

Executive Summary

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Requirements for the telematics interface in vehicles Trustworthy access to vehicle data and to data generated by vehicles

The automatization and the interconnection of cars will increase in the future. It is crucial to provide a protection of the data of the consumers as well as a protection against cyberattacks and to establish equal conditions for all competitors with data-based business models.

In this respect the Association of Technical Inspection Agencies (VdTÜV e.V.) proposes a **security architecture (automotive platform)** in connected vehicles that comply with all these requirements.

This communication platform creates a uniform and interoperable standard for security and functional safety in the vehicle and protects it against unauthorized external access. Any information leaving the vehicle shall be processed in advance by the implemented platform in accordance with specific user profiles. The vehicle profiles can be modified by a neutral service provider (administrator). Due to data protection requirements this administrator has no direct read access to the data.

The *automotive platform* creates for all parties:

- **security by design:** the vehicle protects itself against external cyberattacks.
- **privacy by design:** data protection of the passengers is granted automatically by the implemented technology. The necessary data and application scenarios can be designed and modified in a flexible manner.
- **a tamper-proof technology:** Due to an embedded, highly *secure element* in the platform this technological approach is tamper-proof.

The *automotive platform* stands for:

- an improvement of **road safety** by using possibilities of the monitoring of safety- and emission related systems of the vehicle.
- **trustworthy administration of data** by an independent, neutral service provider that promotes free competition in the mobility sector.
- **a future proof solution** by highly secure and flexible update options and application scenarios like car-to-x communication.

The **automotive platform approach** of VdTÜV provides a **trustworthy extended vehicle concept** for all market players and consumers who appreciate data protection as well as **safety&security** as an added value for future connected vehicles.