

Progress report of e-Lab sub-group


1. Discussion points
2. Next Actions

OIL# 52: End of PEV range criteria

Overview: This issue is to consider special treatments for PEVs which are not able to follow the prescribed cycle due to their limited speed or power.

Current status:

Possible solutions are in the following table. The SG requested Europe to have one position for the case of “cap speed”. *) downscale ratio is determined by motor peak power defined in R85, instead of ICE peak power

solutions	features	concerns	
Downscale (defined in Annex2)	in line with ICE*	NA	 SG agreed
Capped speed	Reflect the vehicle performance	Provide inappropriate information to customer Unfair competition	Under discussion

power determination:

The influence of absence of power determination on test results was minimized during phase 1b. Completed power determination could contribute to expand vehicles to which WLTC can apply. At the same time, we need to mind that we need other technical investigations which had been done for ICE vehicles. It should take time. Special treatments for electrified vehicles, for example downscaling, in cooperation with power determination should be discussed in later phases of WLTP.

OIL# 58: PEV shorten test procedure

Overview:

This procedure is based on range calculation. This enables to reduce the test burden keeping good accuracy.

Current status:

WLTP-SG-EV-07-11

WLTP-SG-EV-08-03

The SG has been validating the method. The SG confirmed the deviation of results of shorten test from that of the conventional test is small. Also, the SG confirmed the influence of constant speed on results is small based on the analysis of measured and simulated data.

The SG still needs time to discuss about test conditions, such as boundary conditions, constant speed and distance of constant speed phase.

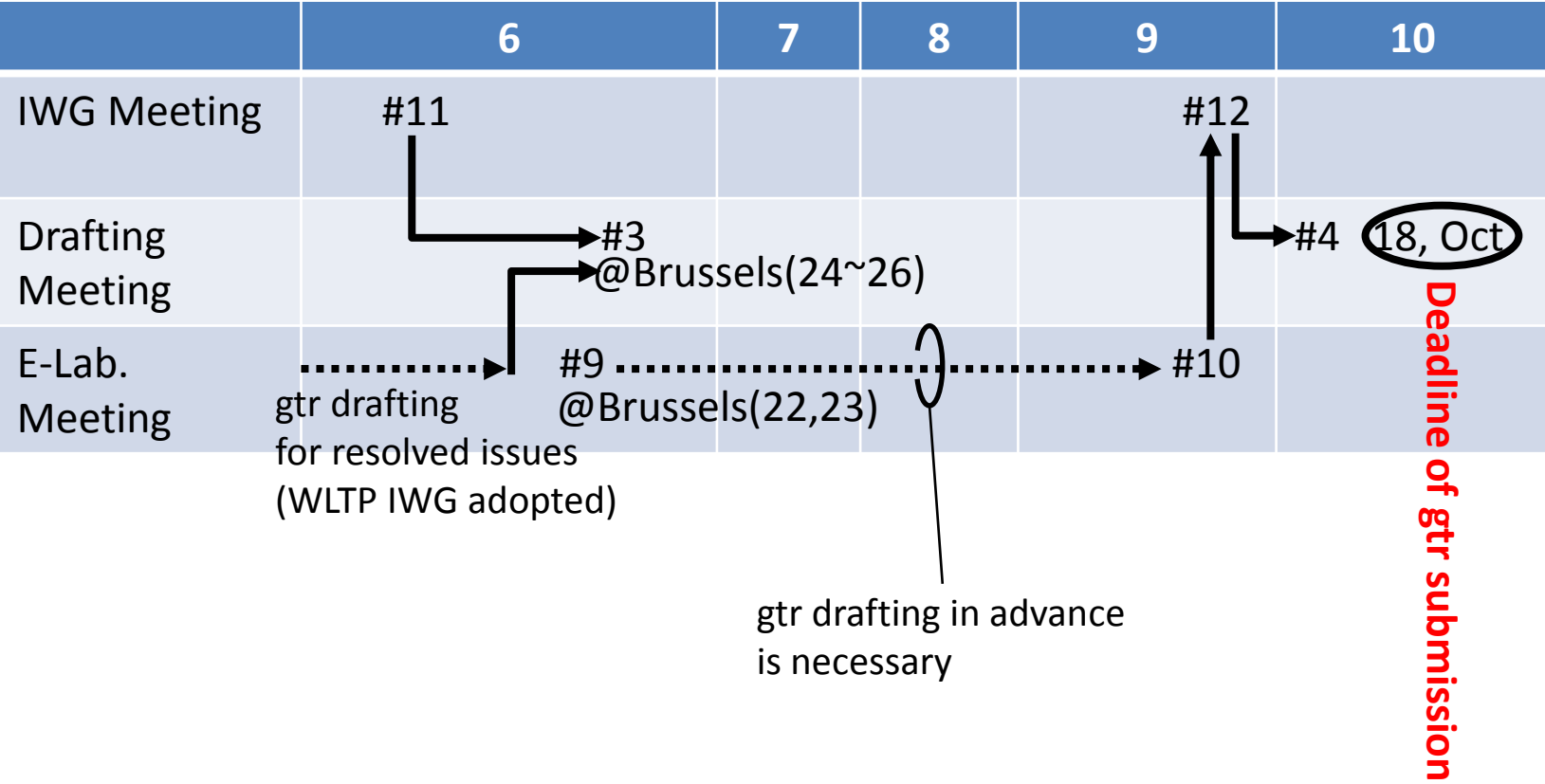
Steps for goal:

The SG will agree on this issue in #9 meeting(June).

Conditions for Shorten Test Procedure (Under construction)

	Proposals (tentative)		
Boundary for STP use	Test method Test vehicle's range	Consecutive cycle test	Shorten test
	Range < 70km (L ~ exH) < 60km (L ~ H)	Mandatory	Prohibit
	Range \geq 70km (L ~ exH) \geq 60km (L ~ H)	Prohibit	Mandatory
Constant Speed Cycle	L ~ exH : 100km/h , L ~ H : 80km/h		
Constant Speed Cycle duration	CSCM : rest (= Total range – cycle driving distance – CSCE) CSCE : 3 ~15km		

2. Next Actions



Information:
WLTP schedule

~2014	2015	2016	2017	2018	2019	2020
Phase 1b →						
Phase 2 items* will be listed →			Phase 2	?	Phase 3	→

*"items" means discussion items in phase 2. it does not mean the GTR(phase 2) items.

1. battery durability

Durability of electrified vehicles is one of possible items in phase 2. The European commission recommends WLTP to collaborate with EVE on battery durability issue. Review of the items for phase 2 will be started as the preparation process of phase 2.