

EKE and Downer

Smart connectivity to harness the power of data

EKE and Downer, a trusted partnership, combines train automation solutions with asset management expertise and digital capabilities allowing organisations to leverage smart connectivity and harness the power of data.

Benefit from a 20-year partnership that combines EKE-Electronics' nearly four decades of rail technology expertise with 150 years of Downer's rail experience including 15 years of digital rail capabilities.

By implementing the EKE-Trainnet® Train Control and Management System (TCMS), you can breathe new life into legacy rolling stock, by seamlessly integrating new technologies with existing systems using its open, modular design, extending the life of your fleet by 15-20 years.

EKE's open-data policy enables real-time monitoring of data alerts. Combined with Downer's RTS Digital (powered by TrainDNA) platform, which then collects and analyses this data. Benefit from class-leading asset management to enhance and optimise your maintenance strategies.

RTS Digital's TrainDNA offerings ensures continuous improvement in train availability and reliability by receiving train data from the EKE-Trainnet® TCMS. Detailed diagnosis of issues reduces maintenance work lead time, drives safety

and supports critical analysis of faults, to help determine repair and maintenance cycles; thereby improving an organisation's overall operational performance.

This powerful partnership provides the opportunity to integrate a customer's train sub-systems with the EKE-Trainnet® TCMS solution. This in turn provides access to utilise Downer RTS Digital's modular TrainDNA platform for effective data-driven decision-making.



EKE-Trainnet® modules can be easily combined for a compact and efficient TCMS solution.

TrainDNA Asset Management Modules

1

Maintenance Management

Asset Management of maintenance activities and the related workforce planning.



2

Operational Intelligence

Real-time data, integrated from many sources (trains, maintenance facilities, operators).



3

Asset Intelligence and Analytics

The process of analyzing data and producing in-sights and



4

Robotics and automation

Remove manual tasks that are prone to human error, difficult to perform and time



5

Sustainability

Optimising real-time power consumption, work practices and track sustainability benefits.



EKE-Electronics Ltd.

EKE

For almost four decades, EKE-Electronics has been a proud supplier of train control and management system solutions for train manufacturers, operators, and integrators around the world. Providing tailored solutions for system integration, train automation, train communications, train diagnostics, and improvement. Offering a flexible business model tailored to customers' unique capabilities and resources. Our customised solutions provide the optimal balance of support and independence for train projects.

Downer



Downer has over 150 years' rail experience delivering innovative transport solutions. Today, we leverage our capabilities to offer rollingstock, infrastructure, rail systems, operation and maintenance, system integration, engineering innovations and digital and data solutions.

Across geographies, markets and economic conditions, the need to change and improve builds, maintenance practices and operations is increasing at pace. To support this transformational change, RTS Digital (powered by TrainDNA), is a full suite of rail-centric tools and capabilities, designed to provide class-leading performance and improve passenger outcomes.

Contact Us



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Case Study

Achieving 99.6 per cent availability for Australia's largest fleet of passenger trains – the 119 Waratah fleet sets.

Built and maintained by Downer, the iconic Waratah fleet, equipped with EKE-Trainnet® TCMS, stands as a flagship project that pioneered the world's first fully Ethernet-based trains. The Waratah fleet has consistently delivered an impressive 99.6 per cent availability, while significantly enhancing security, safety and accessibility.

The EKE-Trainnet® TCMS was later upgraded to integrate the European Train Control System (ETCS) Driver Machine Interface (DMI) into the existing driver display units.

EKE-Trainnet® TCMS solution and the use of Downer RTS Digital's solution-based platform powered by TrainDNA has allowed Downer to retrieve the relevant metrics and data points from the train (via the EKE-Trainnet® TCMS) and use this data to support enhanced operational and asset intelligence, to drive actionable insights.



EKE

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