M I N U T E S of the 15th WLTP IWG Meeting

Location: Geneva, Suisse

Palais de Nations Room V

<u>Date & Time:</u> June 7th 2016, 9:30 – 17:30

1. Welcome & organisation

2. Adoption of agenda & minutes

Minutes 14th IWG WLTP meeting (<u>WLTP-14-24e</u>)

Chair focuses with priority on phase 2a items.

Agenda and minutes adopted.

3. Task Forces (Status reports)

- Subgroup EV:
 - Progress Report by **EV Chairs** (N. Mizushima, P. Ohlund), (<u>WLTP-15-07e</u>) Mizushima-san presents the progress report on EV.
 - Normalization for EVs is still under progress, but need to find the possible solution due to technical difficulty for OVC-HEV and PEV.
 - Durability: technical difficulties of a procedure to determine REESS durability – study until GRPE January 2017

Mike Olechiw (US EPA): EVE will propose durability requirements. He expresses the need for a definition of requirements for different powertrain architectures (e.g. CO2, criteria pollutants, battery stability).

The durability task force will give the requirements for WLTP on the durability criteria (mileage, ...) These requirements will be sent to the EVE group.

EU-COM asks if a representative scheme for all types of batteries would be possible and if there are problems with different battery technologies?

While EVE focuses on the durability of a single battery, WLTP needs a method to define the durability of a whole (EV) vehicle. --> to be changed in the terms of reference! --> develop an appropriate battery test to represent an aged vehicle in the field.

Annex 4 TF:

- Status report on <u>Annex 4 items</u> by **R. Cuelenaere** (<u>WLTP-15-03e</u>) **upload** rev1

Rob Cuelenaere gives a brief overview on the current state of discussions, e.g.:

- Maximum number of splits runs: The task force leader asks the members of IWG to submit data, to have a sound basis for a proposal.
- Fixed run method: Proposal of the task force: close issue --> drafting
 Labs are asked to report on experiences with the method -- >to be
 send to the task force leader.
- Dual-axis dyno: Japan expressed in Paris, that they do not support the current approach as presented by the task force and asked the EU to withdraw the proposal and expressed the need for further discussions on WLTP level.
- Regarding the EU regional requirement, Japan and the task force will try to find a compromise solution.

• EVAP TF:

- Status report on EVAP by **T. Fujiwara** (WLTP-15-08e)

The EVAP procedure for WLTP is based on the new European EVAP procedure. 15 discussion points are still open. Examples:

- Purge cycle: Class 1 and 2&3 shall have a similar distance. Fujiwarasan gives an overview on the current state of discussions.
- Test result: Two option are possible: a) result of the worst day or b) the sum of all days ->According to the current draft C6 regulation, China uses the one day max value. India wants to have an option to use a one day max value. Japan and EU will use the total result of two days. Due to the different needs above, Evapo. gtr shall have options to allow CPs to select either one day max value or two days total value.

US EPA submited written comments to the current WLTP procedure and expresses an interest to harmonise the US and WLTP procedure. Examples of their comments: Purging during urban driving, 2 vs. 3 day diurnals, permeation leaks, prescribed useful live, fuel spillage limits, ORVR, Exhaust emission limits and exhaust emission limits.

US amendments might be added in a phase 2 for EVAP, since the EVAP procedure shall be completed until end of phase 2a.

OICA notices the use of technology related legislation for tanks and will make a proposal for the use of single layer, multilayer tanks (plastic fuel tank) and the use of steel fuel tanks. The latter would be regarded as a single layer tank in the current draft.

The draft gtr will be submitted this week.

• Gear shift TF:

- Status report on gear shift issues by **H. Steven** (<u>WLTP-15-04e</u>) **upload** rev1!
- H. Steven presents the current state of discussions open:

The discussion on n_min_drive will be postponed, Japan will only accept the current proposal as an option in the gtr. The task force will make a proposal.

Cylinder deactivation has to be added to the open issue list.

The 2 second rule will be discussion again in the task force. The task force leader will make a proposal.

<u>Durability TF:</u>

- Explanatory note by **A. Marotta** (WLTP-15-05e)

K. Steininger gives a brief overview of the explanatory note with two roots for durability testing: bench aging and dyno tests. The tests will comprise of heat-, temperature treatment, lubricant – chemical poisoning etc.

The task force will call for an expression of interest until end of June. The actual work will start after summer break in September.

EV vehicle and battery deterioration: specific deterioration modes will be covered by EVE. JRC will join the group and make some contribution on battery durability processes.

OBD TF:

- Questionnaire by **T. Fujiwara** (WLTP-15-06e)

Fujiwara-san explains the questionnaire and asks the CPs and stakeholders to give feedback and send a filled out template until **end of June**.

Possible issue: Harmonize the scan tool protocol, definitions etc. with the gtr on motor cycles.

4. Preparation of GRPE informal documents for phase 2a items

New GTR on EVAP:

- Draft GTR text (<u>WLTP-15-09e</u> _track changes & clean) and presentation by **T**. **Fujiwara** (<u>WLTP-15-08e</u>)
- the document was not presented during IWG meeting, but uploaded to the UN server and presented during GRPE.

• Gtr 15 amendments:

Documents provided by Drafting Coordinator S. Dubuc:

- Drafting report (WLTP-15-10e)
- Table with corrections / improvements (WLTP-15-11e)
- Draft GTR text with corrections (and RLD and EV issues, if possible) (WLTP-15-12e)
- S. Dubuc presents WLTP15-10e with the current status of the gtr. A drafting sub group will meet early in July. (f2f meeting in conjunction with Annex 4 task force?) The table in WLTP 15-11e gives a condensed overview on the current issues.

Meeting schedule

- 16th WLTP IWG meeting, Sept/Oct 2016, Netherlands
- Schedule of next task force meetings
 - Annex 4 and Annex 2(gear shift tool) in conjunction with the drafting task force on 6./7./8. Of July
 - Supplemental test TF in September
 - Additional pollutants TF JRC is performing experimental work no meetings scheduled
 - In service and COP TF will start in September (call of interest will be send out in time)

For the minutes

Markus Bergmann

(co-technical secretary of IWG)