## General issues

#### 1. DHC update

A preliminary update on the ongoing validation phase 1 has been given. The preliminary results indicate a potential need to modify the driving cycle for improved driveability. The mode construction to be used during validation phase 2 was presented and asked for feedback and will be reviewed by end of September. The pre-conditioning is still open.

# 2. Preparation of validation phase 2

- a. The preparation of the detailed plan of Validation Phase 2 is under the responsibility of the Validation Task Force (VTF).
- b. The preparation of the Technical Guidelines for the participating laboratories is under the responsibility of the DTP chairman, who will be supported by the DTP subgroups.
- c. The sourcing of the vehicles and the execution of the vehicle testing with the new test procedure (and new driving cycle) is under the responsibility of the participating laboratories.
- d. VTF will provide a standardised format for input parameters and for data collection.
- e. The analysis of the test results and the assessment of the acceptability of the new test procedure will be carried out by the DTP subgroups and by DHC under the coordination of the VTF.
- f. The assessment of the acceptability of the new test procedure (with the new driving cycle) will be carried out together by DTP and DHC working groups and will be reviewed by the WLTP steering committee and presented to GRPE in June 2012 for approval.
- g. VTF together with representatives of the participating laboratories will meet from 12<sup>th</sup> to 13<sup>th</sup> October in Brussels to present the details and launch the validation phase 2.
- h. First ideas of assessment criteria will be provided by the DTP subgroups at VTF meeting in October (12<sup>th</sup> to 13<sup>th</sup>).
- i. VTF will circulate a first draft of the technical guidelines for validation phase 2 by end of September.
- j. DTP subgroup chairs will provide DTP chair with the parameter setting lists and relevant additional information by the end of this week (16 September).
- k. H. Steven will provide a revised version of the excel template for results submission.
- I. Ichikawa-san and Céline Vallaude UTAC will propose a test sequence for validation phase 2 by the end of September.
- m. VTF will contact the respective participating laboratories to discuss the parameter setting lists, test sequence, excel template and the technical guidelines by 23<sup>rd</sup> September.
- n. Feedback from these discussions will be communicated to DTP subgroups (and, if needed, DTP subgroup will be asked to integrate/clarify the parameter setting list) before the end of September.
- By end of September / beginning of October, the draft validation phase 2 detailed plan and draft technical guidelines will be distributed to DTP/DHC members and to participating laboratories.

3. Vehicle test mass / inertia classes

After intensive discussions of the proposals from NL, T&E and icct for the vehicle test mass definition and from icct for the inertia classes, DTP has principally agreed on a combined solution for the vehicle test mass definition and for the inertia mass step-less approach. Details are available in the document WLTP-DTP-07-12. The involved parties will check the feasibility of the combined solution. Further discussion on this matter will be required at next GRPE in January 2012. This combined solution will be evaluated in validation phase 2.

4. Road load determination

The testing of the new procedure for the road load determination is not part of validation phase 2. The new road load determination procedure has to be validated separately after validation phase 2. This part has not been planned so far. A revision of the WLTP road map is urgently needed. The steering group will be asked for advice regarding responsibilities in the road map revision. In validation phase 2 existing road load data eg. As used in type-approval will be used for the dynamometer setting.

5. Soak and test temperature

For harmonization reasons and in order to start validation phase 2 in time, DTP agreed to keep the set point of soak and test temperature at 25°C with a target tolerance of the actual value of +/- 2 K. In order to evaluate the technical feasibility of the tolerance, the temperature behavior has to be monitored at each participating laboratory during validation phase 2. DTP recommends nevertheless to EU and Japan laboratories to conduct some tests also at lower temperatures (e.g. 18°C and 22°C), in order to collect data on the subject for the final decision on the test temperature, which is not under the scope of validation phase 2.

- 6. Next steps
  - a. Next DTP (8<sup>th</sup>) will be held on Wednesday 18<sup>th</sup> January 2012 during GRPE in Geneva.
  - b. The 9<sup>th</sup> DTP is not planned yet. DTP chair suggests to hold DTP9 from 16<sup>th</sup> to 18<sup>th</sup> April 2012 in Bern again after completion of validation phase 2.

# Subgroups reports

All subgroup reports will be posted on the CIRCA and UN-ECE website: http://circa.europa.eu/Members/irc/enterprise/wltp-dtp/library?l=/&vm=detailed&sb=Title http://www.unece.org/trans/main/wp29/wp29wgs/wp29grpe/wltp\_dtp07.html

## <u>Lab processes – Electrified vehicles:</u>

- 1. Presentation regarding the group progress and open issues has been given.
- 2. The group has already provided a parameter setting list and is going to deliver a test procedure for validation phase 2 to be included in the VTF technical guidelines.
- 3. An important open issue regards how to handle the low power vehicle which cannot follow the entire WLTC trace, in particular because of the low maximum speed. This point will be discussed further at DHC/VTF meeting in October in Brussels. It is important for that to receive all the data of validation phase 1 by end of September and in particular to draw the attention of India to that matter. DTP chair will inform DHC chair in that regard. This point concerns as well LabProcICE.
- 4. Remaining open issues not directly relevant for validation phase 2 will be handled inside the group. No activities from DTP needed so far, except point h.) from general issues.

5. LabProcEV will give feedback to VTF regarding the test sequence proposal including preconditioning by 23th September.

#### **Lab Processes – ICE:**

- 1. Presentation regarding the group progress and open issues has been given.
- 2. The group has provided a parameter setting list for validation phase 2. A revised version of the list will be posted by the end of the week.
- 3. Advanced CVS procedure Reservations from Japan and USA are still valid. This issue will be reviewed with data from validation phase 2.
- 4. The issue on multimode gearbox testing criteria for pollutant emission and CO2 is still open. Japan and The Netherlands have expressed their concerns to the current proposal of LabProcICE. The issue will be raised at DTP level and will be dealt with at DTP8 during GRPE in January 2012. Until then the subgroup LabProcICE is requested to gather views of other involved parties on that matter and inform DTP chair. For validation phase 2 only the default mode of the automatic gearboxes will be tested. Contracting parties are requested to give their views until next GRPE in January 2012.
- 5. RLD vehicle selection criteria. There are three different approaches available: representative approach by LabProcICE, worst case approach by Japan or leaving it as a certification issue. No agreement could be achieved. The issue is raised at DTP level and will be handled at DTP8 during GRPE in January 2012. DTP chair has requested from LabProcICE to ask the involved parties for views until next GRPE and provide this information until then. Contracting parties are requested to give their views until next GRPE in January 2012.
- 6. Remaining open issues not directly relevant for validation phase 2 will be handled inside the group. No activities from DTP needed so far, except point h.) from general issues.

## PM/PN:

- 1. The PM-PN subgroup chair presented the progress of the group since the last DTP meeting. The subgroup's latest draft GTR text, WLTP-DTP-PMPN-10-08 rev.1, has been updated in respect of secondary dilution requirements (if used), dilution air background correction, PM filter media specification, PM microbalance precision, reference filter weighing and acceptance criteria, minimum filter conditioning time, dilution tunnel pre-conditioning and Volatile Particle Remover minimum solid particle penetration efficiency. Text on the last three items is subject to review based on Validation 2 and PMP VPR calibration round robin experience.
- 2. The subgroup will finalise an investigative experimental outline to examine the feasibility of PN measurement during regeneration at its next meeting on 23<sup>rd</sup> September. The final outline will be included in VTF's Technical Guidelines as an optional Annex. The expectation is that a few of the laboratories participating in Validation 2, e.g. JRC and some OICA members, will conduct these investigative experiments in addition to the validation testing.
- 3. The subgroup's future work will include updating PN calibration guidance documents in parallel with Validation 2. Following the meeting on 23<sup>rd</sup> September Caro Hosier from Ford will take over chairmanship of the subgroup. A new co-chair will also be confirmed on 23<sup>rd</sup> September. DTP thanks a lot Chris Parkin for the excellent work done in his group.
- 4. PM/PN subgroup will review the results of experimental testing on PN measurement during regeneration and make a recommendation (including a technical justification) to DTP on whether this measurement should be included in the GTR.

### **Additional Pollutants:**

1. Presentation regarding the group progress and open issues has been given.

- 2. For validation phase 2 only the measurement of NO2 is mandatory. Further additional pollutants according to the recommendation of AP can be taken into account by the participating laboratories, if the measurement equipment is available.
- 3. AP will provide a parameter setting list by the end of September.
- 4. AP in agreement with LapPRocICE will work out a proposal for the measurement of Methane and NH3.
- 5. Remaining open issues not directly relevant for validation phase 2 will be handled inside the group. No activities from DTP needed so far, except point h.) from general issues.

# **Reference Fuels:**

1. Work is going on. Test fuel for validation phase 2 is specified as a regional reference fuel.

For the minutes:

03.10.2011, G. D'Urbano, DTP chair