

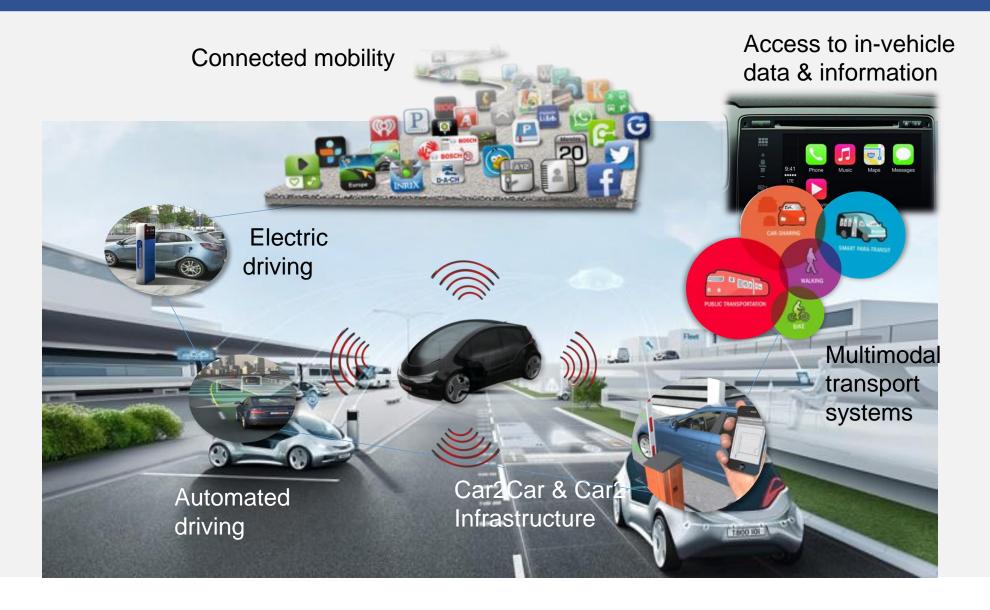


Telematics strategy discussion





The connected car and telematics





The future of car repair and servicing in the digital era



Remote diagnostics, prognostics & repair

Maintenance management

Eco driving

TPS eCall

Repair management

New consumer expectations, where access to data is 'key':

- More remote, interoperable and combined service offers
- Faster, more accurate and more predictable services that reduce downtime and better identify the spare parts requirements
- More location-based and customised innovative services.



Vehicle-related services in the digital era

Direct access to in-vehicle data is the key!

New requirements for innovation and competitiveness:

- In-vehicle applications to perform a wide range of vehicle related services, including those needing access to real-time vehicle data.
- Innovative services such as 'predictive servicing', based on analysis of dynamic in-vehicle data or GPS related services have raised customer expectations.
- This needs to be reflected in legislation!





How can data be accessed?



ExVe – summary of the concept and status

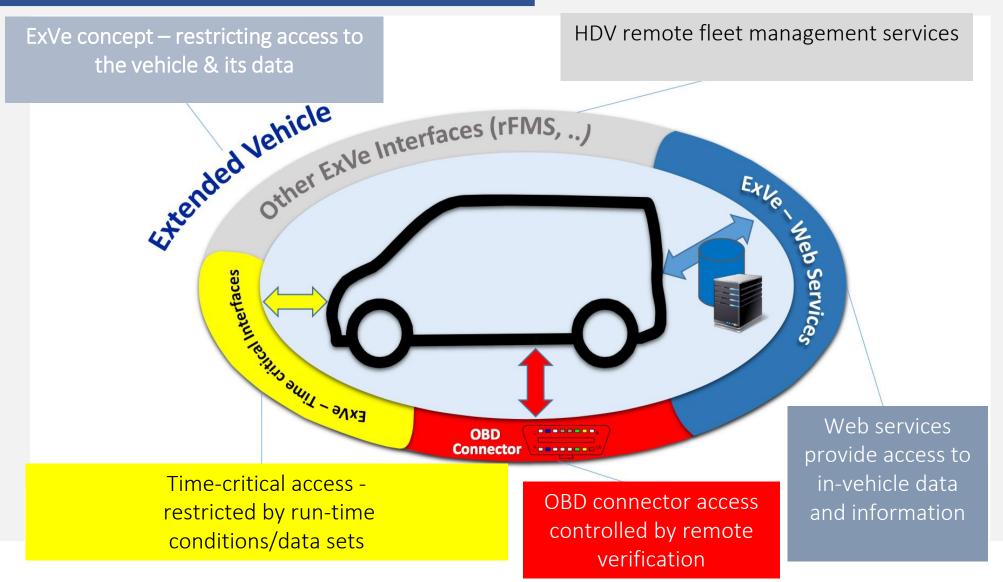
ExVe is proposed by the VMs as a solution to control all communication to and from a vehicle. All communication ports (wired or wireless) are included.

The ExVe is defined as being a complete 'IT architecture' of a vehicle and the VM server.

This is being standardised under ISO TC22/SC31/WG6. However, there are other WGs which would be affected by the WG6 proposals – e.g. WG2 and WG5



Extended Vehicle (ExVe) Concept





Developing discussions worldwide

- Restricting the OBD port is a reality. It may also become necessary to have preverified/certificated applications to allow access to data.
- VMs are proposing to only standardise 'Web Services' in ExVe.
- ExVe could be implemented on a VM server or in-vehicle, or a combination of both.
- VMs want to pre-define data 'Use Cases' to 'understand' what is needed & to restrict what access conditions would apply. VMs want to then sell 'services'.
- Security, safety and product liability issues are constant arguments from the VMs



VDA Paper: access to the vehicle and vehicle generated data (1)

- VDA Paper was signed by CLEPA (incl. Bosch, Hella, Continental, ...)
- Risk that this paper becomes legislation at EU level to solve rapidly the issue of accessing in-vehicle data
- VDA Paper promoting the Extended Vehicle Concept
- Diagnostic is the final 'leverage' to get access to that data, as Extended Vehicle only foresees VM diagnostic routine, no independent multi-brand, no reverse engineering possible anymore, OBD port not remaining open.



VDA Paper: access to the vehicle and vehicle generated data (2)

- The VM is the 'system administrator' bc if open, new risks of safety/security/data privacy.

 WRONG: VM should only be held accountable for the physical car on the street

 (type-approval) vehicle machine generated data are not owned by anybody. IAM will

 always use the highest safety and security set by the VM.
- Data available through B2B contracts to OEM interface.

 WRONG: 'take or leave it', possibility to lock out competitors from the market.
- No direct remote access/communication with the vehicle, only via the VM server.
 WRONG: competition should be ensured between OEM and IAM, IAM should have remote access.
- No direct ECU triggers over the air by third parties (exception only B2B).
 - WRONG: OBD port will be closed during driving and no EU triggers over the air. This is the end for independent dongles and boxes and their ability to provide remote access to real time data.
 - Unified diagnostics services under ISO 14229, using VMs diagnostics routines, not multi-brand tools



VDA Paper: access to the vehicle and vehicle generated data (3)

• Access to third-party is given in a 'non-discriminatory manner'

WRONG: they understand the 'non-discrimination' as NOT applying to them but only between third-party services.

The VDA paper is highly discriminatory on the <u>data</u> (VM reserve themselves all data categories but not for the IAM), on <u>the timeliness</u> of the transfer via the B2B <u>interface</u> (reference to the point when the data leave the VM server) and on the <u>functionalities</u> (no raw data/functionalities available for innovation, only aggregated/processed data for the IAM).

• There are 4 categories of data.

WRONG: scope of the data, quality not clear. A piece of data normally falls into more than one category and could then be refused because falling into a VM-restricted category. Any other data to be negotiated over B2B contracts.

OBD port/Diagnostics.

WRONG: no clear how and when the OBD port will remain open (only in the workshop and for emission until migration into the ExVe Server). Without access to real-time raw data, no multi-brand diagnostic tool can be developed. Only reading/no writing! No reverse engineering possible!



VDA Paper: access to the vehicle and vehicle generated data (4)

Category 1

Data for improved traffic safety

Traffic safety relevant data

Data for e.g. public traffic management institutions.

Fire Department, Police, 911, ...

Category 2

Data for cross brand services

None differentiating vehicle data

Non-discriminatory data access to third parties. #2, #3

Product

Category 3a

Data for brand specific services

Vehicle data differentiating and IP relevant for OEM

OEM or Partner on OEMs behalf

Dealer, Subsidies

Category 3b

Data for component analysis and product improvement

Vehicle data differentiating and IP relevant for OEM and supplier

OEM or Partner on OEMs behalf

Product

Category 4

Personal data

"Right of access" granted only to the parties authorized to process data by law, contract or consent

Customer selected partner

Customer

The customer #1 will be informed of data usage and OEMs will provide the customer with decision options which the customer can reverse at any time, unless the function is required by law

Data usage categories



VDA Paper: access to the vehicle and vehicle generated data (5)

• Data Privacy: data made available to third parties, which have been authorised by the customer for processing (i.e. data that require identification of the user or the vehicle, processed by contract or consent of the customer: vehicle position/VIN)

WRONG: VMs understand themselves as being responsible for the collection and management of the customer consent and the transfer of the specific data per vehicle. IOs will have to show to the VM the contract they have with the individual customer.

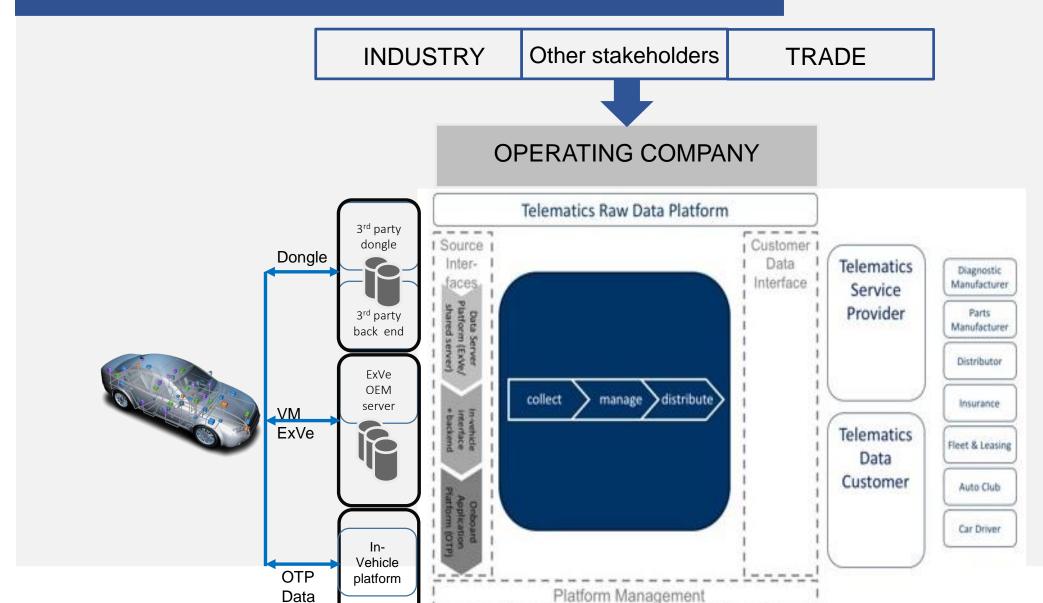
This major disadvantage is slightly softened by servers such as e.g. CARUSO, as individual companies can hide behind that server for their business model but not for the customer data.

Monitoring: data access is done over an interface to the OEM backend server with B2B contract.

WRONG: VMs authorised themselves to indeed monitor every transaction to verify the correct autorisation and the correct data release against the contract agreed between the 3rd party service provider and the customer.

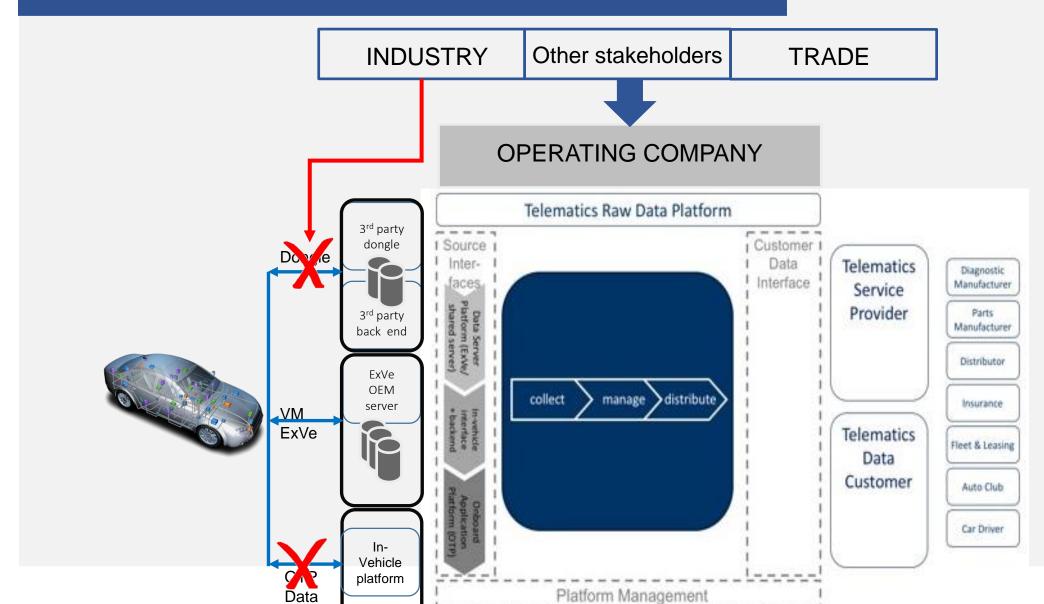


Caruso – Independent Telematics Platform



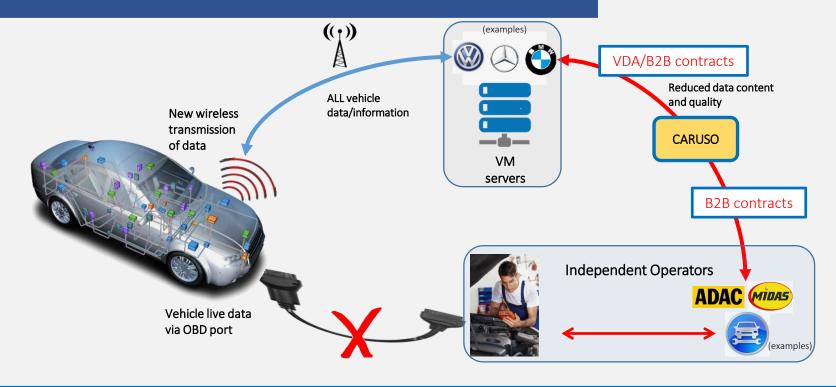


Caruso - Compromised Telematics Platform





The ExVe + VDA + CARUSO Aftermarket threat



No fair competition for Independent service providers. ExVe imposes:

- Reduced scope of data (e.g. no live data) via in-vehicle 'aggregated data gateway' to ExVe server
- Limited functionality using VM data sets and diagnostic processes
- VM can monitor the business of their competitors (Independent Operators) and impose contractual conditions

The VDA agreement misleadingly proposes CARUSO as 'the neutral solution for the Aftermarket': providing a single point for B2B contract negotiation, data access and (some) anonymity for the service provider, but creating a distortion for continued lobbying for the in-vehicle OTP – plus as this is only promoting the ExVe data source:

- Additional access control, latency, cost and 'standardising' of vehicle data (details not yet known)
- No Direct access to in-vehicle data if only data from ExVe is used (as proposed by the VDA agreement)
- Not acceptable as a solution for many Aftermarket stakeholders



SAE Proposal – Vehicle Interface Methodology Standard



SAE VEHICLE INTERFACE METHODOLOGY STANDARD PROPOSAL

Current situation:

- GAP of current vehicle interfaces
- Increasing complexity issue of standards
- Challenge and opportunities in future B2B (OEMs and IOs/Aftermarket)

Proposal:

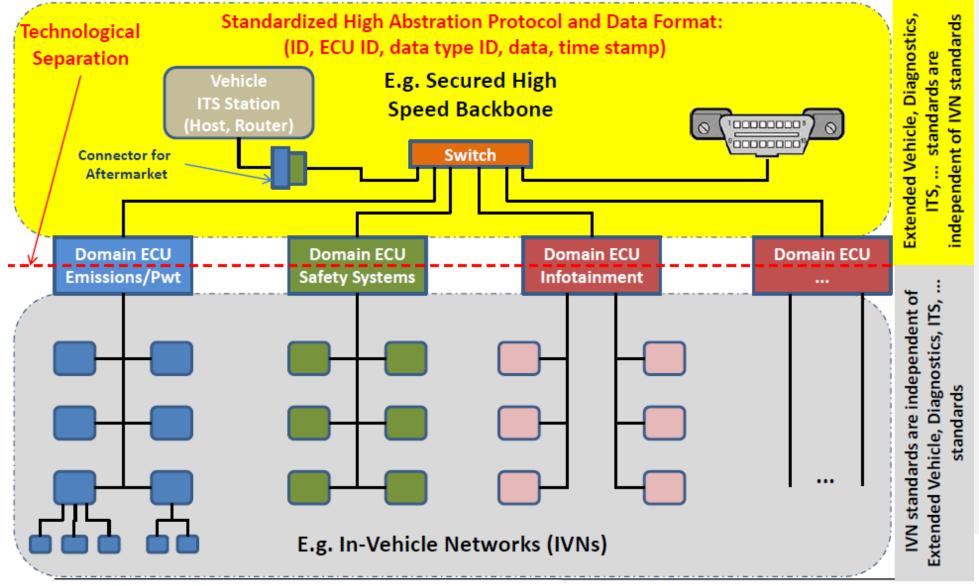
- Technological separation of in-vehicle systems and external test equipment (diagnostic connector) and remote applications (Telematics) Similar to the Vehicle Station Gateway
- Either a single or multiple domain ECU(s) are the technological separation point between in-vehicle systems and external test equipment (diagnostic connector) and remote applications (Telematics)
- Possible new connector

Next steps:

- Create a hold by invitation only SAE one-day symposium (4th Qtr. 2016) with OEMs to identify and gauge the interest level and commitment to start the work
- If the interest level warrants the project, determine the appropriate SAE committee for the project



Example of technological separation of in-vehicle systems and external test equipment / remote applications (ExVe)





SAE VEHICLE INTERFACE METHODOLOGY STANDARD PROPOSAL

Benefit to the 3rd party vehicle data service implementer

- A consistent, standardised interface across all vehicle brands/models minimises development, verification, maintenance costs and time to market.
- An abstraction layer using standardised units (e.g. for voltage, temperature, pressure etc.) simplifies data conversion and presentation.
- Developing 3rd party products against a published standard allows the developer to innovate without discussion with Automakers or other 3rd parties thus protecting his IP

Benefit to the legislator

- A standard which is universally attractive with few objectors is easier to legislate.
- A single standard reduces the time to achieve the desired result.

Benefit to the vehicle owner/user

• Enhanced functionality and innovation through safe access to vehicle data enhances the in-vehicle experience.



ETI Paper





ETI Paper – Are Vehicle Scan Tools Endangered?

http://www.eti-home.org/Blog/are-vehicle-scan-tools-endangered/

The OBD port is outdated: one user at a time, only one level of access, lack of security, not suited for new scenarios (telematics, automated driving, "zero accident" transportation systems)

Comparison of two approaches:

SAE - Secure Vehicle Interface (SVI) Methodology

- requires the gateway module to be installed internally onboard vehicles
- use security protocols to govern access either via the current underdash port (not recommended by SAE), a new access port or via wireless communications.

ISO - Extended Vehicle (ExVe) Methodology

• requires gateway security measures for initial access to be located outside of the vehicle within the automaker's cloud server

The Aftermarket supports a collaborative "win-win" solution over the "nobody wins" alternative.



VDA Paper: impact on EGEA Members

Diagnostic tool manufacturers

- Not being able anymore to communicate with the car
- Not being able anymore to do reverse engineering
- Introduction of more web based diagnostics by the VM's

PTI

- Vehicle self-testing using remote OBD monitoring
- Controlled connection with ASAnetwork in PTI testing stations (access by digital certificates)
- Repairers less able to prepare the car for PTI due to absence/control/cost of communication with the car



Key basic requirements

For the developing business models, we need:

- 1. Access to real-time raw data
- 2. In-vehicle applications to provide 'at source' algorithms
- 3. The ability to handle data via a server to provide services



What is available today?

- 1. Plug-in dongles
- 2. ExVe
- 3. CARUSO
- 4. Other data platforms
- Limited choice so optimise the possibility
- Our full needs can only be provided by the in-vehicle interoperable platform



Key objectives for the Aftermarket – OBD connector

- The physical connector needs to be maintained until a viable interim alternative or OTP is in place. (vehicle manufacturers are claiming it must be closed as it is a security and safety risk).
- The data via this connector will also need to be maintained.
- Currently it is only covered by emissions legislation, so access to all other data can legally be blocked and routed via ExVe.
- Additional standardisation for the connector and the data may be necessary,
 'OBD+' e.g. Ethernet, plus there may be a certificated access requirement
- We need to ensure that OBD plug-in devices are seen in a more positive light e.g. that they are only used as the IAM does not have access to the vehicle telematics system



Next steps

- EGEA replied to the C-ITS TRL Study on access to in-vehicle data and resources deadline: 11th of November. Results will feed into EC report and any future legislation (if EC will legislate), it will be a political decision!
- Finalisation of EGEA Position Paper on Connectivity for circulation to members and WG2 members for final feedback
- EGEA to continue its lobbying activities together with AFCAR colleagues
- In parallel, EGEA will be involved in the European Commission Free flow of data initiative interview with consultancies and EC foreseen end of November 2016. Report scheduled in March 2017.







EU Commission Initiative – Free Flow of Data B 5C345C 34B23AB23BC3



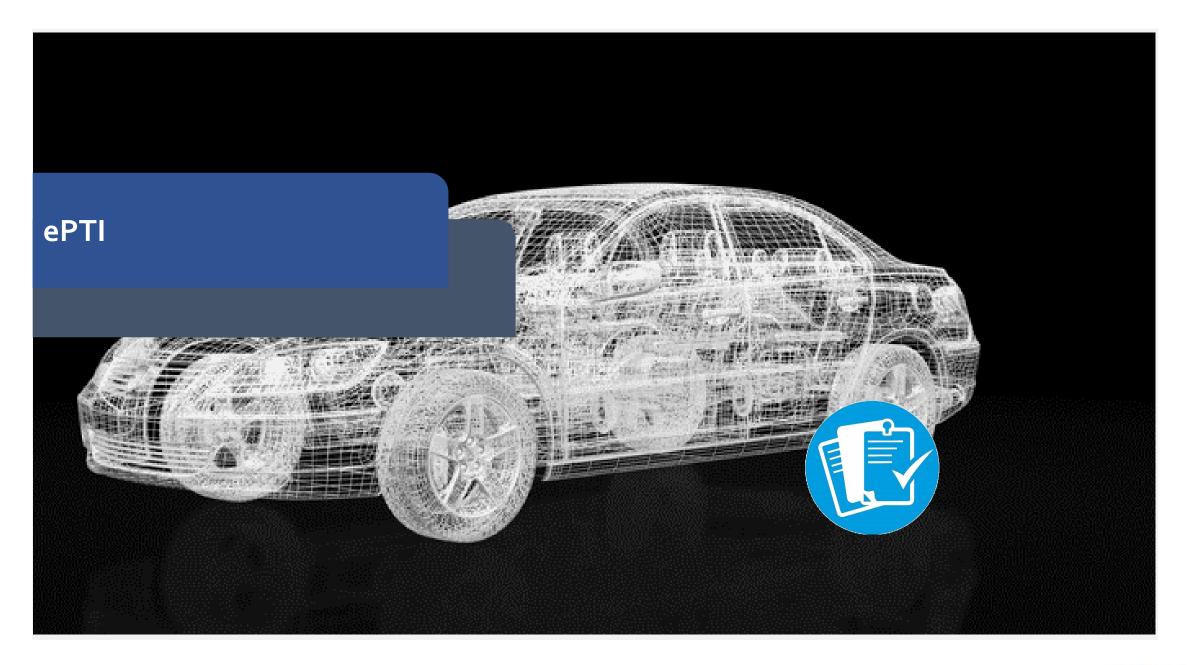
Free Flow of Data – Brief update

- European Commission is currently working on a initiative with the objective of addressing existing barriers to the free flow of data, and legal uncertainties (data ownership, reuse, portability and liability).
- This initiative is expected early January 2017, but official communication will be released already end of November 2016.
- This initiative is covering various sectors and includes now, thanks to the AFCAR work, the vehicle repair industry.
- Problem was raised: insufficient access to data through remote or physical access/free flow of (repair) data exist but will be blocked by VMs → need for pertinent legislation in that field
- Aim: ensure that we have a fair and level playing field to have access to this data to allow for the repair of these vehicles and related systems.
- Next steps: interview with consultancy in charge of that initiative to be scheduled asap











ISO TC22/SC31/WG7 ePTI

Scope in details:

- communication between the Inspection Tool and the ePTI relevant system
- reading of basic vehicle information (identification, systems fitted)
- specification of required ePTI tests:
 - fitment test (e.g. Adaptive Cruise Control equipped [YES; NO])
 - status test (e.g. Airbag [OK; NOK])
 - functional check (e.g. Activation of exterior lighting)
- authentication and authorization mechanism

 needed but big threat for EGEA members!
- protection against tampering of the defined ePTI test methods



ePTI – Big Picture

ePTI Scan tool



Established Project Teams (PT):

- PT "ePTI Use Cases"
 Queries about system fitment, vehicle values as well as trigger control of safety functions
- PT "Technical Solutions*"
 Technical concepts to check feasibility of use case implementation
- PT "Terms & Definitions"
 Unique definitions of terms used in the ePTI standard
- PT "Data Link Initialization" (WG2 PT)
 Recommended standards to be applied by the ePTI
 tester UDS protocol via DoIP or DoCAN
- PT "Authentication and Security" (WG2 PT) Authentication, authorization, Protection against tampering

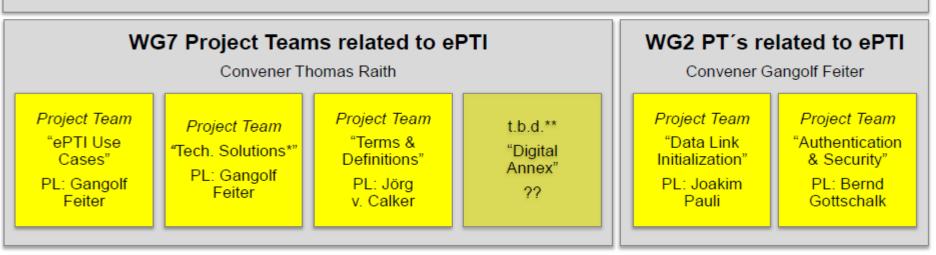
Safety related system Safety related ECU Continuous monitoring of safety system function Actor Physical data link ECU 5 5 ... Data bus **OBD Interface** Truck, Van or Car

* The PT-Title "Technical Solutions" is not finally decided by WG7. Further discussion is planned at the next WG7-F2F meeting



ePTI – Plan – Joint development of WG2 and WG7 of ISO TC22/SC31

ISO Standard 20730 - Electronic Periodical Technical Inspection (ePTI)



- * The PT-Title "Technical Solutions" is not finally decided by WG7. Further discussion is planned at the next WG7-F2F meeting
- ** Digital Annex
 - to be decided by WG7 whether the digital annex is integrated part or separated (outside) from the ePTI standard
 - to be developed within the project team "Technical Solutions" if it should be integrated in the standard

Work Item/ Projekt No.	•	Time- frame	AWI / WD	CD	DIS	FDIS	IS
20720	Road vehicles - Vehicle roadworthiness interface for electronic	36	10.99	30.00	40.00	50.00	60.60
20730	Periodical Technical Inspection (ePTI) - Communication requirements	month	2015-05-27		2017-05-27		2018-05-27



ePTI - Next Steps

- Key points discussed at last f2f meeting from 13th to 14th October in Berlin:
- Report about the last authentication and authorization mechanisms \rightarrow to discuss within WG2!
- Last contentious Use Cases (1/2):
 - Technical Fault Information Solution (UC 5.3)
 - Are DTC's useful for the PTI technician to assess "grey" cases? => national differences
 - FSD / German test organizations want DTCs
 => blurred border to "repair" use case
 - VMs proposals will be discussed at the next WG7 meeting; e.g. BMW/Daimler "Two step approach": 1) System level result (standardized)
 additional custom information (off board) linked to error message (on board).

Fault processing in cars REPAIR > 50 000 > 20 000 > 20 000 Merge Debounce, DTC Healing Memory Raw DTCs Fault DTCs Paths 50 - 500 **SAFETY** Safety Priorization Instrument Assessment For Display Cluster Ш Display IC Display **ECSS Status** A, B, C: Options, depending on ECU architecture Verband der The numbers are only raw estimations!

The usage of repair information for PTI purposes (no matter whether the PTI information is onboard or offboard) would lead to massive efforts (evaluation of each DTC)!



ePTI - Next Steps

- Contentious Use Cases (2/2):
 - Software version and integrity information (UC 4.3, 4.4)
 - Readiness Status and conditioning (UC_{5.1} and 5.2)
 - Activate safety system's actuators / routines (UC 6.1) → VMs not giving direct access to actuators,
 but prefer a more controlled way ("Routine Control") that however may require more effort to
 implement. Likely both approaches will be allowed, bringing more complexity to the equipment
 manufacturers.
- It was notified, that based on the feedback of the functional request for ePTI relevant system identification, the tester shall be capable to set up a configuration table for all supported functions that can be requested physically. NOTE: This is a deviation of current OBD implementations which always requires functional requests;
- Technical solutions based on UDS services for at least 6 use cases have been identified and agreed upon so far.
- Test methods are not in the scope of ISO
- Next f2f meeting from 1st to 2nd of December 2016 in Munich



ePTI - Next Steps

Inspection Module	Descrpition	UseCase	Description	UseCase Defin.			TechSolutions			
				in discussion	PT consensus	WG	uoissuosib ni	PT consensus	WG	
IM 1	Discover ePTI data link and ePTI-relevant safety-systems	1.1	Discover ePTI data link.							
		1.2	Discover ePTI-relevant safety-systems							
IM 2	Authentication and authorization	2.1	ePTI external test equipment authentication							
IM 2		2.2	Vehicle safety system(s) authentication							
IM 3	Query available ePTI inspection modules	3.1	Queries supported data identifier							
		3.2	Queries supported safety system's actuator / routine identifiers							
	Query ePTI-relevant safety-system information	4.1	Query vehicle identification number (VIN)							
		4.2	Query vehicle odometer value							
IM 4		4.3	Query vehicle's ePTI-relevant systems software version information							WG7
		4.4	Identify installed ePTI-relevant systems' software integrity information							WG7
	Query ePTI-relevant safety system readiness and fault category information	5.1	Queries safety system readiness status							WG7
IM 5		5.2	Queries safety system readiness conditioning information							WG7
		5.3	Queries safety system fault information							WG7
		5.4	Query self test results from continuously running monitors							WG7
		5.5	Queries safety system fault information (initial definition)							WG7
	ePTI-relevant safety system function and performance tests	6.1	Activate safety system's actuators/routines							
IM 6		6.2	Queries pre-condition status of vehicle to allow test to be performed							WG7
		6.3	Queries information from safety system's to qualify function and performance							WG7
IM 7	ePTI-relevant conformance tests	7.1	Vehicle ePTI system conformance test							WG7
		7.2	ePTI external test equipment conformance test							WG7





PTI – Access to PTI technical information

- Last RTWG (Technical WG) held on the 12th of October
- EGEA together with CITA still fighting for the functionality testing for headlamps at least, EC not in favor of such complete test and would prefer to rely on OBD/MIL lamp only.
- The full text is supposed to be adopted by all Member States at the next Roadworthiness.
 Committee but this meeting might be postponed due to current discussions.
- No further technical WG will be organised → no transparency on next decisions regarding technical annex

Next steps:

- Last lobbying activities should therefore be done at national level as soon as possible.
- EGEA will write an official position paper with FIA and with CITA (tbc) to question some key technical points and request inclusion of functional testing for headlamps
- Test methods will be updated in a separate delegated act after consultation of stakeholders in a dedicated WG to be launched within 6 months.



Tech Info Required: Headlamps (1)

Item	Reasons for failure (2014/45/EU)	Tech Info required (note 5)
4.1.2 Alignment	(a) Aim of a headlamp not within limits laid down in the requirements.(b) System indicates failure via the electronic vehicle interface.	 Software verification data* For dynamic systems, actuation of headlamp beam movement to allow assessment of alignment.
4.1.3 Switching	a) Switch does not operate in accordance with the requirements. (Number of headlamps illuminated at the same time) Maximum permitted light brightness to the front exceeded. b)Function of control device impaired. c) System indicates failure via the electronic vehicle interface.	 Software verification data* List of control signals triggering headlamps Readout of control signals triggering headlamps Trigger of headlamps

*If not included as part of note 4 tech info







Tech Info Required: Headlamps (2)

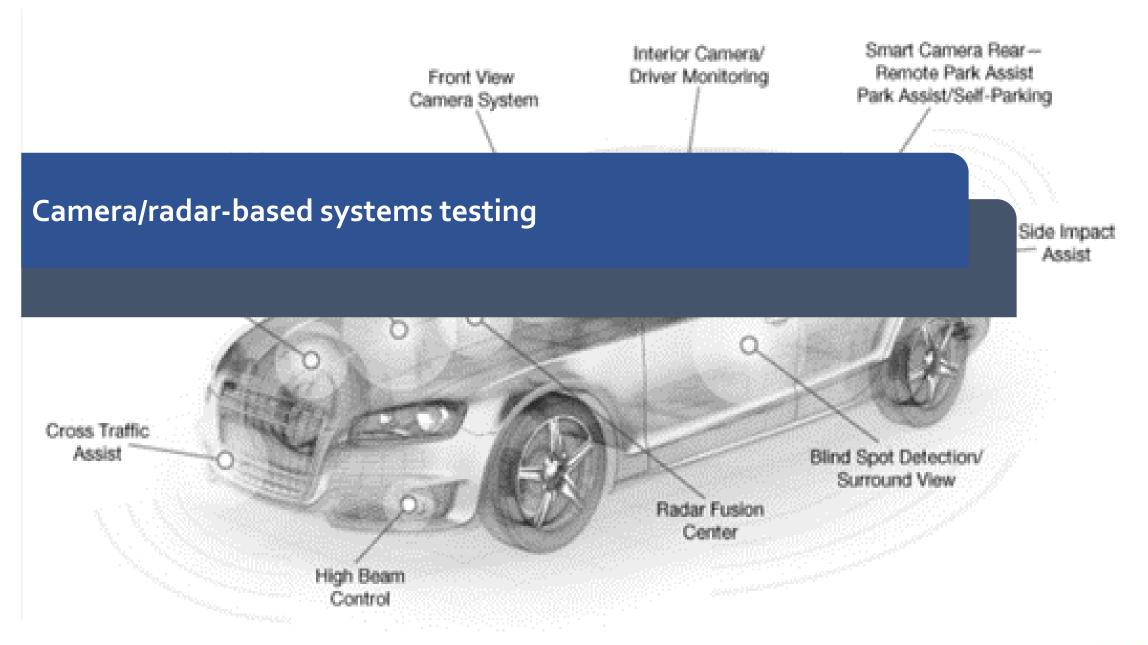
Item	Reasons for failure (2014/45/EU)	Tech Info required (note 5)
4.1.5 Levelling	a)Device not operating. b)Manual device cannot be operated from driver's seat. c) System indicates failure via the electronic vehicle interface.	1.Software verification data2. Actuation of headlamp beam movement to allow assessment of levelling movement range.3. Readout of headlamp levelling sensor

^{*}If not included as part of note 4 tech info











Camera/radar-based systems testing

Maturity Degree

OEM Workshop OEM Partner Fast Fitter Glass Specialist Tyre Workshop **Body Workshop** IAM Workshop



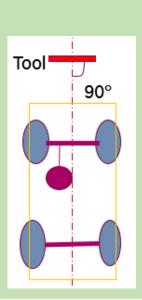
<u>Service track</u>: Ford, Opel, Volvo, Land-Rover, Jaguar... Combined solutions: BMW, Mercedes, PSA, Citroen, Honda ...



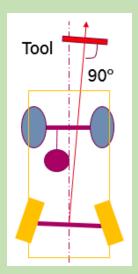
Camera/radar-based systems testing

ADAS calibration solutions for IAM Requirements of static calibration

- Reference 1 = vehicle center line
- Mercedes
- Toyota / Lexus
- Kia / Hyundai
- Nissan
- Mazda

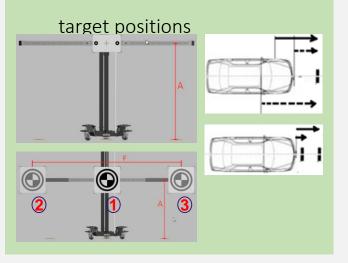


- Reference 2 = driving axis (thrust line)
- BMW (Radar)
- VolkswagenGroup
- Fiat
- Maserati
- Geely



Other Parameter:

- 1. Target Distance
- 2. Target Height
- 3. Single / multi step calibration
 - -> on different distances
 - -> in one line with different



Alignment methods and setup rules to position reflection mirrors & targets square to vehicle







Need for a common standard communication protocol

Update from the EGEA WG10 - European Network Standard for PTI and workshop equipment

- Meeting of the asanetwork and EGEA boards on 9/11/2016
- The need for a common standard was confirmed; it is a common interest that this is based on Asanet under the following conditions:
 - Interface definition and communication protocol will be open standards. This means that competing software (including the network manager) can be developed.
 - Asanetwork remains a commercial product. Companies under the EGEA umbrella will be invited to join asanetwork buying additional shares to finance further development of the standard.
 - Compatible products will undergo a compliance test by notified bodies in order to obtain the EGEA label.
 - EGEA will have the technical lead in the development of the standard: the asanetwork technical working group will merge with the EGEA WG10.
 - Independence testing by notified bodies and competition/anti-trust must be ensured
- Details of the proposal and business model are under definition (Beaujean-Maha) and are due by end 2016.



FSD – update from Germany











Reverse engineering

- Short legal memo finalised
- Legal basis:
 - Trade secrets Directive 2016/943/EU:
 - reverse engineering cannot be perceived as an "illegal practice" of Independent Operators if they use data and the Original Equipment Manufacturer's tools in the course of reverse engineering in order to check the functionalities and create with their own know-how their own diagnostic tools.
 - To this end, it is allowed to use OEM diagnosis tools in course of the reverse engineering process.
 - The deviating practice of OEM to bloc Independent Operators from such activity must accordingly be perceived as anticompetitive and without justification in itself.
 - BUT as recent Directive, it is yet open how the implementation of the directive into national law will happen in detail.



Reverse engineering

- Legal basis:
 - EU Software Directive 2009/24/EC
 - "the person having a right to use a copy of a computer program shall be entitled, with-out the authorisation of the right holder, to observe, study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which he is entitled to do."
 - The directive shows the EU legislators intent to reduce certain software copyrights in order to foster innovation and competition on the software market by creating interoperability between otherwise foreclosed IT systems.
 - The directive is therefore a further example that reverse engineering of software (by decompiling and monitoring) generally should be perceived as a legal business activity.
- Any next steps? EGEA Position?



Revision of the Vehicle Type Approval Framework Regulation [Draft Regulation COM(2016) 31 final] - update





'Euro 5/6' RMI Legislation

- As shown in the Commission's 'Ricardo-AEA' Report, independent operators in the automotive aftermarket value chain face serious difficulties in accessing RMI:
 - Compliance and implementation problems
 - Difficulties with scope of information, formats...
 - Lack of enforcement
- Urgent need to address legacy problems and update RMI in the Vehicle Type Approval Framework Regulation, where the RMI provisions are being "migrated"
- RMI provisions of Reg. 715/2007 (passenger cars) and Reg. 595/2009 (HDV) consolidated..... but not modified or improved.
- Other chapters have been improved to respond to structural weaknesses or the "Dieselgate" scandal
- AFCAR acting to:
 - Ask European Parliament to act on the Ricardo Report and improve the functioning of the RMI access system
 - Screen the regulation and fix transposition errors



Vehicle Type Approval Framework Regulation – new structure

Motor vehicles + *trailers* (passenger cars + HDVs)

Directive 2007/46 for Type-Approval

Euro 5 & 6 Regulations (Impl. Reg.)

Euro VI Regulations (Impl. Reg.)

MAC Dir. (Impl. Reg.)

Recyclability Dir. (Impl. Reg.) **General Safety** Reg./Tyres Reg. (Impl. Reg. Or UNECE Req.)

Pedestrian protection (Impl. Req.)

> Hydrogen (Impl. Reg.)

Basic Regulation

Migration of RMI

provisions

+ 4 implementing Regulations (RMI provisions: Reg. 44/2014)

2 & 3 wheelers

168/2013

Tractors & forestry vehicles

Basic Regulation 167/2013

+ 4 implementing Regulations (RMI provisions: Reg. 1322/2014 + revised text to be published by the end of the year)

New IAM-relevant provisions

- Reinforcement of independent vehicle type approval testing
- Market surveillance obligations
- Introduction of in-service emissions testing by using 'real driving emissions' test as part of the 'market surveillance'.
 - May help increase in-service compliance, but may weaken our claim to maintain tailpipe testing in PTI.
 - Could still be a risk that VM's could circumvent the RDE tests by using telematics to change engine map/programming.
 - Future PTI emissions test can still be OBD only, but we can also argue that tailpipe testing remains the only reliable method.



AFCAR Amendments - 1

- Improved definition needed and availability of RMI for all IOs, by establishing that the Vehicle Manufacturer (VM) should be the benchmark (and not authorised dealers as it is now)
- Standard OBD connector: clear reference is needed + direct access to in-vehicle data to be ensured
- Roadworthiness testing: inclusion into RMI definition + EGEA list to include PTI technical information for test tool manufacturers
- Validation of VCIs: more robust testing environment that includes conformity compliance is needed + VMs to respond within 6 months to a request for testing



Roadworthiness testing – in detail

• Updated vehicle repair and maintenance definition:

(46) 'vehicle repair and maintenance information' means all information required for diagnosing, servicing, inspecting, <u>road worthiness testing</u>, periodic monitoring, repairing, re-programming <u>re-initialising or for the remote diagnostic support</u> of a vehicle as well as for the fitting on vehicles of <u>components</u>, <u>separate technical units</u>, parts and equipment, and that is <u>used or provided by the manufacturer including</u> his authorised <u>partners</u>, dealers, <u>repairers and network</u>, to <u>offer products or services for vehicle repair and maintenance purposes</u>, including all subsequent amendments and supplements to that information;

In a new Annex:

"<u>Technical information to enable complete roadworthiness test methods to be fulfilled</u>"



Validation of VCIs – in detail

For the validation of the compatibility of the manufacturer-specific application and the vehicle communication interfaces (VCI) complying to ISO 22900-2 or SAE J2534 or TMC *RP1210 B*, the manufacturer shall offer *within six months of the granting of type approval*, a validation of independently developed VCIs *and the test environment*, *including information on the specifications of the communication protocol and the* loan of any special hardware, required for a VCI manufacturer to conduct such validation himself. The conditions of Article 67(1) shall apply to fees for such validation or information and hardware.

Corresponding conformity compliance must be ensured either by mandating CEN to develop appropriate conformity standards or by using existing ones such as SAE J2534-3. The conditions of Article 67(1) shall apply to fees for such validation or information and hardware.



AFCAR Amendments - 2

- Reprogramming: reinstate the reprogramming standards for passenger cars as well + specifications of the high speed communication protocols introduced by VMs to be made available to IOs
- Proprietary communication protocol information to be made available to diagnostic tool manufacturers
- Reprogramming standards should also apply to diagnostics procedures
- Availability of competitive multi-brand replacements parts: need to access unequivocal parts identification information in bulk



Reprogramming – in detail

With regard to vehicles falling in the scope of Regulation (EC) No 595/2009, Reprogramming of control units <u>and diagnostics</u> shall be conducted in accordance with either ISO 22900-2 or SAE J2534 or TMC *RP1210 B* using non-proprietary hardware.

If reprogramming or diagnostics is conducted using ISO 13400 DoIP, it shall comply with the requirements of the before-mentioned standards.

Where vehicle manufacturers use additional proprietary/specific communication protocols, then these protocol specifications shall be made available to independent operators.



AFCAR Amendments - 3

- Remote Diagnostic Support: to be reinstated into the RMI definition (for HDVs only)
- Security Forum (SERMI): correct misleading wording
- **Standardisation**: no automatic obligation to be imposed for the transfer of International Standards into EU.



EU Decision making process

EU – Commission

- 28 Commissioners
- Directorates General-DG GROW-



Commission proposal sent for decision to:

EU - Parliament

- 751 Members
- 3 Committees involved (IMCO, ENVI, TRAN)

IMCO (leading cttee): MEP Dalton rapporteur -ECR

TRAN (opinion cttee): MEP Karima Delli rapporteur - Greens



ENVI (opinion cttee): MEP Christofer FJELLNER rapporteur - EPP

EU – Council of Ministers

- 28 Minister Councils
- Council Working Party on Techn Harmonisation





Timetable

Timetable in the EP:

- 7 November 2016 ENVI Committee Final Vote on the opinion
- 10 November 2016 TRAN Committee Final Vote on the opinion postponed to 5th December!
- 28-29 November 2016 IMCO Committee Final Vote on the report postponed to end of January 2017!

Timetable in the Council

- 15November 2016 Meeting of the Council Working Party on Technical Harmonisation
- 6 December 2016 Meeting of the Council Working Party on Technical Harmonisation



Actions & activities: your support please!

EU level

- European Parliament: AFCAR had already over 30 meetings since April 2016, and will continue meeting all key Members of the European Parliament (MEPs) depending on the amendments tabled.
- Field visits have been organised in the UK for the rapporteur/ in the Denmark for the shaddow rapporteur/ in the UK for the EP delegation to illustrate practically all our concerns laid down in our position paper

National level

- AFCAR national alliances have been built at national level and meetings with your Ministries have been organised. Join them and support them to represent diagnostic tool manufacturers!
- Motivate your national association!
- Next Council (ministries) Working Party on Technical Harmonisation meetings: 6th December 2016
- We will inform you soon about the outcomes in the EP and we will ask your support in relation to the tabled amendments.



Update on ADPA activities





Article 3 – Aims and objectives

The Association pursues the not-for-profit purpose to ensure fair access and competitive framework conditions for independent data publishers to automotive data and information to be able to design and provide competitive, innovative and multibrand products and services to operators of the automotive aftermarket to enable competitive choice to motoring consumers and businesses in the care of their vehicles. The Association is also vested with the mission of performing scientific, economic, technical and administrative studies of all issues related to the publishing of data and information.

President: Ralf Pelkmann, TecAlliance

Vice President: Peter van der Galien, Haynes-Pro Treasurer: Michael Pedersen, Hella-Gutmann

Board Member: Mark Trepte, Autodata Board Member: Harald Neumann, Bosch





Thank you!



