
VDV-requirements 435-0 Internet of Mobility (IoM) – Grundsätzliche Aspekte / Basics aspects

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The automation and networking of industrial companies is an essential part of the modern economy. Within this framework, developments are driven worldwide which are known under the buzzwords digitalisation, industry 4.0 and IoT (Internet of Things). This is the basis for further developments such as Big Data and AI (Artificial Intelligence).

This VDV recommendation 435-0 gives an orientation on how these developments in public transport can be applied for operational automation and what effects this has on operational business processes.

Business processes require data exchange between systems in many places.

New business processes often only become possible through data collaboration between different systems.

There has been a change away from the dedicated provision of data for certain purposes towards the free provision of data without limiting the use and further processing of the data.

Existing technological platforms for the free and collaborative provision of data are e.g. DataWarehouse applications or also the VDV data turntables.

The VDV 435-0 first examines the opportunities for data collaboration in public transport and corporate cultural aspects, and then describes the possibilities of how a data broker in the form of a data broker enables the interaction of operational telematics systems.

The availability and performance of a data broker must be adapted to the use cases and the associated risk considerations. It goes without saying that a data exchange that is important for the core process and possibly time-critical requires a very high availability and performance of the data broker.

The VDV 435-0 is the prelude to a new VDV publication series which describes the data-driven application in public transport and provides a framework for the standardisation of this data (payload) and its structuring into topics and functions (topics).

The technical work is based on the results of the German research project DiMo-FuH ("Digital Mobility - Vehicle and Station"), which was funded by the Federal Ministry of Transport and Digital Infrastructure.

The VDV publication series is designed in such a way that it can be continuously expanded and adapted. The VDV Internet Forum (<https://forum.vdv.de>) serves this purpose, as in the further development of IBIS-IP (VDV 301-x).

The VDV publication series will be developed bilingually in order to include non-German-speaking users in the developments. Pure technical descriptions, as they are to be expected when defining the data, are only provided in English.

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