Subgroup   I.   Lab Processes

The Lab Processes subgroup shall be responsible for the development of a test procedure which includes vehicle prepartion, vehicle description, vehicle operation, measurement equipment and formulae for the measurement of criteria pollutants, CO2, and fuel consumption for conventionally fueled light duty vehicles. In addition, the Lab Processes subgroup will be responsible for the development of those considerations that are common with electrified vehicles.

The HEV/PHEV/EV Subgroup will be responsible for developing solutions required to complete the lab processes portion of the test procedure which are unique to electrified vehicles, including HEV, PHEV, REEV, BEV and FCV vehicle types.

Both groups will be responsible for submitting text, diagrams, tables, and all related references for the development of the final WLTP GTR.

			Conventional Vehicles	Electrified Vehicles
A.	**Vehicle**	Preparation	X	X
		Preconditioning	X	X
		Soak	X	
		Degreening	X	
		Determine Vehicle Option Content	X	
		Vehicle operating mode(s)	X	
		Worse case vs.best case	X	
		Tire pressure	X	
		Electical accessories and state	X	
		Bench aging	X	
B.	**Test Cell**	Dynomometer	X	
		Roadload measurement / derivation	X	
		Dyno performance requirements	X	
		2WD / 4 WD considerations	X	
		Vehicle Parameters	X	
		Inertia weight class	X	
		Definition of how to calculate	X	
		Option content	X	
		Delinieate type of electrified vehicle (EV/HEV/PHEV/REEV)		X
		Environment	X	
		Temperature	X	
		Humidity	X	
		Driver's Aids	X	
		Vehicle cooling	X	
		Fan size and capacity	X	
C.	**Measurement**	Calculations	X	
		Emissions Measurements	X	
		Constant Volume Sampling	X	
		PMP - Covered by separate subgroup	X	
		Criteria Pollutants - NOx, CO, N2O, etc w/ C02 and Fuel Consumption	X	
		Electrical Power Consumption		X
		Regeneration Emissions	X	
		Ki factor determination	X	
		Electricfied vehicle C02 emissions and correction factor		X
		Cycle length and number of cycles (work with DHC?)		X

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Subgroup   **PM/PN Measurement Procedures**

A.	**Vehicle**	Preconditioning
		Degreening of Aftertreatment
		Pre-conditioning of Aftertreatment

B.	**Test Cell**	Dilution System*
		Dilution system type
		Diluent Filtration

C.	**Measurement**	Sampling
		Probe(s)
		Pre-classifier(s)
		Transfer System Requirements
		PM Measurement
		Sample temperature & face velocity control
		Filter Holder Requirements
		Filter Media & Collection Efficiency
		No of Filters
		Reference Filter Requirements
		Background Measurement
		Weighing Room/Chamber
		Temperature & humidity control
		Microbalance accuracy
		Control of static electricity
		PN Measurement
		Sample Pre-conditioning Requirements
		PN Counter Requirements
		System Response Time
		Calibration
		Microbalance
		PN Measurement System
		Calculations
		Filter Buoyancy Correction
		Regeneration Emissions
		Ki factor determination

* Requires liaison with Lab Processes subgroup