



Revision of vehicle type-approval – background info on OBD Connector





ASSOCIATION

Status of the dossier in the EU institutions



Compromise Amendment (CA) n. 16: Keeping the OBD live port to the vehicle open and accessible, as this connector is the lifeline for the communication with the vehicle, and it is the basis for innovation and choice in the aftermarket sector

Annex XVIII – point 2 – point 2.8 a (new) [Extract]

2.8 a. For the purpose of vehicle OBD, diagnostics, repair and maintenance, the direct vehicle data stream shall be made available through the serial port on the standardised data link connector specified in paragraph 6.5.1.4 of Appendix 1 of Annex 11 to UNECE Regulation No 83 and Section 4.7.3 of Annex 9B to UNECE Regulation No 49.



Keeping the OBD live data port to the vehicle open and accessible

COMMISSION PROPOSAL

COUNCIL AMENDMENTS

AFCAR proposal for Trilogue

Please support EP proposal (AM 248) with the following addendum (two new paragraphs):

For the purpose of vehicle OBD, diagnostics, repair and maintenance, the direct vehicle data stream shall to be made available through the standardized connector as specified in UN Regulation No 83, Annex XI, Appendix 1, para 6.5.1.4 and UN Regulation No 49, Annex 9B.

For new vehicle types, independent operators shall request certificates from an independent body that identifies the operator and electronic tools used when communicating with the vehicle for specific security functions or approved changes of the emission control systems or for read-only in-vehicle OBD, diagnostic, repair and maintenance data when the vehicle is being driven.

Additionally, vehicle manufacturers shall make available key criteria necessary for the safe communication of devices that connect through the standardised serial port (OBD) connector for when the vehicle is being driven.



| EP | AN | 1EN | IDN | 1EN | TS |
|----|----|-----|-----|-----|----|
| | | | | | |

Article 65 – paragraph 3 a (new) Manufacturers' obligations to provide vehicle repair and maintenance information (AM 248)

For the purpose of vehicle OBD, diagnostics, repair and maintenance, the direct vehicle data stream shall to be made available through the standardized connector as specified in UN Regulation No 83, Annex XI, Appendix 1, para 6.5.1.4 and UN Regulation No 49, Annex 9B.

Recital 37 b (new) (AM 44)

Without prejudice to vehicle manufacturers' obligation to provide repair and maintenance information via their website, the access to in-vehicle data, should remain directly and independently accessible to independent operators.

Annex XVIII – point 2 – point 2.8 a (new)

Access to vehicle OBD and vehicle repair and maintenance information (AM 324)



For the purpose of vehicle OBD, diagnostics, repair and mainter direct vehicle data stream shall be made available through the ial port on the standardised data link connector specified in b 6.5.1.4 of Appendix 1 of Annex 11 to UNECE Regulation No 83 and on 4.7.3 of Annex 9B to UNECE Regulation No 49.



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However, the EP amendments could be enhanced to address all possible concerns, we therefore invite you to support the added supplementary text (underlined):

Article 65 – paragraph 3 a (new) and Annex XVIII – point 2 – point 2.8 a (new) :

For the purpose of vehicle OBD, diagnostics, repair and maintenance, the direct vehicle data stream shall to be made available through the standardized connector as specified in UN Regulation No 83, Annex XI, Appendix 1, para 6.5.1.4 and UN Regulation No 49, Annex 9B.

For new vehicle types, independent operators shall request certificates from an independent body that identifies the operator and electronic tools used when communicating with the vehicle for specific security functions or approved changes of the emission control systems or for read-only in-vehicle OBD, diagnostic, repair and maintenance data when the vehicle is being driven.

Additionally, vehicle manufacturers shall make available key criteria necessary for the safe communication of devices that connect through the standardised serial port (OBD) connector for when the vehicle is being driven.

Scope of data to be maintained

• all diagnostics and RMI-related in-vehicle generated data

When shall this comprehensive data be made available?

• Vehicle stationary: OBD port to be accessible without any security restrictions that are related to remote data access. Only security measures within the scope of the SERMI scheme shall be active.

AFCAR/EGEA Position Paper

- In motion, but for read-only data:
 - evaluation and verification of dynamic vehicle generated data should be possible
 - plug-in devices that are compatible with the OBD port to be installed for remote services (e.g. diagnostics, prognostics or predictive maintenance services) should be allowed
- No writing of data to the vehicle's control units is required when the vehicle is in motion. Remote actuation/re-coding would only be done when the vehicle is stationary.

Safe and secure use of the OBD connector

To address potential safety and security issues when using the OBD connector, independent operators could accept for new types of vehicle, a company accreditation and certification scheme for the safe and secure use of tools connected to the OBD connector.

AFCAR/EGEA Position Paper

2 elements:

- A company identification certificate for the independent operator
- Electronic communication certificates for connected devices

+ suggestion to use **the existing SERMI certification scheme** for access to security-related RMI to act as the independent certification body.



Certificated access to the vehicle and its data – Report on ISO work (G. Feiter)



International Organization for Standardization



How to ensure security of the OBD port?





For who?

- Workshops
- Technicians
- Tool manufacturers
- Dedicated tool functions

For what services?

- Workshop use
- Legislative testing (e.g. PTI, emissions,)
- Security-related information only
- Remote services (e.g. RDS, ...) when the vehicle is moving
- Re-programming, reconfiguration, recoding, software changes,...
- → Read-only data and/or writing data?
- \rightarrow Stationary or vehicle moving?



What data access and scope?

• Should the certificate be related to the access only, the function or to the data?



Validity duration?

- Certificate once use only
- Certificate limited per day/hours
- Certificate limited to system/function
- Certificate extended validity
- How to avoid requesting certificates constantly, whilst ensuring security (vs. exposed to cyber-attacks)?



Process of accessing and using certificates?

- Process structure?
- Costs?
 - To avoid cost duplication when repairing and testing (e.g. PTI information is a subset of RMI)
- Legislation?
 - Legislation will be needed, SERMI can be an existing solution (cf. Euro 5 legislation)







Third-party positions





- Leasing companies
- Insurance
- PTI (PTI test companies, FSD, ...)



TRL Study on acces to in-vehicle data and resources





Assessment of compliance with WG6 guiding principles

| Technical solution | Data provision conditions – consent | Fair and undistorted competition | Data privacy and data protection | Tamper-proof access and liability | Data economy | |
|--|---|--|--|---|--------------|--|
| On-board Application Platform | | | | | | |
| In-vehicle Interface | | | | | | |
| Data Server – Extended Vehicle | | | | | | |
| Data Server – Shared Server | | | | | | |
| Data Server – B2B Marketplace | | | | | | |
| Assessment of | compliance wit | th WG6 guiding | principles | | Rating | |
| Compatible with guiding principles | | | | | | |
| Minor issues with compatibility or issues that could be addressed with low cost/impact | | | | | | |
| Issues with compatibility or issues that could be addressed with medium cost/impact | | | | | | |
| Significant issues with compatibility or could be addressed with high cost/impact | | | | | | |
| Incompatible with guiding principles in current form | | | | | | |

EUROPEAN ASSOCIATIO

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3 scenarios pre-selected...

| Scenario | Rationale | | |
|--|--|--|--|
| Scenario 0 – No action (Extended vehicle/neutral server; the baseline scenario) | If there is no market intervention, the 'Extended Vehicle/Neutral Server' proposed by ACEA is expected to become established (alongside proprietary On-board Application Platforms) as the predominant technical solution. | | |
| Scenario 1 – Scenario 0 with measures at European level to accompany market development and address risks | Supporting measures to ensure that the Neutral Server aspect of the technical solution is implemented and a range of further measures designed to mitigate the risks of market distortion. | | |
| Scenario 2 – Short term: Shared server | The Shared Server solution could be encouraged in preference to the Extended Vehicle/Neutral Server concept. This maintains the short-term security of the vehicle and does not place large additional burdens on the automotive industry while on the other hand providing, with the addition of interventions at European level, features more aligned to delivering fair competition than the Extended Vehicle/Neutral Server. | | |
| Scenario 3 – Long term: On-board | For this solution to be implemented and to result in an interoperable system, it is strongly recommended that legislation will be necessary. | | |
| application platform | In the longer term (up to 5 years before it is accessible to the market), the On-board Application Platform could be encouraged because this provides all market participants with access to real-time data and the vehicle HMI and is therefore the solution with features most aligned to delivering fair and undistorted competition. We acknowledge the safety and security challenges of this solution (the burden of which lies with the vehicle manufacturers), but measures could focus on limiting access to non-safety critical data and using an "if fitted" approach. This could also be implemented in phases to provide adequate time for manufacturers to integrate the required technical development into their existing E/E versions/model cycles. | | |



EGEA Position – Today & the Future





The established basic principles from today to tomorrow:

Today

• Basic principles of standardised, interoperable, direct access to some invehicle data unmonitored and free of charge

Future

 Basic principles of standardised, interoperable, direct access to in-vehicle data <u>and resources</u> unmonitored



