

Maintenance Of Way Equipment

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WHY TELEMATICS?

If you're not leveraging railway telematics technology in your maintenance of way operations, you could be overlooking a crucial opportunity. ZTR Railway Telematics Solutions make it easier to do more work, more quickly — with less equipment and lower costs. See how you can get unparalleled visibility into equipment utilization, maintenance requirements, and production efficiency.

A successful telematics program can help equipment lessors **realize significant reductions in operational costs** while improving the customer experience. Let ZTR show you how.

Maximize Equipment Utilization



Get the most value out of each piece of equipment with unparalleled visibility. Enable real-time location and utilization information to rent more equipment, more often, so you can:

- · understand true equipment availability
- streamline delivery and return processes
- offer flexible rental contract terms

Enhance Rental Experience



Stay ahead of the competition and give the customers what they want. Equip telematics to elevate the rental experience and:

- provide complete equipment visibility to customers
- · help customers manage their leased equipment and build loyalty
- automate rental processes, improve customer service and remote diagnostics

Optimize Equipment Maintenance Processes



Advanced visibility for targeted maintenance plans and lower costs. By combining utilization information with advanced engine parameters and faults, you can:

- Plan maintenance based on actual need; shift towards predictive maintenance.
- · Increase lessee accountability.
- · Fewer, better prepared and more effective mobile repairs.

ANALYTICS AND INTEGRATION

Collecting data is important, but turning it into **valuable business insight for you and your customers** is the key to an effective telematics program. The **ZTR ONE i3 platform** is an intuitive, user friendly tool with standard or custom reports and dashboards. Used in conjunction with the **ZTR mobile app**, you can get insights where and when you need them. Where processes and business systems exist, **increase their effectiveness by integrating with the ONE i3 platform**.



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WORK WITH A TRUSTED INDUSTRY EXPERT







From versatile and robust hardware options for **all makes and models** of equipment, to targeted and rich insights, ZTR can deliver the **end-to-end solution** you need. We've been exceeding railway industry expectations for more than 30 years with our innovative technology.



1. Equipment and Device Integration

A telematics device from our broad portfolio of proven hardware can be paired with any and all equipment models in your portfolio. Installations are possible on the production floor and as retrofits in the field.



Off Track and Rubber Tire

- · Front end loaders
- · Back hoes
- Excavators



On Track and High Rail

- Hi-Rail Excavators
- Tampers
- · Ballest Regulators
- Spikers



Accessory Equipment

- Trailers
- · Light Towers
- Plows



2. Wireless Communications

ZTR has relationships with major carriers to leverage existing communication systems and ensure we stay ahead of the evolving communication landscape.



Cellular Options



Satellite Options



Communication Standards



3. Gateways and Data Center

ZTR deploys the latest in edge and cloud computing technology to maximize data security, throughput, storage and accessibility.



Third Party Security

Evaluations



Scalable, Cloud Based



4. Service Delivery and Network

The ZTR ONE i3 platform includes a variety of features including mapping, geofencing, fleet management, alerts and faults, maintenance planning and analytics. Use internally and as a value added service for your customers.



User Friendly Portal, Quick Response Time, Mobile App



Advanced Analytics



Role Based Security



Integrates with Existing
Business Systems



5. Support, Processes and People

ZTR is more than a supplier. We're a partner committed to advancing your digital strategy at every stage – from collecting data, acquiring insights and realizing long-term benefits.



Equipment Review and Program Scoping



On-site Surveys, Installation
Support and Instructions



Customer Support, Fleet Health and Remote Updates

CHOOSE FROM A VARIETY OF STANDARD OR CUSTOM SERVICE PACKAGES

Whether you're looking to add services for your customers or leverage the information to build better equipment, ZTR has a service package **built to suit** each and every piece of equipment.



Standard Service Packages

Tracker

Location Services

- Mapping
- Geofencing
- Breadcrumbing

Alert/Fault Management and Notification

Maintenance Planner

Optional Business System Integration

Mobile Capable

Core+

Location Services

- Mapping
- Geofencing
- Breadcrumbing

Alert/Fault Management and Notification

Maintenance Planner

Optional Business System Integration

Mobile Capable

Run Hours Reporting

Battery Voltage Reporting

Analytics / Reporting, e.g. -

- Utilization
- Faults
- · Raw Data

Optimum

Location Services

- Mapping
- Geofencing
- Breadcrumbing

Alert/Fault Management and Notification

Maintenance Planner

Optional Business System Integration

Mobile Capable

Run Hours Reporting

Battery Voltage Reporting

Analytics / Reporting, e.g. -

- Utilization
- Faults
- · Raw Data, etc.

Engine Operating Parameters, e.g. -

- Engine Speed
- Oil Pressure
- Coolant Temperature

Engine Faults

Production

Location Services

- Mapping
- Geofencing
- Breadcrumbing

Alert/Fault Management and Notification

Maintenance Planner

Optional Business System Integration

Mobile Capable

Run Hours Reporting

Battery Voltage Reporting

Analytics / Reporting, e.g. -

- Utilization
- · Faults
- · Raw Data, etc.

Engine Operating Parameters, e.g. -

- Engine Speed
- · Oil Pressure
- Coolant Temperature

Engine Faults

Production Counts and Reporting, e.g. -

- Cycle Counts
- Work Time

Custom Equipment Data

Get the maximum benefit with **customized**, **flexible** and **innovative** features in a **Railway Telematics Solution** from ZTR.

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^{*}Custom service packages are available.