Progress report Annex 4 validation test plans

In WLTP-IWG meeting #6 adoption of a general Annex 4 validation test plan at IWG meeting #7 was foreseen. A need for validation tests for the Wind tunnel method, Torque meter method, Road load family concept and On-board anemometry method was identified. A validation test for Default road load parameters was subject to further developments. In the extra progress meeting on Annex 4 open issues, dd 12 May in Munich, the validation test plans were discussed.

A general Annex 4 validation test plan is not ready for adoption at WLTP-IWG #7.

1. Wind tunnel method

In the Munich meeting Task force members agreed that the French PFA-program, presented at WLTP-IWG meeting #6, is a good starting point for building the validation program. The PFA-program, that initially covered wind tunnel and chassis dyno road load measurements, will be expanded with flat belt and wind tunnel measurements at VW. Further details of the exchange will be settled bilaterally.

The test program is on schedule and will be finalized by October 2014.

For practical reasons (budget and timing) inclusion of other validation tests was deemed not feasible.

2. Torque meter method (situation per 22/05/14)

Earlier tests conducted by Ford demonstrate the capability of the torque meter to get equivalent results to coast down measurements. In the Munich meeting Task force members agreed that additional double blind testing is required to demonstrate equivalency of both methods. Ford offered to develop a test program accordingly.

Ford aims at sharing further details of a test program before WLTP-IWG #7.

To meet the overall schedule, details of the validation program have to be discussed and agreed before the summer break.

3. Road load family concept (situation per 22/05/14)

In the Munich meeting BMW presented the general outline of a validation program and offered to investigate if it can conduct the measurement/validation series. Confirmation is expected at WLTP-IWG #7.

If this program can be discussed, agreed and run before the end of October 2014, the schedule can still be met (decision on the general concept in WLTP-IWG #9; decision on the details in WLTP-IWG #10).
4. Default road load parameters

In the Munich meeting 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.

5. On-board anemometry method (situation per 22/05/14)

No progress on the on-board anemometry validation program can be reported. It was agreed in WLTP-IWG #6 that a validation program is required and should be run before October. To meet this schedule prompt action is required.
<table>
<thead>
<tr>
<th>Open issue</th>
<th>Lead</th>
<th>Validation test</th>
<th>Vehicle selection</th>
<th>Support TF members?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind tunnel</td>
<td>UTAC/PFA</td>
<td>Yes</td>
<td>June-Sept</td>
<td>PSA+Renault+VW</td>
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<tr>
<td>Torque meter</td>
<td>Ford</td>
<td>Yes</td>
<td>&lt;=October</td>
<td>Tbd</td>
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<tr>
<td>RL-family</td>
<td>BMW</td>
<td>Yes</td>
<td>&lt;=October</td>
<td>Tbd</td>
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<tr>
<td>Default RL – N1</td>
<td>-</td>
<td>No test required</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>On board anemometry</td>
<td>Ford?</td>
<td></td>
<td>Critical</td>
<td></td>
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