Current status of EC –JPN bilateral meeting on OBD-gtr draft

Main points to be discussed;

1. Objective of OBD

Japan would like to continually insist that the objective is environmental protection.



Not agreed yet

2. MI activation criteria and related test provisions (Article B.3.)

To avoid that the description of Article B.3 will be apply to OBD-II without discussion, Japan would like to record the description of history to on Part-A.



Agreed!

Access to OBD information(ATOB)

Japan is waiting for EC's new proposal



Japan will submit the list of possibility for ATOB

4. Administrative provisions (Article B.4.)

Japan is waiting for EC's new proposal



Waiting!

Main points to be discussed;

- 1. Objective of OBD
- 2. MI activation criteria and related test provisions (Article B.3.)
- 3. Access to OBD information
- 4. Administrative provisions (Article B.4.)

Objective of OBD

Proposal

On-board diagnostics ('OBD') is essential for environmental protection which can be achieved by effective and efficient repair and maintenance of vehicles.



Justification

(1)EPPR is Environmental and Propulsion unit Performance Requirements. In case that repairability is the first objective, it should be discussed with other work area.

EPPR-11-18e.doc

Areas of work in the working group
The main activities of the group are proposed to be focussing on revising or establishing the following environmental performance verification test types:
Tailpipe emissions test after cold start;
Tailpipe emissions test at (increased) idle / free acceleration test;
Emission test of crankcase gases, including appropriate test procedures, if deemed necessary;
Evaporative emissions test;
Durability testing of pollution control devices;
(Cold ambient emissions. This test type is considered out of scope)
Measurement of energy efficiency (CO ₂ emissions, fuel consumption, electric energy consumption and electric range determination);
Environmental on-board diagnostic verification tests
In addition the group should assess and develop functional aspects of on-board diagnostic (OBD) systems

(2) The purpose in GTR No.5(WWH-OBD) and R83(Automobile) were for environmental protection as first objective. It is not rational that EPPR(motorcycle) seeks different objective.

B. TEXT OF REGULATION

1. PURPOSE

WWH-OBD ECE-1

ECE-TRANS-180a5e.pdf

This gtr prescribes the requirements for on-board diagnostic (OBD) systems to detect, and, if applicable, record and/or communicate failures of specific vehicle and engine systems that affect the environmental or safety 1/ performance of these systems, as described in the specific modules of this gtr.

In addition, this gtr specifies the elements concerning the OBD system to facilitate the diagnosis and maintenance of specific vehicle and engine systems and the polymetric diagnosis.

The objective was not agreed between Japan and EC.

It depends on the compromising solution of "Access to OBD information."

Main points to be discussed;

- 1. Objective of OBD
- 2. MI activation criteria and related test provisions (Article B.3.)
- 3. Access to OBD information
- 4. Administrative provisions (Article B.4.)

MI activation criteria and related test provisions (Article B.3.)

- □ Review of the last bilateral meeting
- EC and JPN agreed to the flow chart to clarify the MI activation criteria.
- However some homework still remain;
 - a) Some wordings in the flow chart to be studied.
 - b) Where to put the flow chart.
 - c) How to handle B.3 (test provisions with OBD threshold)
- □Japan proposal on homework b)
- The flow chart to be put in Part A for the following reason.
 - <Reason>

Japan would like to put it in the provision body so that each CP definitely refers it. However, Japan also understands it is not suitable to put it in Part B, which is the text of the regulation. Therefore Part A is the best solution.

- □ Japan proposal on homework c)
- Japan could agree that B.3 remains as it is, if one point as follows can be described in Part A.
 - "B.3 of test provisions with OBD threshold should be reviewed when OBD UN stage II is studied, because B.3 is not studied yet considering OBD UN stage II."

Based on the above proposals, the specific amendments are shown in next slides

Agreed!

MI activation criteria and related test provisions (Article B.3.)

A. STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION

A.4.2.

Requirements

Regarding functional requirements for OBD, the GTR contains:

- minimum monitoring requirements for OBD stage UN I;
- provisions regarding design of the malfunction indicator (MI), fault codes, diagnostic signals and connection interfaces;
- MI activation criteria as shown in the flow chart

Added

provisions regarding access to OBD information;

Regarding the environmental test procedure for OBD, the GTR contains:

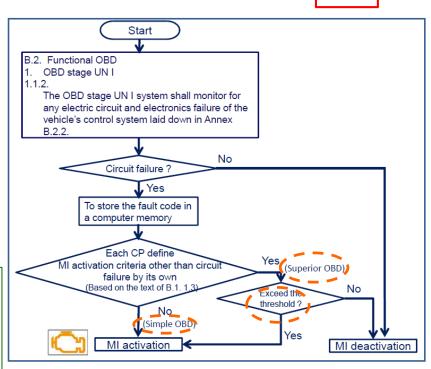
definition of propulsion unit families with regard to OBD;

- test vehicle requirements;
- test procedure by simulating failure of exhaust emission-relevant components in the powertrain management system and emission-control system and monitoring the OBD system reaction during a type I test cycle;
- failure modes to be tested for OBD stage UN I
- When considering the OBD UN II step in the future it is appropriate to include OBD fail thresholds in section B.3. These OBD thresholds are subject to scrutiny and assessment before taking a final decision and reaching agreement between contracting parties.

Agreed!!

Corrected wording in the flowchart:

- "Simple OBD"→"Stage UN-I"
- "Superior OBD"→"Enhanced OBD"
- "Exceed the threshold"→"fail the threshold" (needs native check)



Adde

MI activation criteria and related test provisions (Article B.3.)

B.2.1

2.1.

If applied by a by a Contracting Party the on-board diagnostic environmental system performance and the functional OBD capabilities shall may be verified [and demonstrated to the [certification] / [approval] authority] by performing the type VIII test procedure referred to in section B.3

Already agreed at bilateral meeting in April



B.3.

1.1

This Annex describes the procedure for type VIII testing, environmental on-board diagnostics (OBD), which a Contracting Party may require for the [certification] / [approval] of a vehicle complying with the UN stage I requirements. Test type VIII environmental verification testing is optional and application of OBD emission and torque other fail thresholds are at the discretion of the Contracting Party. The procedure describes methods for checking the function of the OBD system on the vehicle by simulating failure of emission-relevant components in the powertrain management system and emission-control system.

B.3 remains as it is on the basis that Part A is amended as the previous slide

Revise the word from "torque fail thresholds" to "other fail thresholds"



Main points to be discussed;

- 1. Objective of OBD
- 2. MI activation criteria and related test provisions (Article B.3.)
- 3. Access to OBD information
- 4. Administrative provisions (Article B.4.)

Access to OBD information

Same as 16th/Apr bi-meeting

The proposal of prevention for illegal modification about components information

Present (8-13e)

	•
4.2.	Upon request, the vehicle manufacturer shall make the relevant information on the OBD system available to any interested components, diagnostic tools or test equipment manufacturer on a non-discriminatory basis:

Proposal

- 1. Add follows sentence on Article4.2
- "unless such information is covered by intellectual property rights or constitutes specific know-how of the manufacturer or the OEM supplier(s)."
- 2. If agreed, EC and Japan will make a joint proposal. (At the same time Japan will withdraw our proposal EPPR-09-14e.)

<u>Justification</u>

1. It will be guideline for unfair modification on describing intellectual property right and know-how

<reference:UN R83, para.3.2.12.2.7.6 of Annex 1>

"unless such information is covered by intellectual property rights or constitutes specific know-how of the manufacturer or the OEM supplier(s)."

Japan is waiting for EC's new proposal



Not agreed yet!

Japan will submit the list of minimum disclosed information for ATOB.

Main points to be discussed;

- 1. Objective of OBD
- 2. MI activation criteria and related test provisions (Article B.3.)
- 3. Access to OBD information
- 4. Administrative provisions (Article B.4.)

Japan is waiting for EC's new proposal from EPPR-07-16-Rev1e.xlsx



