

## **LowT 2018- Minutes f-to-f meeting**

<b>Date</b>	<b>November, 19-20<sup>th</sup> (2018)</b>
<b>Title</b>	<b>Minutes of the 22<sup>nd</sup> f2f - Low Temperature Task force</b>
<b>Document</b>	<b>LowT 22-01 - MINUTES</b>

The Chair (C. Astorga) welcomed the TF members and presented the agenda.

Following the request of some members of the TF previously to the f2f meeting, on the timeline of this TF, the Chair included in the agenda the point “timeline of WLTP”. Ichikawa-san, as technical Chair of the WLTP iWG, was invited by Chair of this TF to present the time line of WLTP iWG as it appears in WLTP document “schedule of WLTP phase 2”. (A copy of that excel file can be found in the minutes of this TF corresponding to 16th March 2018- Telco no. 17th)

VW and JAMA raised the question on deadlines to provide the final LowT GTR and to finalize different technical points. In response, the Chair pointed out that the TF got an extension – aligned to the WLTP phase 2 - to work until 2020 and that a technical report must be provided by the end of 2019. This (delivery time 2020) was later illustrated in the time schedule shown by WLTP iWG technical Chair.

CH (G. D'Urbano) pointed out that the group has to address a list of technical points before writing the new GTR. Nonetheless, it was needed to start the discussion on the bases of a drafting document as several options could be used for the Low T GTR.

Rob Gardner was invited by the Chair to present a summary on the state of play of the transposition of the GTR 15 into UN Regulation under the 1998 and 1958 agreements. During its presentation R. Gardner pointed out that it would be more difficult to transpose into UNR a GTR that does not refer to Reg. 83.

Chair clarified that TF was requested (by the GRPE) to produce a “standalone” GTR document and not an Annex of the GTR 15. This question was already done in the TF months ago, then raised by the Chair to the WLTP IWG and answered from the secretary of the GRPE.

Among other reasons, it was remarked that an Annex to GTR-15 would not be possible, as CP such as India do not agree with this approach. However, Gardner pointed out that an “optional Annex” would solve this issue. The question will be presented to the Secretariat.

The Chair presented a series of slides that summarize the work flow up to now. She showed that a general procedure to measure emissions (of Type I criteria pollutants and CO2) from pure ICE, NOVC-HEV and OVC-HEV was proposed (by JRC and EC). However, there has not been developments for PEV and what concerns to range, energy consumption and CO2 emissions from OVC-HEV. To this point M. Naegeli pointed out that there are general points that need to be clarified before SG-EV will be able to work on these points.

JAMA pointed out that the group need to know the purpose of the Low T procedure. To this the Chair indicated that CP had replied to this, and other similar questions in the questionnaire submitted in 2016 (final version of the answers of the CPs is available since early 2017).

CH (P. Bonsack) presented a series of proposals for the points (most of them technical, but not only) previously indicated which are marked as priority 1 and 1.5. The proposals included: name of the GTR (which was agreed), cycle (4 phases WLTC) test procedure (including, preconditioning temperature (T) soaking time (t) and temperature, test temperature and range of the temperatures), family concept (focused on pollutant emissions control systems, not CO2 based). The document that gathers all the proposals as well as comments will be distributed to the group.

R. Suarez (JRC) presented following a similar approach to CH a proposal for the test procedure (including, preconditioning temperature (T) soaking time (t) and temperature, test temperature and range of the temperatures) pure ICE, NOVC-HEV and OVC-HEV. Most of the points presented were in agreement with CH, with some differences in the coast down and preconditioning temperature. The proposal also included some considerations for K factors of NOVC-HEV and OVC-HEV. This document will be shared with the TF members together with CH's.

CH and EU proposal remarked the need of 4 phases/ WLTC while JPN expressed the preference for 3 phases/ JPN WLTC. Therefore, at current state a regional option may be presented.

TF members are expected to provide their comments on these documents [\*] .A final proposal should be created with those comments, if any.

To CH and JRC proposal VW (B. Coleman) pointed out that for certain OEMs, the lowest reaching T suggested in the proposals (-10 C) could be difficult to meet as the freezing point of AdBlue is -11C and the uncertainty of temperature sensors used by some OEMs is higher than 1C.

PSA requested to reconsider the need for  $T_{oil}$  and  $T_{coolant}$ . To this JPN replied that both T are requested in Type I test.

It was indicated that it would be wise to include in the GTR all vehicle Classes and therefore the different cycles and requirements that come with them.

Regarding Ref. fuels, JPN is conducting an experimental campaign. It is expected to have the results in late December. No feedback will be provided before that time.

Together with CH and JRC documents another document presented by JPN which provides an overview of the current status of the work done will be updated and it will summarize issues that need to be discussed. Expected deadlines for the actions will be shared with the TF members.

The Chair highlighted that Annex 8, in relation all possible issues concerned at lowT should be revised inside the SG-EV. SG-EV technical secretary (M. Naegeli) pointed out the need to clarify which technical points should be discussed in the TF and which in the SG-EV to avoid double discussions between the LowT TF and SG-EV.

SG-EV is expected to provide an extensive list of opened points related to electrified vehicles. The Chair and CH requested that, once available, the SG-EV should also provide the input to the priority list of issues to be discussed. This priority list was created by the drafting coordinator, S Dubuc on the 17<sup>th</sup> of September (Tokyo WLTP 24<sup>th</sup>) and it is revised. Comments from the Chair, Japan, JRC, and CH have been already received. Final version will be distributed to the TF

The Chair expects the SG-EV to provide a proposal on how should range, efficiency and energy consumption from electrified vehicles be evaluated at -7C by March 2019 (no need to include NOVC-HEV which will be tested as a pure ICE using Type I correction factor, unless SG-EV suggests differently). The TF members were informed that until then the Chair will not call for a new f2f meeting.

SG-EV will invite for a meeting to ask input on PEV evaluation at -7C.

CLEPA (Ch. Petitjean) presented the current state of play on the selection of devices that are considered Auxiliary devices under the current definition, that are affected by the cold (-7C) ambient temperature and can lead to impacts on vehicle emissions and range.

Ch. Petitjean suggested to include in his approach two lines that will help to decide on the applicability: one that considers the worst case, and the other the common use.

During the presentation, it was pointed out that peripheral devices definition may change in the upcoming months. Nonetheless, the work will continue as it is unless the auxiliary devices considered are affected by these changes.

It was discussed if additional burners should be considered in this frame, but Sweden pointed out that they are covered by Reg 122, which consider their emission, and should not be considered as Aux dev. The group agreed.

As a next step Ch. Petitjean will provide an approach to evaluate the devices as their effect during: soaking-precondition-running

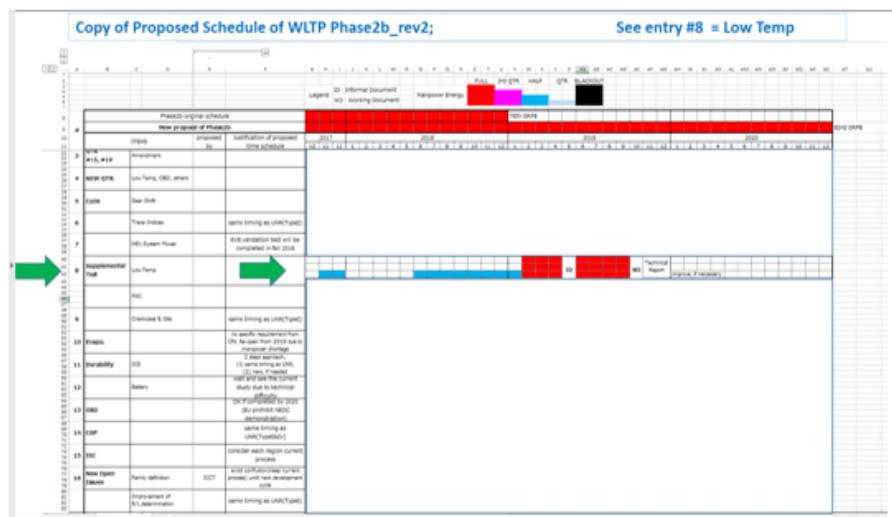
CH will provide to the TF an overview that will be created together with SG-EV, JPN and JRC.

[\*] These docs were distributed by the chair to all TF members. No comments were received by the 11<sup>th</sup> of Dec (deadline for submission of comments)

## Annex 1 -

*Copy of minutes 17 telco (see CIRCA) referring to the phase 2 – revised. Presented in March 2018 – this calendar was copied from the WLTP file*

**NEW Proposed Schedule of WLTP Phase2b\_rev2-Copy LowT.pdf:**



**Short Summary & information regarding LowT TF progress report**

Information delivered in Jan 2018 at WLTP 21<sup>st</sup>:

Document = WLTP-21-07e\_LowT TF progress Rep.pdf

(<https://wiki.unece.org/display/trans/WLTP+21st+session>)

**Content of the next f2f meeting in April 16th & 17<sup>th</sup>:**

**Day 1- Afternoon**

A/ Update from Japan in relation to Temperature of the test in winter conditions.

Information / presentation

Information and position from other CPs are expected (Sweden, Switzerland and EC)

B.Coleman asked if EC will be present as CP.

B/ Work of the Low T TF expected in 2018 and Progress and development of GTR

C/ During the 2nd day of the meeting, the agenda will include some technical presentations. One has been announced by Thomas Büttler (EMPA); title will be announced

Minutes of the 17<sup>th</sup> TelCo- Low Temperature TF; March, 16<sup>th</sup> (2018)

**Annex 2 -**

*Copy of minutes 17<sup>th</sup> Telco (see CIRCA) referring to the phase 2 – revised. Presented in March 2018 – this calendar was copied from the WLTP file*

GTR work progress and discussion will be among the main items in the agenda in f2f meeting. S. Dubuc together with Bonsack and G. D'Urbano will lead this part of the work from BAFU (CH).

Ichikawa-san mentioned that, due to the extension of the time available for the work during phase 2, it should not be necessary to rush and remarked that Japan, as CP, would not be ready to give conferred opinions on GTR issues in short time.

At this point, Chair shared the calendar of the WLTP IWG, which shows the extension (see below). In this calendar appears that a Technical report of the Low Temperature TF must be completed by the end of 2019.

All work of phase 2 must be completed by the end of 2020

*Minutes of the 17<sup>th</sup> TelCo- Low Temperature TF; March, 16<sup>th</sup> (2018)*



EUROPEAN COMMISSION  
JOINT RESEARCH CENTRE (JRC)  
DIRECTORATE FOR ENERGY, TRANSPORT & CLIMATE  
SUSTAINABLE TRANSPORT UNIT

*22<sup>nd</sup> face-to-face - Low Temp Task force*

Low Temp Task force Agenda	
Date	Nov 2018 Monday 19 <sup>th</sup> (13:30- 17:30h) Tuesday 20 <sup>th</sup> 9:00 to 16:00h
Informal Document	Agenda Low Temp TF 2018-22-01 (Doc TF LowT 22-01)
Room link	<a href="https://ecwacs.webex.com/meet/mastorqa-llorens">https://ecwacs.webex.com/meet/mastorqa-llorens</a>

Time	Agenda item	Lead/ contributions	Working Document
13:30	Welcome and introduction Presentation of Agenda	Coordinator	<a href="#">Agenda TF LowT 22-01 (doc attached mail 16 Nov)</a>
13:40	Timeline for WLTP iWG	Ichikawa-san	
13:45	Update on drafting meeting of GTR lowT (17 <sup>th</sup> Sept - Tokyo)	G. D'Urbano	
14:00	Information on Future transposition of GTR-15 into UN Reg.  Q&A [*]	R. Gardner (Telco)  B. Coleman Mayumi-san	
14:15	Input from CP	P. Bonsack G. D'Urbano (BAFU-CH) R. Suarez-Bertoia (EC-DG-JRC) (confirmed)	
		Others (tbc)	
	<b>Priorities 1 &amp; 1.5 Technical discussions</b>  <b>Priority 2 &amp; Reconsideration of (other) priorities</b>	Coordinator CP - Japan, BAFU-CH; EC-JRC, Other CPs/ All	Minutes of the LowT drafting meeting Geneva – (7 <sup>th</sup> of June 2018). Circa BC
17:30	End of meeting day 1		

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Document: 2018\_11\_19 & 20- F2f 22nd meeting - Low T -Agenda FINAL.docx; (Doc TF LowT 22-01)  
Date: 19-20 November 2018

<b>Day 2</b>			
<b>9:00-13:00</b>	<b>EV group and LowT TF (See below [**])</b>	P. Ohlund M. Naegeli Ichikawa-san	
<b>14:00-15:00</b>	<b>Auxiliary Devices &amp; working document</b>	Ch. Petitjean	<b>Auxiliary assessment matrix</b>
<b>15:15</b>	<b>Information on GTR LowT work progress</b>	G. D'Urbano P. Bonsack BAFU (CH)  S. Dubuc	
	<b>Next Telco and meetings and new calendar 2019</b>		
<b>16:00</b>	<b>End of the meeting</b>		

Venue: OICA office  
4, rue de Berri, Paris 75008)

[\*] ONLY for Information - Transposition of GTR15 into UN Regulation.  
(doc GRPE-75-18.pdf)

[\*\*] SG EV sees a need for discussion of following EV issues in Low Temp TF

- EV / hybrids vehicles and lowT : Timeline and purpose
- Discuss about the best proceeding to avoid double work
  - Structuring of the work packages
  - Discussion in SG EV and in Low Temp TF or just in Low Temp TF but with all SG EV experts (under the leadership of the task force)