

# DIGITIZATION ENABLES MORE EFFICIENT PROCESSES

Pay a visit to Zedas InnoTrans booth

ZEDAS

GERMAN SOFTWARE SPECIALIST ZEDAS IS AN INNOVATIVE PROVIDER OF BRANCH SPECIFIC SOFTWARE SOLUTIONS FOR THE ASSET MANAGEMENT OF ROLLING STOCK AND RAILWAY INFRASTRUCTURE AS WELL AS FOR THE LOGISTIC MANAGEMENT OF LONG-HAUL AND SHUNTING TRAFFIC. WITH MORE THAN 28 YEARS OF EXPERIENCE AND A SPECIALISED, POWERFUL NETWORK, ZEDAS SUPPORTS PROFESSIONAL CUSTOMERS WORLDWIDE.



## Efficient asset management for rolling stock and railway infrastructure

The analysis, documentation and predictive maintenance are particular performance characteristics of the asset management software solution zedas®asset. The condition data derived in operation is used to determine critical conditions. This makes it possible to derive maintenance data. Via the complete recording of all maintenance measures, what used up time and materials, as well as condition information from infrastructure objects or vehicles, a comprehensive asset history is created. History and current data when combined allow the future condition to be derived, and enable a condition-oriented maintenance. Via mobile application all processes are assisted device-independent. The solution supports your continuous improvement process, increases availability and reduces operating costs.



## Know tomorrow's failures today

In the field of advanced analytics zedas®asset enables with integrated diagnosis and prognosis predictive maintenance. Solutions like the Track Analyser for railway infrastructure show deviations and trends. Significant conditions changes can be detected with positional accuracy by automatically evaluation. Prognosis functions for the status and remaining useful life support the detailed budget planning and strategic investments.

In the field of rolling stock zedas®asset e.g. allows the prognosis of wheelset wear based on operating and historic data (e.g. determination of reprofiling time). Or the solution forecasts the failure rates of the relay systems in train doors. The relays responsible for the "green loop" system provide information on whether all of the doors on the train have been closed. In the event of a door fault, the train will come to a standstill, which also stops the following trains. To reduce the delays and the resulting costs to a minimum, the trains run with diagnostic equipment and a direct link to zedas®asset.

## Software and support for shunting traffic

The cost and efficiency pressures that exist in rail freight services are greater now than ever. Customers, dispatchers and shunters require access to the current process data at the same time to ensure optimum operating procedures. The branch software zedas®cargo is a tried-and-tested solution to design operating procedures in such a way that all processes are optimally interwoven. There will always be an overview of arriving and departing trains, shunting movements, loading point operations, change-over processes, track occupancy, and this enables the optimal control of the procedures. zedas®cargo, allows to plan, monitor and document the shunting traffic more quickly, transparently and efficiently.

## Cost advantages and employee satisfaction through optimization

The latest developments focus on zedas® cargo modules that solve quantitative

optimization tasks. The result for the customer will be a tremendous time relief in resource planning as well as significant cost advantages. The integrated optimization module enables an immediate reaction to short-term changes and unplanned events related to the planning (such as additional orders, failure of locomotives, illnesses, etc.) and quickly delivers a new optimal solution for the changed conditions. The new features are an enormous relief for the staff planners and offer additional contracting potential for the railway undertaking, since they can deal with customer inquiries much faster and more flexibly. Moreover, experience shows that resources are used more evenly. Another top functionality makes it possible for employees to enter requests for a change directly via app and to put them into an exchange. The solution independently determines appropriate solutions based on the stored rules and presents them to the planner for approval, where feedback can be made immediately. Employee satisfaction is greatly enhanced by this new and very easy way of influencing personal service scheduling.

## Slot management in ports

Increasing transshipment volumes and the many parties involved in the process call for a high degree of coordination between the port authority, railways and terminals to enable the effective use of track capacities. Based on the many years of expertise as an industry partner, ZEDAS has developed a software solution which digitalises, synchronises and documents all the railway processes in the harbour. As a result, the track capacities will be optimized. The traffic flow in the port is improved and unnecessary waiting times are minimised. At the same time, the efficient solution integrates all the partners involved in the process and ensures transparency and an accurate basis for billing.