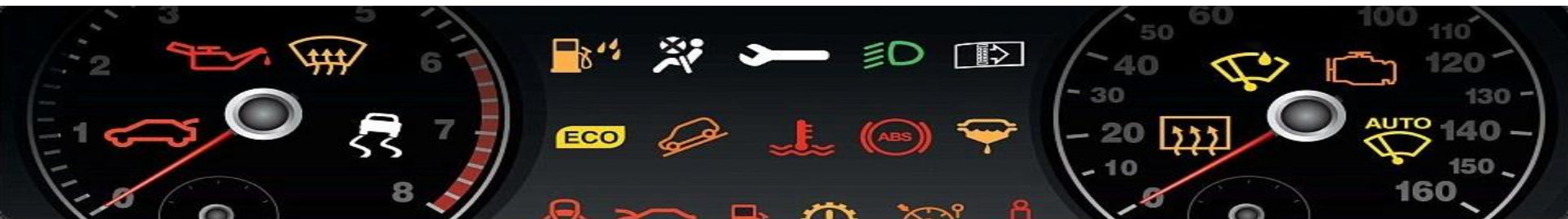


Diagnostics meeting

24th July 2014 - Brussels



AGENDA - Meeting 24th July 2014 (1)

- **Update on the CITA ECSS project – part of the Periodic Roadworthiness Testing Directive 2014/45 (EU)**
 - Final report and next steps

- **European Commission study – Ricardo survey on the functioning of Euro 5**
 - Feedback from WG2 companies/participants
 - Other market sector operators' feedback

- **Review of telematics developments – access to in-vehicle data:**
 - e-Call legislation – update of the state of affairs
 - HDV 'Remote diagnostic support'.
 - Update of the VSG – ISO NWIPs
 - AFCAR proposal and EGEA position

AGENDA - Meeting 23rd July 2014 (2)

- **New EGEA WG rules**
- **Input from WG2 diagnostic members for 2014/15 activities**
(EGEA Board request)
- **Any other business**
- **Date of next meeting**

CITA ECSS Study



CITA ECSS study

- The final draft report has been sent last week and the EC have asked for the absolute final report by the end of July.
- The study included EGEA as a principle partner and the basic principles of the test methods and test tools was part of the EGEA work.
- The study proposes testing the *functionality* of the ECSS systems (except SRS) by controlling the various parts and components of the ECSS systems and verifying the results on other PTI test equipment (brake tester, headlamp tester)
- A definition of the ‘requirements for tools’ includes using existing diagnostic VCIs, but without any definition of the hardware platform that will support the ECSS test application. This has been left ‘flexible’ to allow the widest choice of platform solutions.

CITA ECSS study – next steps

- The final *draft* report has to be accepted by the European Commission.
- The final report includes the ‘requirements for tools’ and ‘requirements for technical information’ from the vehicle manufacturers.
- The European Commission have already started to discuss with Member States, CITA, ACEA and other stakeholders, what new test items will be included in the future PTI testing, together with the technical information requirements (the RTWG).
- Once the report is issued, there is likely to be further analysis for the cost benefit ratio by Member States and scrutiny concerning test methods, technical information requirements, test tools and equipment



**Commission Study on Functioning of
Euro 5 commissioned to
Ricardo-AEA**



Functioning of Euro 5 – Ricardo survey

- The survey has now been completed, but as the results were better than Ricardo expected, they have been granted a 2 month extension to deliver their final report to the European Commission.
- Feedback from EGEA members.....?
- Other market operators who received their own version of the survey questionnaire included repairers, parts producers and wholesalers, data publishers.



eCall / Teleamtics



Telematics – the developing threat

The access to the vehicle and its data is becoming an increasing issue.

The VM's claim that unrestricted access is unacceptable and want to define what data can be accessed, how it can be accessed, by whom and when this can be allowed.

Although this is part of telematics, it is spilling over into a wider consideration of any connection to the vehicle – through the 16 pin connector, 'local' wireless connection in the workshop, or remotely via telematics.....



A bit of background on eCall legislation...

The Commission is planning to introduce the automatic eCall (emergency call) system 112 into all new types of vehicles as from 2015 (2017)

A three-fold legislative package has been proposed, to tackle all aspects of the eCall service:

In-vehicle part	Proposal for a Regulation under the vehicle type-approval legislation
Infrastructure part	Upgrading the PSAPs infrastructure in the framework of the Directive 2010/40/EU on the deployment of ITS in Europe, with a restriction of TPS's.
Telecom part	Recommendations to the MS targeting MNOs (mobile network operators) on the transmission of eCall

What is the threat for the Aftermarket?

- eCall introduces an in-vehicle telematics platform which **often shares the same basic hardware and software components** that can also be used for other telematics system functions, such as accessing vehicle RMI data.
- Currently, **only vehicle manufacturers** can access the full set of data when communicating 'on-line' with the vehicle.
- To remain competitive in the market, independent service providers need to be able to access this new wireless telematics communication to the vehicle and its data in **the same timescale** as the vehicle manufacturers.

The on-line access to the vehicle has become a crucial timing issue!

What has been agreed in Brussels so far?

The European Parliament has adopted its official position on the eCall Regulation in February 2014.

The amendment adopted (Art.10a par.3) gives a **mandate** to the Commission to draft a legislative proposal on “***the technical requirements for an interoperable, standardised, secure and open-access platform***”, once the eCall legislation is adopted (= 2015 as forecast)

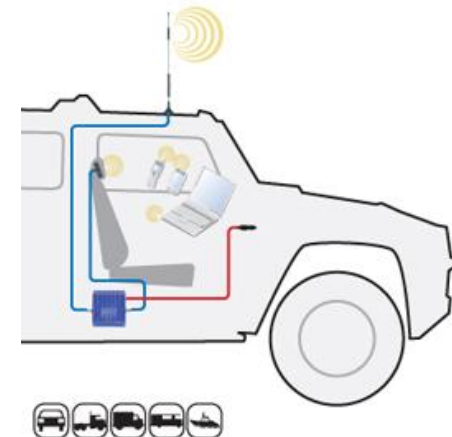
This amendment will have to be discussed by the Commission, Council and Parliament in the trialogue, as from **September 2014**



How is EGEA affected?

In parallel to the discussions about obtaining a legal basis which will define in the future the telematics access to the vehicle, **the discussions about the future telematics technical solution** has also already started in areas such as:

- Euro VI Heavy Duty Vehicles legislation, which includes 'remote diagnostic support' (Reg. 595/2009, Article 3 (11))
- VSG - Vehicle Station Gateway (ISO Project)
- Intelligent Transport Systems (ITS)



How is EGEA affected?

The challenges are:

- Will *independent* communication with the vehicle be possible in the future?
- Will all communication be routed via the VM server and can our business then be monitored and profiled by the VMs?
- Will there just be a 'lower level access' to the vehicle using mobile devices and a reduced set of vehicle data?
- Will the telematics platform be standardised to enable IOs to write and implement applications in the vehicle?
- Will EGEA have the ability to both read and write data to and from the vehicle in a future telematics system?

AFCAR activity on remote diagnostic support for Heavy Duty Vehicles (HDV)



HDV Remote Diagnostic Support: Background

There is a legal mandate that supports **'Remote Diagnostic Support'** for HDV vehicles in the Euro VI legislation (EC 595/2009) which is increasingly important to provide services to vehicle fleet operators.

- Vehicle manufacturers refused to address the issue.
- Therefore AFCAR went to the EC Commission and asked for arbitration.

The EC Commission confirmed that VMs and AFCAR must address the issue within the current work of CEN on standardisation of Repair and Maintenance Information (ISO 18541-5).

What was our approach?

Prepared our case, arguments and for the meeting with the EC and prepared 'basic principle's for future multi-brand aftermarket telematics access to the vehicle.

This was based on:

- A definition of the wording of the legislation
- The basic principles of what IOs need to offer competitive services

Basic principles - 1

- The vehicle owner/operator should be able to choose what amount and depth of data is exchanged with whom and how the data is transmitted to perform a specific service.
- IOs need to be able to access the vehicle and the in-vehicle data independently from the VM in a standardised way.
- Be able to make multi brand competitive offers in an un-monitored way.



Basic principles - 2

All IOs need the same access conditions as the VMs in terms of:

- same contents (not only static but dynamic vehicle-specific data)
- same latency (timescale)
- same capacity to read and write information to be able to offer competitive independent remote diagnostic support services and thus allow fleet owners, operators or managers to be able to choose competitive multi brand services.



Basic principles - 3

Independent, competitive and full remote diagnostic support must include the three interdependent key processes of:

- Remote Notification Service (RNS)
- Remote Diagnostic Information Service (RDI)
- Remote/workshop Repair and Maintenance Service (RMS)

IOs must be able to combine these 3 processes!

Update on 'Vehicle Station Gateway'

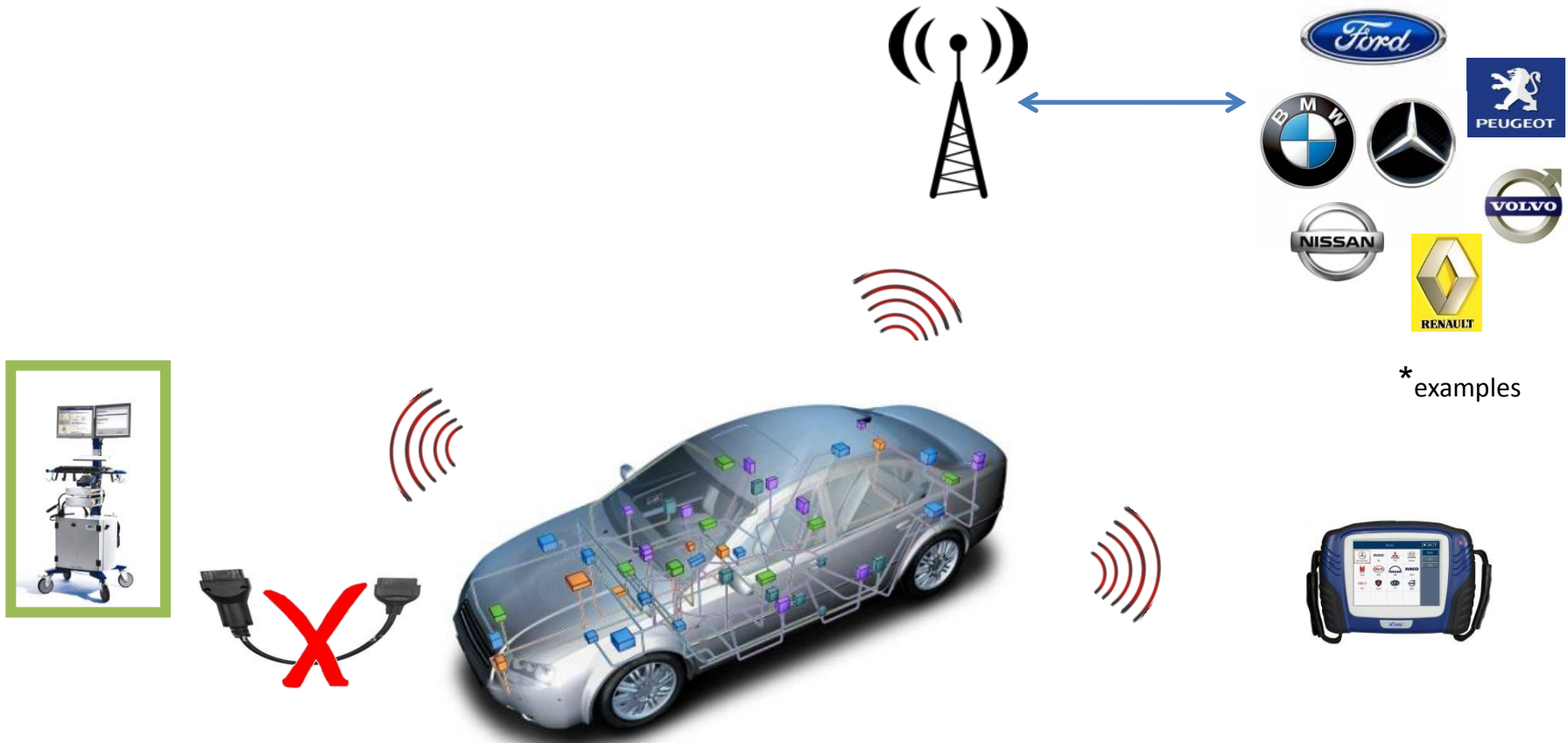


VSG: Background – a reminder....

Background:

- Initially established to protect the in-vehicle networks from 'unauthorised access' via internally or externally connected test equipment, especially through the 16 pin connector.
- Intended to protect secure access to a vehicle's electronic systems using a protected in-vehicle interface which is only accessible remotely (UMTS, Wi-Fi, Bluetooth) or through a restricted on-board connection, but where only **pre-authenticated** communication would be permissible, based on **pre-defined use cases**.
- ISO project (ISO 13815), but without any legislative mandate.

Access to the vehicle data will be controlled



IOs' access could be restricted to pre-defined use cases and no plug-in devices will be possible

VMs could be able to access all vehicle data, both directly in the workshop, or through telematics

VSG: Threats for EGEA

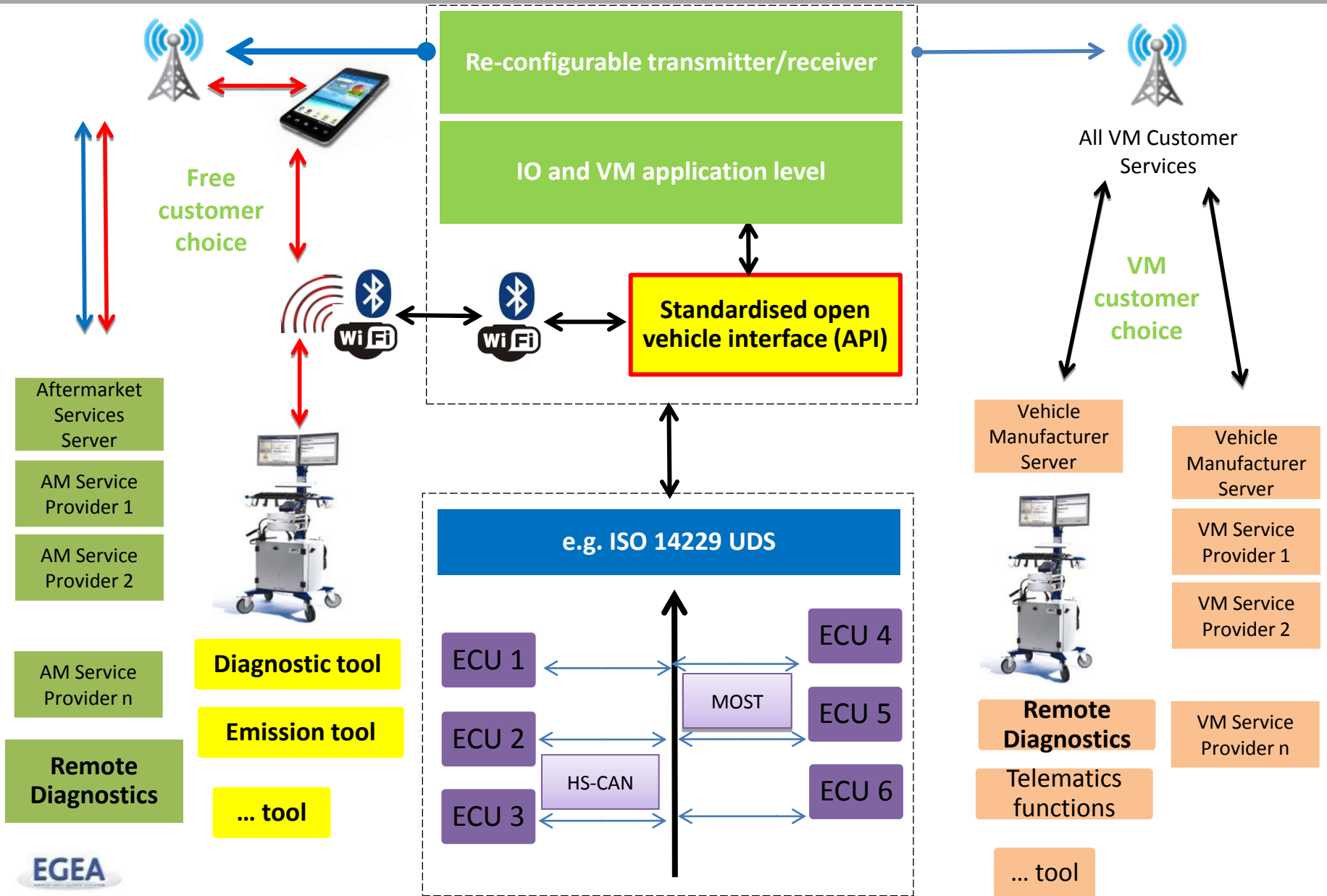
“The VSG will de-couple the link between external/internal test equipment and in-vehicle communication.”

- “Unauthorised” tools will not be able to communicate with the vehicle
- The in-vehicle networks will no longer be visible externally, regardless of whether the connection is wired or wireless
- The VSG concept introduces a communication firewall on all interfaces

Impacts on EGEA:

- Current OBD port could become data-limited (even just EOBD only).
- Reverse engineering could be blocked.
- Use Case cluster-specific VSG data configuration (i.e. only authenticated test equipment with appropriate configuration) would be allowed to be installed.

VSG - Agreed AFCAR & USA approach



VSG NWIPs – current state of play

- VSG has evolved into 3 x VM NWIP and 1x ITS NWIP – all as ISO standards (NOT CEN) – a new VM tactic.
- The VM's have proposed 'extended vehicle' proposals, which define the in-vehicle access, what (restricted) data would be available and the communication routing through their servers.
- The ITS/Aftermarket NWIP proposes secure access to in-vehicle data, using in-vehicle applications with routing through a connection to an IAM server.
- Voting on these NWIPs starts as early as the end of this week.

What did we do?

**EGEA joined forces with AFCAR and
our US colleagues from ETI and AAIA**



**Common EU-US independent aftermarket
industry presentations at VSG meetings!**

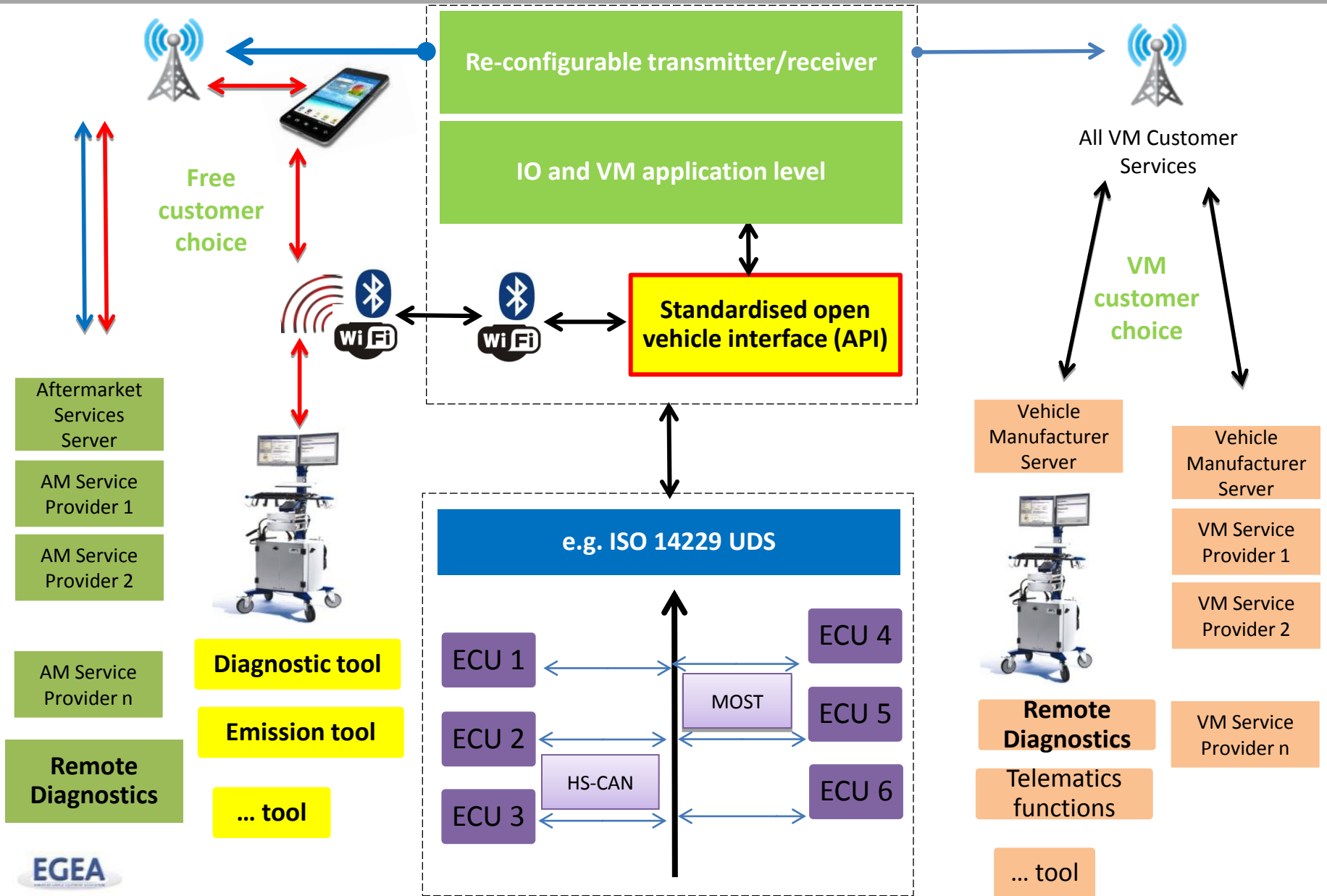
EU and US approach

Before a common position was agreed, we clearly had different approaches in the EU and in the USA on a possible solution for all aftermarket players.

Key differences:

1. Configuration of the VSG to allow IO applications to be written and installed in the vehicle (AFCAR).
2. The use of nomadic devices to support IO applications and act as the interface between the driver, the vehicle and a remote service support. (AAIA)
3. The ability to access vehicle data at the same level as the VMs. (AFCAR)
4. Re-configurable SIM card to allow alternative destinations of data transmission to be selected by the driver. (AFCAR)

VSG - Agreed AFCAR & USA approach



VSG: Update from last meeting in Berlin (May)

VSG has collapsed compared to its initial goals:

- VMs have proposed 3 new work items (NWIP) to TC22 for an 'extended vehicle' that would route all data through the VM servers.
- Alternative proposal to create the vehicle station gateway (VSG) but for 'remote diagnostics' only.
- 4th NWIP from the ITS perspective to support in-vehicle applications and data exchange with an IAM server

Depending if any of the above are rejected by ISO, then VSG could collapse, or could continue, but with a different scope.

Initiatives on OBD – European level

Key activities at the European level:

- Review of UNECE Regulation 83 for EURO 6 OBD
- ISO 27145 be included – what would be the impact?
- 29 bit identifiers for OBD – ACEA proposal
- Market surveillance for OBD emissions type approval compliance – should it be more robust?
- Should EGEA propose technical revisions to support improved OBD functionality?



WG2 diagnostic activity planning – 2014/2015

- Work plan for 2014 – 2015 – key diagnostic activities
- Budget planning – needed by the EGEA Board

Any other business

- New EGEA WG rules
- Any other business?

Spare slide



Thank you!

