## Level Concept for SG4

USE	Reference Vehicle	Represent ativeness	Energy consumption		Maintananaa	Complete Life	Othor
PHASE			In-use	Charging	Maintenance	Service Life	Other
Level 1	General concept per powertrain tech /energy carrier	Global average	Average homologation value normalized to WLTP corrected for RW (global)	Generic charging effici ency (?)	Generic	Generic/Globa I	
Level 2	Same as Lv 1	Regional (EU/US/JP /KR/CN)	Regional RW correction	Regional charging effici ency value (standardised)	Generic/regio nal	Regional / Unique service life	
Level 3	Representative vehicle for each OEM/powertrain/en ergy carrier (need to define criteria)	OEM/Natio nal	OEM-resolution and assumptions for RW performance	OEM average efficiency (standardised ?)	OEM Specific	Regional with option to declared higher life	
Level 4	Specific OEM's vehicle model	OEM's specific vehicle model	High-resolution RW value (based on OBFCM or similar data)	Vehicle specific charging effici ency (standardised	Model specific	OEM/Model specific average data	

## Level Concept for SG4 – Ricardo

egion to decide what needed/used or not.

	feedback on potential revisions 10/10/23					region to is needed
USE	Reference Vehicle	Representa tiveness	Energy cons	umption	Maintenance	Service Life
PHASE			In-use	Charging	Wallitellalice	
Level 1 (Generic)	General concept per powertrain tech /energy carrier	Global average	Average regional homologation value (ideally normalized to WLTP) corrected for RW (e.g. basic global SBTI value of 1.1)	Generic charging efficien cy (unless already included in homologation)	Generic by powertrain	Generic/Global
Level 2	Same as Lv 1	Regional (EU/US/JP/K R/CN)	+Regional RW correction (can be =Lv1 if required by specific CP)	+Regional charging efficiency value (standardised)	As for Level 1	Regional / Unique service life
	Poprosontativo		OEM model variant			

Up to the relevant CP/ e Life Other

> Projected energy mix use (current policy); Default

factors fugitive emissions + degradation

As previous onal / level, plus service specific sensitivities? Representative OEM model variant,

OEM model-Regional with vehicle model variant OEM's regional RW corr. or **OEM** model specific (for the option for OEM for each OEM specific optional OEM efficiency representative to declared /powertrain /energy vehicle specific alternative (standardised) configuration) by higher life with carrier (need to model assumptions for RW evidence powertrain define criteria) performance OEM's As for Level 3, As for Level 3, None: OEM specific Specific model/variant vehicle model and specific EC, plus Highbut also by but also by vehicle resolution RW value As for Level 3 variant /configuration specific model specific model (i.e. engine, battery (based on OBFCM or model and variant (if variant (if similar data)

Level 3 As previous (OEM) level OEM modelspecific fugitive Level 4 emissions + (OEM+)degradation size, other options, etc) different) different) variant factors

## Level Concept for SG4 – Ricardo simplified alternative 10/10/23

Up to the relevant CP/ region to decide what is needed/used or not.

Other

specific

sensitivities (to

be agreed)

+OEM model-

specific fugitive

emissions +

degradation

factors

PHASE		tiveness	In-use	Charging			
Level 1 (Generic)	General concept per powertrain tech /energy carrier	Global or regional	Average global or regional homologation value (ideally normalized to WLTP) corrected for	Generic global or regional charging efficien cy (unless already included in homologation)	Generic by powertrain type	Generic global or regional	Projected energy mix use (current policy); Default factors fugitive emissions + degradation factors
Level 2		average (EU/US/JP/K R/CN)	RW (global, e.g. SBTI value of 1.1, or regional RW if required by CP)				
Level 3	Representative vehicle model variant for each OEM	OEM's specific	OEM model variant + regional RW corr. or optional OEM	OEM model	OEM model- specific (for the	Regional with option for OEM	As previous level, plus

resolution RW value

(based on OBFCM or

similar data)

efficiency

(standardised)

As for Level 3.

but also by

specific model

variant (if

different)

**Energy consumption** Representa **Reference Vehicle** 

tor each OEM specific optional OEM specific alternative /powertrain /energy vehicle assumptions for RW carrier (need to model define criteria) performance None: OEM specific OEM's Specific model/variant vehicle model and specific EC, plus high-

vehicle

model and

variant

USE

(OEM)

Level 4

(OEM

optimal)

variant /configuration

(i.e. engine, battery

size, other options)

to declared higher life with evidence As for Level 3

Service Life

Maintenance

representative

configuration) by

powertrain

As for Level 3,

but also by

specific model

variant (if

different)