

TRANS PUBLIC TRANSPORT
FORMING

BOOM

BOOM BUS & RAIL SOLUTIONS

Digital solutions for efficient
and reliable operations

DIGITAL

INTEGRATED

FUTURE-PROOF



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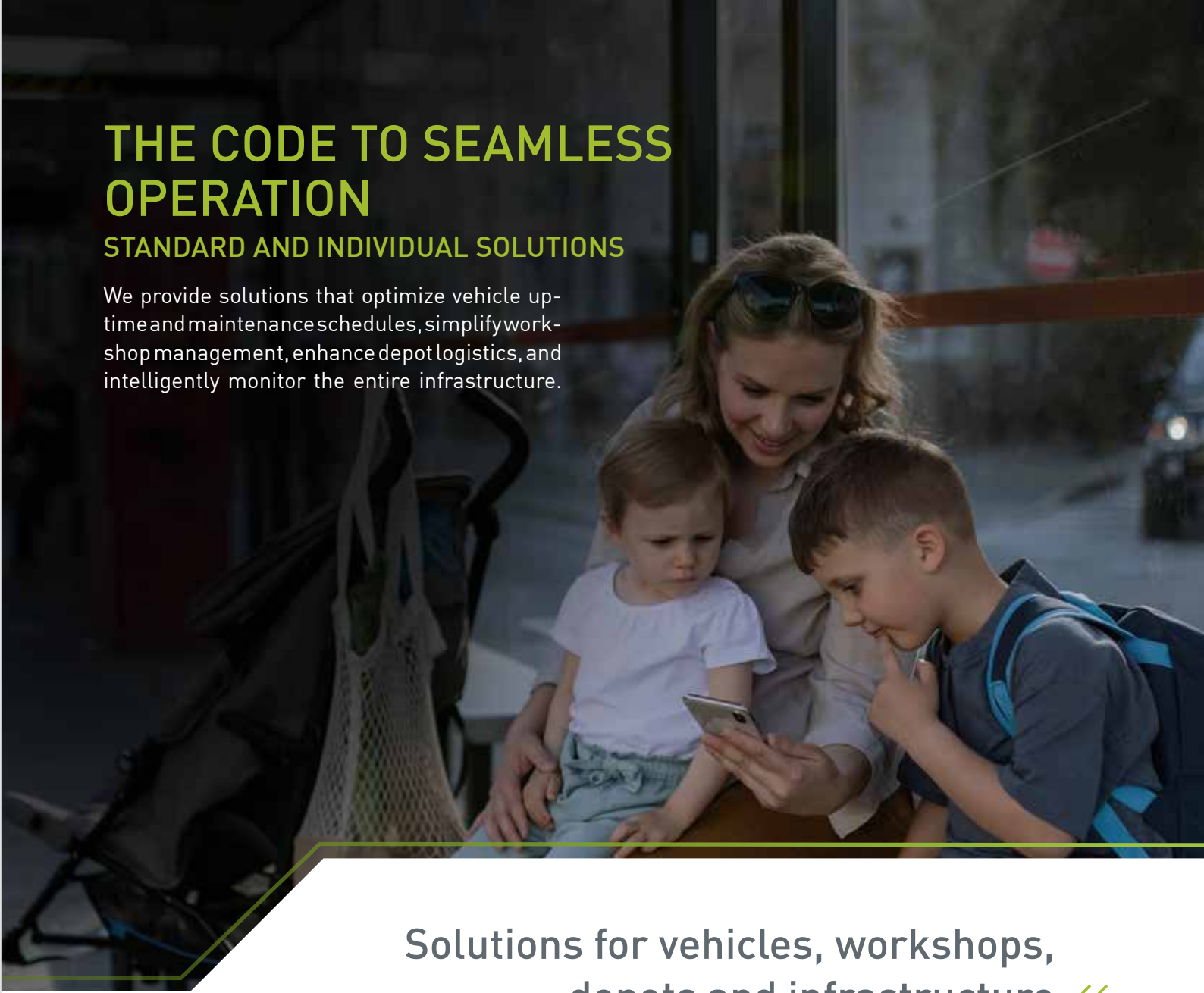
Boom Software

What you need to know about Boom

THE CODE TO SEAMLESS OPERATION

STANDARD AND INDIVIDUAL SOLUTIONS

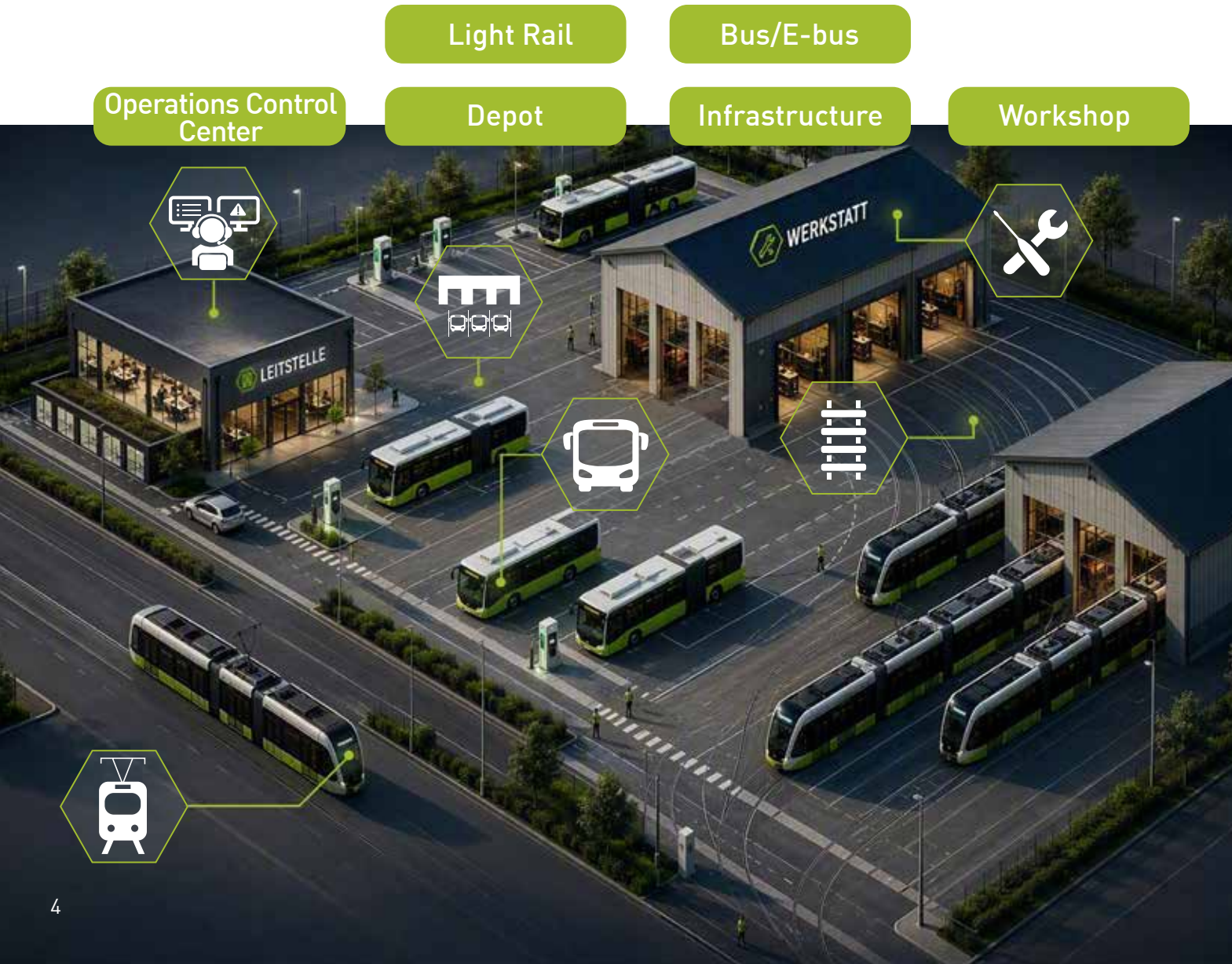
We provide solutions that optimize vehicle up-time and maintenance schedules, simplify workshop management, enhance depot logistics, and intelligently monitor the entire infrastructure.



Solutions for vehicles, workshops, depots and infrastructure <<

End-to-end & everything from a single source.

WHO BENEFITS FROM THIS?



ONE SOLUTION. ENDLESS POSSIBILITIES.

DIGITAL SOLUTIONS FOR SUSTAINABLE PUBLIC TRANSPORT

Whether dealing with rail-bound vehicles such as light rail, trams, or metros, or managing bus operations and related infrastructure, our Boom Bus & Rail Solutions address every aspect. This all-inclusive solution en-

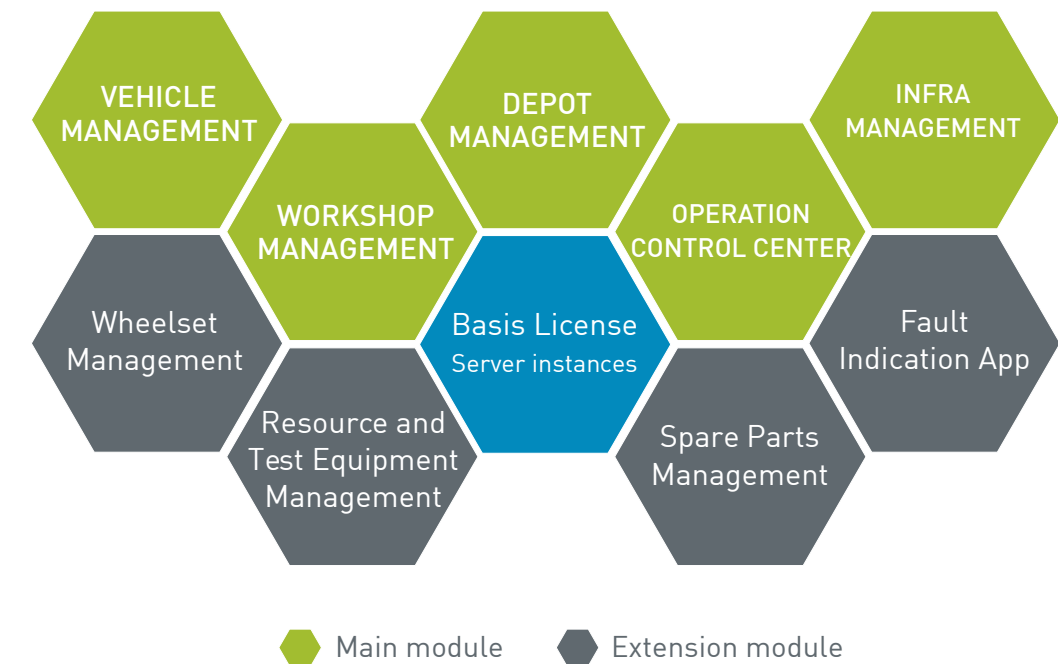
ures seamless integration of vehicle management, workshop management, depot management, communication hubs, and infrastructure management into a modular system, complete with tailored additional modules.

**START TODAY.
SCALE TOMORROW.**
On-Premises or in the Cloud

Use exactly the functionality you need today and expand your solution as your requirements evolve.

No system hopping. No limitations.

TRANSFORMING PROCESSES INTO DIGITAL SOLUTIONS

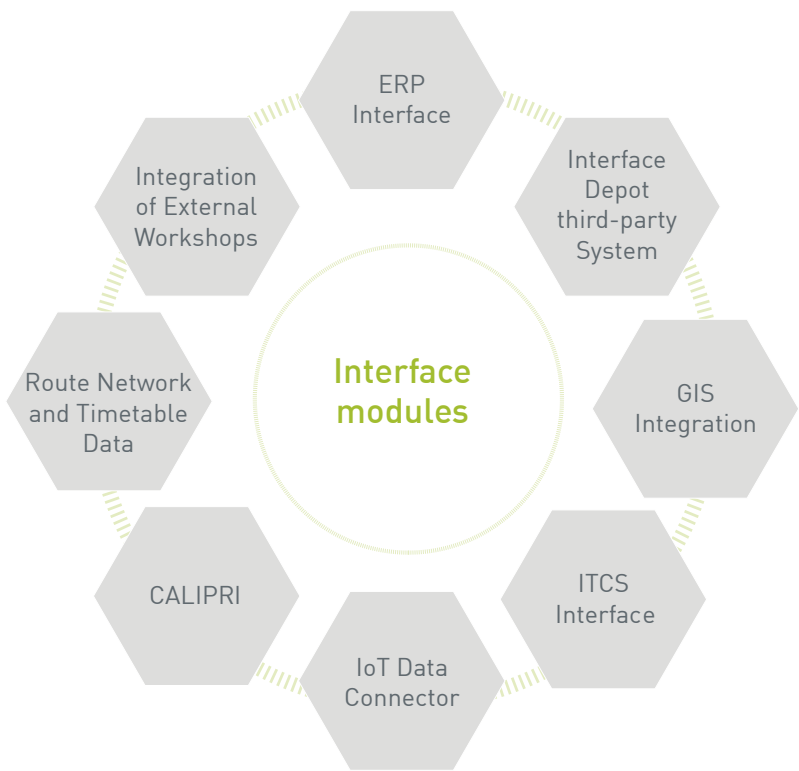


SEAMLESS SYSTEM
INTEGRATION WITH BBRS

The Boom Bus & Rail Solutions all-in-one package provides extensive asset and maintenance management for both vehicles and infrastructure, along with depot and reporting management.

Its modular, end-to-end design can be tailored to specific needs through our Total Customizing approach. Additionally, we offer clients the option to integrate with third-party systems through additional interfaces for even greater integration.

INTERFACES TO THIRD-
PARTY SYSTEMS



Do you need interfaces that are not listed here?

Reach out to us, and we will gladly create a custom interface to meet your specific needs.

REDUCING EFFORT. ACCELERATING PRODUCTIVITY.

With a structured implementation approach and secure data migration, we accelerate your path to productive operations.

PROJECT DELIVERY & SUPPORT



Personal guidance throughout all project phases, from preparation to successful go-live and day-to-day operations.

- Dedicated project leadership and clear communication channels
- Workshops, alignment sessions, and hands-on process consulting
- Collaborative go-live preparation to ensure a smooth transition

DATA ASSESSMENT & PREPARATION



Existing data is analyzed, cleansed, and structured to ensure optimal use within Boom Bus & Rail Solutions.

- Analysis of data sources, structures, and data quality
- Data cleansing, mapping, and migration planning

LEGACY DATA MIGRATION



Relevant operational and historical data is selectively migrated to ensure information remains available and accessible.

- Secure transfer of business-critical data and documentation
- A validated data foundation for a successful go-live



Faster implementation



Higher data quality



Efficient use of resources

Making implementation more predictable, reducing effort, and accelerating time to value.

VEHICLE MANAGEMENT

FOCUS ON THE VEHICLE



URBAN TRANSPORT-SPECIFIC ASSET MANAGEMENT FOR

VEHICLES COMPONENTS INTANGIBLE ASSETS

Optimized Maintenance Planning

(corrective | preventive | condition-based | user-based)

Efficient planning of workshop visits based on operational and maintenance requirements, including predictive calculation of future maintenance schedules.

Complete Traceability

The digital vehicle record documents all relevant events throughout the lifecycle of a rail vehicle, ensuring full traceability and supporting ECM-oriented processes.

A 360° View of Your Vehicle

Access all technical, operational, logistical and commercial vehicle data, including component information, from a single central source.

Structured Damaged Vehicle Management

Standardized damage codes enable accurate capture of defects and incidents, providing the foundation for efficient maintenance planning and condition monitoring.

Seamless Integration with Third-Party Systems

Connect ERP systems and import wheelset measurement data, mileage information, operational counters, fault reports and other operational data through standardized interfaces.

YOUR BENEFITS AT A GLANCE

Vehicle Management combines operational efficiency with strategic transparency.



VEHICLE MANAGER

- Optimal maintenance planning
- Documentation in accordance with applicable standards
- Life cycle cost optimization
- Continuous thematic and technical development of the solution
- Mean time to repair optimization



FLEET MANAGER

- Vehicle availability up to 100 %
- Minimization of downtime
- Increase in customer satisfaction



EXECUTIVE BOARD

- Customized reports as the basis for investment decisions
- Pilot workshop provides investment security
- Cost savings through process optimization of up to 20 %
- Data foundation for risk management



INFORMATION TECHNOLOGY

- Continuous development of the solution by Boom (both functionally and technically)
- Cloud or on-premises deployment options
- Scalability
- Integration with third-party systems
- ISO 27001:2022 certification
- Resource-efficient implementation process

WORKSHOP MANAGEMENT

THE DIGITAL BACKBONE OF YOUR WORKSHOP



STREAMLINING AND DIGITALIZING THE WORKSHOP PROCESS

The Paperless Workshop

From job creation and planning through to mobile execution and digital documentation, Workshop Management supports seamless, largely paperless maintenance workflows, helping teams work more efficiently and consistently.

Focus on What Matters Most

Optimized information and documentation workflows reduce administrative effort and ensure that crucial information is available exactly when and where it is needed.

For Integrated and Independent Workshops as well as Mobile Service Teams

Workshop Management supports a wide range of maintenance organizations in reducing turnaround times, making better use of available capacity, and increasing overall productivity.

Flexible Licensing Without User Limits

A function-based licensing model provides flexibility and cost predictability, regardless of the number of users.

YOUR BENEFITS AT A GLANCE

Workshop Management brings together efficient maintenance processes, optimized resource planning, and complete operational transparency in a single solution.



WORKSHOP MANAGER

- Improved planning and traceability
- More efficient resource utilization
- Optimized capacity and workload planning
- Mobile access to relevant information
- Reduced stabling and turnaround times



MAINTENANCE TECHNICIANS

- Reduce administrative workload by up to 20%
- Shorter waiting times
- Mobile work order management
- Integrated material and time recording
- Access to real-time information
- Efficient digital documentation



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DEPOT MANAGEMENT

Plan operations proactively –
Maximize resource efficiency.
Minimize operational complexity.



PROCESS-DRIVEN WORKFLOWS FROM ENTRY TO REDEPARTURE

Transparency and control

Our system manages all key functions, providing full transparency and security for your processes. Keep track of your operations in real-time – across buses and rail vehicles and at all depots: All in one single solution, designed to meet your needs.

Optimize your operational processes

Benefit from efficient management of vehicle entry, service processes, optimal stabling planning, and deployment planning. Receive all relevant information precisely where and when it is needed.

Fully automated stabling planning and vehicle routing

Stabling locations and rotations are calculated and suggested in the software solution based on operational criteria, vehicle attributes, conditions, planned maintenance, and potential infrastructure disruptions. This ensures optimal vehicle deployment even with last-minute changes.

YOUR BENEFITS AT A GLANCE

Manage depot operations as one continuous process

Shunting staff

Retrieving conditions of transport

Dispatcher

Precise planning and allocation of vehicles and quick adaptation to changes in operating procedures

Vehicle driver

Shorter waiting times and flawless condition of the vehicles

Workshop manager

Automated monitoring of maintenance requirements and times as well as efficient use of manpower and materials

Vehicle engineer

Smooth implementation of maintenance processes

Depot manager

Better monitoring and coordination of all operational processes and immediate access to operating data

Service personnel

Reduction of downtimes

THE RIGHT INFORMATION. AT THE RIGHT TIME.
IN THE RIGHT QUALITY. IN THE RIGHT PLACE.



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INFRASTRUCTURE MANAGEMENT

INTELLIGENT MANAGEMENT OF STATIONS, SWITCHES, TRACKS, ETC.



AVAILABILITY & RELIABILITY OF INFRASTRUCTURE

Digital Management of Your Railway Infrastructure

Manage railway infrastructure assets and their components in a structured and centralized way, including track, substructure, signalling systems, power supply, service facilities, and stations.

A 360° View of Your Infrastructure Assets

Technical data, asset conditions, maintenance records, and documented activities provide a complete picture of your infrastructure, supporting informed decisions throughout the entire asset lifecycle.

Optimized Maintenance Planning

Plan and monitor inspections and maintenance activities efficiently. Potential issues can be identified early and translated directly into corrective actions and work orders.

Integrated Work Management

Personnel, materials, tools, and schedules are coordinated within a single process. Relevant information is provided directly to field teams, while completed work, measurement results, and resource usage are fed back automatically, ensuring transparency, complete documentation, and a reliable basis for future planning.

YOUR BENEFITS AT A GLANCE

For the efficient management and maintenance of railway infrastructure.



INFRASTRUCTURE MANAGER

- Increased infrastructure availability and reliability
- Real-time visibility of infrastructure assets
- System-supported condition monitoring
- Early detection of weaknesses and predictive insights
- Maintain complete asset documentation



MAINTENANCE ENGINEER

- Reduce administrative workload by up to 20%
- Minimize waiting times
- Mobile work order management
- Integrated material and time recording
- Access real-time information
- Fast, efficient, and paperless documentation



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OPERATIONS CONTROL CENTER

**CAPTURE DISRUPTIONS CENTRALLY.
DISTRIBUTE INFORMATION EFFECTIVELY.
ACCELERATE PROCESSES.**



END-TO-END DIGITAL INCIDENT MANAGEMENT.

One digital workflow from reporting to resolution.

The Right Information, at the Right Time, in the Right Place

Capture incidents quickly, route them efficiently, and manage them with transparency. Operations Control Center consolidates all reports in a central platform and automatically steers the flow of information to the appropriate stakeholders. Clear responsibilities, faster response times, and complete traceability ensure an efficient handling process from start to finish.

Event-Based Incident Management

Automated distribution lists reduce manual communication efforts and ensure that information reaches the right people. Related reports can be grouped into a single event, providing a clearer overview and enabling more efficient resolution.

-  Create complete and compliant incident reports
-  Centralized management of role-based reporting templates
-  Full traceability throughout the entire reporting process
-  Automatic status updates for report creators

YOUR BENEFITS AT A GLANCE

Full visibility and traceability from incident reporting to resolution.



OPERATIONS CONTROL CENTER MANAGER

- Full visibility of incidents, deviations, and processing status
- Automated distribution of information to relevant stakeholders
- Faster response times through clear responsibilities and status updates



INCIDENT REPORTER

- Support for quick and easy incident reporting
- Automatic routing of information to the right people
- Full visibility of processing status at all times



TRAFFIC CONTROLLER

- Associate all related reports with a single event
- Link photos, reports, feedback, and related information to a single event
- Rapid information sharing with all relevant departments through distribution groups



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MOBILE FAULT INDICATION APP

Fast Incident Reporting – Simple, Mobile, and On-Site



Vehicle operators can record damage, faults, and other incidents directly at the vehicle. The mobile app guides users through a structured reporting process, enabling reports to be created quickly and efficiently anytime, anywhere, and in just a few steps.

EVERY REPORT REACHES ITS DESTINATION EFFICIENT COMMUNICATION THROUGHOUT THE REPORTING PROCESS

The mobile incident reporting app guides users through the reporting process quickly and intuitively. Relevant vehicle and component data, damage categories, and operational restrictions are available for selection, ensuring consistent and accurate reporting. Vehicles can be identified using a QR code,

while GPS position data and photos can be added instantly. Completed reports are automatically transferred to the Operations Control Center Module and distributed to the responsible stakeholders. Existing reports are immediately visible, helping to avoid duplicate entries and improve coordination.



Platform Independent
For Android and iOS



Flexible Deployment
Cloud or on-premises



Manufacturer Independent
Suitable for vehicles from different manufacturers



Can be Extended as Required
Flexible extension of functions and organizational processes



Open Interfaces to Third-Party Systems
Enhancing interoperability and integration capabilities



Highly Scalable
Designed for large user bases and organizations
(>40,000 active users)



FLEXIBLE AND SCALABLE CUSTOMIZABLE TO YOUR ORGANIZATIONAL AND OPERATIONAL REQUIREMENTS

The application's flexible architecture allows it to be extended both functionally and organizationally, making it suitable for a wide range of operational scenarios. Features such as digital handover logs, shift planning, and process-specific extensions support more efficient workflows and collaboration. The solution can also be adapted to existing IT infrastructures and business processes, ensuring a tailored fit to the individual needs of each organization.

NORM-BASED WHEELSET MANAGEMENT

Optimizing Wheelset Lifecycles through Condition Monitoring in accordance with EN 15313



Boom Wheelset Management supports the monitoring, assessment and optimization of wheelsets throughout their entire lifecycle in accordance with EN 15313.

As an extension module for Vehicle Management, it provides complete visibility into wheelset condition, reduces manual effort and supports informed maintenance and lifecycle decisions.

WHEELSET DATA WHERE YOU NEED IT. WHEN YOU NEED IT. MEASUREMENT DEVICE INTEGRATION

The extension module enables the automatic transfer of measurement data from digital measuring devices and electronically submitted measurement reports. Measurement data is assigned directly to the corresponding wheelset and centrally documented, creating a reliable foundation for condition monitoring

and maintenance planning.

Predefined threshold values support rapid condition assessments and provide early indications of required maintenance actions. This reduces manual effort, improves data quality, and accelerates maintenance processes.



Holistic Mapping

Comprehensive digital representation of all wheelsets



Wear Forecasting

Improved planning through reliable wear predictions



Interfaces to Measuring Devices

Flexible integration with various measurement systems



Automated Data Import

Automatic import and structured assignment of measurement data to each wheelset



Predefined Threshold Tables

Threshold values provide insights into remaining service life



Full Traceability

Installation and maintenance documentation at asset and component level

PREDICT WEAR. PLAN AHEAD. FROM WEAR ANALYSIS TO MATERIAL REQUIREMENTS



Gain deeper insight into wheel wear and remaining service life through intelligent wear forecasting. By combining measurement data with operational wear patterns, maintenance activities can be planned more accurately, wheel life can be utilized more effectively, and replacement materials can be procured at the right time.

FUTURE-ORIENTED & SAFE: READY FOR ECM

Although urban public transportation is not covered by the ECM Regulation (EU) 2019/779, we have deliberately chosen to equip our Boom Bus & Rail Solutions to comply with ECM regulations. This ensures that compa-

nies will be prepared to operate in accordance with the regulation if it is expanded in the future, without incurring additional costs for ECM-supporting software solutions.

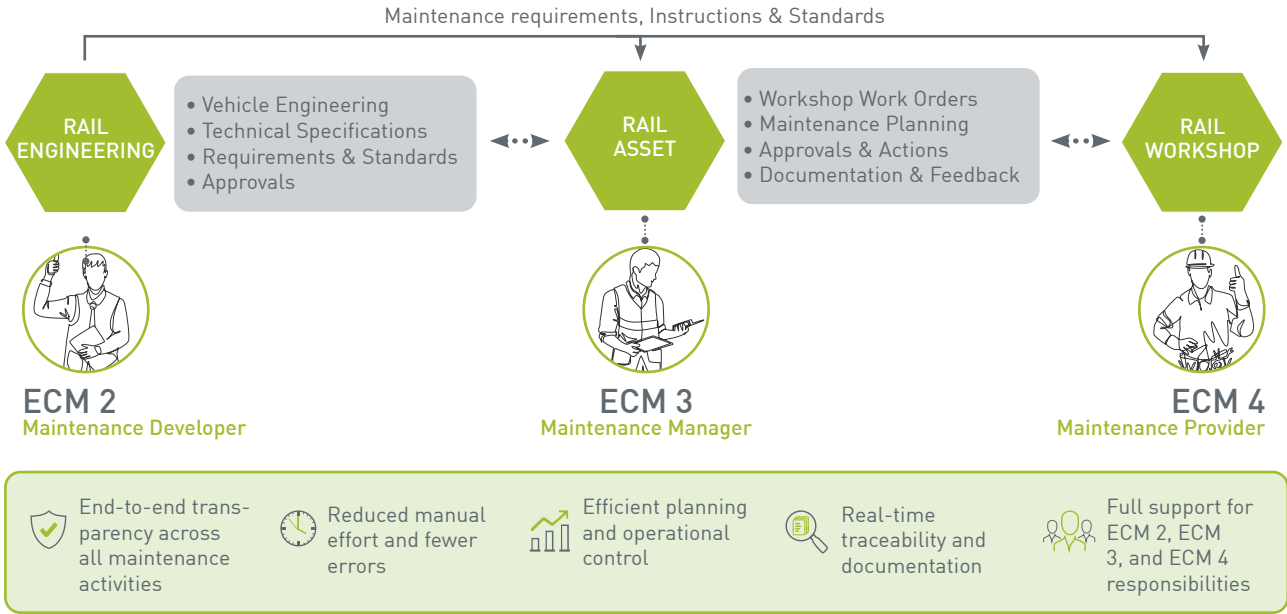
More about the ECM regulation can be found on our website:



rail.boomsoftware.com/en/ecm-standards

ECM PER DESIGN

Digital processes for safe, compliant, and efficient rail operations.



PROVEN ACROSS EUROPE. RELIED ON EVERY DAY.



ROLLING STOCK, TROLLEYBUS-ES AND INFRASTRUCTURE WELL UNDER CONTROL

© Salzburg Linien Verkehrsbetriebe GmbH

From stand-alone solutions to a complete solution

Salzburg Linien Verkehrsbetriebe GmbH aims to enhance user-friendliness and process orientation through a comprehensive software solution. Previously, needs were addressed by individual partial solutions, leading to a very heterogeneous system landscape and complicating central control.

Therefore, Salzburg Linien Verkehrsbetriebe GmbH is implementing standard software for the maintenance of vehicles and infrastructure. This software will integrate with existing systems like SAP as well as other systems, such as personnel management. It

also includes specialized solutions for reporting by vehicle operators or special services that use sensors to report various conditions. This comprehensive software solution will create a central platform, allowing for the consolidation and efficient management of all relevant information and processes.

Boom's complete solution allows for better control of processes and faster response when needed. This results in increased productivity and a significant improvement in our service quality.

COMPREHENSIVE DIGITALIZATION FOR MAXIMUM EFFICIENCY

© CFL

Safety and quality: An essential standard throughout the entire process

The Société Nationale des Chemins de Fer Luxembourgeois (CFL) moves over 25 million passengers and approximately 2,440 million ton-kilometers of freight each year with a fleet of 220 vehicles.

Previously, outdated manual processes hindered the efficiency and availability of their fleet. To address this, CFL implemented a digital maintenance management system that greatly enhances workshop planning. This system allows for seamless tracking of all vehicle maintenance activities and the tools utilized.

With this solution, workshop managers can effectively allocate resources to specific tasks, ensuring that maintenance is performed exclusively by qualified personnel. Additionally, these workers are equipped with the necessary tools and designated work areas.

With the digital maintenance solution, CFL can track who carried out each maintenance task on the vehicle and which tools were used, providing a comprehensive maintenance record.



COMPLETE LIFECYCLE MANAGEMENT OF ROLLING STOCK

© National Express Rail GmbH

Central master data administration and consistent documentation

Reliability and fleet availability play a central role at National Express Rail GmbH in order to ensure uninterrupted operations. Their vehicles are maintained by external workshops.

At National Express, maintenance management is handled digitally using a solution from Boom Software. The core elements include central master data administration and comprehensive documentation of maintenance activities. In addition to fundamental data such as UIC and serial numbers, commissioning date and manufacturer, all built-in meters on the vehicle are logged. The en-

tire structure of the components, including their master data, is also fully documented. This allows the company to maintain a comprehensive overview of the condition of the vehicles and generate maintenance orders based on both the manufacturer intervals and condition reports.

National Express Rail GmbH always has complete and up-to-date life cycle files for its vehicles. In the event of incidents, the company can react quickly and thus promote trouble-free operation.



ECM COMPLIANCE FOR FREIGHT TRANSPORT, LIGHT RAIL, AND TRAMS

© Stern & Hafferl

Comprehensive digitalization initiative for vehicle maintenance

Stern & Hafferl Verkehrsgesellschaft m.b.H is implementing a comprehensive digitalization strategy for the maintenance of its rail vehicles. The goal of this initiative is to fully and efficiently digitalize the entire ECM process. This includes all areas from technical documentation and planning to scheduling and execution of maintenance activities.

By extensively digitalizing vehicle and component management, precisely capturing and tracking faults, and seam-

lessly integrating maintenance due-date calculations into maintenance planning, the company aims to enhance efficiency and ensure the quality of maintenance measures.

The use of Boom Bus & Rail Solutions ensures a modern, transparent, and effective management of all maintenance processes – from planning to vehicle recommissioning. This approach minimizes vehicle downtime to the greatest extent.

EXTENDED EXPERTISE FOR YOUR PROJECTS

OUR JOINT VENTURES

Together with our joint venture partners, we expand our expertise in vehicle and component testing, infrastructure management, and track construction. By combining our digital know-how with the domain expertise of our partners, we deliver specialized solutions tailored to the needs of the rail industry.



INFRASTRUCTURE

voestalpine **DIGITAL TRACK MANAGEMENT**

A joint venture between voestalpine Railway Systems and Boom. It focuses on the digitalization of railway infrastructure maintenance. The solution supports digital asset management, condition-based maintenance, real-time data availability, and complete traceability of infrastructure assets, components, and maintenance activities.



Predictive Maintenance



Digital Twin



Condition Monitoring



Learn more



TRACK CONSTRUCTION

RAILium **MACHINE MANAGEMENT**

A joint venture between Rhomberg Sersa Rail Group and Boom. RAILium supports the efficient operation of track construction machinery by connecting all relevant processes within a single platform. The solution creates seamless workflows and supports the effective management of ECM responsibilities.



Machinery Management



Resource Planning



Competence Management



Transport Management



Learn more



TESTING FACILITIES

INFRATRACK **SOLUTIONS GMBH**

A joint venture between PJ Messtechnik and Boom. INFRATRACK provides a unique testing and innovation environment for railway vehicles, components, and infrastructure. Modern testing methods, real-world operating conditions, and digital technologies create ideal conditions for development, testing, and validation.



Vehicle weighing



Stabling tracks for rail vehicles



Infrastructure for mobile maintenance and service work



Learn more

BOOM SOFTWARE

30 years of expertise in digital transformation for complex processes



Established
1995



Employees
100



Turnover
15 million



Certification
ISO 27001:2022



Trusted by Industry Leaders across
Rail & Public Transportation
Manufacturing Industry
Service Management



Joint Ventures
voestalpine Digital Track Management GmbH
(together with voestalpine Railway Systems)
INFRATRACK Solutions GmbH
(together with PJ Messtechnik GmbH)
RSRG & BOOM GmbH
(together with Rhomberg Sersa Rail Group)



Headquarters
Leibnitz, Austria

Offices
Graz, Austria
Oldenburg, Germany

MORE THAN SOFTWARE.

EXPERIENCE YOU TRUST. PARTNERSHIP YOU VALUE.



EXPERTISE

- 30+ years of experience in digitalizing rail processes
- Deep industry knowledge and trusted partnerships
- In-depth understanding of rail-specific regulations, standards, and requirements



TECHNOLOGY

- FLEXIBILITY**
Standard and tailored solutions, modular design, and flexible customization through Total Customizing
- USER EXPERIENCE**
Integrated platform, responsive design, intuitive usability, and multilingual
- FUTURE-READY**
Cloud or on-premises deployment, scalable architecture



PROJECT & SUPPORT

- Rapid prototyping through dedicated pilot workshops
- Support for data analysis and data preparation
- Continuous enhancement of functionality and technology
- Professional support backed by experienced experts



RELIABILITY

- Strong international partner network
- High information security standards (ISO 27001 certified)
- Proven implementation approach designed to minimize resource demands

BOOM

TRANS_{PUBLIC TRANSPORT} FORMING

Scan
to learn
more



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