INQUIRY INTO PRESSURES ON HEAVY VEHICLE DRIVERS AND THEIR IMPACT IN NEW SOUTH WALES

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Better Connected Means Better Protected

NETSTAR TELEMATICS SUBMISSION TO THE PARLIAMENTARY INQUIRY INTO PRESSURES ON HEAVY VEHICLE DRIVERS AND THEIR IMPACT IN NEW SOUTH WALES



ABOUT NETSTAR

At Netstar, we give peace of mind to vehicle and fleet owners, their employees and their families through the safety and security features of our products.

Our solutions include industry-leading engineered and fitted hardware and easy-to-use software applications, combined with Australian-based customer service and support teams.

Netstar's focus on safety, security and efficiency has made it the leading Telematics choice. With a commitment to providing innovative and reliable solutions, Netstar has helped thousands of companies keep their fleets connected.

WE HAVE HELPED OUR CUSTOMERS TO ACHIEVE

1 Million

Over 1 million customer subscriptions operating globally and growing daily.

30%

Our customers save up to 30% on reduced fuel consumption <u>by opti</u>mising routes.

20%

Our customers have reported up to 20% reduction in road incidents and accidents.

OUR TELEMATICS SOLUTIONS



Fleet Management

Our hardware and software solutions give you the technology to control your fleet.



Dash Cam Solutions

You can rest assured that your drivers are always safe and monitored while on the road.



Lone & Remote Workers

Keep your people safe by monitoring worker safety in isolated and remote locations.



GPS Tracking

Reduce fuel costs, increase driver accountability, and enable secure tracking of company assets.

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Asset Tracking

Ensure your valuable assets are being tracked 24/7.



Electronic Work Diary

Track everything from driver hours to vehicle maintenance, so you have less paperwork to worry about.



PRESSURE ON THE WORKERS

In today's trucking industry, truck drivers face an extraordinary level of pressure that defines their daily work experience. Whether it be long-haul or the daily delivery run, truckies often spend extended periods on the road, leading to a sense of isolation and separation. The pressure to meet tight delivery schedules and cover extensive distances while adhering to stringent regulations can be immense. With the advent of technology, drivers are also expected to manage electronic logs, navigate complex routes using GPS systems, and stay in constant communication with dispatchers and shippers. This constant connectivity means that the pressure to perform efficiently can persist 24/7, contributing to a sense of burnout and fatigue.

On top of this, truck drivers must deal with the physical and mental toll of their profession, facing the daily stress of unpredictable weather conditions, traffic congestion, and the potential hazards of the road, along with the sedentary nature of long hours behind the wheel which can lead to health challenges, including obesity and related issues.

All these factors combine to create a demanding work environment where drivers must excel in time management, safety, and adaptability to survive in the modern trucking industry. Finding ways to manage this pressure, ensure well-being, and maintain a healthy work-life balance becomes paramount for the well-being and safety of today's truck drivers.

Netstar cannot solve all these problems; however, the technology that we have today and what we are planning for tomorrow is targeted to:

- Simplify the driver interface to ensure ease of maintaining compliance,
- Minimise driver distractions while driving, and show them only what is needed now and in the immediate future,
- Provide the tools to minimise driver decisions to allow them to concentrate on safe driving.

PRE-START CHECKLIST

The journey begins with the safety check prior to getting underway. A checklist is presented via tablet or phone to the driver. The driver follows simple on-screen instructions to check that the vehicle is safe to go, and they declare fit for driving. If the driver has a trailer or other equipment, the driver will be directed to complete safety checks on these assets as well. Also, the driver can review previous checklists to confirm the maintenance history of the vehicle.

Logic is built into the checklist to advise the driver if the vehicle is unsafe as well as sending the data and alert through to the fleet manager. Although not implemented, this logic can readily be extended to the in-vehicle telematics device which can inhibit engine start if the vehicle is not safe to drive.

As all data is electronically sent and saved, it is readily available for reporting purposes.

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ELECTRONIC WORK DIARY

For those drivers required to utilise work diaries under the heavy vehicle law to comply with fatigue management, this is an added burden. Not so much the entry of data, it is the interpretation and calculations to determine compliance with the rest requirements. At first glance, this might seem simple, yet the overlapping inter-relation aspects plus the special conditions for night work make it hard for a truck driver to manually keep abreast of their status and create advanced plans. Indeed, even my developer team originally struggled with the timekeeping concepts!

The Electronic Work Diary (EWD) application is a tool to ease the driver's life and enhance compliance. Again, the key focus for Netstar was to simplify the process, allowing ease of entry of the data, easy view of the various rule conditions for long-term planning, and quick view of what the next rest is for immediate planning.

While in operation, the Netstar EWD has a highly visual countdown timer for when the next rest is to be taken, with a spoken word reminder alert generated 30 minutes prior to a reset required, which for many highways a rest area is available approx. 30 minutes apart. Future enhancements are being considered to geo-code the rest area to provide improved guidance, for example, if there is no rest area located within the next 30 minutes of the journey, the app may suggest taking the rest earlier to align with available rest facilities.

This could certainly be taken further, and route planning generated prior to starting a journey, either being curated by the driver or the fleet manager, where the technology matches the available work hours against the route planned and the available rest hours.

To learn more about the Netstar EWD solution please visit our website - <u>https://www.netstaraustralia.com.au/fleet-telematics-solutions/electronic-work-diary/</u>or view our educational video online - <u>https://youtu.be/4j4njGmxNcY?si=g0UVwY0kokBYQJP0</u>





TRUCK NAVIGATION APPLICATION

Either at application start-up or during operation when the load changes, the driver will enter the truck's dimensions, weight, and load type. By leveraging the entered truck information and our mapping partner we can unlock trucking restrictions and advise the driver of restrictions in two ways. Firstly, when a driver chooses to enter a location that he wishes to drive to, the routing engine takes the truck information into account and routes accordingly to avoid any restricted roads based on vehicle height, weight, or goods. For example, if they have explosive goods, they will not route the truck through the Sydney Harbour tunnel. Similarly for bridges or weight-restricted roads.

Secondly, while the driver is not using a calculated route, the map will be showing all the relevant road restrictions and will alert the driver if they are approaching a restricted road, bridge, or tunnel. Further to these features, the Truck Navigation application map data contains the road speed limit, inclusive of truck-specific speed limits and school zones, and provides a visual indication on-screen and audible alerts if the speed limit is breached.

For those drivers who use EWD, it is in planning to show this information within the Truck Navigation application to ensure the truck driver has all pertinent information readily available.

Further enhancements are planned to bring the upcoming NHVR truck routes onto the map to provide a visual indication to the driver for high mass or special vehicle routes.

AI CAMERA TECHNOLOGY

Another piece of the puzzle is driver behaviour. Netstar has several options available now and more in planning.

First is the latest generation of camera technology with builtin AI to detect bad driving behaviour such as harsh braking, acceleration, cornering, tailgating, forward collision warning, driver distraction (phone, smoking), not wearing seatbelt, fatigue detection, and more. A small screen alerts the driver to any of the above, providing instant feedback to guide behaviour change.

{images of Streamax cameras and Rwatch}

Ideally, the camera systems are the best option, as they allow for evidentiary reporting and training; however, Netstar also accommodates black box-only installations through the use of audible warnings via an in-cab buzzer, or visually if they have the Truck Navigation application installed.



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× Truck Details				
Length (In Meters)		13.0	n	
Width (In Meters)		3.0	n	
Height (In Meters)		5.0	n	
Type of Load		Gas. Explosive	>	
Mass (In Tonne)		10.0		
Disclaimer				
The route selection will be purely based permitted route for the specific truck.	on the parameters you enter. Please fill in all the trud	k details as required to show the		





AUSTRALIA'S TRUSTED TELEMATICS PRODVIDER

We're proud to offer a comprehensive range of solutions tailored to our customer's unique needs, and we're committed to providing the best possible service at all times. We know that happy customers are the foundation of a successful business, so we always aim to exceed your expectations.

We understand the importance of keeping your fleet running smoothly, and our team is always on hand to help with any problems you may have. With our comprehensive range of solutions, you can be sure that we have a product to suit your needs.

TRUSTED BY BUSINESSES RIGHT ACROSS AUSTRALIA

Our Telematics Solutions are used by customers in a variety of industries, such as Government, Emergency Services, Trades, Mining, Construction and the Hire Industry. Whether you manage a large fleet or are a sole trader, our solutions will help your business improve safety and compliance and reduce operating costs.





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Please direct all enquiries to Peter McAlpine the Netstar Chief Technical Officer

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