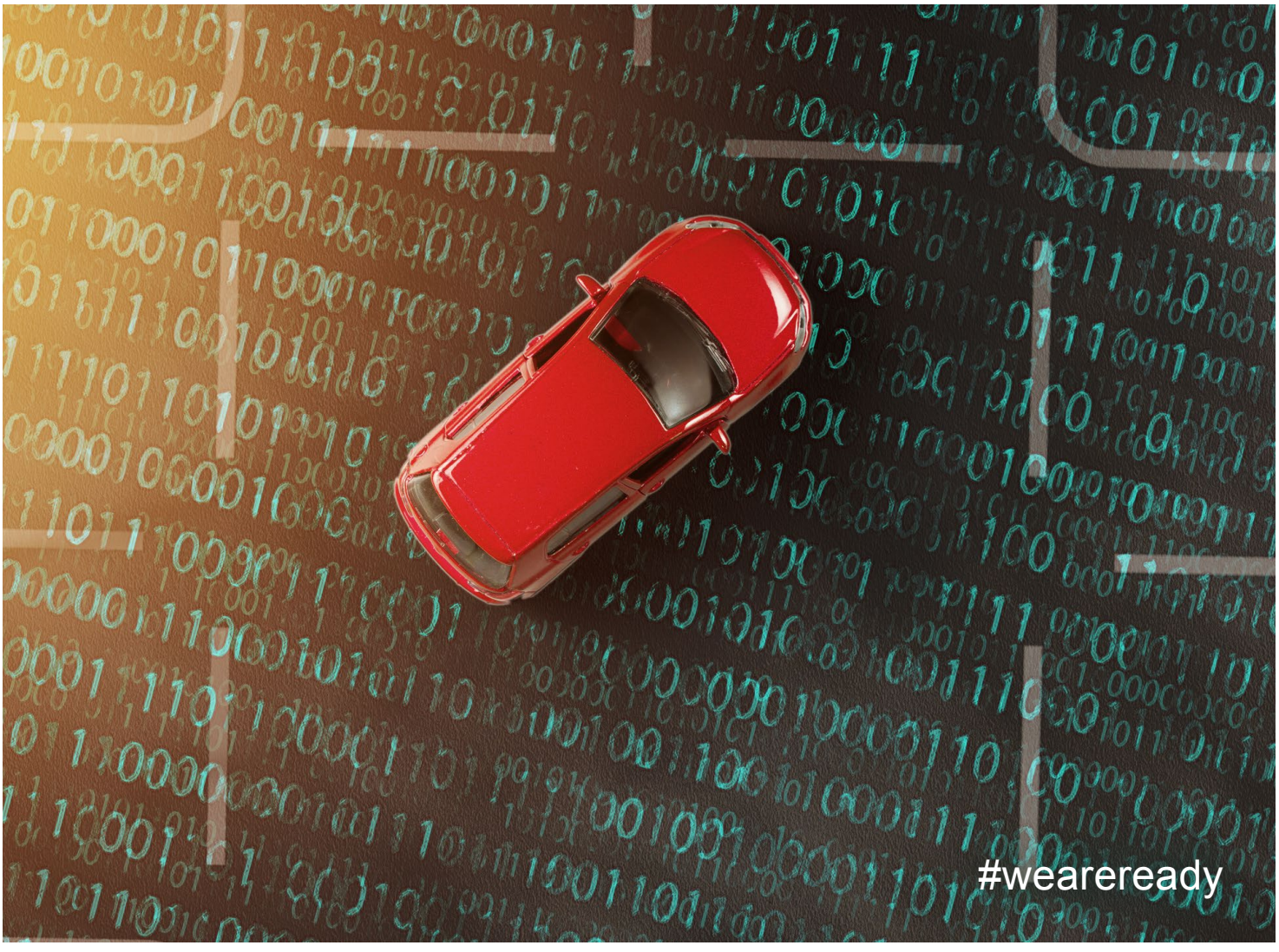
VDA German Association of the Automotive Industry

Executive summary

Access to in-vehicle data

December 2021



Berlin, December 2021

The VDA

Over 600 companies are members of the German Association of the Automotive Industry (VDA). In Germany they manufacture motor vehicles, engines, bodies and containers, as well as parts and accessories.

1. Innovation through data – data value chain: from the generation of data to the service offering for the customer

The VDA member companies already make extensive data available for customer-oriented use cases and offer a wide range of technical access options. This proactive offering is continually being expanded.

The automotive industry's commitment to fostering innovation and data-driven business models is reflected in the billions of euros invested in forward-looking operating systems, electrical/electronics architectures and connectivity.

These investments form the foundation for all business models based on vehicle data.

2. A common market for data – for our customers, mobility and the environment

The companies collaborating under the VDA umbrella believe in the added value that can be created by using and sharing data.

We enhance this added value by working proactively together to expand the data offering and secure technical access so that we can offer our customers added value through relevant data-based services and also improve the mobility of our customers and society in a way that does not have a negative impact on the environment nor the climate while remaining secure. Customers have sovereignty over their data, subject to applicable legislation.

This is based on a stable and reliable regulatory framework that gives all those involved a level playing field and the space to develop the emerging data market.

Our commitment enables innovative business models for all stakeholders. All the companies in the VDA share a common understanding that any regulation of the data market will include rules of fair play applicable to all parties involved.

Data availability and data access will not be relevant solely to vehicles, but also to vehicle-related data held by service providers, insurance companies, financing companies and other downstream sectors within the automotive environment. This is the only way to develop new services in the interest of the customers.

3. A growing data offering – as the engine of a data-based business model

Only a comprehensive data offering supported by all vehicle manufacturers across all models will enable service providers to successfully roll out new business models.

The VDA member companies therefore support the development of a basic data set. It should be possible to make this data set available for all vehicles in compliance with legal requirements. A prerequisite for this is that the vehicles be equipped with the corresponding technologies.

The data set should be regarded as a common starting point. It will be continually expanded based on customer-oriented use cases. This expansion will be driven by those use cases demonstrating the greatest customer benefit and thus the greatest demand, and for which data can be supplied both rapidly and on a broad scale. Decisions on expansion of the use cases will be made together with the associations in a dialogue between partners.

The companies involved agree to create transparency concerning their entire online data offering available via extended vehicle (ExVe)[1] web services. These data are described using suitable semantic markups to guarantee interoperability.

4. ADAXO: Automotive Data Access – Extended & Open: confidentiality crucial to success

The VDA represents companies whose success is based on innovation and which support the protection of intellectual property and innovations accordingly. The confidentiality necessary for data-based business models is ensured by the ADAXO concept, which is a further development of the VDA's existing concept. The ADAXO concept also provides the option of disclosing neither the identities nor the business models of the accessing companies to the primary data collectors. The ADAXO neutrality concept can also be implemented in data spaces, and for us it represents the logical next step in neutral data provision. Ultimately full sovereignty over the data remains with the vehicle customer.

The ADAXO data offering includes the aforementioned initial data set that will be prepared via the use case approach described and continually expanded.

5. FRAND – rules for collaboration between partners to the benefit of our customers

Fair, reasonable and non-discriminatory (FRAND) are the common rules for all participants in the data market. The VDA member companies offer FRAND access for data and functions to those companies that likewise commit to the FRAND principle.

The OEMs offer access to all data and functions that they themselves use to provide their own services. Non-discriminatory access to the data is provided either masked (e.g., neutral server) or directly via the OEM on the basis of B2C or B2B contracts, respectively.

[1] Extended vehicle concept: Manufacturers route the data via an OEM back end.

Individual contracts are drafted for each company. From the perspective of the VDA member companies, efforts should be made to define standard contract components provided this is permissible under antitrust law. Fair data sharing is also based on transparent pricing that is not prohibitive.

6. Authorization management – creating added value in the interest of our customers

In accordance with applicable law, data is transferred only for a particular purpose, i.e., for the specific use case.

- From the customer's perspective and from that of data protection law, authorization management should be central, consistent and simple to use, and as such should rest with the manufacturer (OEM) as the central contact for data collection.
- The customers have sovereignty over the data. They decide, in accordance with the applicable law, which data are transmitted to which recipients. The manufacturers should comply with the customers' wishes.
- The commercial data flow is not monitored by the OEMs, unless this is required for legal, contractual or security reasons.
- Confidentiality clauses ensure that customer data are not analyzed, thus preventing reverse engineering. Authorizations for third-party services can be encrypted so that the business models of third parties do not become known to OEMs.

The manufacturers can make data accessible to OEM-operated and non-OEM-operated data marketplaces that satisfy the relevant prerequisites. The primary data collectors will ensure compliance with the legal requirements by means of an end-to-end authorization management system.

7. Technical access – customer-focused and efficient provision of data

The VDA member companies already offer various technical access methods so that vehicle data is made available in a customer-oriented manner in compliance with legal requirements. All the companies support the ADAXO concept, which enables data – such as the jointly developed basic data set – to be obtained under FRAND conditions. In addition, the OEMs operate their own online portals through which companies can acquire data directly, based on B2B and B2C contracts. The Mobility Data Space (formerly the DRM "Datenraum Mobilität") will add another marketplace that offers, in particular, the possibility of obtaining data from many different sources swiftly, efficiently and with high transparency using standardized data connectors. A large number of VDA members already support this approach and are promoting its further expansion.

8. Third-party data access – security first

Today third parties can already be granted direct access to vehicle data and functions if they confine with the technical and legal requirements.

As development progresses, various vehicle manufacturers will offer the option of installing software from third-party providers in vehicles, subject to regulatory requirements (e.g., UNECE R155 on cybersecurity), certification aspects and the requirements for software update management systems (UNECE R156). To this end, guidelines should be developed in collaboration with the associations to provide a secure basis for the installation of third-party software in vehicles.

Fundamentally, though, only the company responsible for certifying the vehicle can approve software and manage vehicle resources (e.g., bandwidths for data transmission in the vehicle). When considering possible options or developments, all companies must give top priority to the safety of all road users.

This executive summary is supplemented by an in-depth technical document.

https://www.vda.de/en/News/publikationen/publication/adaxo--automotive-data-access---extended-and-open

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