Multifunctional apps for efficient operations

Logistics and maintenance – integrated software solution to optimise processes

Photo: ZEDAS GmbH

A core task of railway undertakings is the safe and timely delivery of goods to their destination. The quality of service is determined by smooth planning and execution of the logistics chain. The availability of locomotives and wagons is a prerequisite for achieving this goal.

■ The software specialist ZEDAS GmbH has combined the approach of a comprehensive view of logistics management and asset management in its product suite. The dispatching software for rail-freight transport zedas®cargo facilitates and automates not only operational but also commercial processes. zedas®asset is a software for the asset management of rail vehicles and rail infrastructure, that enables predictive maintenance.

This minimises unplanned downtime and thus increases the safety and availability of assets. The use of zedas®cargo and zedas®asset combines and coordinates logistics and maintenance processes. If a scheduler plans vehicles for a rotation, he can see at first glance which vehicles are available and which are due for immediate maintenance. If a vehicle is scheduled for a rotation that is longer than the remaining mileage before the next scheduled maintenance, conflicts are immediately displayed and another vehicle can be used ad hoc. During operation, the vehicle's mileage is automatically and continuously updated, transferred to all components and used for performance-dependent maintenance planning and deadline calculation.

Simple app – great effect

Locomotive drivers can directly record damaged wagons on the spot via the app. The damage data including the damage code, photo documentation, the location and consignment data are transferred to the maintenance system without media disruption. The data pool is available for further planning and processing in the workshop. The feedback on workshop orders and the processing of checklists takes place electronically and without media disruption via the app. The maintenance delivery notification by the workshop (ECM 4) as well as the approval to return to operation by the fleet manager (ECM 3) is carried out digitally in a complete and audit-proof manner, and the vehicles are immediately available for scheduling.

The efficient interaction of logistics and maintenance processes allows railway undertakings to take advantage of a number of synergies. Vehicles can be scheduled for maintenance while their rotations can be optimised at the same time, verbal coordination between the specialist departments is reduced to a minimum and the obligation to provide proof and documentation is significantly simplified. An efficient end-to-end working method allows cost-saving potentials to be tapped. **ZEDAS** |⚑ **CityCube Berlin | 100**