Summary of 6th WLTP-DHC Meeting

13 January 2011 Palais des Nations, Geneva

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1. Current Status

1. In-use Data Collection

| | In-use Data | Traffic Statistical Information |
|-------|--|---------------------------------|
| China | On going (expect to complete by May. 2011) | ← |
| EU | Completed (on going for more data acquisition) | Not yet |
| India | On going (expect to complete by Apr. 2011) | ← |
| Japan | Completed | Completed |
| Korea | Completed | Completed |
| USA | Completed | Completed |

 Methodology → It was agreed by DHC group (refer to WLTP-DHC-06-03e.rev1)

Informal document No. **GRPE-61-xx** (61st GRPE, 13-14 January 2011, agenda item 6.1)

| | Issues | Discussion points | Proposed Actions | | |
|---|---|--|---|--|--|
| 1 | Deadline for submission of driving data | a) India and China requested deadline be extended to May | CPs to submit as much data by end of Jan as possible. Propose to AC3 that only data submitted by deadline be used ??. Compress possible work elements to accommodate delay. | | |
| 2 | Regional Weighting when developing the WLTC | a) traffic volume b) same weighting | Wait for initial analysis, then make a decision during 7 th | | |
| 3 | Threshold Speed for L/M/H | a) according to DHC-06-03 b) CP's requirement | DHC meeting | | |
| 4 | High Phase Cycle Construction (US&EU versus other regions) a) only ONE unified cycle b) possess TWO type of High phase cycle | | Wait for initial analysis, then further discussion is necessary before developing the 1st WLTC | | |
| 5 | Mode Construction | a) cold start test only b) cold start & hot soak start | After developing the 1st WLTC, further analysis is necessary during the validation 1 | | |

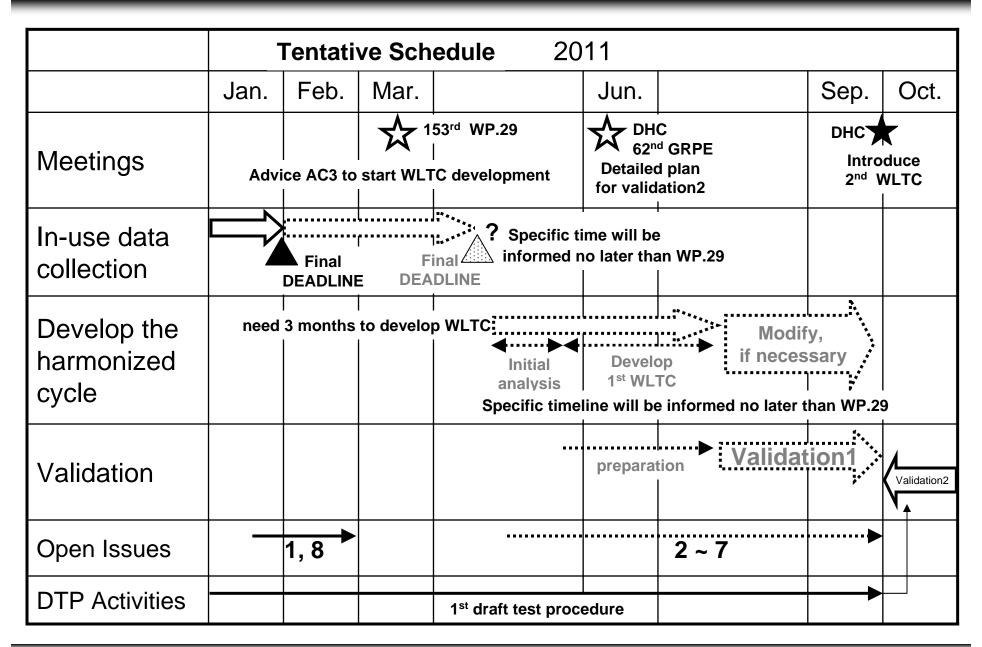
2. Open Issues -2

| | Issues | Discussion points | Proposed Actions | | |
|---|---|--|--|--|--|
| 5 | Unique Weighting Factor for L/M/H Phase | a) harmonized weighting factorsb) permit regional weighting factors | After developing the 1st WLTC, check the representativeness for each region. | | |
| 6 | Gear Shift Points | a) fixed pointsb) based on vehicle specificationc) others | JARI, JRC and Mr. Steven work together to finalize the method before developing the 1st WLTC. | | |
| 7 | How to treat the vehicles which are not able to follow the prescribed cycle | a) continue to drive with wide-open-throttleb) exempt the H (or M&H) phase(s)c) others | Develop the proposal during validation 1 tests. | | |
| 8 | Check the driving profile based on the vehicle characteristic | | Analyze the in-use data based on vehicle characteristic (i.e. power to mass ratio) | | |

- 1. Submit available data by the end of January.
- 2. Review the each DHC work element and provide the revised time schedule to accommodate the in-use data collection extension by no later than the end of January 2011.
- 3. Advise WP.29/AC3 (in March 2011) for their decision to move on to WLTC development ??
- 4. Start the development of initial WLTP.
- 5. Make a concrete plan for validation1 and start testing.
- 6. Propose the countermeasure for each open issue.

3. Next Actions

(61st GRPE, 13-14 January 2011, agenda item 6.1)



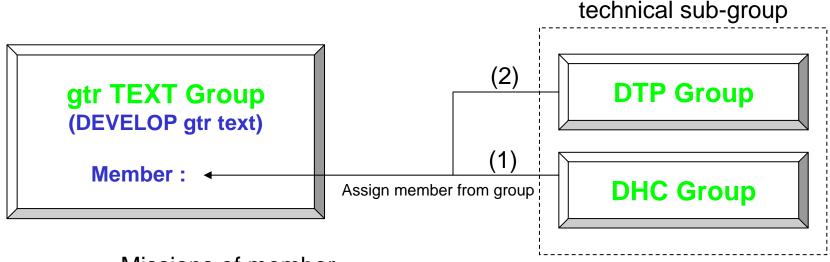
4. Test Program of Validation 1 Informal document No. GRPE-61-xx (61st GRPE, 13-14 January 2011, agenda item 6.1)

| | | Test Vehicles * *) vehicles configurations are based on its "power to mass ratio", "DTC", "compliance emission level" and so on. | | | | |
|--|--------------------------------------|--|----|----|----|---|
| | | #1 | #2 | #3 | #4 | Unique technologies (e.g. regeneration system, hybrid, PEV) |
| DRIVEABILITY PRACTICABILITY | SMOOTH THROTTLE OPERATION | | | | | |
| | APPROPRIATE SHIFT POINT (MT only) | | | | | |
| VEAE | CLUTCH OFF POINT (MT only) | | | | | |
| DRI | MODE TRACEABILITY | | | | | |
| | TIRE LOCK, SLIP | | | | | |
| REPEATABILITY ** | | | | | | |
| (including different test drivers) | | | | | | |
| **) emission level, driving energy index, etc | | | | | | |
| Request from DTP | | | | | | |
| (e.g. additional pollutants, etc) | | | | | | |

Korea, Japan and OICA will work together to develop the detailed test protocol and conduct the testing after completion of 1st WLTC.

5. gtr Text Group Organization Informal document No. GRPE-61-xx (61st GRPE, 13-14 January 2011, agenda item 6.1)

It was agreed to establish the gtr text group for gtr development. DHC/DTP chairman have a responsibility to assign the member from their group.



- Missions of member
- 1. Develop overall gtr structure
- 2. Coordinate with each sub-group for text development
- 3. Editorial check

Missions of each sub-group

1. Develop gtr text