

Low and Realistic Winter Temperature TF

Progress Report - WLTP 19th meeting 6th June 2017 (Geneva Palais des Nations)

M. C. Astorga Llorens



9th January • Final version of the ToR: completed (based on the answers to the Work development questionnaire CP). Ready for reporting to WLTP (3rd f-toff • Questionnaire prepared in Paris, 21st Nov; Deadline 2nd of January Geneva) • Consolidated version of the ToR 24th of January • 2017 01 09-LR W Temp ToR-WLTP 14-14e - Revision-FINAL (4th Telco) • The participants were asked to comment work plan proposal 14th of February • Presentation of the work plan 2017-18 • 2017 01 24-Proposal work plan TF doc LowT 04-06-v4.docx (5th Telco) 13th-14th March • APPROVAL OF Work Plan (6th f-to-Ispra) Low & realistic Winter Tem TF: Progress 18th WLTP - April 2017

January 2017 February 2017 March 2017



Low & Realistic winter Temp TF: Schedule – Planning 2017

10th Jan 2017 WLTP 17th

18-20th April 2017 WLTP 18th 6th June 2017 WLTP 19th

3rd f-to-f meeting LowT TF Geneva (9th Jan 2017)

4th Telco LowT TF (24th Jan 2017) 5th Telco LowT TF (13th Feb 2017) 6th f-to-f meeting LowT TF Ispra (13-14th March 2017)

> Joint Research Centre

7th Telco LowT TF (27th –April-2017)

8th Telco LowT TF (23rd May-2017) 9th Telco LowT TF (1st June-2017)

- Information about the development of the latest WLTP meeting, including appointment of new Chairman of the WLTP iWG
- TF should draft an Annex or a separate GTR with the procedure for low temperature testing; more information should be indicated by the GRPE during next session (June 2017)

- Japan presented the results of a study on the effect of "low-high temperature on vehicle emissions" (WLTP-18-11e_rev Low-High_Temp_Study_Japan).
- One ICE and one NOVC- HEV gasoline vehicles were used for this study.
 Test temperature varied from -7 to 30 C for the ICE and 0 to 30 C for NOVC-HEV
- The highest emissions were measured at the lowest temperature.

- Japan presented a comprehensive table summarizing the items that should be discussed for the low temperature procedure (WLTP-18-12e LOW Temp_Japan contribution).
- It was pointed out that it is unreasonable to stabilize the REESS temperature down to testing temperature (e.g., -7 C) as it would take long time if done after vehicle battery charging.
- It was agreed that this issue needs further discussion within the EV sub-group.

Document LowT 07-02 - Draft MINUTES

- Daimler representative (C. Walawski) presented an overview of vehicles family definition (2017_04_27_Low Temp TF_WLTP family criteria_v1)
- BMW representative (C. Lueginger) presented a summary of how road-load is estimated at 14 and -7 C and what are the main elements related with vehicle road load that are affected by the temperature. The main question which needs to be addressed is how accurate the CO2 value will need to be. It was indicated that current approach may be enough for about 10% accuracy.

(2017_04_27-Improvement-Proposals_BMW-1-WLTP-18- 22 Annex4)

Document LowT 07-02 - Draft MINUTES

• JRC delegate (R. Suarez) briefly presented a short review on winter fuels: Feedback from CP on winter grade fuel specification in the different regions is needed.

It was indicated that different European CP have stated the need to use -7 C as temperature during the low temperature test procedure. Therefore, it would be good to search for winter grade fuels that could be used at that temperature (e.g., at least winter diesel grade D with a CFPP of -10 C).

Japan suggested the possibility to agree on harmonized solution for reference winter fuels.

8th Telco - Low Temperature Task force May, 23rd (2017)

- Mayumi-San (JPN) presented a document with Proposal from Japan about REES that raised the concern of the effect of the low temperature on the battery recharging capacity.
- It was highlighted that temperature stabilization of REES would take longer time. It was also showed that REES temp does not change much during a test.
- (REESS related Proposal from Japan_May.pdf)

8th Telco - Low Temperature Task force May, 23rd (2017)

- Ricardo S. (JRC) showed a summary of reference fuels and winter commercial fuels. It was shown that some of the fuels described in GTR 15 could be used for low temperature testing.
- Japan will provide information regarding their winter commercial fuels.
- It was pointed out that DVPE range for current reference gasoline is too large and should be revised.

9th Telco - Low Temperature Task force June, 1st (2017)

- Presentation of a summary on issues related to low temperature procedure of electrified vehicles that were discussed by the EV-SG on May 29th (by M. Naegeli -VW-ACEA- on behalf of the EV-SG)
- The main points of discussed by the EV-SG were related to REESS.
 REESS conditioning is an important point for the procedure at low temperature. (Doc will be presented during the WLTP 19th)

9th Telco - Low Temperature Task force June, 1st (2017)

Document LowT 07-02 - Draft MINUTES

Other issues like:

testing vs model procedure during the phone-conference

• that battery performance

...not discussed yet in the EV – SG

Next appointments of the TF:

Phone conferences 2017:

29 June (9:00 to 11:00h) 11 July (9:00 to 11:00h) 7 September (9:00 to 11:00h)

27 October (9:00 to 11:00h) 20 Nov (9:00 to 11:00h)

Face-to-face meetings:

14 & 15 of September 2017 12 & 13 December 2017