

# WLTP-E-Lab Sub Group Progress report

WLTP-DTP-E-LabProc-012

Leader: Per Ohlund / Kazuki Kobayashi

# Meeting

- 1<sup>st</sup> meeting:  
Date:30.9.2010  
Location: Phone conference  
Topics: Terms of reference & action plan was proposed.
- 2<sup>nd</sup> meeting:  
Date:13-14.10.2010  
Location: Vienna  
Topics: Terms of reference & action plan was agreed.  
Top 5 issues were discussed.  
To make a comparison table.( to compare the details of Jp/EU/US regulations)

- 3<sup>rd</sup> meeting:

Date:24-25.11.2010

Location: Brussels

Topics: Discussion open issues.

gtr text: part of BEV

- 4<sup>th</sup> meeting:

Date:16.12.2010

Location: Phone conference

Topics: working schedule for gtr text.

gtr text :part of Definition

# Open issue list1

A/P/OI	Item	Issue	Action
OI	Utility factor	The us and jp regulation has methods which include statistical analysis. ( EU:25km)	These methods will be considered.
OI	SOC	For CS mode, it could be necessary to compensate the CO2/fuel consumption based on SOC balance to obtain correct value. (for CD mode, no need to compensate).	Need results about the driving cycle from the DHC group to continue the discussion.
P	Shorten the test procedure:	Current requirement (full charge to empty) is basic procedure. As an option, need to adapt the shorten procedure to reduce testing burden (i. e. SAE J1634)	
OI	CO2 compensation for range test	Separation point of CD mode and CS mode in one cycle is agreed but the method on how is still an open issue.	Still an open issue.
A	Energy consumption test condition	Battery temperature requirements	Follow recommendation from ICE group regarding ambient temperature, in phase 1 only normal ambient temperature and in phase 2 consider cold ambient temperature.
OI	Road load	In case of the vehicle with no mechanical neutral	Follow recommendations from ICE group except in cases where there are differences for example no mechanical neutral gear. Agreed to consider minimum requirement. This will make flexibility for future technical development and prevent judgment variation by contracting parties.
OI	Weighting factor	The vehicles which have difficulty to follow the prescribed cycle. (like as electrified vehicles for only urban)	follow development in the DHC group. Vehicles that will have problem following the driving cycle will be considered by the DHC group.

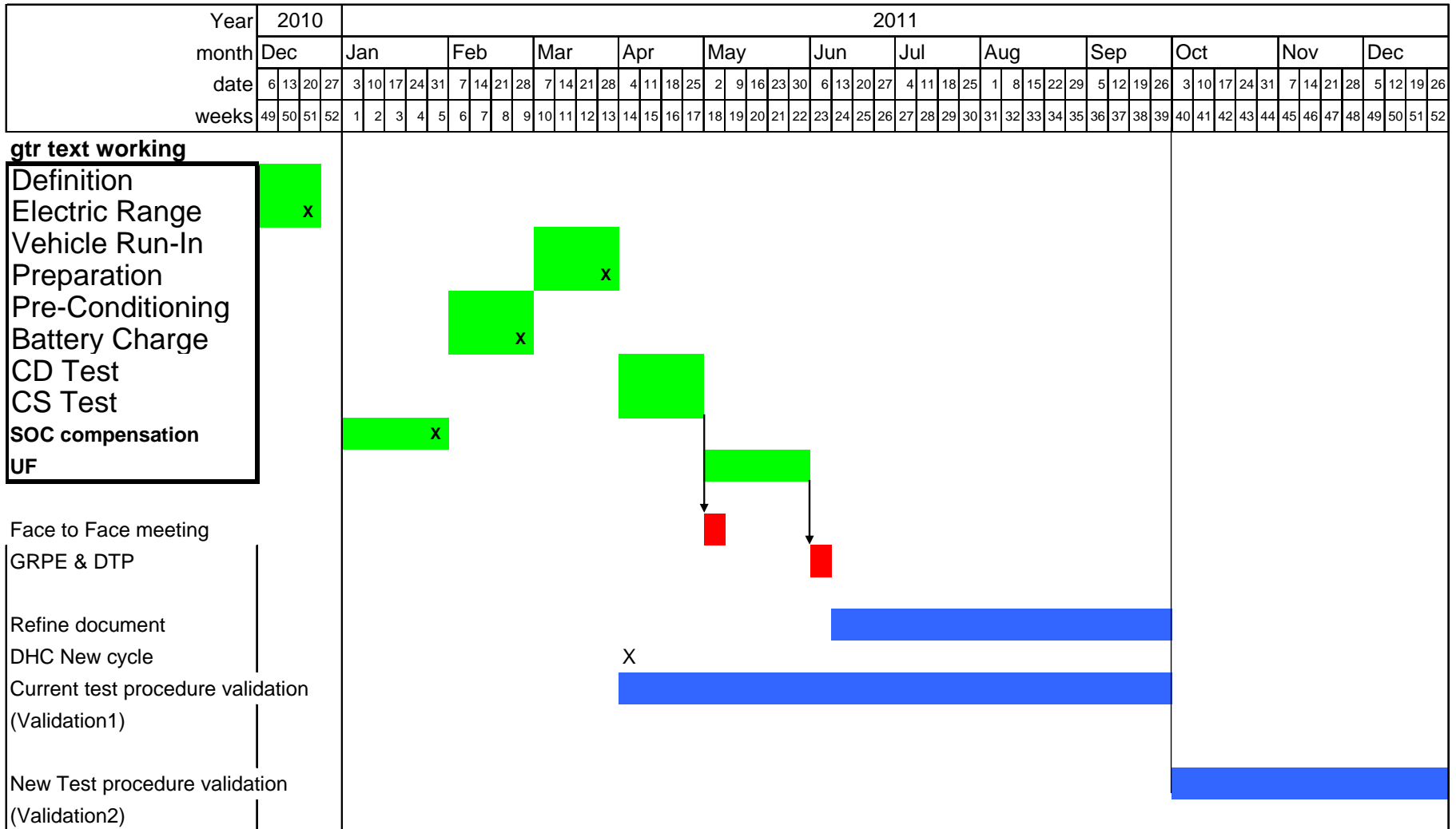
# Open issue list2

A/P/OI	Item	Issue	Action
OI	Emission worst test	General opinion to avoid to large number of tests.	Still an open issue.
A	Run in mileage	Run in mileage for test	300km or more
A	Charging condition	to not regulate the possibility to soak outdoor. (proposed by Jp)	It could be a safety issue for by some contracting parties if we do not allow charging outdoor.
A	Charging method	charging method	manufacture's recommended
A	Charging time	Soak time:12 hr or more, less than 36hr.Charging time: Stop with full charged.	Upper limit for charging time is 36 hr.
OI	criteria for end of charging	which is the criteria "plug-off" or indication of charging completed from the vehicle.	Still an open issue.
P	Interruption condition	Less than 3 minutes interruption is possible for every one cycle. During interruption, main power may be OFF.	still an open issue. Needs the driving cycle from DHC.
OI	test termination condition	Test termination condition for range measurement	Still an open issue.
A	Stop condition	Proposed stop condition :Accel Off ,and press braking pedal when 5 km/h or lower to stop.	agreement

# Open issue list3

A/P/OI	Item	Issue	Action
A	Discharge condition	Discharge condition before test: Discharge until manufacture's recommended level	agreement on the proposal and a wish that this should be optional and not a requirement. And also to add temperature condition for the discharge driving.
OI	Watt-hour meter measurement accuracy	US and JP: +/-2% EU: +/-0.2%	To be discussed
OI	Accuracy of ammeter	JP: +/-1% F.S. EU: +/- 0.5%	To be discussed
OI	LOD of ammeter	JP: 0.0001Ah (<=50A) 0.001Ah(>50A) EU: Regulation 0.3%	To be discussed
OI	SOC tolerance	calculation method for delta SOC	To be discussed
OI	CD test	calculation method for CD test (fuel consumption)	To be discussed

# Road map for gtr draft



X: phone conference

# Appendix

- Terms of reference
- Comparison table (for example)
- gtr text (for example)