Squarell technology

technical vehicle data

Maintenance

Maintenance solutions using vehicle data

Downtime because of bad maintenance is one of the most critical threats to fleets today. It can have a major impact on operational costs and can have a negative effect on fleet companies' return on investment.

Squarell offers the vehicle data which can be used for maintenance solutions based on telematics systems. Squarell's vehicle data can be monitored to improve service call schedules and reduce maintenance costs.

Three key areas of maintenance

We can divide maintenance into three key areas where Squarell's vehicle data can predict necessary maintenance:

1. Planned maintenance
2. Predictive maintenance
3. Reactive maintenance

1. Planned maintenance: take early action

Planned maintenance is often recommended by the vehicle's manufacturer. A message on the dashboard informs the driver about the upcoming service call and gives him the responsibility to follow-up on it.

Example parameters for planned maintenance
- Service interval
- Total vehicle distance
- Total engine hours
- Total engine revolutions

2. Predictive maintenance: continuous monitoring

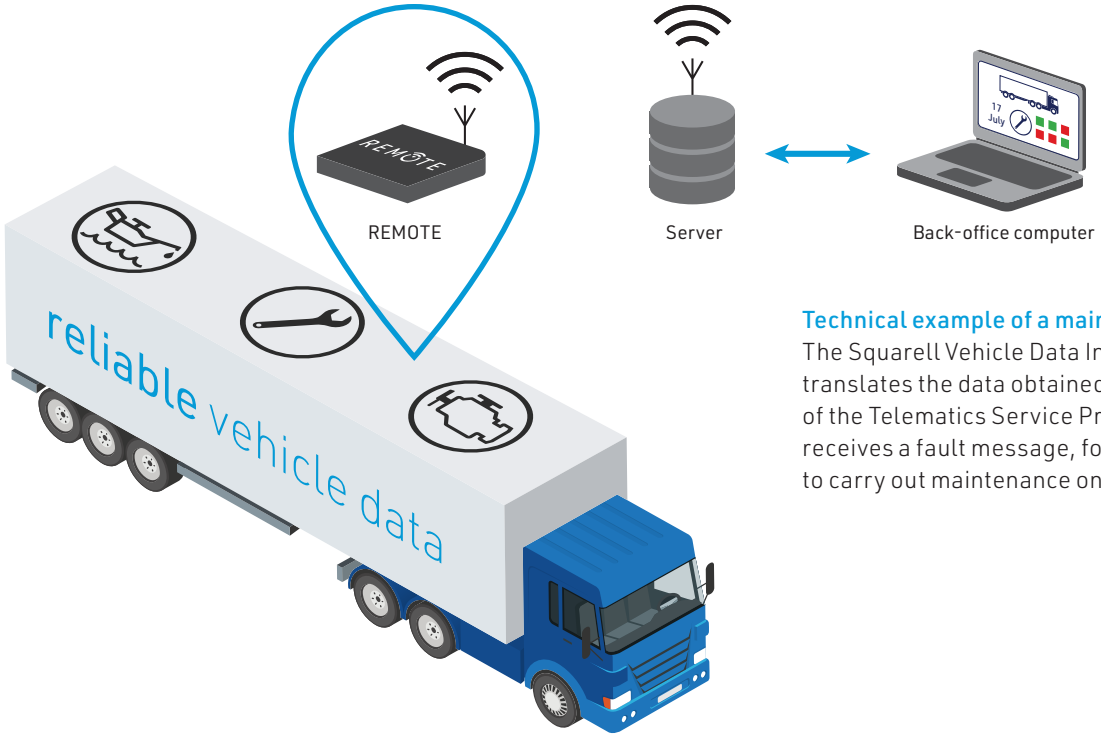
Since the checks performed during scheduled maintenance are snapshots, parts may still break down over time. A technician can make an estimate based on wear and tear when maintenance should take place, but is not able to predict technical failures.

Examples parameters for predictive maintenance
- Brake lining remaining
- Tyre pressure/temperature
- Battery potential
- Engine coolant temperature
- Engine oil temperature
- Transmission oil temperature

3. Reactive maintenance: utilise dashboard lights

Reactive maintenance is indicated when the previous categories have not been able to prevent a definitive failure.

Examples parameters for reactive maintenance
- Engine MIL indicator
- Worn brake lining
- Brake failure
- ABS failure
- AdBlue level low



Technical example of a maintenance solution

The Squarell Vehicle Data Interface processes and translates the data obtained and sends it to the server of the Telematics Service Provider (TSP). The TSP now receives a fault message, for example, and can decide to carry out maintenance on the vehicle.

SOLUTIONS

Advanced Tell-tales
Environment
Event Data Recorder
Maintenance
Safety
Tachograph

PRODUCTS

BE
CANcliQ and DatacliQ
Driver Awareness Panel
Power Output Module
REMOTE+
SOLID+
Trailer Box

VEHICLES

Buses and Coaches
Electric Vehicles
First Response Vehicles

INFORMATION

CAN bus Networks
Wired Networks
Wireless Networks

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20250626_MS_PVV