

Updated minuetts OBD on UDS

From 4-9-20 meeting

Notes from Marl Laleman – Ford

Vehicle E E System Diagnostic Standards Committee Chair

IUMPR alternate proposal status

- -Alternate proposal details are still under review by industry, Alliance meeting on April 14th to continue discussion
- -In previous discussion, CARB request parameter to show a history of the value prior to reset by running diagnostic
- -A. Zettel presented some details of new parameter for EWMA values, presentation will be provided once industry consensus is reached

NRC/Timeout for message too long

- -In cases where a message may be too long to fit into that maximum CAN message size, NRC 0x14 will be sent to the tool in response
- -Specific case discussed is when “DTCs not Complete” requested right after powerup, or after code clear, and module supports more than 1000 DTCs
- -J1979-2 will document the NRC requirement, and any timeout parameter needed to be implemented by the tools
- -J1978 will also need to address how NRC is handled, team will ensure discussion occurs
 - Additional 100 msec P2 timing information
 - -See attached from Eric Swenson

CARB request for Streaming Data

- -CARB requested a streaming data function similar to J1939 functionality, with DID request made once, and repetitive response without additional tool request
- -Service \$2A/\$2C functionality exists in ISO 14229, however requires additional service tool content, and would be difficult to standardize
- -CARB asked if existing internal CAN network communication could be monitored by tool, e.g. module to module communication of Engine RPM as an example
- -On vehicles that support J1979, the internal communication is not standardized, even between electrical architectures within an OEM, and there are security concerns with monitoring this traffic.
- -CARB/J1979-2 committee agreed to discuss this as a potential future update, not as part of this regulatory update

Freeze Frame Priority request

- -CARB proposed that a phase-out of Misfire/Fuel Freeze Frame priority could be accommodated
- -Some OEMs would like to retain priority to avoid changing their diagnostic manager handling of similar conditions
- -Other OEMs would like to retain priority to ensure technicians see frames for Fuel/Misfire codes, as these benefit from freeze frame analysis
- -Debate over whether 5 frames would be enough to ensure technician gets adequate data, more frames can be optionally supported if OEM is concerned
- -Point from G. Potter, why is phase-out necessary if CARB will allow priority initially in UDS? CARB indicates priority handling issues are common mistakes
- -CARB to internally discuss how to address priority, provide feedback.

Readiness per OBD ECUs that support CCM

- -CARB question regarding how tool would determine correct readiness status for vehicle CCM
- -PID \$01 is required for all modules that support CCM today, expected that the new equivalent would also be required on all modules that support CCM.
- -PID \$00 has a bit that indicates to the tool if PID \$01 is supported. The GST would be required to indicate which modules had reported readiness, and the status of that module.
- -The GST should also be able to indicate it did not get an expected response. J1699 would check this also.
- -J1979-2 will document the required “ping” message for the tool to determine what OBD modules are present

Walk Ins

Substitute for J1699 testing on Early Vehicles

- -Concern that J1699 updates will not be ready for 22/23MY vehicles
- -How will vehicles be validated?
- -CARB intends to include regulatory language that will require manufacturers to use alternate methods to prove compliance, similar to when J1699-3 was being developed.