EGEA

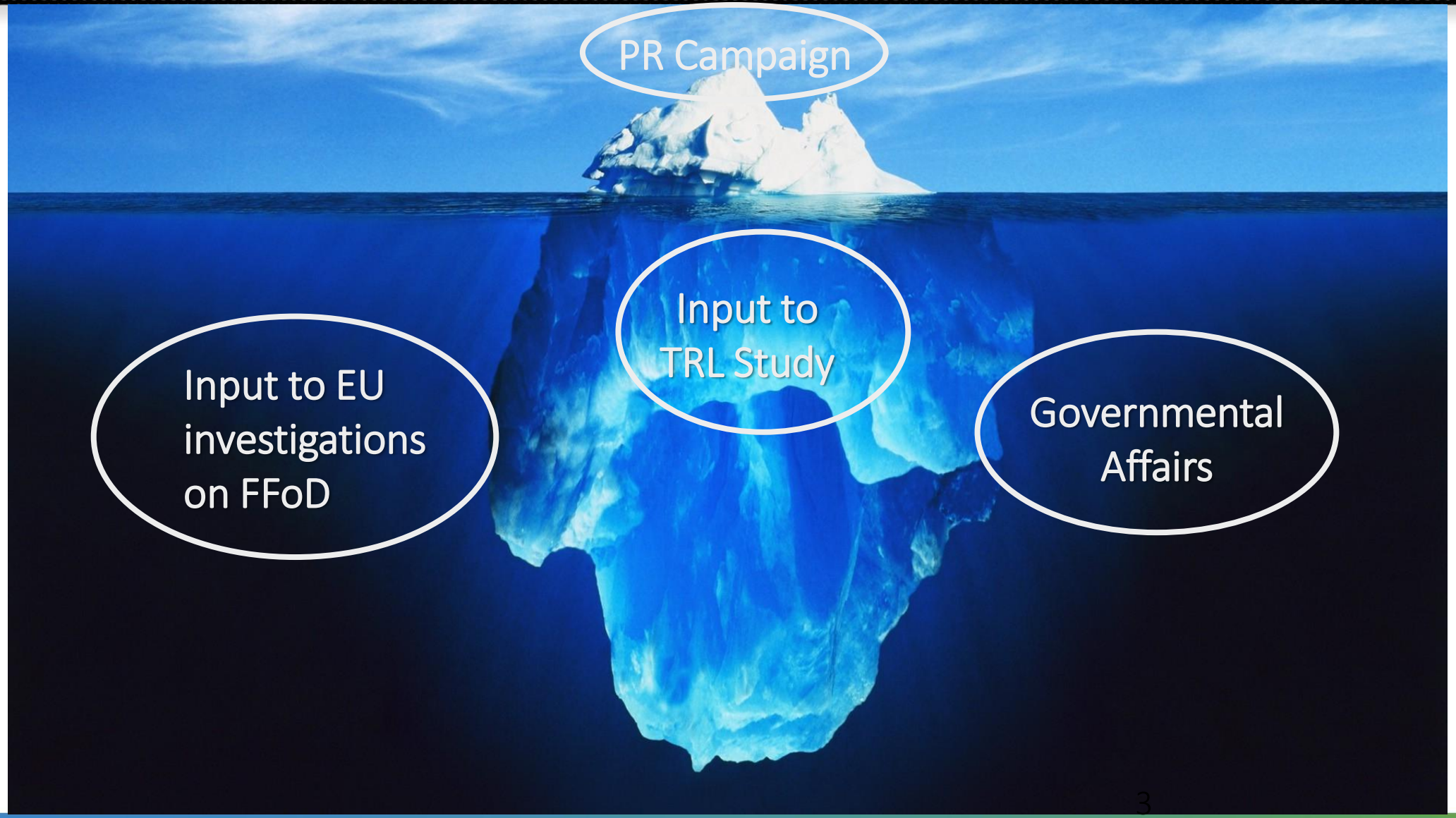
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

EGEA WG2 Meeting - Diagnostics

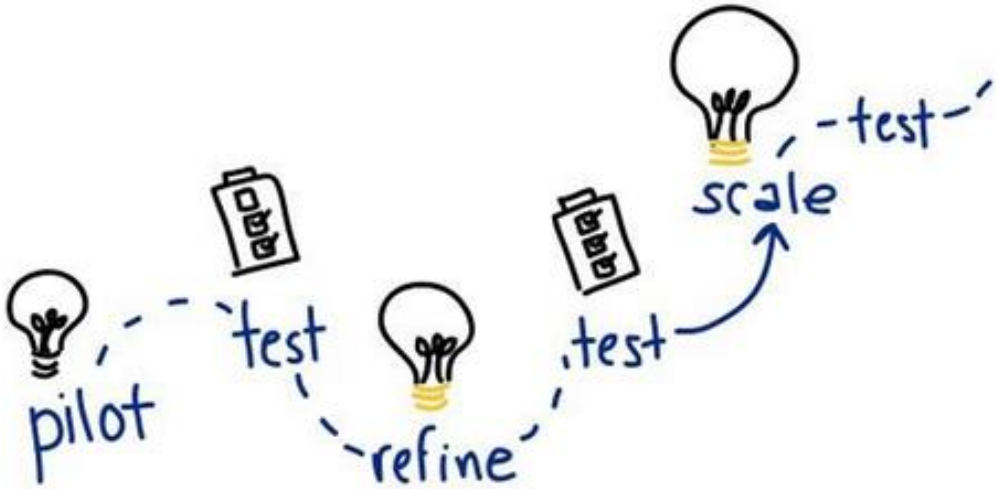
20th April 2017 - Brussels

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

Update and discussion on vehicle telematics access to in-vehicle data and resources


PR Campaign
Input to TRL Study
Input to EU investigations on FFoD
Governmental Affairs

VDA Agreement – proof of concept



The VDA agreement (VM's and principle tier one suppliers) proposes ExVE + Neutral server

- **Proof of concept** – joint WG from CLEPA and ACEA to verify that the proposal will provide the required access to vehicle data
- **VMs claim that no new legislation is needed** – the market has agreed a solution……
- **Status today** – the webservices interface (ISO 20078) has been tested using a single data (fuel level) transmitted 2-3 times per hour
- **New use case for monitoring tyre wear** – proposed, but VMs responded with the need to verify and implement an in-vehicle APP and a B2B contract (so outside the proof of concept)

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

TRL Study update

Access to In-vehicle Data and Resources

Stakeholder Workshop Discussion Document

19 January 2017

Written by Authors M McCarthy, Neetan Kathuria

Project Manager [January – 2017] N Kathuria

TRL

TRL study – objective and current status

- **Objective** – to provide the EC with a cost/benefit analyis of the different possible technical solutions from the C-ITS forum WG6 report
- **F2F meetings** – Brussels workshop on 19th January and at TRL on 06th March
- **Aftermarket input** – University of Koln preparing a detailed analysis of the impact of direct access to the in-vehicle data and resources versus Extended Vehicle
- **Final report date** – end of May 2017 to DG Move – who will publish their position mid/late June

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

Revision of vehicle type-approval legislation RMI provisions (OBD connector, validation of VCIs & reprogramming

Status of the dossier in the EU institutions

- The EC draft **legislative proposal** (January 2016);
- The EC proposed **RMI amendments** to its own proposal (November 2016).

1 **EU Commission**

- Ricardo-AEA Study

✓ Published in 2014;
✓ EC issued a report on this study in Dec. 2016;
✓ FIGIEFA position paper on the EC report in Jan. 2017.

First Reading

- IMCO voted **Dalton report** on the 9 February 2017;
- Several **positive amendments** adopted by IMCO; most crucial on RMI!
- Next steps: EP has to establish **final position** in the Plenary.

2 **EU Parliament**

3 **Council**

- Discussions in working party are still on-going;
- RMI not discussed yet;
- Expect to establish final position in April/May;

Trilogue/Conciliation

4

- Trilogues are expected when EP and Council have established their position;
- Trilogues will probably start in May.

5 Formal vote and adoption by EP and Council.

Keeping the OBD live port open and accessible

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.**

Accurate communication with standardised communication protocols

Am. 1129: **Ensuring that independent multi-brand diagnostic and testing tools are able to accurately communicate with the vehicle using standardised communication protocols**

Annex XVIII – point 6 – point 6.4 [Extract]

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 communication protocols, then these protocol specifications shall be made available to independent operators. 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, 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.

Information in “electronically processable format”

Am. 907, 908: **Improving the format of the information given to independent operators which should be in “electronically processable format”**

Article 65 – paragraph 2 – subparagraph 2

The vehicle OBD and the vehicle repair and maintenance information shall be made available on the websites of manufacturers using a standardised format or, if this is not feasible, due to the nature of the information, in another appropriate format. **For independent operators other than repairers, the information shall also be given in a machine-readable format that can be electronically processed with commonly available IT tools and software, which allows independent operators to execute their business functions in the aftermarket supply chain.**

Improving the definition of "RMI"

Am. 354: Updating of the "non-discrimination principle" – The Vehicle Manufacturers as benchmark

Article 3 – paragraph 1 – point 46 [Extract]

(46) 'vehicle repair and maintenance information' means all information required for diagnosing, servicing, inspecting, **road worthiness testing**, repairing, re-programming or re-initialising of a vehicle as well as for the fitting on vehicles of parts and equipment, and that **is used or** provided by the manufacturer, **including** his authorised **partners**, dealers, **repairers and network, to offer products or services for vehicle repair and maintenance purposes**, including all subsequent amendments and supplements to that information.

Improving the unequivocal spare parts identification

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

Am. 207, 1127: Ensuring that the parts identification information is made available in an electronically processable format

Annex XVIII – point 6 – point 6.1 – paragraph 3 [Extract]

Information on all parts of the vehicle, with which the vehicle, as identified by the VIN and any additional criteria such as wheelbase, engine output, trim level or options, is equipped by the vehicle manufacturer and that can be replaced by spare parts offered by the vehicle manufacturer to its authorised repairers or dealers or third parties by means of reference to original equipment (OE) parts number, shall be made available, **in the form of machine readable and electronically processable datasets**, in a database that is, accessible to independent operators.

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

Improving the clear vehicle identification

Am. 1141: **Ensuring that vehicle manufacturers make available the complete vehicle identification number together with a description of all the specification and configuration features in electronically processable form as datasets**

Annex XVIII – point 7 a (new)[Extract]

Vehicle manufacturers shall make available via a web service or as a download an electronic data set comprising all VIN numbers (or a requested sub-set) and the correlated individual specification and configuration features which were originally built into the vehicle.

Reinstatement of Recitals omitted by the European Commission

Compromise Amendment (CA) n. 16: **Recitals n 12/18 from Reg 566/2011**

- **Recital 35 a (new)** In order to ensure effective competition on the market for vehicle repair and maintenance information services, and in order to clarify that the information concerned also covers information which needs to be provided to independent operators other than repairers, so as to ensure that the independent vehicle repair and maintenance market as a whole can compete with authorised dealers, regardless of whether the vehicle manufacturer gives such information to authorised dealers and repairers directly, it is necessary to set out the details of the information to be provided for the purposes of access to vehicle repair and maintenance information.
- **Recital 36 b (new)** Since there is currently no common structured process for the exchange of vehicle component data between vehicle manufacturers and independent operators, it is appropriate to develop principles for such an exchange of data. A future common structured process on the standardised format of the data exchanged should be developed by the European Committee for Standardization (CEN) formally, where upon the mandate given to CEN does not predetermine the level of detail this standard will provide. The CEN's work should, in particular, reflect the interests and needs of vehicle manufacturers and independent operators alike and should also investigate solutions such as open data formats described by well-defined meta-data to accommodate existing IT infrastructures

Forum for Exchange of Information on Enforcement

Compromise Amendment (CA) n. 5: **Inclusion of stakeholders or third-party compliance verification tester to provide direct input.**

Article 10 – paragraph 1 subparagraph 2[Extract]

This Forum shall be composed of members appointed by the Member States, **including their type-approval and market surveillance authorities. The Forum shall also invite observers to its meetings when appropriate, and at least once a year. The invited observers shall include representatives of the European Parliament, technical services, recognised third party testing organisations, representatives of industry or other relevant economic operators, safety and environment NGOs and consumer groups. Observers invited to meetings of the Forum shall constitute a broad, representative and balanced range of Union and national bodies representing relevant stakeholders.**

Empowerment to the EC to adapt legislation to technical progress

- Compromise Amendment (CA) n. 16: **The Commission should be empowered to adapt legislation to technical progress in the future field of 'telematics'-**

Article 65 – paragraph 10 a (new)

The Commission shall be empowered to adopt delegated acts in accordance with Article 88 and create Annex XVIIIA to address technological developments in the field of digital data exchange using a wireless wide area network, ensuring the continued direct access to in-vehicle data and resources for Independent Operators and competition-neutrality by technical design.

European Commission

RMI amendments tabled by European Commission (EC)

EC tabled some of their own amendments to its proposal for a Type-Approval Regulation in order to correct it's omissions/errors:

- Recitals n. 12/18 from Reg. 566/2011: description of scope of information to be given to IOs
- Annex XVIII, point 2, point 2.9: OBD live port to the vehicle open/accessible: but reference to RMI is not accurate because through the OBD port the IOs get data and not repair information
- Annex XVIII, point 6, point 6.3 : Correcting the wrong label to RMI Security Forum (SERMI)
- Annex XVIII point 6, point 6.4: Reinstate the reprogramming standards for passenger cars
- Annex XVIII point 8(new), point 8.1: Reinstating provisions on electronic system security

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

The EC's Ricardo-AEA Report

- **The Commission issued its long awaited report on the Ricardo Study in Dec 2016**
- **EGEA analysed it** → the Commission report did not take into full consideration the set of recommendations for improvements from the Ricardo-AEA Study.
- EGEA (AFCAR) organised **high level meeting with Mr. Antti Peltomäki** (DG GROW Deputy Director-General);
- EGEA circulated a **position paper** on the Commission Report to the MEPs, to the Council and to you (23 Jan 2017);

Council

Council: Status and EGEA Activities

Council:

- Discussions at working party meeting are still on-going

- EGEA (AFCAR) met the previous Slovakian Presidency, the current Maltese presidency and we are organising meeting with the next Estonian presidency.

- In parallel meetings (AFCAR/ EGEA or locally) with government representatives were organised in various Member States:

  Thank you for your support in organising these meetings!

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

Meetings with Council (Member States or Perm. Rep. in Brussels)

- Bulgaria
- Czech Republic
- Denmark
- France
- Germany
- Hungary
- Italy
- Netherland
- Poland
- Romania
- Slovakia
- Spain
- UK

Next steps:

We should organise another series of meetings with Governments: it is crucial they know what we want and what they should support during the trilogue negotiations.

Request for your support:

1) Support for organising meetings with Governments;
2) Keep contacts/call your national MEPs in view of the Plenary session in April.

You will receive some information soon.

Thank you.

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

Camera and sensor calibration: access to information

At stake?

- Which kind of information is needed?
- What kind of equipment can be proposed to both workshops and PTI test centres?
- Any experiences at national levels?
- Actions at EU level required?

Pre and post collision diagnostics and repair in US

etr™

Position Statement: Pre- and Post- Repair System Scanning (1/2)

The Equipment and Tool Institute (ETI) fully agrees with the process of the pre- and post-systems scan position many in the industry are taking.

The electronic safety systems on today's vehicles are very important for occupant safety and must be checked after a repair for proper functionality. The pre-scan is now necessary for the repair facility to be able to help scope and estimate the repair processes required for a safe and complete repair.

This is an important concern for collision repair providers as the vast majority are not OEM dealership facilities. The need for affordable access to the tools and data that are essential to perform safe, complete and accurate repairs is extremely important. It is unlikely most aftermarket shops will be able to justify the purchase cost of multiple OEM scan tools for this procedure since independent body shops work on a great variety of OEM's vehicles. Thus, the importance of having accurate, timely and affordable OEM scan tool data provided to the aftermarket to ensure our members have the information necessary to fully emulate the factory tool functions.

Position Statement: Pre- and Post- Repair System Scanning (2/2)

- While we understand that many of the manufactures do not know the capabilities of all the aftermarket scan tools, we know that many of the higher quality aftermarket tools provide the needed and necessary functions to complete a pre- and post scan properly for a majority of the vehicles they currently service.

- Data for the development of aftermarket scan tools is provided directly to ETI scan tool manufacturers as agreed upon by previous contracts in the U.S. in order to be able to fully emulate the factory tool. Many OEM's provide this information in an affordable, accurate and timely manner. Yet some OEM's are less forthcoming and either restrict access to important data or price it at unaffordable levels. These access issue continue to plague the industry.

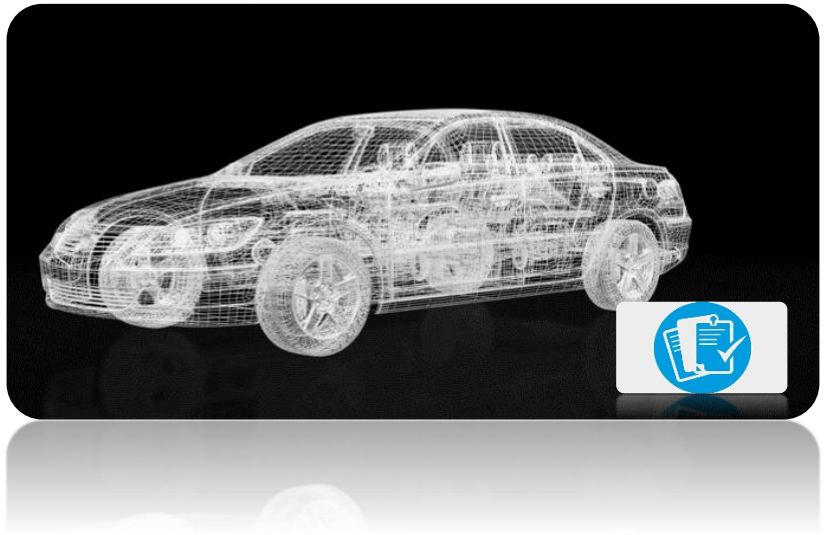
- ETI has no concern with repairers utilizing OEM tools when they are available and endorses their use in situations where they may be needed e.g. vehicles in their early years of service, where coverage may not be implemented in the current aftermarket tool release.

Next steps

- EGEA Position?
- Any experiences at national levels?
- Actions at EU level required?

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

ePTI - status



Status of ISO 20730

- Last meeting in Berlin (21 February) – next meeting in Goteborg (17 May)
- Proposal to use certificates to provide access to PTI relevant test methods and data
- EGEA proposed SERMI process if certificates become a requirement
- Most test methods are vehicle OBD system based, with only a limited (headlamp) functionality test
- Next steps with the EC/Roadworthiness committee

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

ISO TC22/SC31/WG7 Report – ePTI status overview

Inspection Module	Description	UseCase Number	Description	Technical Classification	UseCase Defin.			Tech.-Solutions			Comments based on WG7-Meeting in Berlin 23.02.2017
					in discussion	PT consensus	WG consensus	in discussion	PT consensus	WG consensus	
IM 1	Discover ePTI data link and ePTI-relevant systems	1.1	Discover ePTI data link.	mandatory			■			■	Completed
		1.2	Discover ePTI-relevant safety-systems	mandatory			■			■	Completed
IM 2	Authentication, authorization	2.1	ePTI external test equipment authentication	optional			■			■	Example for the technical soution is missing
		2.2	Vehicle ECU authentication	optional			■			■	Example for the technical soution is missing UC description was revised
IM 3	Query available ePTI identifiers	3.1	Query supported data identifier	mandatory			■			■	Completed
		3.2	Query supported routine identifiers	conditional			■			■	Conditional - only required if at least one ePTI relevant routine identifier is supported (see ISO 20730-3)
		3.3	Query supported input/output control identifiers	conditional			■			■	Conditional - only required if at least one ePTI relevant input/output identifier is supported (see ISO 20730-3)
IM 4	Query ePTI system information	4.1	Query vehicle identification number (VIN)	mandatory			■			■	Completed
		4.2	Query vehicle odometer value	mandatory			■			■	Completed
		4.3	Query system´s software number	tbd		■		■			Task 2017-02-001assigned
		4.4	Identify installed systems' software integrity information	tbd		■		■			depending on result of discussion with WG11
		4.5	Query information from system	tbd	■			■			Task 2017-02-003 assigned Moved to IM 4
IM 5	Query system test completed and fault information	5.1	Query system test completed status	mandatory			■			■	Completed
		5.2	Query system fault information	mandatory			■			■	Remaining editorial work
IM 6	Activate systems routines, Input/Output controls	6.1	Activate system's routine	conditional			■	■			Conditional - only required if at least one test routine is assigned to an ePTI relevant routine identifier (RID) (see ISO 20730-3)
		6.2	Activate system's input/output controls	conditional			■	■			Conditional - only required if at least one test input/output is assigned to an ePTI relevant I/O identifier (RID) (see ISO 20730-3)
IM 7	ePTI conformance test plan	7.1	Vehicle ePTI system conformance test plan	n/a			■				Defined in ISO 20730-2 Remaining editorial work in UC
		7.2	ePTI external test equipment conformance test plan	n/a			■				Defined in ISO 20730-2 Remaining editorial work in UC

EGEA
EUROPEAN GARAGE EQUIPMENT ASSOCIATION

WG7 Report – ePTI document structure

- ISO 20730-1; Road vehicles – Vehicle roadworthiness interface for electronic Periodical Technical Inspection (ePTI) – Part 1: Communication requirements;
- ISO 20730-2; Road vehicles – Vehicle roadworthiness interface for electronic Periodical Technical Inspection (ePTI) – Part 2: Communication requirements conformance test plan
- ISO 20730-3; Road vehicles – Vehicle roadworthiness interface for electronic Periodical Technical Inspection (ePTI) – Part 3: Data definitions and requirements

- Part 1 and part 3 cover the scope of the current approved project of ISO/WD 20730 - Request to change the title
- DIS ballot of the ISO 20730 (in the future of part 1) is expected end of October 2017. A timeline extension of 48 month for part 1 and 3 is requested.
- Because part 2 is not in scope of the current ISO/WD 20730, a NWIP on part 2 is intended be submitted end of 2017.

Compliance test for vehicles

ACEA recently ordered below 1’st work package from RA Consulting
The kick-off meeting ACEA<->RA Consulting was held W710:3

The specification for the ISO 27145 Compliance Test Cases Tool will be based on the test procedures of the SAE J1699-3 Compliance Test Cases.
§ The tool will be a command line tool similar to J1699.exe.
§ The project will be split into several working packages:
§ First working package:
§ Specification for the static test, which includes the test procedures similar to test cases 6 to 10 according to SAE J1699-3.
§ Implementation of an initial version of the test tool which includes test procedure 6 according to SAE J1699-3.

… and who will take care of the external tester side?

SAE OBD II Security Workshop

September 12: Letter from House Committee on Energy and Commerce to NHTSA RE: OBD-II Security "…request that NHTA convene an industry-wide effort to develop a plan of action for addressing the risk posed by the existence of the OBD-II port in the modern vehicle ecosystem."

September 28: NHTSA requests SAE to take the lead and convene industry group to examine issue

October 14: NHTSA response to House Committee highlights SAE role:
"At NHTSA's urging, SAE International has started a working group that is looking to explore ways to harden the OBD-II port. This group is making good progress and the Agency remains hopeful that the group will move expeditiously to develop a set of recommendations."

SAE hosted invitation-only industry workshops December 1, 2016 and January 30 2017

Group coalesced around idea of a "Gateway Filter"

SAE OBD II Security Workshop

Discussion yielded the following high-level scope items:

What are we worried about?	What are we not worried about?
• DLC access Point (J1939/J1962 connector) • Re-programming modules; only concerned about unlocking Someone spoofing normal message content (writing non-diagnostic messages) • Overloading the CAN Bus • Overloading the gateway • Ensuring solution complies with existing regulations and MOUs • New on-road vehicles (less than 14K pound GVW)	• Other access points (infotainment, etc.) • J1979 functionality • Emission-related diagnostics; J1939 equivalent diagnostic functionality • Physical attacks to the in-vehicle network • Privacy • Tool/dongle security

New SAE OBD-II Cyber Security Committee and Task Force

Data Link Connector Vehicle Security Committee (TEVDS20)

– Small group Task Force Developing a Proposal for new Recommend Practice (J3138)
–"Hardened OBD-II Port" terms and definitions
–Outline recommendations for both
    –Firewall security functions, and
    –ECU security functions
–Still allow required communications
    –Vehicle emissions regulations
    –Aftermarket repair support

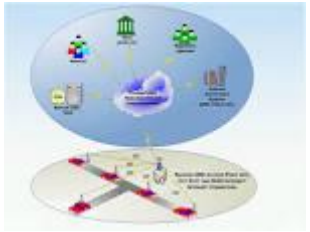
J3138 draft under development

–Vehicle OEMs providing input on gateway functions
–Targeting document draft for January 2018 ballot

SAE J3005 Report

SAE J3005-1 Permanently and Semipermanently installed diagnostic communication devices

- Purpose: Allow for a good application which will not disturb in-vehicle functionality
- Recommendations for:
  - Services
  - Data
  - Repetition rate
  - Power consumption
  - Physical size
- SAE J3005 published in end of 2014
- Guidelines for:



Remote OBD

PEMS

Split-cables

WLAN interfaces

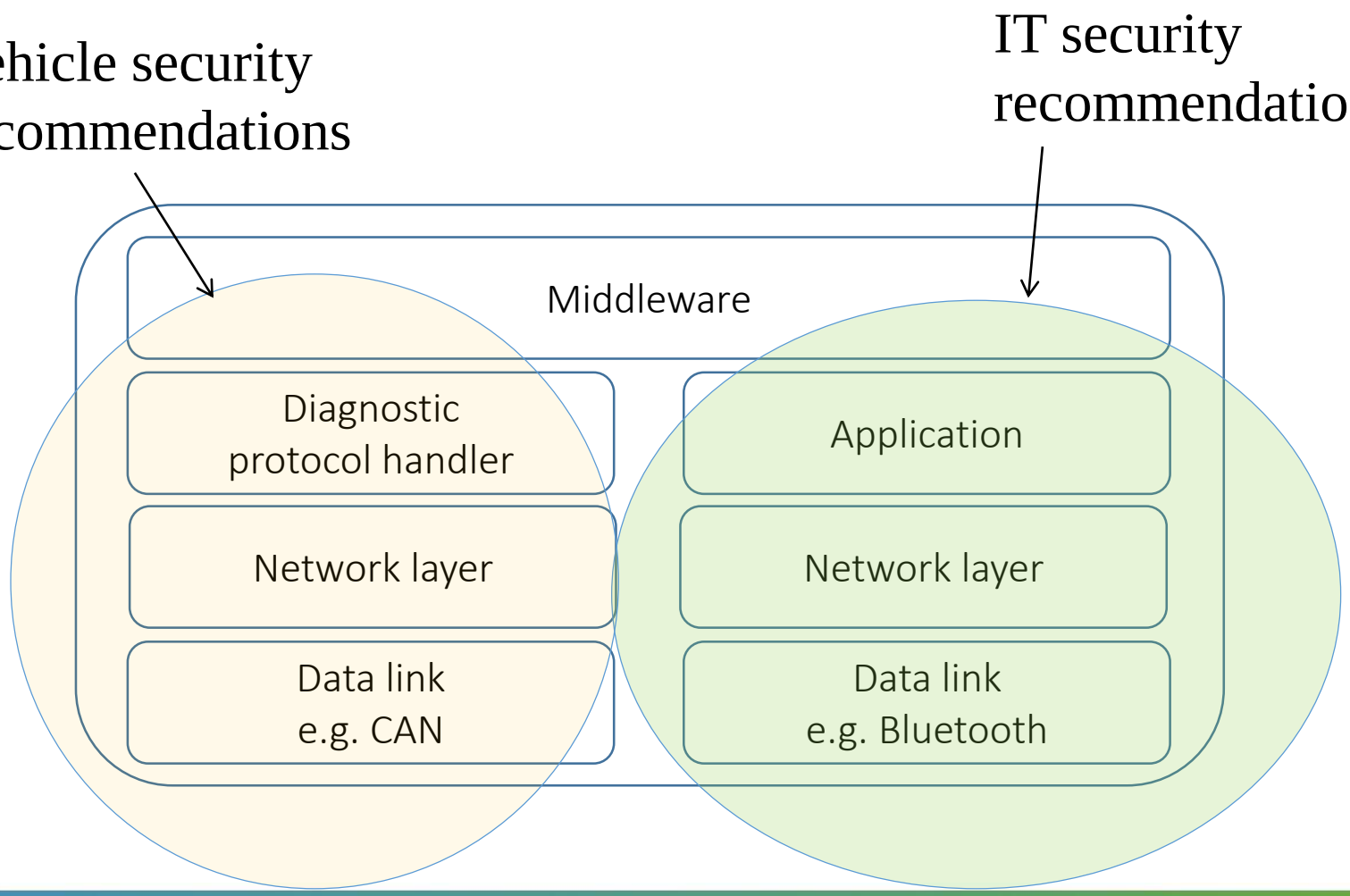
Insurance devices

GPS

SAE J3005 Report

SAE J3005-2 Permanently or semi-permanently installed diagnostic communication devices – Security guideline

- Working draft exists
- Proposed to be Recommended Practise
- Data privacy to be included
- Purpose
  - Secure the dongle and protect the vehicle
- Recommendations for
  - Services
  - Communication issues (error frames)
  - Update of dongle firmware
  - IT security of dongle



Elections of WG2 Chairmen & Deputy-Chairmen


THANK
YOU
GRACIAS
ARIGATO
SHUKURIA
DANKSCHEEN
BIYAN
SHUKRIA
TINGKI
YAQHANYELAY
TASHAKKUR ATU
SUKSAMA
EKHMET
MEHRBANI
GRAZIE
MAAKE
KOMAPSUMNIDA
JUSPAXAR
GOZAIMASHITA
EFCHARISTO
BOLZÏN
MERCI
PALDIES
SPASIBO
DENKAUJA
NHACHALHVA
SIKOMO
MINMONCHAR
MAKETAI
SPASSIBO
SNACHALHUYA
NUHUN
CHALTU
WABEEJA
MAITEKA
HUI
YUSPAGARÀTAN
DHANYABAAD
AINHA
ATTO
MERSI
UNALCHÉÉSH
GUI
HATUR
EKOJU
SAHCO
MERASTAWHY
GAEJTHO
LAH
TAVTAPUCH
MEDAWAGSE
AGUYJE
FAKAAUE
BAIKA