WLTP-E-Lab Sub Group
Progress report

WLTP-DTP-E-LabProc-070

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State of E-lab sub group activity from DTP #10 in June

1.**gtr** draft study (DC will report)

2.Conducting for Validation Phase 2

Validation phase2 is on going and will be finished by the end of October.

The validation results will be analyzed in November and December.

Open issues

Green	Agreed or deleted	25
Yellow	Validation test	11
Blue	Proposed	2
White	Open issue	15

Color means state of each issue on Open issue list

15 open Issues will be discussed on 16th of November.

Test vehicles for Validation 2

Vehicle type		OVC-HEV	NOVC-HEV	BEV
brand/type		Toyota Prius PlugIn	Toyota Prius	Mitsubishi i-Miev
Location		Japan(NTSEL)	Japan(NTSEL)	Japan(NTSEL)
Vehicle weight		1420kg	←	1100kg
ICE	displacement	1.797L		
	Power	73kw		
	Torque	142Nm		
Moter	Power	18kw	←	47kW
	Torque	207Nm		180Nm
Driving Battery	Battery type	litium-ion	←	Litium-ion cell
	voltage	207.2V		330V
	Battery capacity	4.4kwh		16kwh

Status of ACEA EV vehicle or EV test support for the Validation Phase 2

OVC-HEV	brand / type	status	test location
high capable electric powertrain: (v max.E >= v max.WLTC)	Opel Ampera/Volt (launched)	measured	at DEKRA
low capable electric powertrain: (v max.E < v max.WLTC)	Toyota Prius Plugin(85km/h) (launched)	measured	at TME
all time blended operation type	current not available	??	??
special type e.g. without CD(ICE) capability (BEV+REX)	current not available	??	??
without neutral charging balance, CS operation	current not available	??	??

2Vehicles

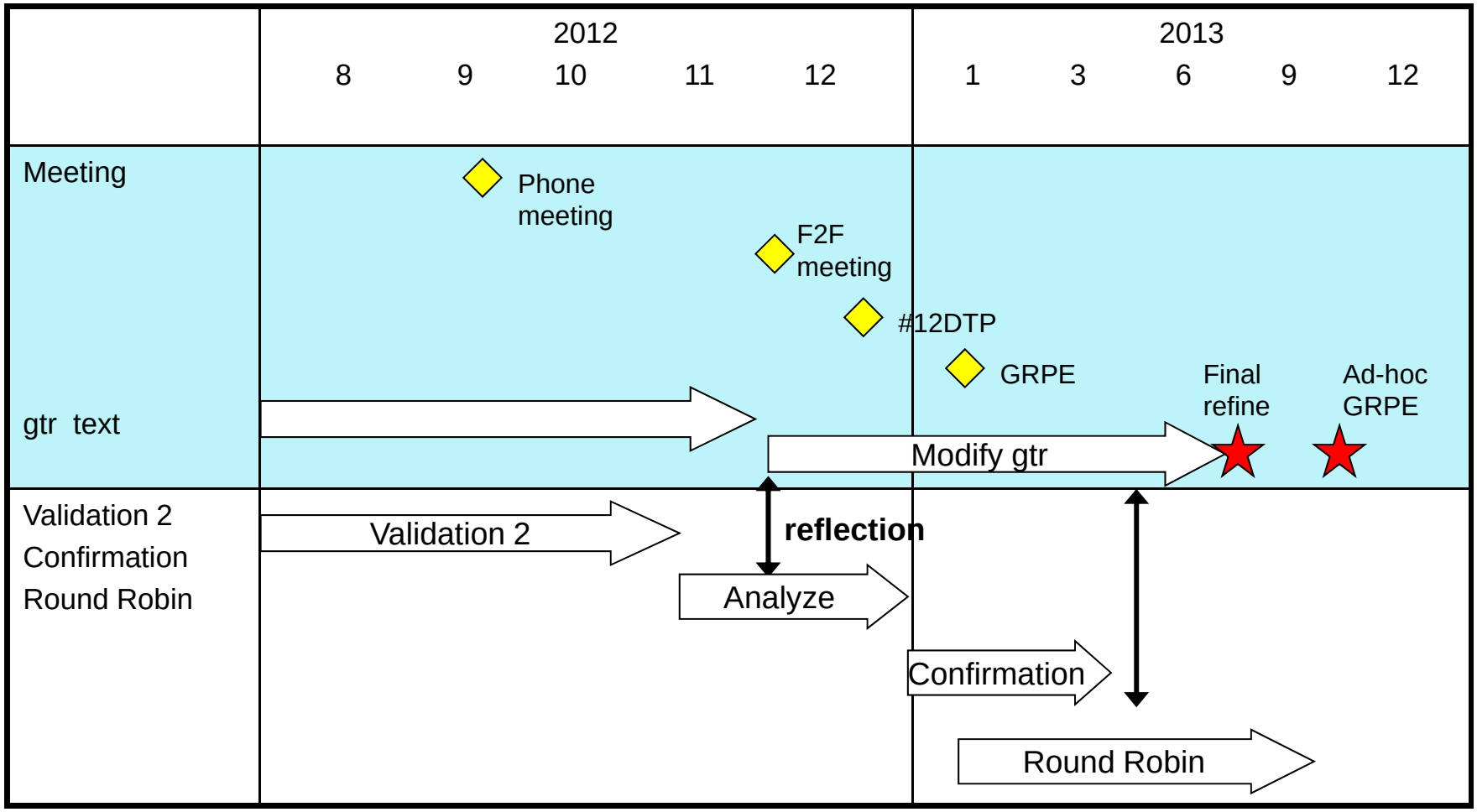
NOVC-HEV	brand / type	status	test location
CI	Peugeot 3008	in progress	at PSA
PI	Volkswagen Touareg Hybrid	in progress	at DEKRA
	Toyota Prius Hybrid PHEV in NOVC MODE	in progress	at TME
	BMW Active Hybrid 5	measured	at DEKRA

4Vehicles

BEV	brand / type	status	test location
high capable electric powertrain: (v max.E >= v max.WLTC)	~~Nissan Leaf (launched)~~	~~tbd~~	~~tbd~~
	BMW Active E (launched)	measured	at DEKRA
	~~E-Mini~~	~~confirmed by BMW~~	~~measurements at DEKRA~~
	Renault FLUENCE	in progress	Renault
low capable electric powertrain: (v max.E < v max.WLTC)	E-Smart	measured	at DEKRA
	Citroen C0/ION	in progress	at PSA
special type e.g. (pure city car with v max.E < 70km/h)	~~Renault Twizy (Quad)~~	~~ACEA has to rent~~	~~measurements at DEKRA ????~~
	~~any other~~	~~tbd~~	~~tbd~~

4Vehicles

E-Lab sub group Action plan



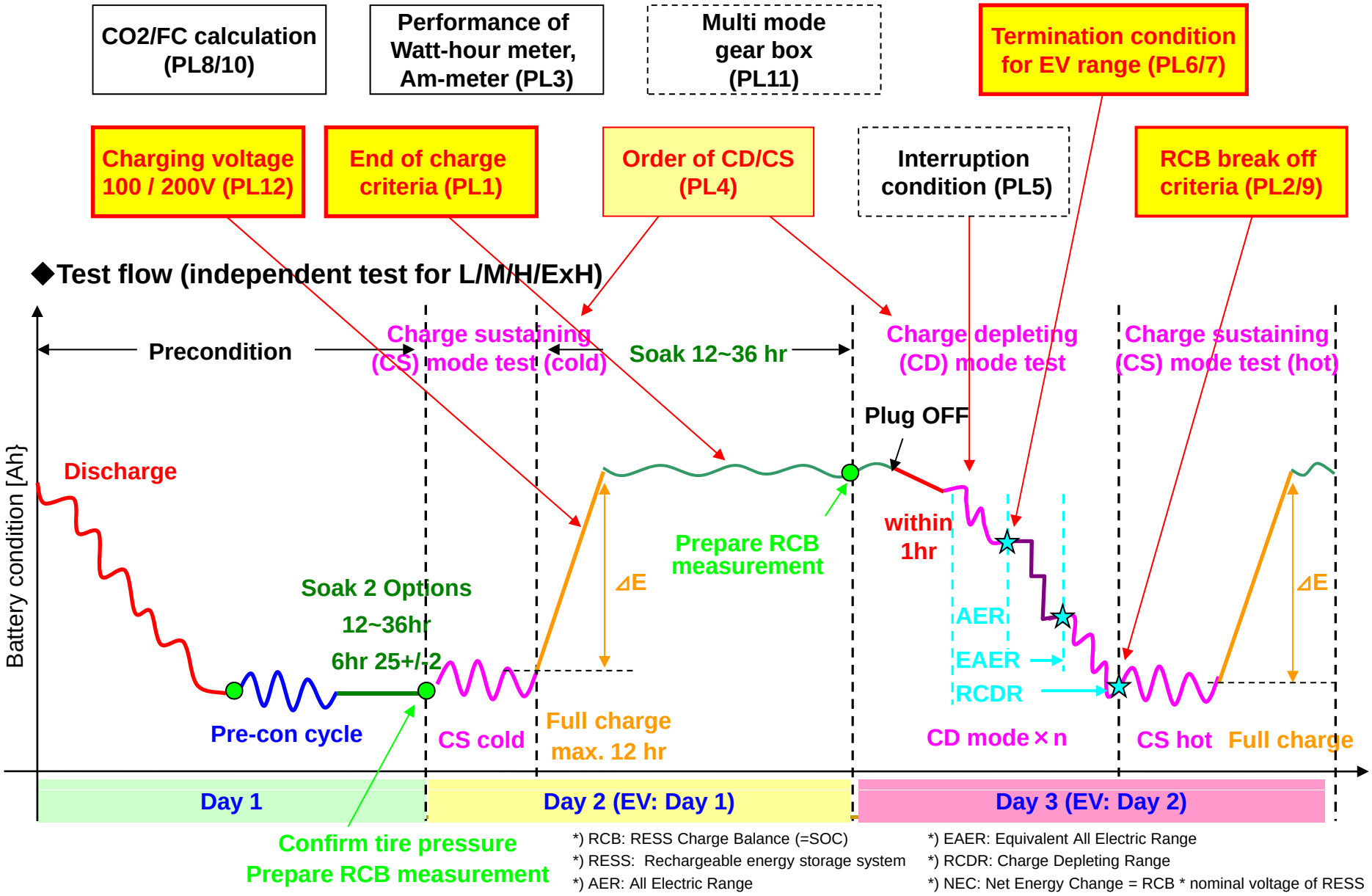
[Background]

1.Phone meeting was held on 11th of Sep.

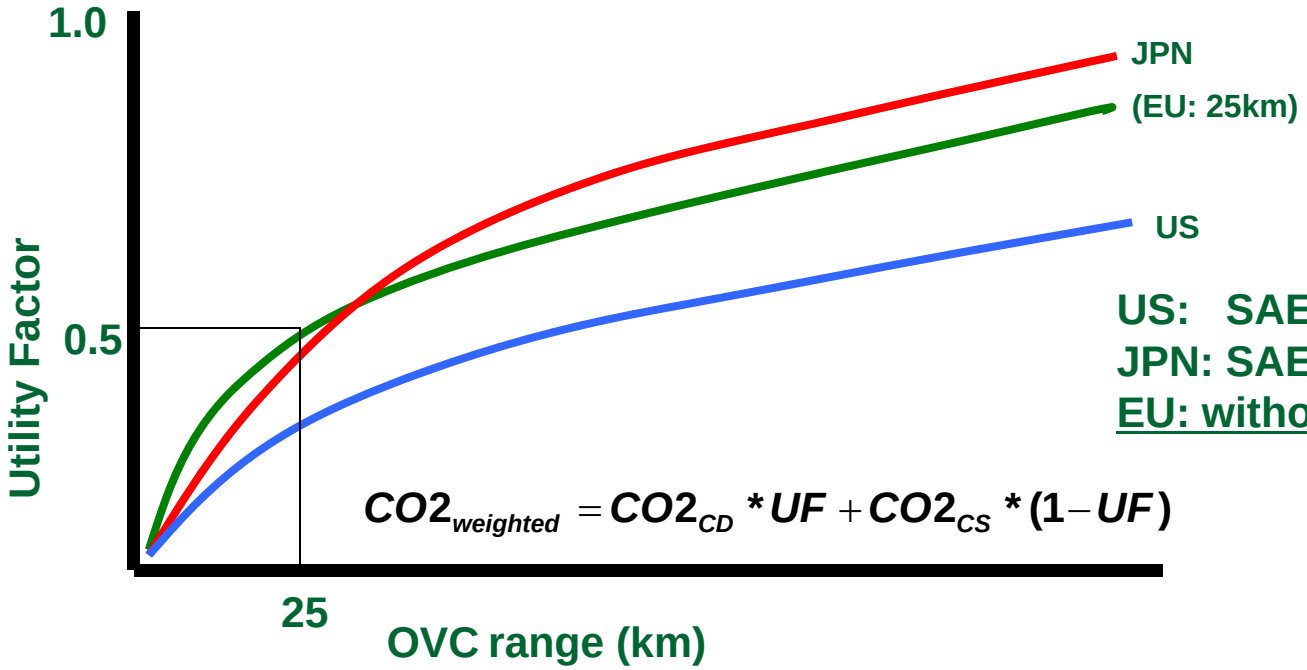
2.Face to Face meeting will be held on 16th of Nov.

3.Validation result will be analyzed and reflected to gtr by the end of 2012.

Consideration items on E-Lab. Gr.



Open Issue No.1 Utility Factor for OVC HEV



$$CO2_{weighted} = CO2_{CD} * UF + CO2_{CS} * (1 - UF)$$

US: SAE J1711 with US data
JPN: SAE J1711 with JPN data
EU: without the traffic data

	Operation switch	Utility Factor
EV	Without	n/a
OVC HEV	With (incl. pure EV)	OIL. No.1 SAE method is acceptable. US and Japan can use current UF. Other CP shall provide the traffic data.
	With (no pure EV)	
	Without	

Appendix : Open issues

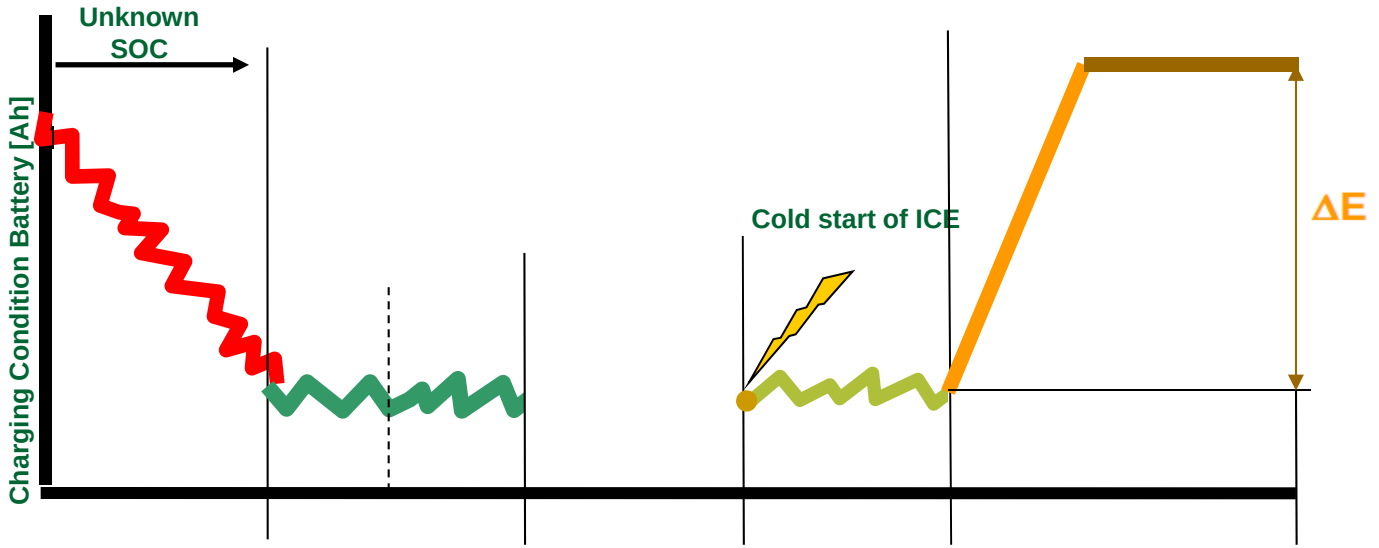
- Green color means “agreed or deleted”
- Red color means “to be discussed “.
- Blue color means” to be confirmed in Validation phase 2”.
- Under line means “changed from last DTP in Geneva”.
- These under lined issues will be reported today.

Proposal

Step 3 Charge Sustaining Mode

Performance of Watt-hour meter, Am-meter

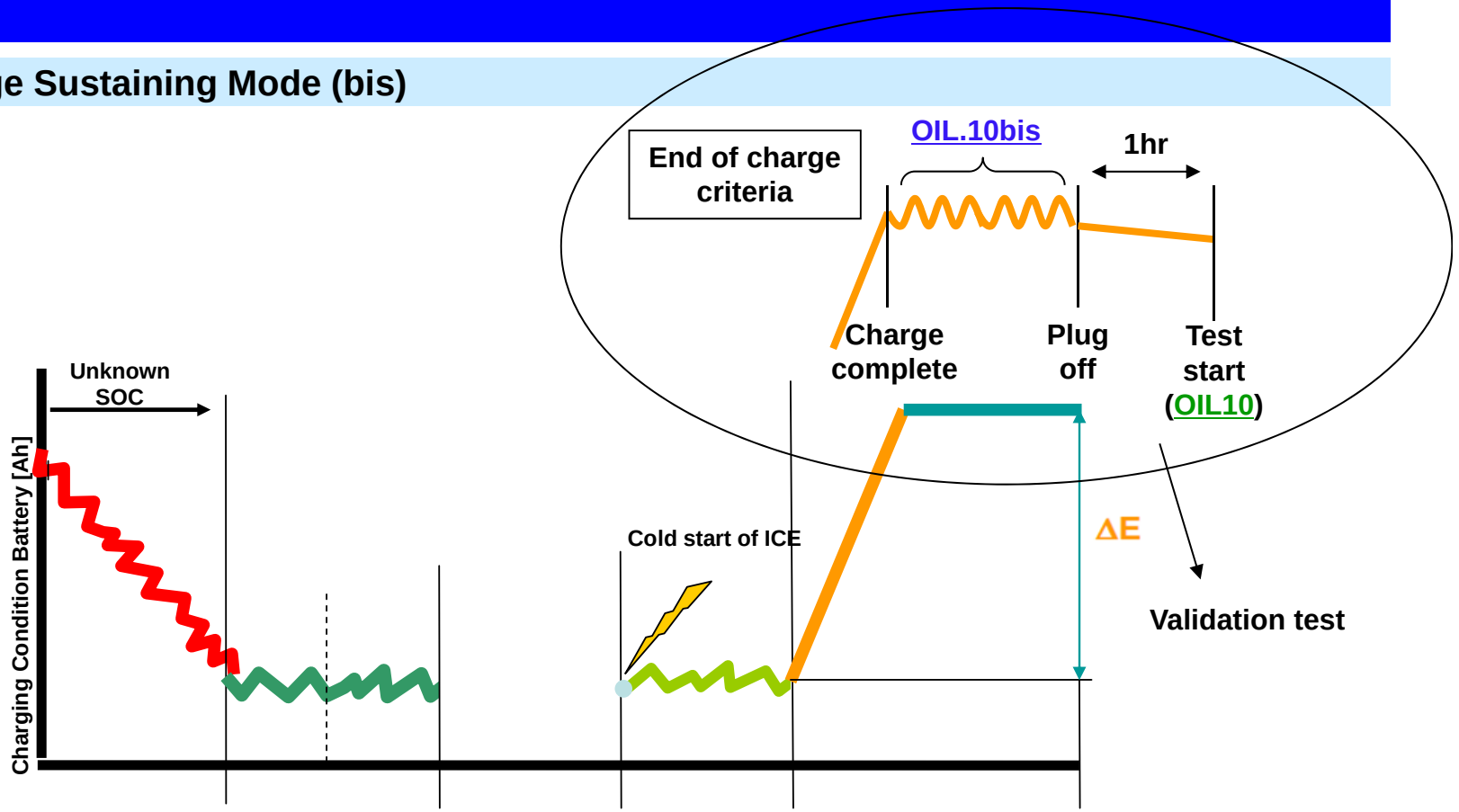
OIL No.15,16,17



	operation switch	initial discharge	pre-conditioning	Soak time	Charge sustaining test	Charging OIL No.8 Charging method
EV	n/a	n/a	n/a	n/a	n/a	Consumptiontest OIL No.2 Charging time: OIL No.9 Condition: OIL No.7 end of charge :OIL No.10,10bis → Validation test
OVC HEV	without	OIL No.14 discharge condition MR	follow ICE	follow ICE	OIL No.26,27 RCB correction Ex; correct emission?	
	With					
	With					
NOVC HEV	Without	n/a	follow ICE	follow ICE		n/a
	with					
	with					

Proposal

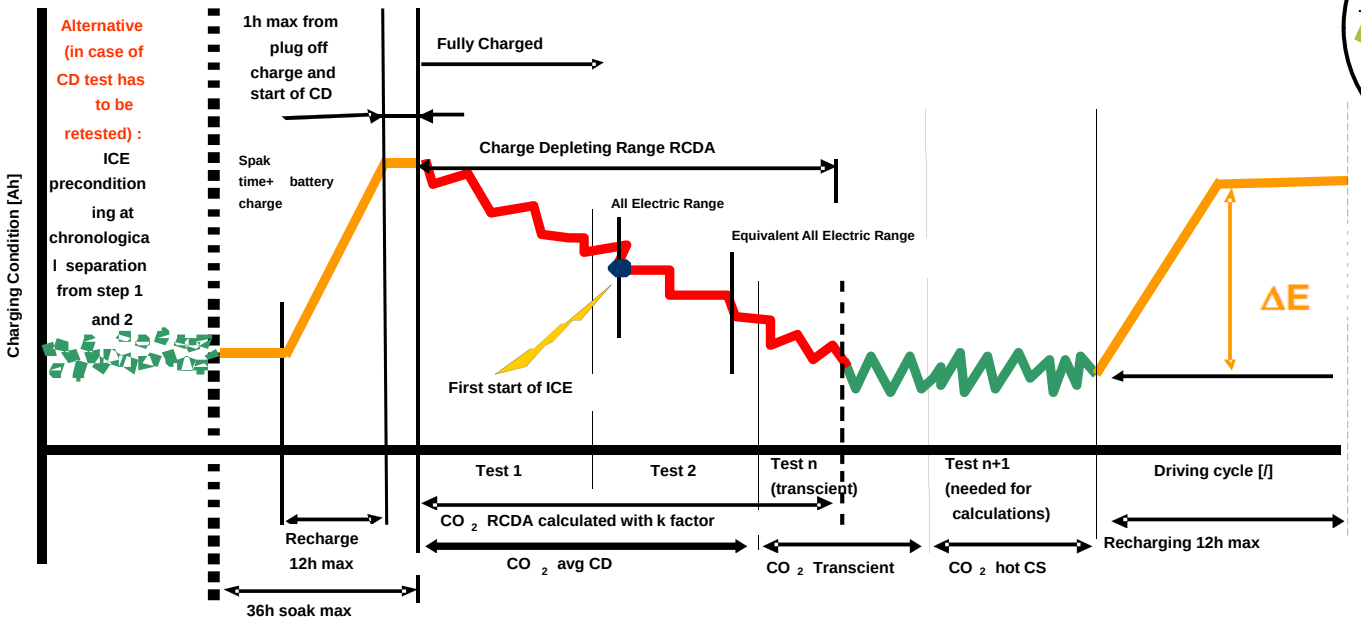
Step 3 Charge Sustaining Mode (bis)



	operation switch	initial discharge	pre-conditioning	Soak time	Charge sustaining test	Charging
EV	n/a	n/a	n/a	n/a	n/a	
OVC HEV	without	OIL No.14 discharge condition	follow ICE	follow ICE	OIL No.26,27 RCB correction Ex; correct emission?	Charging time: OIL No.9 Condition: OIL No.7 end of charge :OIL No.10,10bis
	With					
	With					
NOVC HEV	Without	n/a	follow ICE	follow ICE		n/a
	with					
	with					

Proposal

Step4 Charge Depleting Mode



	operation switch	charging after CS test	Charge depleting test/EV range test OILNo.11Interruption Condition	Charging
EV	n/a	n/a	Test termination Condition OIL No.12 Stop Condition OILNo.13	Same as Step3
OVC HEV	without	refer to step3	RCB break off criteria: OIL No.25& ~~25bis~~ Deceleration condition; OIL No.13bis EAER determination OIL No.21 To be discussed based on validation result.	
	with			
	with			
NOVC HEV	without	n/a	n/a	
	with			
	with			

OIL.No31
Low power vehicle

What is Low power vehicle?
How to validate?

To be discussed

Proposal

Step5: Calculation

Pollutants : **Detailed calculation formula is developed based on validation test results.**

CO2/Fuel Consumption :

Range :

	Operation switch	Pollutants	Fuel Consumption	Electric Energy	Range					RCB(DC)	Chaege Duration	others	
					AER	EAER	Rcda	Rcdc	AERcity				
EV	n/a	n/a	n/a	applicable	applicable	n/a					Applicable		
OVC HEV	Without	applicable	applicable	Applicable	Applicable								
	With												
	With												
NOVC HEV	Without	applicable	applicable	n/a									
	With												
	With												

Appendix: Open issue list 1

	tech/polit /overlap	A/P/OI	Item	Issue	Action	Vehicle	Date of discussion	gtr text	VP2	Comments Sept. 2012
1	political/te	OI	Utility factor	The us and jp regulation has methods which include statistical analysis. (EU:25km)	These methods will be considered. **SAE method is acceptable. But to get the traffic data of all country is too difficult.** **Result of Stockholm meeting.** **The formula to calculate CO2 is agreed.** **How to determine UF is still open issue.** **How to get the trafic data is still open issue.** **11.9.2012 phone meeting**	OVC(PHEV)	1.6.2011->5.7.2011 **->11.9.2012** **To be discussed**	**2.4.11 Appendix V**	**CAL1-3**	Japan supports SAE method to determine the UF. Japan proposes to start getting traffic data in several countries even though it is still in discussion to adopt united UF or individual UF.
2	tec	A	Energy consumption test condition	"Battery temperature requirements" : What does it mean ? -–> "T°C of the test" ? need to precise this wording	Follow recommendation from ICE group regarding ambient temperature, in phase 1 only normal ambient temperature and in phase 2 consider cold ambient temperature. **EU commision required to discuss about different temprature and external condition.**	BEV	agreed	**Appendix IV**	**?**	
3	tec/Overla	OI	Road load	* Issue for vehicle with no mechanical neutral gear * consider the charging/recharging electrical energy during deceleration : to guaranty the same behavior on the "road" and on the chassis dyno	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	ALL	9.5.2011->5.7.2011 **->11.9.2012** **Japanese proposal was agreed.** **propose to ICE**	-	**RL6**	Japan proposes to add the following meaning of the sentence to the relative ANNEX: The special vehicle condition for road load determination and setting dynamometer shall be reported to the authority and approved.
3 bis	tec/Overla	OI	Road load	Coast Down Mode : there is a need for a coast down mode and where there are special requirement for electrified vehicles this will be addressed by the Elab subgroup.	To be discussed (see T&E proposal) : ICE proposal ok with a few corrections from E-lab **E-Lab subgroup made a proposal for ICE in Stockholm**	ALL	9.5.2011->5.7.2011 **->11.9.2012** **Japanese proposal was agreed.** **propose to ICE**	-	**RL6**	Japan proposes to add the following meaning of the sentence to the relative ANNEX: The special vehicle condition for road load determination and setting dynamometer shall be reported to the technical service and be approved.
4	tec/Overla	OI	Low power vehicle	The vehicles which have difficulty to follow the prescribed cycle. (like as electrified vehicles for only urban)	follow development in the DHC group. Low power vehicles that will have problem following the driving cycle will be considered by the DHC group.	ALL	after DHC completed	-	**?**	
5	tec	A	Emission worst test : to merge row 5 and row 29	General opinion to avoid to large number of tests. Only Japanese regulation has worst emission test for CD mode.	out of GTR scope Japanese worst emission test is out of gtr scope.. Same with No29	OVC(PHEV)	agreed	**(6.1.1.2)**	**?**	
6	tec	OI	Run in mileage	Run in mileage for test	300km or more (Evs) and for PHEVs ? **EV:300km or more, PHEV->Follow ICE battery 300km ->agreed** **How about Vehicle run in mileage?300km?** **Japan Comment 18032012** **Follow [paragraph for ICE vehicles requirement].** **4.1.2. and 4.2.2.** **It should be deleted..**	Evs and PHEVs	1.6.2011-**>11.9.2012** **Japanese proposal was agreed**	**4 Vehicle and REESS preparation 4.1 OVC-HEV**	**P0**	Battery run-in shall be done on boad. EV : 300km or more PHEV:3000km-15000km

Open issue list2

	tech/polit /overlap	A/P/OI	Item	Issue	Action	Vehicle	Date of discussion	gtr text	VP2	Comments Sept. 2012
6 bis	tec	A	Run in	Battery / ICE operation ratio during vehicle run in for OVC type HEV. Consider the necessity to define the "battery operation ratio" during "run in mileage"	**HEV :Follow ICE** **OVC(PHEV)** **1.Vehicle has default mode: Run in should be performed in default mode.** **2.without default mode:manifacture recommendation.** **3.Run in should be performed with CS mode.**	OVC(PHEV)	~~9.5.2011~~**->5.7.2011** **->11.9.2012** **->Japanese proposal was agreed(11.9.2012)** **to inform ICE**	**4 Vehicle and REESS preparation 4.1 OVC-HEV**	**P0**	Japan propose "manufacturer recommendation". It is difficult to define the "battery operation ratio" during "run in mileage" ,because manufacturer can set any condition as a default mode.
7	tec	OI for EV and for PHEV	Charging condition	~~to not regulate the possibility to soak outdoor. (proposed by Jp) .~~ ~~Remark :~~ actually maybe still an OI for PHEV (electric ranges impact) as well. Please to explain which country(ies) has (have) a problem to perform the charge of the battery inside ?	It could be a safety issue for by some contracting parties if we do not allow charging outdoor. **Agreement:25+/-5degC .** **To be deleted outdoor condition**	OVC(PHEV)/BEV	1.6.2011**->5.7.2011** **->agreed**	**Appendix IV 2.1.2.1**	**CD3**	
8	tec	A	Charging method	charging method	manufacture's recommended	OVC(PHEV)/BEV	agreed	**Appendix IV**	**CD3**	
9	tec	~~A~~ P	Charging time	Soak time:12 hr or more, less than 36hr.Charging time: Stop with full charged. 4.5. The Lab-process group has decided to have 2 alternatives for the soak time: Alt 1: This	~~Upper limit for charging time is 36 hr. To be discussed~~ **ICE proposal should be confirmed during validation test**	OVC(PHEV)/BEV	**1.6.2011->11.9.2012** **To be discussed after Validation**	**Appendix IV 2.1.1**	**CD3**	Japan objects forced cooling method because OVC(PHEV)/BEV have other parts and devices that should be considered. Also it is different from the normal operation in the market.
10	tec	~~OI~~ P	criteria for end of charging	which is the criteria "plug-off" : indication of charging completed from the vehicle and starting within 1 hour from plug off test procedure shall be applied (ACEA proposal)	~~Still an open issue.~~ See ACEA proposal **To be confirmed during validation test for considering RCB fluctuation from charging completed to plug off.**	BEV/PHEV	1.6.2011 **->11.9.2012** **ACEA reject Japanese proposal.** **To be discussed in November**	**Appendix IV 2.OVC hev battery conditioning** **3.BEV battery conditioning**	**CD4**	Japan proposes to measure RCD as a series of phases L⇒ M ⇒ H⇒ EX-H). This method make it possible to fix the condition before charging and to compare each charge volume. It is not necessary to consider RCB fluctuation from charging completed to plug off. Full charge condition can be manufacturer recommendation. This method will restraint improper operation indirectly.
10 bis		New OI	criteria for end of charging	see § End of charge criteria : to find a consensus on the "same conditions" before and after the test.	All Charging length : losses issue to deal with as far s energy consumption calculation is concerned. Do we have to take into account such losses in the procedure	EV/PHEV	1.6.2011 **->11.9.2012** **ACEA reject Japanese proposal.** **To be discussed**	**Appendix IV 2.1.2.2**	**CD4**	Japan proposes to measure RCD as a series of phases ⇒ M ⇒ H⇒ EX-H). This method make it possible to fix the condition before charging and to compare each charge volume. It is not necessary to consider RCB fluctuation from charging completed to plug off. Full charge condition can be manufacturer recommendation. This method will restraint improper operation indirectly.

Open issue list3

	tech/polit /overlap	A/P/OI	Item	Issue	Action	Vehicle	Date of discussion	gtr text	VP2	Comments Sept. 2012
11	tec	P and OI	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. **For range test of EV :3minutes is acceptable(cycle:30min)->Validation test** **PHEV:to be discussed.**	BEV/OVC(PHEV)	1.6.2011**->5.7.2011** **->11.9.2012** **Question from ACEA** **How about the key position during break? Key off or on?** **->>To be discussed**	**5.1.4.1.4**	**CD6-1**	Both for OVC HEV and BEV, ″three breaks of no more than 15minutes in total ″ is acceptable for range test on the premise that the meaning of ″break″ is to stop the operation of the vehicle in the range test. For example, driver−change during idling phase is not included in ″break″.
12	tec	OI	test termination condition	Test termination condition for range measurement	ACEA will make a proposal : Need to know the driving cycle in order to close the open issue. **Japan proposed 4 seconds->TBD**	BEV~~, PHEV~~	9.5.2011 **->11.9.2012** **Japanese proposal was agreed**	**5.1.5.3.1** **5.3.2.5.4**	**CD7**	Japan proposes ″4 sec.″ after vehicle speed goes out from the tolerance limits on the premise to measure EV range by each phases.
13	tec	A	Stop condition	Proposed stop condition :Accel Off ,and press braking pedal when 5 km/h or lower to stop.	**The range should be measured until break off criteria.** **Stop condition isn't necessary.** **Japan comment 18032012** **Criteria of [test end] and how to stop the vehicle after reaching the criteria are still open.**	BEV	agreed→TBD ->**11.9.2012** **Japanese proposal was agreed**	**5.3.2.5.4**	**CD7-1**	Japan proposes to add following sentence to current proposal: ″to stop within 15 sec. after reaching the criteria″
~~13 bis~~	~~recoverable~~ OI	~~deceleration condition~~	~~ACEA proposal: to enable OEMs to fully take advantage of regenerative brewing potential, it should be allowed to disengage the clutch at deceleration periods. There may also be (dependingon) ICE vehicle concepts with very long~~	~~To be discussed~~ (not yet mature. To be reconsidered when the new cycle is known)	~~ALL~~	~~9.5.2011~~	-	-		
14	tec	A	Initial Discharge condition	Initial 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 (?? To check this requirement --> A priori, the T°C should be the same as the	BEV	1.6.2011**->agreed**	**Appendix IV 2.1.1**	**PC1**	
15	tec	OI	Watt-hour meter measurement accuracy	US and JP:+/-2% EU:+/-0.2%	**Japan proposed +/-0.2%**	BEV/OVC(PHEV)	9.5.2011**->5.7.2011** **->TBD(Validation test)**	**3 General Requirement**	**EQ1**	Japan supports 0.2%.
16	tec	OI	Accuracy of ammeter	JP:+/-1% F.S. EU:+/- 0.5%	**Japan proposed +/-0.5%.** **But ACEA coment:+/-0.5% is difficult.->TBD**	EV/OVC(PHEV)	9.5.2011**->5.7.2011** **->TBD(Validation test)**	**3 General Requirement**	**EQ2**	Japan supports 0.5%
17	tec	OI	LOD of ammeter	JP:0.0001Ah (<=50A) 0.001Ah(>50A) EU: No regulation	**Japan proposed minimum measurable integration amount which regulated Jpn regulation.**	EV/OVC(PHEV)	9.5.2011**->5.7.2011** **->TBD(Validation test)**	**3 General Requirement**	**EQ2**	Japan supports 0.0001Ah（<=50A） 0.001Ah(>50A)
18	tec	A	RCB(SOC)	Definition;Rename " SOC" to "RCB". RESS(Rechargeable energy storage system) ECB(RESS Charge Balance)	To be discussed	ALL	agreed	**2.4.4**	-	
19	tec	A	RCB(SOC)	For CS mode, it could be necessary to compensate the CO2/fuel consumption based on ~~SOC balance~~ RCB 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. Same with No26	OVC(PHEV)	agreed	**6.2.1.2.3**	**CAL2**	
20	tec	OI	CD test	calculation method for CD test (fuel consumption)	**ACEA will disucuss internally.TBD**	OVC(PHEV)	**5.7.2011->deleted**		**CD**	to discuss based on ACEA proposal

Open issue list4

	tech/polit /overlap	A/P/OI	Item	Issue	Action	Vehicle	Date of discussion	gtr text	VP2	Comments Sept. 2012
21	tec	OI	EAER determination : (CO2-related)~~CO2 compensation for~~	Separation point of CD mode and CS mode in one cycle is agreed but the method on how is still an open issue.	**ACEA will make a proposal.**	OVC(PHEV)	**5.7.2011 ->Validation test**	**6.4.1.3**	**CD7**	
22	tec	P	Electric range : 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)	To be discussed	BEV/OVC(PHEV)	**5.7.2011->TBD**	-	-	
24	Overlap with ICE	OI	Ambient Air Correction	Open issue from ICE group. Intake air emission should be subtracted from tail emission.	To be considered. Follow ICE group.	ALL	follow ICE	-	-	
25	Tec	OI	For detection of CS condition : ~~RCB~~ break off criteria	1) ACEA and JAMA agree on the principle to perform n+1 test sequence to confirm the end of CD test and define the transient cycle as the test n. If the battery energy used during each test sequence is less than a certain value [to be defined in % of fu	Actions : 1) method to be developed to determine the cycle energy demand and then to define the value ; 2) to check Renault's proposal (26/05/2011) and to reformulate it if any. (The [values] are given as an indication but have to be well defined) ->Need	OVC(PHEV)	9.5.2011-**>5.7.2011 ->Validation test**	**2.4.13 2.4.14 5.1.3.3.2 5.1.3.3.3**	**CD6-5**	
25 bis	New tec	A	~~For detection of CS condition : RCB break off criteria~~	~~Reminder : end of CD test criteria: NEC < X Wh ---> new O-1, to be discussed with EC / JRC, other experts to find an acceptable way to measure in safety conditions or to pick-up the voltage information from the ecu ?~~	To be measured in Ah	OVC(PHEV)	9.5.2011-**>5.7.2011 ->deleted**	-	-	
~~26~~	~~tec~~	A	~~RCB correction~~	~~Japan proposal:All emissions should be corrected. ACEA proposal:FC/CO2 should be corrected.~~	~~All emission should be corrected,excluding no relation with emission value. Need to consider AP constituents including PN/PM.~~	~~PHEV~~	deleted	-	-	
26	New tec	A	RCB correction	JAMA and ACEA agree to only correct CO2 and fuel consumption. No relevance for pollutant emissions because no relationship between RCB and pollutant emissions	Tests related to CO2 correction factor elaboration are used to show that polluant emissions comply with the limit values and no relationship with RCB. So, it means that specific tests should not be required for certification test. The non relationship bet	NOVC HEV and PHEV in CS test	**5.7.2011->agreed**	**Appendix II**	**CAL2**	
26 bis	New tec	OI	RCB correction	Need for a clarification regarding statement from ACEA and JAMA. Both agrees that there is no need for pollutants emission correction unless there is evidence for a correction. Remark from AIFA there is the Marante study that could give clarity for the ne	Need of pollutants emisson correction if evidence to be discussed for final clear position. Especially, if there is relationship between RCB and pollutants emissions but in any cases the pollutants emission crumply with the limit value : should we need to	NOVC HEV and PHEV in CS test	**5.7.2011 ->11.9.2012 Japanese proposal was agreed**	**Appendix II**	**CAL2**	Japan confirmed there is no relationship between RCB and mass of additional pollutants. Only mass of CO2 shall be corrected by difference of RCB.
27	tec	OI	RCB correction criteria (window definition) CO2-related	ACEA proposed ~~the tolerance~~ a window (% of fuel energy) in which there is no RCB correction. Japan does not agree. But JAMA coul agree with ACEA as per a reasonable window definition	ACEA will make a proposal until 18th March : RCB window without correction needed; in case of exceeding the 1% (of fuelenergy used) a correction calculation is required.	NOV HEV and PHEV in CS test	**5.7.2011 ->11.9.2012 To be confirmed**	**Appendix II**	**CAL2**	Japan supports 1% according to R101.

Open issue list5

	tech/polit /overlap	A/P/OI	Item	Issue	Action	Vehicle	Date of discussion	gtr text	VP2	Comments Sept. 2012
28	tec	A	CS test achievement : E1/E0 criteria	Only Japanese regulation: If necessary, to confirm	Japan will confirm the necessity and reason. ->Japan agreed to delete this criteria.	OVC(PHEV)	agreed	-	-	
~~29~~	~~tec~~	~~A~~	~~CD EM test~~	~~Only Japanese regulation has worst emission test for CD mode.~~	~~Japanese worst emission test is out of gtr scope~~	~~PHEV~~	deleted	-	-	
30	tec	OI	~~energy efficiency~~ Calculation of electric consumption of CD range	Japan proposal: to be calculated by EAER ACEA proposal: to be calculated by RCDA (or Rcdc : to be checked)	ACEA/JAPAN will provide the concrete calculation sample, then discuss its advantage/disadvantage **->TBD**	OVC(PHEV)	**5.7.2011 ->11.9.2012 To be discussed in November**	**6.3.1.2.2 6.3.1.3.2**	**CAL3-2**	Japan supports both calculation methods can be written in the gtr for flexibility. In additional Japan proposes a note to explain the meaning of both method.
31	tec	OI	AER City	There is an interest for EV and OVC HEV with low power engine and even with full capable engine to consider such an electric range like AER city (which means low speed part(s) of the WLTC). As far as NOVC HEV are concerned, we have to consider the interes	To discuss with all together and especially along with the european Commission. **L+M phase should be AER City. AER City should be optional test for customer information.** **JapanComment 18032012 Weigting each phase is still open.**	BEV/OVC HEV	**5.7.2011 ->TBD**	**5.3.2.6 6.4.2.2**	**TBD**	
32	tec	P	performance info.	additional performance item(s) may be necessary for customer information, e.g. B charge time	EC ask JRC? for study	BEV/OVC(PHEV)	September	-	-	
33	tec/overla	OI	gear box/multi modes	See ICE group proposal according to the presence or not of a default mode : number of tests to perform for pollutants emissions and CO2/fuel consumption ..	To check if it is transposable to electrified vehicles ? To be discussed	All	1.6.2011 ->Check ICE proposal	**5.1.1.3**	**P3**	
34	tec	A	CD test : pollutants emissions compliance	Discussion about requirement on emissions during CD test. The Japanese legislation require emissions compliance during CD test and the manufacturer is to provide documentation that for different initial SOC there is also compliance with emission standards	Final decision of the group confirmed on 31/03/2011 : agreement to remove such requirement (additional tests) from the GTR and to let it only at the regional request that is to say at the Japanese government request if needed.	OVC(PHEV)	**agreed**	-	**CAL1-2**	
35	tec overlap with ICE	OI	12 voltage battery	See ICE proposal and give the E-lab position	To be discussed	NOVC HEV /OVC(PHEV)	TBD	-	**PC8**	
36	overlap with ICE	OI	scope of E-lab	Does the group to handle hybrids vehicles as well or hybrids vehicles are part of ICE group ?	DTP_E-lab group has to discuss with ICE group		GRPE	-	-	
37	tec	A	REESS	RESS renamed REESS in GRSP (R100).	Definition of RESS should be corrected.	ALL	26-28.3.2012 ->**Tobe discussed in November**	**2.2.2**	-	Japan proposed REESS which was from R100 before. On the other hand we are wondering the necessity to consider the expression in ISO.

Open issue list6

	tech/polit /overlap	A/P/OI	Item	Issue	Action	Vehicle	Date of discussion	gtr text	VP2	Comments Sept. 2012
38	tec	OI	EV mode	Most electric energy consuming hybrid mode or most electric energy consuming mode,such as EV mode should be considered for CD test.	For Validation phase 2, Option 3 should be evaluated and Option1 and 2 will be additional.	OVC HEV	26-28.3.2012 ->>**11.9.2012 ACEA comments How about the vehicle without defoult mode? To be discussed in November**	**2.6.3 2.6.4 5.3.2**	**?**	Japan proposes to perform CD test by "Default mode". There exists variable usage in the market and common use is important for this item.
39	tec	OI	R101 revision For EAER test	->	To be discussed	OVC HEV	26-28.3.2012 ->>**11.9.2012 To be discussed in November**	**5.1.15**	**CAL3-2?**	Japan supports calculation method by CO2 compensation for EAER. Japan ask for an explanation of the background and target of the proposal from Germany.
40	tec	A	Range measuremen	->	The significant figure for the range value (AER, AER city, EAER and so on) should be for calculation 0.1km, for report nearest whole number.	ALL	26-28.3.2012	**3.4**	**CAL3**	
41	tec	OI	Soak time between each phase	->	Soak time between each phase should be validated during validation phase two.	ALL	26-28.3.2012	**5.1.3.3**	**CSL6**	
42	tec	OI	Start of charge	->	The time for the start of charging after test (30 minutes) should validated during validation phase two.	BEV/OVC(PHEV)	26-28.3.2012 ->**11.9.2012 Japanese proposal was agreed**	**5.3.2.3.5**	**CD9**	Japan proposes "within 2 hours" according to ISO.
43	tec	OI	Fuel consumption formula	ACEA proposed with the unit l/100km	Japan will propose fuel consumption formula with unit (km/l) as an option to (l/ 100 km).	except BEV	26-28.3.2012 ->**11.9.2012 agreed**	**Appendix II 1.3.1**	**CAL4-1**	Japan proposed to add km/l.
44	tec	OI	Charge depleting	Description of relationship with CS is more understa	Add [until change to charge sustaining operation].		**11.9.2012 to be discussed in November**	**2.4.1**		Japan proposed to add "until change to charge sustaining operation" according to the definition in ISO.
45	tec	OI	Electric energy consumption	Electric energy consumption of CD operation.	How to use?		**11.9.2012 to be discussed in November**	**6.3.1.3**		Japan want to confirm the formula meaning with the editor. Because it seems to be wrong. For example, E weighted should be a value of "Wh/km", not "Wh".
46	tec	OI	weighted total AC electric energy consumption	Utility factor weighted total AC electric energy consumption including charging loss.	How to use?			**6.3.1.1**		
47	tec	OI	RCDA	Option2 needs absolute SOC, but no measurement method has been established.	Japan comment Vote for option 1		**11.9.2012 to be discussed in November**	**6.4.1.5**		Japan supports OP1 and proposes to delete OP2 because measuring method for "absolute SOC"is not established yet.