

OBD new GTR draft		Sources	comments CLEPA green indicates ok from CLEPA point of view blue indicates proposal / discussion needed red means error identified
3.	Definitions		ok
	The definitions set out in gtr No. 2 shall apply. In addition, the following definitions shall apply in this gtr:		ok
3.1.	"Access" means the availability of all emission-related OBD data including all fault codes required for the inspection, diagnosis, servicing or repair of emissions-related parts of the vehicle, via the serial interface for the standard diagnostic connection pursuant to [paragraph 3.12. of Annex 1];		ok
3.2.	"Confirmed DTC (Confirmed fault code)" is a diagnostic trouble code stored when an OBD system has confirmed that a malfunction exists. It is stored in Service \$03 according to the standard specified in paragraph 3.10 in Annex 1.		proposal added
3.3.	"Control system" means the electronic engine management controller and any component referred to in this gtr which supplies an input to or receives an output from this controller;		proposal: stay with EOBD / EU 2wh OBD: 'emission control system' means the electronic engine management controller and any emission-related component in the exhaust or evaporative system which supplies an input to or receives an output from this controller;
	Reserved		"decision area" not needed in regulation, not used
3.4.	"Deficiency" means, in respect of vehicle OBD systems, that components or systems that are monitored contain temporary or permanent operating characteristics that impair the otherwise efficient OBD monitoring of those components or systems or do not meet all of the other detailed requirements for OBD.		ok, based on EOBD, without limiting number

3.5.	<p>“Diagnostic trouble code” or “fault code” is a numeric or alphanumeric identifier for a fault condition identified by the On Board Diagnostic system.</p>		ok
3.6.	<p>A "driving cycle" consists of engine key-on, a driving mode where a malfunction would be detected if present, and engine key-off."</p>		<p>ok, as in R83/05 1st amendment and WLTP Reg 2017/1151 "A “driving cycle” consists of engine key on, a driving mode where a malfunction would be detected if present, and engine key-off” ." Important: two other elements in 1st amendment must be included and are included in sheet 5. General requirements in § 5.3.11.3. and § 5.3.17</p>
3.7.	<p>“Engine misfire" means lack of combustion in the cylinder of a positive ignition engine due to absence of spark, poor fuel metering, poor compression or any other cause. This does not include lack of combustion events in non active cylinders due to default fuel shut off or cylinder deactivation strategies.</p>		<p>same text as in R83/05; proposal to add: This does not include lack of combustion events in non active cylinders due to default fuel shut off or cylinder deactivation strategies.</p>
3.8.	<p>A "Fuel trim" refers to feedback adjustments to the base fuel schedule. Short-term fuel trim refers to dynamic or instantaneous adjustments. Long-term fuel trim refers to much more gradual adjustments to the fuel calibration schedule than short-term trim adjustments. These long-term adjustments compensate for vehicle differences and gradual changes that occur over time</p>		<p>fuel trim to be reported in freeze frame and data stream Proposal of WLTP OBD WG 2017: move this to diagnostic signals sections for data stream and FF in Annex 1 as for calculated load value</p>
	reserved		<p>Definition "Lean NOx adsorber" necessary ?</p>

3.10.	<p>"Malfunction Indicator for category 3 vehicle (MI for category 3 vehicle*)" means a visible indicator that clearly informs the driver of the vehicle in the event of malfunctions.</p> <p>*ECE/TRANS/WP.29/1045, as amended by Amends. 1 and 2 (Special Resolution No. 1)</p>		<p>Ok - new draft discards alternative 'audible'</p> <p>Change to "MIL" ?</p> <p>Why limitation to category 3?</p>
3.12.	<p>"On-Board Diagnostic system for category 3 vehicle* (OBD for category 3 vehicle*)" means an electronic system fitted on-board of a vehicle that has the capability of identifying the likely area of malfunction by means of fault codes stored in a computer memory which can be accessed by means of a generic scan tool;</p> <p>*ECE/TRANS/WP.29/1045, as amended by Amends. 1 and 2 (Special Resolution No. 1)</p>		<p>ok. As EOBD</p> <p>Why limitation to category 3?</p>
3.13.	<p>"Pending DTC (Pending fault code)" is a diagnostic trouble code stored upon the initial detection of a malfunction prior to illumination of the malfunction indicator. It is stored in Service \$07 according to the standard specified in paragraph 3.10 in Annex 1.</p>		<p>proposal added</p>
3.15.	<p>"Power take-off unit" means an engine-driven output provision for the purposes of powering auxiliary, vehicle mounted, equipment.</p>		<p>ok - auxiliary and ancillary are synonym, ask native speaker what is better.</p> <p>Proposal of WLTP OBD WG 2017: move this to diagnostic signals sections for data stream and FF in Annex 1 as for calculated load value</p>
3.16.	<p>"Readiness" means a status indicating whether a monitor or a group of monitors for which status reporting is required according to the gtr have run since the fault memory was last cleared erasing. It is stored in Service \$01 according to the standard specified in paragraph 3.10 in Annex 1.</p> <p>Readiness is also indicated when status is erased by power loss.</p>		<p>Readiness is not defined in EOBD and EU 2wh OBD Reg., but the term used in section on bifuel gas vehicles.</p> <p>Readiness is required in EOBD as "status codes" in § 3.6.1.</p>
3.17.	<p>"Scan tool" means an external test equipment used for standardized off-board communication with the OBD system in accordance with the requirements of this GTR.</p>		<p>Not defined in EOBD, but linked to SAE / ISO standards</p> <p>OK: but decide for one of the following terms everywhere in this GTR: "scan tool", "generic scan tool" or "diagnostic scan tool" (all are used)</p>

3.18.	<p>"Secondary air" refers to air introduced into the exhaust system by means of a pump or aspirator valve or other means that is intended to aid in the oxidation of HC and CO contained in the exhaust gas stream.</p>		<p>OK ("flow" / "stream" synonym) Proposal of WLTP OBD WG 2017: move this to diagnostic signals sections for data stream and FF in Annex 1 as for calculated load value</p>
3.20.	<p>"Software calibration identification number (CAL ID)" means a series of alphanumeric characters that identifies the emission-related calibration and/or software version. It shall be provided in a standardised format according to paragraph 3.10 in Annex 1.</p>		<p>EOBD only requires Cal ID, 2wh OBD Cal ID and CVN</p>
3.21.	<p>"Standardized" means that all data stream information, including all fault codes used, shall be produced only in accordance with industry standards which, by virtue of the fact that their format and their permitted options are clearly defined, provide for a maximum level of harmonization in the motor vehicle industry, and whose use is expressly explicitly permitted in this Regulation according to paragraph 3.10 in Annex 1.</p>		<p>proposal</p>
3.22.	<p>"Unrestricted access to the OBD information" means: (a) Access not dependent on an access code obtainable only from the manufacturer, or a similar device; or (b) Access allowing evaluation of the data produced without the need for any unique decoding information, unless that information itself is standardized.</p>		<p>proposal: as this GTR is only about OBD, not for RMI</p>

3.23.	<p>"Useful life" means the relevant period of distance and/or time over which compliance with the OBD system has to be assured.</p>		<p>"Full useful life" is used for emissions control purposes for the age or mileage for which the durability has to be ensured, either by performing the Type V durability tes or using default deterioration factors. Emission limits are full useful life limits. For OBD purposes "entire life" (as in EOBD and EU 2wh OBD) should be used (CARB uses "actual life")</p>
3.24.	<p>"Vehicle type" means a category of power-driven vehicles which do not differ in such essential engine and OBD system characteristics</p>		<p>check if this the same definition as in WLTP GTR</p>
3.25.	<p>"Warm-up cycle for category 3 vehicle*" means sufficient vehicle operation such that the coolant temperature rises by at least 22 °C from engine start-up to at least 70°C If this condition is insufficient to determine the warm up cycle, with the permission of the approval authority, alternative criteria and/or alternative signal(s) or information (e.g. spark plug seat temperature, engine oil temperature, vehicle operation time, accumulative engine revolution, travel distance, etc.) may be adopted. In any case, all signal(s) and information used for determination need to be monitored by the ECU and shall be made available by data stream.</p> <p>*ECE/TRANS/WP.29/1045, as amended by Amends. 1 and 2 (Special Resolution No. 1)</p>		<p>ok - option to define alternative criteria w/ approval authority</p> <p>to be considered: Include extension for start/stopp and HEV/PHEV ? Note: difference in WUC defintion between EOBD and CARB OBD</p>
	<p>"Calibration verification number" means the number that is calculated and reported by the engine system to validate the calibration / software integrity (CVN). It shall be provided in a standardised format according to paragraph 3.10 in Annex 1.</p>		<p>EOBD only requires Cal ID, 2wh OBD Cal ID and CVN</p>