

## Compilation of Input made by Experts during the Working Group 2 and Working Group on Euro 5 Guidance Paper Joint Meeting on 30<sup>th</sup> June 2009 in Frankfurt

- REV 03-

Draft Proposal – ANNEX I, Appendix 5 Comments EGEA – WG Euro VI Guidance Paper – 30th June 2009

## 3. Information required for the manufacturer of diagnostic tools

In order to facilitate the provision of generic diagnostic tools for multi-make repairers, vehicle manufacturers shall make available the information referred to in the points 3.1 to 3.3. through their repair information websites. This information shall include all diagnostic tool functions and all the links to repair information and troubleshooting instructions. The access to this information may be subject to the payment of a reasonable fee.

In order to facilitate the provision of generic diagnostic tools for multi-make repairers, vehicle manufacturers shall make available the information referred to in the points 3.1 to 3.3. This information shall be made available in bulk in an electronic and for further processing suitable format, if available and applicable in ODX. This information shall include all diagnostic tool functions and all the links to repair information and troubleshooting instructions. The vehicle manufacturer can choose to make the information available through their website in a downloadable form. However, as a minimum the website shall have the contact details of the person responsible for the distribution of the information. The access to this information may be subject to the payment of a reasonable fee.

The information referred to in points 3.1 to 3.3 is not limited to emission relevant systems, but covers the entire vehicle.

## 3.1 Communication Protocol Information

The following information shall be required indexed against vehicle make, model and variant, or other workable definition such as VIN or vehicle and systems identification:

The following information shall be required indexed against vehicle make, model and variant, or other workable definition such as VIN or vehicle and systems identification, suitable to be used in off-line mode:

If any of the following, non security related, information or functions is protected by means such as special algorithms, passwords, or seed and key mechanisms to prevent access to this said information or functions, these means need to be made available as information.

- (a) Any additional protocol information system necessary to enable complete diagnostics in addition to the standards prescribed in Annex XI Section 4, including any additional hardware or software protocol information, parameter identification, transfer functions, "keep alive" requirements, or error conditions;
- (a) Any additional protocol information system necessary to enable complete diagnostics in addition to the standards prescribed in *Annex XI Section 4*, including any additional hardware or software protocol information, parameter identification, transfer functions, "keep alive" requirements, or error conditions;
- (b) Details of how to obtain and interpret all fault codes not in accordance with the standards prescribed in Annex XI Section 4:
- (b) Details of how to obtain and interpret all fault codes not in accordance with the standards prescribed in *Annex XI Section 4*:
- (c) A list of all available live data parameters including scaling and access information;
- (c) A list of all available data parameters including units, scaling and access information;
- (d) A list of all available functional tests including device activation or control and the means to implement them;
- (d) A list of all available functional tests including device activation or control and the means to implement them;
- (e) Details of how to obtain all component and status information, time stamps, pending DTC and freeze frames;
- (e) Details of how to obtain all component and status information, time stamps, pending DTC and freeze frames;
- (f) Resetting adaptive learning parameters, variant coding and replacement component setup, and customer preferences;
- (f) Resetting adaptive learning parameters, variant coding and replacement component setup, and customer preferences:
- (g) ECU identification and variant coding;
- (g) ECU identification, complete identification string, including matching conditions to ODX content, and variant coding;
- (h) Details of how to reset service lights;

(h) Details of how to perform and reset/set service indicators, system calibrations, and settings;
(i) Location of diagnostic connector and connector details;
(i) Locations of all diagnostic connectors and connector specifications including detailed pin-out;
(j) Engine code identification.
(j) Engine code identification;
3.2. Test and diagnosis of OBD monitored components
The following information shall be required:
(a) A description of tests to confirm its functionality, at the component or in the harness
The following information shall be required:
(a) A description of tests to confirm the component's functionality, at the component or in the harness.
(b) Test procedure including test parameters and component information
(b) Test procedures including test parameters and component information. The information shall include the procedure, initial conditions, warnings, and process steps to perform the test and diagnosis;
procedure, minute contained, manifest, and process stops to perform the took and analytics.
(c) Connection details including minimum and maximum input and output and driving and loading values
(c) Connection details including pin information and component values with minimum and maximum input and
output and driving and loading values;
(d) Values expected under certain driving conditions including idling
(d) Values expected under certain driving conditions including idling;
(a) Talabo oxpostou unus. contain unung containe including laining/
(e) Electrical values for the component in its static and dynamic states
(e) Electrical values for the component in its static and dynamic states such as e.g. ignition off, ignition on,
system idle, system under normal use conditions;
(f) Failure mode values for each of the above scenarios

- (f) Failure mode values for each of the above scenarios;
- (g) Failure mode diagnostic sequences including fault trees and guided diagnostics elimination.
- (g) Failure mode diagnostic sequences including fault trees and fault elimination by guided troubleshooting / guided diagnostics.

## 3.3. Data required to perform the repair

The following information shall be required:

(a) ECU and component initialisation (in the event of replacements being fitted)

The following information shall be required:

- (a) ECU and component initialisation (in the event of replacements being fitted) shall be provided for offline use and implementation. The information shall include the procedures, initial conditions, warnings, configuration transfer details when applicable, and process steps to perform the repair;
- (b) Initialisation of new or replacement ECU's where relevant using pass-through (re-) programming techniques.
- (b) Initialisation of new or replacement ECU's where relevant using pass-through (re-) programming techniques.

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