M I N U T E S of the 17th WLTP IWG Meeting

<u>Location:</u> Palais des Nations, Room XII

<u>Date & Time:</u> January 10th, 9:30 – 17:30, 2017

1. Welcome & Organisation

2. Adoption of Agenda & Minutes

Agenda was adopted

- Minutes of 16th WLTP IWG meeting (<u>WLTP-16-31e</u>)
 Minutes were adopted
- Current status and schedule of Phase2 items (<u>WLTP-17-03e</u>)
 The current status was presented by N. Ichikawa. Despite some delays in the schedules, all task forces still aim to finish their work in due time.

3. Transposition to UNR

• Status report by **R. Gardner** (<u>WLTP-17-14e</u>)

Rob presents a recap of the whole process since the last meeting in The Hague.

Step 0: transitional provision

Step 1: Transfer to R83 (proposed by OICA)

Step 2: taskforce has not met, yet.

Japan (Y. Inoue) does not accept the OICA proposal to continue in the framework of R83 for step 1, but expresses the need to develop a new UN regulation. Japan will be a sponsor for the transposition. EU-COM will support the task force of this project. Details on the timing will be discussed in the upcoming GRPE meeting. The outcome will be presented as soon as possible

before the next IWG meeting in Bern. Rob Gardner will prepare a discussion document for GRPE.

4. Cycle TF

- Status report by H. Steven (<u>WLTP-17-08e rev1</u>)
 Heinz Steven presents clarifications of the text in Annex 2 that has already been sent to the drafting coordinator. For n_min_drive the group could not find any common solution. H. Steven proposes to close this item and leave the definition as it is. The round robin calculation test will be postponed.
 The issue "Downshifts during decelerations down to standstill" is still under discussion, the outcome will be presented during the 18th meeting in Bern.
 - The group's proposal for the downscaling rank order was adopted by the group.
 - The group's proposal for the cycle to be used for speed capped vehicles was adopted by the group.
- Study on drive trace index of electrified vehicles by **T. Haniu** (<u>WLTP-17-07e</u>)
 T. Haniu presents the current state of the drive trace evaluation made by Japan. The normalisation procedure, as investigated by EU COM, is not applicable for electrified vehicles. Therefore he presents the candidate indices that are affected by smooth or rough driving. The timescale foresees a final decision on indices and possible thresholds in 78th IWG in 2018.
 It was requested to collaborate with the normalisation study to avoid different regional processes. The leading team encourages the audience to support the work of the drive index task force and get started as soon as possible.

5. Supplemental Test TF

- Status report on low and realistic temp. by C. Astorga-Llorens (<u>WLTP-17-17e</u>)
 - C. Astorga-Llorens presents the ToR of the task force that were revised during the low temperature test task force meeting. The document includes the compendium of the replies on the questionnaire sent out in December.

Main issues: gtr 15 shall be used as a basis for the development of a text for the low temperature test. Open issues (examples): harmonised temperature, test procedure, dyno setting, development of a new gtr or an annex for gtr 15. All vehicle classes that emit criteria emissions and CO₂ shall be subject to this procedure. The effect on the range of electrified vehicles will be investigated. Next phone conference will be held before the end of this month.

Bill Coleman presented some clarifications and amendments to the ToR text.

The revised version of the ToR will be sent out as soon as possible.

EU-COM stressed that the gtr will be in place at least for the next 20 years and therefore the group should put high effort into developing methodologies to measure especially NOx and particles.

OICA points out that they want to avoid burden that has not been justified by the respective regions. EU-Com clarifies that a possibility to measure an emission, does not mean that there will be am limit.

In parallel to the above discussion, technical secretary proposed to start the development of a test procedure under X[tbd] degreeC so that we can complete within expected time frame.

6. EVAP TF

• Status report by **M. Morimoto** (WLTP-17-11e)

M. Morimoto is taking over the position of Fujiwara-san and presents the time schedule for the next steps of the task force. She focusses on the unique test procedure for sealed tanks. She summarises the current positions of Japan, EC and other parties (NGOs).

US-EPA (Michael Olechiw) statement: USA will abstain from a vote since concerns stressed during the last meeting were not reflected in the current EVAP gtr. The US expressed that more appropriate test procedures should be developed (including ORVR)

OICA asked the US whether they would accept ORVR being a separate GTR from that on Evaporative emissions from the vehicle fuel system, as this would allow CPs who apply an alternative to ORVR to maintain this alternative whilst adopting the harmonised evaporative emissions gtr. The US answered that this concept would appear acceptable.

Canada: Canada will abstain from a vote, since ORVR is not included in the EVAP gtr.

CHINA: China developed own EVAP standards and encourages the task force to consider the current China C6 procedure in the next steps and to support the more stringent EVAP standards.

Technical report for EVAP GTR by M. Morimoto (GRPE-74-04)
 The technical report is already uploaded but has not been discussed during this meeting.

7. Durability TF

• Status report by **A. Marotta** (<u>WLTP-17-16e</u>)

A. Marotta gave an overview on the proceedings of the last three months. The work of the DTF has started in October 2016 and is foreseen to work until end of 2018.

The issue of battery durability will be dealt with jointly by EVE and WLTP EV groups. An experimental activity is foreseen that will require the extension of the DTF activity into WLTP Phase 2b. The group intends to compare the thermal load of the SRC (standard road cycle) vs. WLTP, gain knowledge on the deterioration of DeNOx systems, particulate filters and SCR systems.

US-EPA comments on Diesel bench ageing: US industry made some promising proposals for the SRC (standard road cycle). Information will be provided. Battery durability: Durability requirements (runtime, range...) should be defined by the durability task force. Afterwards the EVE group can develop techniques to determine the durability.

OICA stresses the need to be careful and to distinguish between mechanical failures (sudden processes) and durability issues (slow degradation).

Canada comment: A presentation on different types of criteria were presented in June EV sub group in the last year. Data is already provided and should be analysed by the task force.

Presentation on mandate and ToR (<u>WLTP-17-04e</u>)
 The document was only presented briefly, the main points were already addressed during presentation WLTP-17-16e.

Presentation on proposed work plan (<u>WLTP-17-05e</u>)
 The document was not presented. The three main actions were already shown in presentation WLTP-17-16e.

8. OBD TF

• Status report by **M. Morimoto** (<u>WLTP-17-10e</u>)

Until now only a kick off meeting took place in December. The aim is to develop harmonised OBD GTR by the end of 2018. There shall be no CP options in the method, only alternatives. It is planned to write a separate gtr.

She presents the next steps of the task force and a time schedule for the next phone conferences and f2f meetings. ToR will be developed during the next meetings.

9. In Service TF

Since N. Steininger had to stop working for WLTP, no work on In Service issues has been done, yet. EU-COM is planning to start the work on In Service in the near future and will inform the IWG on the chairmanship for this group, presumably from February 2017.

Japan (WLTP 17-06e) presented their priority issues for the In Service group:

- Highest priority of this group should be the test procedure for in-use vehicle and the statistical method of judgment for surveillance
- Harmonisation does not have the highest priority.
- Both, vehicles type approved with the wind tunnel method and the coastdown method should be subject to surveillance.

EU-COM addresses that also vehicles type approved with the torque meter method shall be subject to surveillance.

The gtr already addresses that coastdown, windtunnel method and torque meter method have to be equivalent.

OICA pointed out that depending on vehicle technologies road load determination could not be carried out with one or the other of the aforementioned methods.

10. E-Lab. Sub-Group

• Status report by Chairs (N. Mizushima / P. Ohlund) (WLTP-17-12e)

N. Mizushima gives a brief overview on the current status of the group's work. e.g. HEV system power, normalisation, low temperature test, auxiliary devices, post processing, durability, OBD, FCHV.

A communication structure in the UNECE framework was presented on how the sub group communicates with WLTP IWG, EVE IWG, TF durability and TF low temperature test and the ISO working group on system power. The presentation was finished with the time schedule for the aforementioned issues.

11. Carryover from Phase1b

- Status report on Annex 4 items by R. Cuelenaere (<u>WLTP-17-15e</u>)
 Almost all issues were closed, the remaining points are:
 - Correction for the dyno roller radius should be part of phase 2b, if Japan requires this issue.
 - Alternative road load determination, to be reviewed in phase 2b
 - New issue: Inconsistent references in the Annexes on road load coefficients.
 Iddo Riemersma presents a proposal to solve this problem. The proposal was
 adopted by the group and will be handed over to the drafting coordinator.
 - Bill Coleman will deliver a text proposal on how to interpolation between different vehicle classes and downscaled vehicles.
- Status report on dual-axis roller usage by I. Riemersma
 No work has been taken place. From a technical point of view, the work has been done and the text has been incorporated in European legislation. The only remaining item is that there is a different political opinion between EU and JAPAN, which cannot be handled by the task force.
- Practical study on dual-axis roller usage by Japan (<u>WLTP-17-13e</u>)
 Ichikawa-san
 - N. Ichikawa presented a study on the restraint system using chains in different positions. It could be shown that the number of restraint points and positions lead to different rolling resistances. The results indicate that there is a need to define clear restrain procedure for 4WD testing.

The study is ongoing and will include wheel hub and bar systems and shall be finished until March 2018.

12. Drafting

Status report by S. Dubuc (<u>WLTP-17-09e rev1</u>)
 Possible future issues: Check of the consistency of terms, of the use of singular and plural and a report on the rework/rewording of some parts of Annex 4.

13. Meeting schedule

- 18th WLTP IWG meeting
 Switzerland, Bern 18th to 20th April
- Schedule of next task force meetings will be sent out by the task force leaders.

14. AoB

- Selection of chair of WLTP IWG: EU COM has not been able to confirm a new candidate, but EU COM gives the commitment, that a new chair will be presented for the Bern meeting.
- D. Kawano will resign from his position as vice chair, Japan will introduce a new vice chair in Bern.
- The meeting in Bern will be organised by N. Ichikawa and M. Bergmann.
- The need for a calendar including all relevant meeting dates of IWG, GRPE, and all task forces was raised.
- How to Introduce changes to the gtr before 2019?
 In the second half of 2017, S. Dubuc will inform the group on how long he will stay drafting coordinator.
 - Regarding a process for amending and maintaining the status of gtr 15 outside of the subject areas of the task forces and sub groups, Bill Coleman highlighted the timescales which would result from a paper having to be adopted by the IWG before being submitted to GRPE. A concept was suggested whereby a working paper could be submitted to GRPE and then discussed by the IWG who would have the power to reject or amend the paper (the latter through an informal paper to GRPE). This procedure was agreed by the group.

Markus Bergmann (co-secretary of WLTP IWG)