Digitalisation of railway processes

App for train dispatch wins German Mobility Award 2020

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ZEDAS GmbH brings the German Mobility Award 2020 to Brandenburg. Under the motto "Smart travel: together – interconnected – mobile." the "Germany – Land of Ideas" initiative and the Federal Ministry of Transport and Digital Infrastructure were looking for innovative flagship projects and creative ideas that use the potential of digital connectivity for the mobility of the future. The zedas®cargo Train Check received an award as part of the competition.

Efficient logistics management in rail freight transport requires railway undertakings (RUs) to have integrated processes that save time and costs. Thanks to zedas®cargo, the software solution for rail logistics, digitalisation already begins with train dispatching: With the zedas®cargo Train Check app, wagon masters can carry out the train check directly on the train via smartphone or tablet. Under the title "App speeds up train handling from A to Z", the project convinced the jury of the German Mobility Award in all three competition criteria:

The Train Check solves an everyday challenge of RUs and specifically uses the new possibilities of digitalisation.

Degree of realisation and implementation strength

The app was launched in 2019 and is a role model. If the efficiently designed train dispatching is scaled up, there will be high savings potential for RUs.

Networking

The zedas®cargo Train Check promotes networking on several levels. Train dispatching via app with numerous, standardised interfaces instead of pen and paper speeds up data exchange between RU employees and between RUs and external parties. The networking of individual processes within the logistics chain enables efficient management. Last but not least, the app supports RUs in international rail freight transport in complying with country-specific regulations.

Train dispatching as part of a whole

Train Check significantly shortens and simplifies very time-consuming tasks in rail freight transport. It automates manual, recurring work within the scope of train check. RU employees - whether in the control centre or in the field - are significantly relieved.

Digitally supported operations in the zedas®cargo Train Check:

- Train control, including retrieval of data on pre-booked wagons, TAF interface to the AVV Broker and new entry of wagons

- Registration of damaged wagons, including mobile documentation and reporting via the AVV-Broker (TAF interface)

- Brake calculation: Determination of possible brake positions, calculation of braking weights and braking percentages taking into account the requirements of planned train paths.

- Document creation and retrieval (wagon list, braking slip) directly in the driver's cab

With the help of the zedas®cargo Train Check app, train dispatch is carried out directly at the train with the convenience of a smartphone

- Data exchange between RUs and train registration to infrastructure managers via the interfaces HERMES and TCM

The app clearly displays a wealth of information that the wagon technician needs for the train check. As a modular component in the large zedas®cargo system, Train Check has been dovetailed accordingly: in contrast to stand-alone apps, it takes over all data from previous processes, such as the transport order, and uses it for all downstream steps. This means that data is largely only confirmed; manual entry is the exception. All changes are available in real time in the central system.

About ZEDAS

ZEDAS GmbH develops software for the logistics management of rail freight transport and the maintenance management of vehicle fleets and railway infrastructure. With the app for train dispatching, another piece of the puzzle has been digitised and incorporated into the continuous flow of information. Three decades of industry-specific know-how on the part of the IT company went into its development. As a co-initiator of the project, a customer of ZEDAS GmbH provided important impulses directly from practice.

The German Mobility Award 2020

There were over 300 applications for the Innovation Award throughout Germany. A top-class jury of experts chaired by Steffen Bilger, Member of the German Bundestag, Parliamentary State Secretary to the Federal Minister of Transport and Digital Infrastructure, selected the ten winners of the competition. "Deutsche Bahn" and "Verband Deutscher Verkehrsunternehmen" (VDV = Association of German Transport Companies) are partners of the competition.

On Demand Webinar

ZEDAS GmbH took the award of the Train Check with the German Mobility Award as an opportunity to hold a webinar. The webinar shows how to digitally carry out a train check and the automatic brake calculation as well as how to create a wagon list and a braking slip - always taking into account the specific train path requirements, even across countries. ∎

Further links (adapted by ZEDAS):

Video German Mobility Award:
https://youtu.be/n8w9FesOcIs