
VDV Report 1508 „Use of RFID to simplify operational processes“

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The commonly used procedures for maintenance, logistics and allocation of urban rail vehicles are, even though on a comparably low level, error-prone and often require manual rework by entering data via keyboard into the local enterprise resource planning system. Even with greatest care unintended insertions of faulty data and transcription error are hardly to avoid. In many cases components necessary for daily operation are not labelled or dirt makes the label unreadable.

RFID allows to take advantage of the digital transformation, making data capturing more uniform and simpler. Such systems are easily integrated into existing IT infrastructures and facilitate tracing of items. Furthermore they ease and complement the configuration and change management. Especially safety relevant components benefit from consistent supervision.

RFID is just one of the techniques for automatic gathering of data. Compared to the widespread optical techniques (1D and 2D barcodes) RFID systems offer advantages in rough environments that deteriorate labels due to dirt or wear. In addition, RFID gateways allow parallel acquisition of several transponders, shortening acquisition time.

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