



# Real-time driver fatigue management

How dedicated compliance technology provides dramatic improvement in the management of safety.

# Welcome!

**Here today is:**

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# Brief History of Transtech

**Transtech offers value-added compliance and transport solutions to some of Australia's most progressive transport and logistics operators.**

Transtech has combined 25 years of industry experience and road transport knowledge with technology to deliver high quality integrated solutions that provide a significant return on investment.

# Acquired by Teletrac Navman

## Acquired by Teletrac Navman in February 2016

- Over 700 Transport operators using Transtech products
- Market leader in Regulatory Telematics
- Reputation for Customer Service
- Massive Investment in Skills & Knowledge
- Market Leading Innovative Products
- Excellent Relationships with Jurisdictions & Government
- Selected by Vic Govt for ITS project

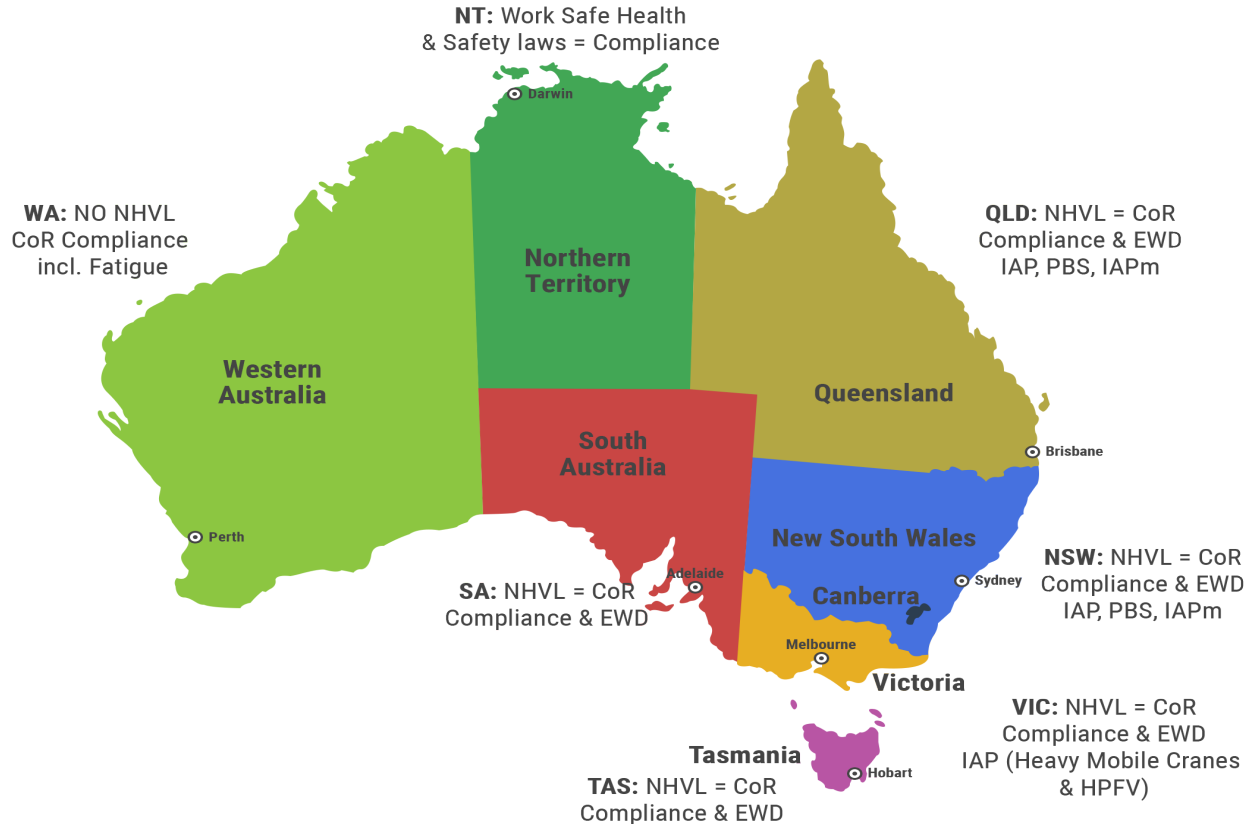
# Why Transtech?

- First, Longest Serving and Largest IAP Service Provider and On Board Mass Solutions in the Transport Industry
- TCA partner in the Swedish IAP
- Value-add solutions around compliance incl. Mass, Fatigue, Speed & Maintenance
- First with proven EWD solution (in field for the last 10 years)
- Unique job management platform that is customised to your workflow & integrates completely with Freight2020



# The Regulatory Landscape

# Australian Regulatory landscape



# Heavy Vehicle National Law

In 2013, Australia for the first time adopted a national approach to the regulation of heavy vehicles. **This has been described as a revolution 150 years in the making.**

The **Heavy Vehicle National Law (HVNL)** consolidates more than twenty years of 'model laws' designed to harmonise heavy vehicle freight operations across the country.

The intent is to **promote public safety**; manage the impact of heavy vehicles on the environment, road infrastructure and public amenity; provide for the efficient movement of goods and passengers and promote efficient, innovative, productive and safe business practices.

The **Northern Territory** and **Western Australia** have not commenced the HVNL at this time.



# Chain of Responsibility

The **Chain of Responsibility (CoR)** is a policy concept used in Australian transport legislation to place legal obligations on parties in the transport supply **chain** or across transport industries generally.

Currently covers mass, dimension, loading, speed and fatigue. From 2018 will include vehicle standards and maintenance.

# Chain of Responsibility



The CoR Means that anybody (not just the driver) who has control in a transport operation can be held accountable for breaches of road laws and may be made legally liable.

# Paper Work Diary Challenges

- It can be difficult for a driver to manage their paper work diary in the midst of the stresses of driving.
- Calculating their remaining times or even just the basics of when to take rest breaks isn't as simple as working a 9-5 job.
- Fatigue rules and their interpretations are complex. Designed by academics with little apparent thought of who will be using them.
- Some drivers may have little education with low literacy levels.
- We are seeing more English as a second language drivers.
- A mistake in counting time might not be picked up for several days.

# What is an EWD?

An Electronic Work Diary, or EWD for short, is a technological solution that allows the driver and operator to manage fatigue electronically.

Not all EWD's have the same functionality.

Currently, they are a business tool to help businesses manage driver fatigue. From late 2017 electronic work diaries will be certifiable, allowing drivers to use EWD's as a replacement for the paper work diary.

# How Does it Help the Driver?

**Sentinel on the iFace is a tool to help the drivers manage their own compliance**



- Drivers are presented with a simple, informative and real-time view of their fatigue.
- Allows them to effectively manage their own fatigue.
- Audio and visual alerts of when the next rest break is required, before it's required
- High level views of all rest break requirements

# Real-time Driver Alerts

- Driver's are able to set two warnings before they breach fatigue rule sets that can be set based on the work being completed.
  - Linehaul might want a 45minute notification because it's harder to find a place to pull over safely.
  - Metro might only need a 20-30 minute notification.
- These warnings are spoken and also have a visual notification.
- When a rule is breached emails/SMS, alerts are raised to notify before, when or after violations occur.

# Real Time View of Fatigue Status

- The fatigue rule engine runs on the iFace.
  - Even when the driver is out of communications range, their fatigue is always calculated & available in real-time.
  - The information is synchronised with the back-office when the driver is back in cellular coverage.
- Drivers have more information about their fatigue management rules such as night/long hours, 24 hour rest breaks and night rests.
- Drivers can see how long till their next rest & how long it needs to be.
- The driver can concentrate on driving and being nice to your customers and other road users, rather than stressing about driving hours.
- These features keep the driver compliant, which in turn keeps your business compliant, which in turn keeps your customers compliant.

# How Does it Help the Back-Office

**Sentinel provides information in real-time to staff in the back-office.**

- Staff are able to keep an eye on each driver's fatigue information.
- Alerts can be set up to warn when drivers are going to violate their rule sets, allowing for real time management of fatigue.
- Historical tracking and detailed reports, allowing you to create driver rosters calculated from real-time driver fatigue information and associated rule sets.





# Sentinel & Fatigue Management

- Sentinel provides the ability to help manage fatigue compliance for both the driver and back-office.
- Allocators and schedulers now have visibility of what hours the driver has available, reducing risk when scheduling work.
- Operators still requires sound policies and procedures
  - How the technology and information is used; and
  - What action responsible parties in the chain take when drivers are in breach.
- Log book auditing tools and audited close off process for breaches.
- You may need to re-evaluate the current work you are doing.
  - Your drivers may have been stretching their hours to “get the job done”

# Leverage your In-Cab Device

**Sentinel/EWD is a major part of Transtech's value-added solutions, but it's also just one part.**

- **SmartJobs**; mobile job execution with sign on glass and photo POD
- **Mass Manager** to help comply with payload restrictions based on vehicle configurations
- **Pre-Trip Checklists** to help ensure vehicles are fit for duty
- **SpeedAssist** to provide instant feedback on a driver's on-road behaviour
- **Easydocs** provides the ability to store documents electronically in the cab

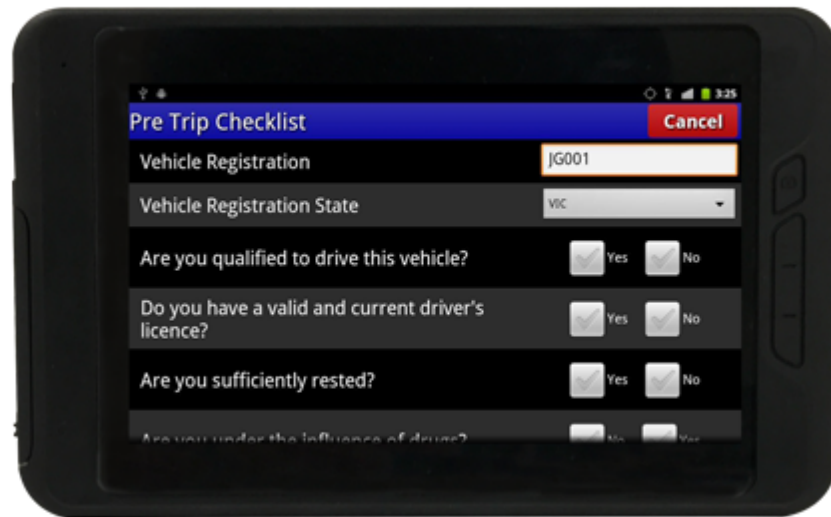
# Mass Manager



- Mass Manager assists transport operators with the collection of Mass Management information for programs such as the NHVAS and your own business intelligence.
- It provides drivers with the ability to record axle group mass and vehicle configuration directly on the iFace, along with trip details as required under NHVAS.

# Pre Trip Checklist

- Required, under the NHVAS Maintenance Mgmt. module, Pre-Trip Checklist can be used to ensure drivers are declaring readiness for duty and complying with Chain of Responsibility obligations.
- This application allow the operating driver to go through a pre-defined checklist of vehicles safety in order to start their journey
- Back-office staff are able see the results of the checklist once they have been completed, including the ability to export to Excel for auditing purposes.
- Real-time alerts for failed Pre-Trip questions.



The image shows a tablet displaying a 'Pre Trip Checklist' application. The interface is dark-themed with a blue header bar containing the title 'Pre Trip Checklist' and a red 'Cancel' button. Below the header, there are several input fields and checkboxes:

- 'Vehicle Registration' with a text input field containing 'JG001'.
- 'Vehicle Registration State' with a dropdown menu showing 'VIC'.
- 'Are you qualified to drive this vehicle?' with 'Yes' and 'No' checkboxes.
- 'Do you have a valid and current driver's licence?' with 'Yes' and 'No' checkboxes.
- 'Are you sufficiently rested?' with 'Yes' and 'No' checkboxes.
- 'Are you under the influence of drugs?' with 'No' and 'Yes' checkboxes.

# SpeedAssist



- SpeedAssist is a driver tool that provides a simple and powerful interface to assist drivers in maintaining safe driving practices. It combines audio and visual tools and alerts to inform drivers of related issues and allow them to take preventative measures.
- Speed management is a fundamental aspect of the Chain of Responsibility (CoR) requirements for the transport and logistics industry. Transtech's SpeedAssist significantly assists Transport Operators in maintaining their due diligence under Chain of Responsibility.

# EasyDocs

- Easydocs is an application that allows operators to store documents on the iFace.
- It minimises the paperwork and administrative burden operators and drivers face in their day-to-day work.
- The cab of the vehicle isn't a filing cabinet, Easydocs allows you to store and update documents from the office, which update automatically for the driver.



**Thank you!**

