

Worldwide Harmonised Test Procedure for Light Duty Vehicles WLTP

EVE 9nd Session
17 of February 2014
Per Öhlund
Co-chair Sub-group EV

WLTP

- Phase 1 GTR adopted by GRPE 14 November 2013
- WP 29 adoption March 2014

Organisation WLTP

WLTP Informal Group

Chair : S. Redmann

Vice Chair : K. KOBAYASHI

co-TSs : K. Kolesa / N. ICHIKAWA

Drafting Coordinator : from EU

Task Forces

IG designates responsible CPs/Individual for each task.

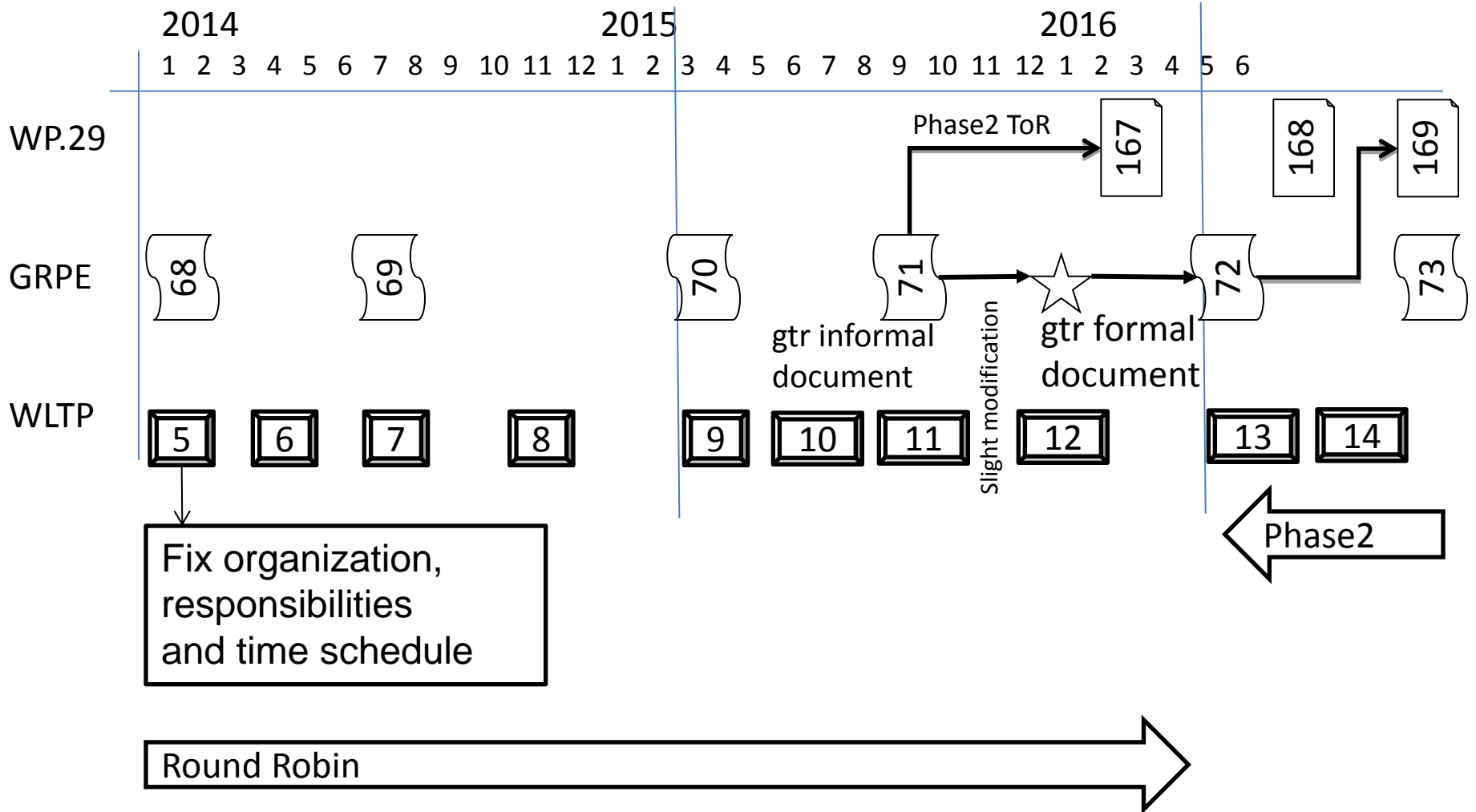
Shall be flexible for practical and effective work depend on case by case basis.

E-Lab. Sub-group

co-Chairs : Ohlund / Niikuni

TS : N. ICHIKAWA / S Hartmann

WLTP Phase 1b Rough Schedule



Open issues for EV sub-group phase 1b

	Annex	Section	brief description	latest situation	Necessary action (e.g. validation)	responsibility during Phase1b
2	main part	5.6.1.	CO2 family definition	general review required, EV family to be developed (comment IR 28)	depend on E-Lab. unique method	E-Lab. TF
3	1	7.1.	Adaption to electrifef vehicles	plan to develop during Phase1b	consider system power and maximum speed	E-Lab. TF
50	8	1.	RCB correction application	battery function or vehicle categories ?	to be discussed, then modify if necessary	E-Lab. TF
51	8	3.2.4.2.2. 3.2.5.2.1 3.4.2.1.	mode selectable switch	current : same as R83/R101 need to be in line with ICE(predominant) or not ?	to be discussed, then modify if necessary	E-Lab. TF
52	8	3.4.2.3.1.4.	WLTCcity only for lower maximum speed	new proposal in a last minute to be discussed during Phase 1b	to be discussed, then modify if necessary	E-Lab. TF
53	8	3.5. NEW ?	FCV test procedure	to be discussed during Phase1b	to be developed	E-Lab. TF
54	8	4.1.1.1. 4.1.1.3.	Necessity of this section	new proposal in a last minute to be discussed during Phase 1b	to be reviewed, then modify if necessary	E-Lab. TF
55	8	4.2. 4.3.	Phase specific calculation formula including CD/CS combined value	to be discussed during Phase1b	to be developed	E-Lab. TF
56	8	4.4.2.2.	combined approach for Evs	to be developed	to be developed	E-Lab. TF
57	8	Appendix 5	Utility Factor	to be discussed during Phase1b	to be developed	E-Lab. TF
58	8	Appendix 6	PEV shorten test procedure	to be discussed during Phase1b	to be developed	E-Lab. TF

11 open issues shall be solved during phase 1b.

1 New open issue, definition of OVC-HEV. Clarify that also covers range extender.

Main issues EV sub-group

No	Issue	Outline	Solution	Vehicle
55	Phase specific calculation formula including CD/CS combined value	Calculation formula for each phase fuel consumption and CO2 value by total WLTC results. Purpose To compare with ICE vehicle.	Calculation formula was proposed by Japan, however, due to time shortage, further consideration and/or validation is necessary during phase 1b	OVC-HEV
57	Utility Factor	UF based on driving behavior shall be used for combined fuel consumption and CO2. Purpose To calculate combined FC and CO2.	Currently Utility factors are available for US, EU and Japan region. EU is now under the development of revised UF to have more representativeness including the methodology to develop UF.	OVC-HEV
58	PEV shorten test procedure	Test procedure which makes PEV range test shorter and can get each phase EV range. Purpose To reduce huge test burden	Based on SAE methodology, Japan have developed the test procedure for WLTC and have validated its applicability. Due to other intensive issues, EU has requested to validate during phase1b.	PEV