retesting method for multi-compartments**

France gave a presentation on the in-service inspection testing for multi-compartment units. It was decided at the last WP11 meeting that a small working group discuss a new proposal on this topic.

The document was discussed and edited during the meeting; it was pointed out by Mr Nobre (Portugal) that time is running out and we need to approve this in the next few years.

#### **10.1.4 Retesting of cryogenic in-service equipment**

It was too early to put this topic on the agenda, this is a future topic.

#### **10.1.5 Safety factors and ageing of bodies**

No other matters were raised for discussion

#### **10.2 Other matters**

No other matters were raised for discussion

## **11.0 Temperature recorders Annex 2 Appendix 1**

### **11.1 Consideration about practices**

No other matters were raised for discussion

### **11.2 Application of 12830, 13485 and 13486 standards, initial verification and periodic re-verifications**

Temperature recorders (12830) currently under review, it was suggested by Miss Kress (Germany) that it should be possible to move sensors easily out of position in order to re-calibrate.

### **11.3 Other matters**

No other matters were raised for discussion

## **12.0 Impact of environmental regulations and considerations about energy efficiency**

### **12.1 Evolution of refrigerants (regulation and technical developments)**

No other matters were raised for discussion

### **12.2 Energy efficiency (energy labels, minimum energy performance standards (MEPS))**

There were no papers regarding this issue, but it was pointed out by Mr Klotz (Germany) that there would be information concerning energy labelling from Germany hopefully next year.

### **12.3 Evolution of foams (legislative and technical developments)**

No other matters were raised for discussion

### 13.0 Recommendations from the IIR “Test Stations” to UN WP11 meeting in October 2015

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

- Definitions in Annex 1
- Dimensions of panel vans and test report
- Information for MTMC’s
- Liquefied gas systems (informal document)
- Minor modifications to insulated bodies (ATP Handbook)
- Clarification of the X markings (ATP Handbook)
- 6 and 9-year ATP retesting method for non-independent mechanically refrigerated equipment
- New refrigerant (in service equipment)

CERTE papers for next year:

- K values of multi-compartments with fixed walls

### 14.0 Sub-Commission Work Plans

The chairman discussed the sub-commission work plans.

- “Round Robin” thermal tests
- New Refrigerants

The minutes shall be approved by email and submitted as an informal document at WP11.

CERTE Recommendations	WP11 2013 proposal		Adopted to ATP		CERTE 2014 proposal		Adopted to ATP		CERTE 2015 proposal	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Definitions in Annex 1	-	-	-	-	-	-	-	-	X	-
Dimensions of panel vans	X	-	-	X	X	-	-	X	X	-
Information for MTMC’s	-	-	-	-	-	-	-	-	X	-
Liquefied Gas Systems	-	-	-	-	-	-	-	-	X	-
Minor Modifications to Insulated Bodies	-	-	-	-	-	-	-	-	X	-
Clarification of the X markings	-	-	-	-	-	-	-	-	X	-
6 and 9-Year ATP Retesting	-	-	-	-	-	-	-	-	X	-
New Refrigerant	-	-	-	-	-	-	-	-	X	-
“Round Robin” thermal test	-	-	-	-	X	-	-	-	X	-
Airflow	-	-	-	-	X	-	X	-	-	-
Multi-compartment decals	X	-	-	X	X	-	-	X	-	-
Calculation tool	-	-	-	-	X	-	-	X	-	X
Dividing walls (add fixed) add measurements to options	X	-	-	X	X	-	-	X	-	-
Refrigeration unit to collect data for acceptable changes	-	-	-	-	-	-	-	X	-	X
Pull-down test of vehicles	X	-	-	X	X	-	-	X	X	-
Multi-compartment in-service inspections procedure	X	-	-	X	X	-	-	X	X	-
Correction to standards (4.3.2 and 4.3.4 ii)	-	-	-	-	X	-	X	-	-	-

## **14.0 Future Meetings**

- Prague was proposed as a venue for the next CERTE meeting in April 2016, in either the first or forth week.

## **15.0 Any Other Business**

Mr Lawton (United Kingdom) raised an issue with regards to some test stations requesting the re-certification of the refrigeration unit after 6 years; this at present is not a requirement in ATP.

The following comments were made:

Mr Klotz (Germany): was of the same opinion that it isn't mandatory.

Mr Stumpf (TI): commented that this was a valid question that needs to be discussed.

Mr Devin (France): this topic was not on the agenda to be discussed, it was however pointed out by Mr Klotz (Germany) that if that were the case, then should not, in future, the "AOB" be removed from the agenda.

### Attendance: List of Participants

<b>Name</b>	<b>Surname</b>	<b>Country</b>	<b>Organization</b>	<b>Email Address</b>
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