AFCAR
Secure On-board Telematics Platform (S-OTP) Proposal

GRVA

26 May 2021
AFCAR – Alliance for the Freedom of Car Repair in Europe

Garage & Test Equipment Manufacturers

Body Repairers

Data Publishers

Dealers & Repairers

Leasing & Rental Companies

Mobility Clubs

Parts Distributors

ADPA European Independent Data Publishers Association
AIRC International Association of Body Repairers
CECRA European Council for Motor Trades and Repairs
EGEA European Garage Equipment Association
FIA Fédération Internationale de l’Automobile, Region I
FIGIEFA European Federation of Automotive Aftermarket Distributors
LEASEEUROPE European Leasing and Rentals Industry
Why is access to data & functions important for Aftermarket Service Providers?

- Better respond to new customer needs
- Build new remote customer relationships
- Compete equally with OEMs, in his role as Service Provider, on Digital Level
What are our key functional requirements for fair in-vehicle access?

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirement</th>
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<tr>
<td>DATA</td>
<td>In Vehicle, real-time access to all available data &amp; functions</td>
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<td>PROCESS</td>
<td>The ability to run independent software directly <em>in</em> the connected vehicle</td>
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<td>using its onboard computational resources (no need for add-on hardware)</td>
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<td>INTERACT</td>
<td>The ability to safely, securely and independently interact with the driver</td>
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<td>remotely using the in-vehicle Human-Machine-Interface (HMI) functions</td>
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<td>COMMUNICATE</td>
<td>Bi-directional, non monitored communication with the vehicle and its functions</td>
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A set of functional and non-functional software requirements

THE SOLUTION:
Secure On-Board Telematics Platform

HMI access using VM App platform or CarPlay/Android Auto (OEM) Apps

Web services based architecture and ability to run Apps in sandbox environments

Bi-directional access to
- Standardised access functions for deep diagnostics (10,000+functions/data points)
- 500+ Data Points/Functions standardised by name

Secure (encrypted/VPN), undistorted Communication with off board platforms
The S-OTP is not a box!

The Secure On-Board Telematics Platform is a set of functional and non-functional software requirements.
Considerations for secure access

• Solution will ensure
  • Vehicle integrity
  • Authorization & authentication for Apps and Service Providers
  • Right & Roles access based on Separation of Duties Principle
  • Validation process
  • (Cyber-)Secure processing of data in-vehicle
  • Data integrity

• To be done in a way that respects the key principles & based on mandated security requirements
Right & Roles access based on Separation of Duties Principle

• Ensure equal & secure access
  
  • Roles based Access Rights:
    • Privileged read & write/ Privileged read access/ Read & write/ Read access
  
  • Separation of Duties:
    • Enhances security through Multiple eyes principle.
    • Independent management of authorisation
Key Benefits of the Secure On-board Telematics Platform

- Technology Neutrality
- Enhanced security through the Multiple eyes principle
- Competitive marketplace, benefiting of consumers
- Responsibility for vehicle integrity remains with the VMs
- Separation of Duties
- Control the controller
- Traceability in case of security breaches
- Legislative framework in line with technological progress
- Keeping consumers in control (incl. direct consent management)
Conclusive remarks

• UNECE must continue proposing technology neutral solutions - no specific solution such as Extended Vehicle (cf. ISO presentation given at previous GRVA)

• ISO 20080, ISO 20077 and ISO 20078 industry-led standardisation initiatives do not sufficiently address all stakeholders needs/use cases

• Topics related to Extended Vehicle and alternatives are not suitable for mutual recognition and harmonisation at UNECE/global level

• Current regional discussions on access to in-vehicle data ongoing with the European Commission
Thank you for your attention!