

PROPOSAL FOR DRAFT AMENDMENTS TO REGULATION No. 49 - Rev.4

Note: The text reproduced below was prepared by the experts from OICA in order to include technical requirements for assessing the in-use performance of on-board diagnostic systems (OBD) in a new Annex 9C to Regulation No. 49 Rev.4

Further to the decision of GRPE, the present annex will be developed in view of presenting a high level of harmonisation to the US 2010 OBD regulations and the European Regulation 692/2008 concerning passenger cars and Light commercial vehicles.

This annex may be referred to by the in-use performance specifications of OBD systems themselves but does not contain any process, pass-fail criterion or threshold.

PROPOSAL

Add a new Annex 9C, to read:

"Annex 9C

TECHNICAL REQUIREMENTS FOR ASSESSING THE IN-USE PERFORMANCE OF ON-BOARD DIAGNOSTIC SYSTEMS (OBD)
FOR DIESEL AND GAS FUELLED ENGINES FOR ROAD VEHICLES

1. APPLICABILITY
2. Reserved.
3. DEFINITIONS
 - 3.1. "In-Use performance ratio".
 - 3.2. "Numerator".
 - 3.3. "Denominator".
 - 3.4. "General Denominator".
 - 3.5. "ignition cycle counter"
 - 3.xx. Abbreviations

IUPR In-Use Performance Ratio
IUPR_m In-Use Performance Ratio of a specific monitor m

4. GENERAL REQUIREMENTS

The OBD system shall have the capability of calculating the In-Use performance ratio of the OBD monitors specified in this annex (section 5), of tracking and recording these ratios (section 6), of storing them in computer memory and communicating them off-board upon request (section 7).

4.1. IUPR monitors

4.2. Limitation of the use of IUPR information

IUPR is not a piece of information that can be used to determine the status of that vehicle from which the information is downloaded.

5. REQUIREMENTS FOR CALCULATING IN-USE PERFORMANCE RATIOS

$$IUPR_m = (\text{Numerator/Denominator})_m$$

5.1. Requirements for incrementing the numerator

5.1.1. General incrementing rules

5.1.2. Monitors specific incrementing rules

5.2. Requirements for incrementing the denominator

5.2.1. General incrementing rules

5.2.2. Monitors specific incrementing rules

5.3. Requirements for incrementing the general denominator

5.4. Requirements for incrementing the ignition cycle counter

5.5. Incrementing disablement

6. REQUIREMENTS FOR TRACKING AND RECORDING IUPR_m OR ELEMENTS THEREOF

7. REQUIREMENTS FOR STORING AND COMMUNICATING IUPR AND ASSOCIATED DATA"
