

Progress report Annex 4 Open Issues

Most Annex 4 open issues have been discussed during an extra progress meeting, dd 12 May in Munich, organized and hosted by BMW.

1. Wind tunnel method (OIL #10, #18)

The task is to develop the wind tunnel with flat-belt method as an alternative to the (WLTP) coast down method and to demonstrate equivalency. The Task Force agreed on the Roadmap for the development of the wind tunnel method, presented by BMW at the Munich progress meeting.

It is agreed that the French PFA test program, that initially covered wind tunnel and chassis dyno road load measurements, will be expanded with flat belt and additional wind tunnel measurements at VW. This program is considered to cover all tests required for validation of the wind tunnel method.

Additional drafting and decisions are needed on tolerances, vehicle and warm-up descriptions and measurement duration. Also the flat belt measurement method has to be defined.

The test program is on schedule. The initial proposal for the wind tunnel and flat-belt method is still scheduled for WLTP-IWG #8 in October.

2. On-board anemometry and wind speed (OIL #11, #13)

No progress on the on-board anemometry method program can be reported since the WLTP-IWG #6. Progress is pending a proposal and a decision for the validation program.

3. Speed points (OIL #12, #21)

In the period after WLTP-IWG #6, agreement among all members of the Task force has been reached on the set-up of the reference speeds definition in the GTR. Reference speed points range from 20km/h with 10 km/h intervals up to the maximum of 130 km/h, with a 14 km/h margin between vehicle top speed and the highest reference speed point. For vehicles only sold in regions without Extra High phase of the WLTC the speed points, if existing, above 100 km/h may be dropped if indicated with the subscript [100,,w/o EH,,...] (subscript to be discussed) to f0,f1,f2.

Drafting will be finalized shortly. The proposal will not be brought to a WLTP-IWG meeting, but will be circulated for written scrutiny procedure among WLTP-IWG members.

4. Torque meter method (OIL #14, #15, #16, #20)

In the Munich meeting Task force members agreed that additional double blind testing is required to demonstrate equivalency of torque meter and coast down methods. Ford offered to develop a test program accordingly. Confirmation might be given at WLTP-IWG #7. To meet the OIL #14 schedule, details of the validation program have to be discussed and agreed in the Task force before the summer break. Further general review of the torque meter method (OIL #14) is pending the validation program.

The Task Force gave considerations to OIL #15, #16 and #20. No problems are foreseen with running the torque meter tests in descending order (OIL #15), modifying the method to deliver three road load parameters (OIL #16) and aligning the margin of error with the coast down method (OIL #20). Drafting will start shortly after a decision on the validation tests is taken. Drafting might include proposals (1) to drop some reference speed points if test burden is too high and tolerances allow and (2) a general tolerance limit provision in Annex 9 of the GTR.

5. Default road load parameters (OIL #17)

In the Munich meeting the request of OICA members to reconsider default road load table values was discussed extensively. Task force members welcomed a hybrid approach combining default road load table values and road load measurements. It was agreed that the hybrid approach requires no validation tests.

RDW offered to draft a proposal shortly after WLTP-IWG #7, to be discussed before the summer break in the Task Force. The initial proposal is still scheduled for WLTP-IWG #8.

6. Warm up procedure (OIL #19)

At WLTP-IWG #6 it was decided to postpone the decision to WLTP-IWG #8. The issue will be considered in conjunction with developments under the Road load family concept.

7. Road load family concept (OIL #1b_2)

At WLTP-IWG #6 it was agreed to develop the RL family concept. In the Munich meeting the Task force agreed on the roadmap presented by BMW. BMW offered to investigate if it can conduct the required measurement/validation series. Confirmation is expected at WLTP-IWG #7. The validation program has to be finalized by October in order to meet the schedule. Proposals on the maximum range of RL family and the tolerances within the family will come from the validation program.

A decision on the general concept is planned for WLTP-IWG #9; a decision on the details for WLTP-IWG #10.