



DIGITAL TRANSPORT COMPANY



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A COMPLEX TELEMATICS SOLUTION FOR THE DIGITAL PUBLIC TRANSPORT OPERATOR OF THE FUTURE

Digital Transport Company is designed for cities, public transport operators, and regional authorities seeking to transform their mobility ecosystem into a fully digital, data-driven and operationally efficient environment. It is a modular platform that connects vehicles, infrastructure and control systems across all transport modes—rail (trains, trams, metro) as well as road-based public transport (buses, trolleybuses). The concept aligns with current mobility trends such as digitalization, sustainability, and cybersecurity, and complies with applicable European railway standards, including EN 50155.

Digital Transport Company combines onboard systems, dispatcher tools, cloud analytics and diagnostic modules into a unified architecture. The solution enables predictive maintenance (CBM), real-time fleet management, depot automation, energy optimization and integrated cybersecurity. With its open API structure, the platform is ready to interconnect with ERP systems, smart city data layers and third-party technologies.

Backed by measurable KPIs and full data transparency, the public transport operator becomes a true **mobility orchestrator** – delivering safer, greener and more reliable urban and regional transport services. Digital Transport Company is the backbone of tomorrow's intelligent, integrated and resilient mobility.

KEY FEATURES

- Modular architecture** – Covers the full life cycle of rolling stock and infrastructure—from operation and diagnostics to service and energy control.
- Data-driven operations** – Real-time dispatching, dynamic timetable adjustments and automated incident response.
- Predictive maintenance** – Online diagnostics, automated vehicle checks and CBM strategies reduce downtime and boost availability.
- Urban safety layer** – Incident tracking, emergency braking data, integration with first responders and smart stops for vulnerable users.
- Energy efficiency** – Real-time consumption monitoring, charging mode optimization, and ESG-compatible operation of lines and fleets.
- Cybersecurity layer** – Vulnerability management, incident response, real-time SOC monitoring and NIS2/NÚKIB compliance.

FUNCTION TABLE

Area	Key Functions & Capabilities
Operations	Real-time traffic management, dynamic route control, incident detection and response
Maintenance	CBM diagnostics, vehicle health monitoring, automated operating status reports
Depot	Digitized workflows, automated wash systems, resource planning (vehicles, staff, space)
Dispatching	Real-time control center, dynamic service rescheduling, event response, multimodal coordination
Urban Safety	Risk zone identification, incident localization, emergency communication protocols
Energy & Ecology	Consumption tracking, eco-driving support, network-level optimization
Cybersecurity	SOC monitoring, electronic subsystem visibility, vulnerability & incident management
KPI Management	Vehicle availability, timetable adherence, incident reduction, passenger safety
System Integration	Open-source middleware for integration with ERP, SCADA, GIS, AVLS, or municipal IT
Multimodal Support	Supports rail and road vehicles: trains, trams, metros, buses, trolleybuses