TELETRAC NAVMAN

Committee Secretary
Transport and Resources Committee
Parliament House
George Street
Brisbane Qld 4000

15th April 2021

Inquiry into vehicle safety, standards and technology, including engine immobiliser technology.

Dear Committee Secretary,

Background

Teletrac Navman is a leading software-as-a-service (SaaS) provider leveraging location-based technology and services for managing mobile assets. With specialised solutions that deliver greater visibility into real-time insights and analytics, Teletrac Navman helps fleet operators make better business decisions that enhance productivity and profitability, while improving the safety of field work force and mitigating organisational and personal risk.

Teletrac Navman is a global telematics company and is a subsidiary of Vontier Corporation (NYSE: VNT). It is the largest supplier of telematics and associated services in the Australia-NZ region and works with some of Australia's largest corporations in the mining, construction and transport sectors. Commonwealth, State and Local Governments use our solutions to improve safety, governance, reduce risk and obtain a positive Return on Investment (ROI).

Globally our company invests approx. $15m USD each year on Research and Development. This is used in diverse areas such as hardware, software, and data security. This allows our products to meet the changing needs of our customers.

Many of these advancements are being developed in Australia for our global market. An example is "Site 360" which is being used by very large construction projects to manage vehicle movements in and around the major building sites. This is resulting in less residential complaints, greater efficiency and cost savings for contractors, better project governance and less incidents.

Teletrac Navman is recognised by global IT consultants Gartner as an industry leader. In Australia, Teletrac Navman operates in a very competitive industry characterised by about 30-40 market entrants, but only six of those companies meet Transport Certification Australia's (www.tca.gov.au) standards for telematics. Teletrac Navman is one of those six.

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Our technology is recognised by a number of other regulatory bodies, including the ATO that has issued two class rulings on our technology for the use of our data in developing refunds for Fuel Tax Credits. In December 2020, Teletrac Navman was one of the first suppliers to have its Electronic Work Diary (EWD) approved by the National Heavy Vehicle Regulator (NHVR).

In Queensland, our technology is currently being used by hundreds of many small and large fleet operators who aim to meet regulatory requirements, improve productivity, or mitigate risk. Many government agencies and departments also use our technology. This includes 40 of the State's 77 local governments including Brisbane, Gold Coast, Logan, Townsville, Cairns and many other indigenous, regional and rural councils.

Our success is based on not only award-winning hardware and software but supporting staff such as subject matter experts to work with customers to solve issues. For example, our Change Management and Safety team delivers value in areas such as policy review, change management to improve driver behaviour and other activities to ensure field work force and drivers are safe, while ensuring organisations have the structures and processes in place to mitigate personal and organisational risk.

Because of our experience in the telematics industry and our day-to-day interaction with customers and government, including regulators, it is our belief we can make a valuable contribution to the Inquiry in terms of safety, technology, emerging technology trends and immobilisation.

Inquiry Response

Teletrac Navman's response to the Parliamentary Inquiry will be based on our experience and findings on how our technology is being used to mitigate risk and the resulting safer vehicles and drivers on our roads. Our focus will be confined to organisations that operate vehicle fleets. The response will introduce our examples of our working in other jurisdictions, as well as some of our case studies that have resulted in outcomes that align with the intent of Inquiry.

Telematics - What is it?

- A type of Information technology which deals with the long-distance transmission of computerised information
- It involves, telecommunications (cellular networks or satellite or both), vehicle technologies, sensors and computer science, hardware and software
- It is the of IOT (internet of things) of vehicles - plant and fleet (motorised and non-motorised assets are connected on the one platform)
- Not only is the vehicle connected, but data can also be collected from machines and other objects that may be on the vehicle – i.e. flashing lights, seat belts, pumps, sprays, blades, driver identification etc.

The linking of technology to vehicles creates data that is presented in reports which can be used throughout the organisation. This allows for better decision making that can improve finances, service delivery, governance and risk.

Some of the technologies can also be applied to change driver behaviour which can result in a safer workforce, fewer collisions and an improved organisational risk profile. This has a flow on affect in unexpected areas, for example, better insurance premiums.

The fundamental feature is the value that creating immutable and highly accurate data offers to the decision-making process for the organization and operator.

Improved Safety

Telematics provides data that if used responsibility can help change driver behaviour. This data can be captured through cameras or through the hardware which features highly sensitive gyroscopes, accelerometers and driver inputs. This allows for the ability to proactively manage elements of Heavy Vehicle risk that have been traditionally lagging indicators:

- Manage driver fatigue in real time
- See critical road events such as harsh braking, speed violations, and aggressive cornering through our dashboard camera
- Measure driver performance and trends over time through – provides data for effective driver training
- Build dashboards around safety related metrics and KPI's
- Real-time feedback allows drivers to revise risky driving practices.
- Monitoring incidents like harsh acceleration, braking and cornering provides fleet managers a view into driver education needs.

The following table indicates the reduction of insurance claims made by one of our customers across their fleet. A key metric is the "Agency at Fault Claims" which during the three-year period dropped from 92 claims to just 14.

Importantly, this adoption of technology is resulting in organisations significantly changing their risk profile. While improved fuel consumption, asset utilisation and maintenance are key in obtaining ROI, improved insurance premiums or new insurance models (pay-per-use; pay-how-you-drive; pay-as-you-drive) are adding to ways in which cost benefits are being obtained.

The table highlights the benefits in not only a reduction in the number of the claims but also the average cost of claims in a three-year period. It also resulted in less workplace incidents and injuries.

Insurance Summary – Highlighting Improvements since introduction of Vehicle Telematics

Calendar Yr	Total No. of Claims	Agency at Fault Claims	Claims over $5K	Claims over $10K	Average Cost of Claims
2016	198	94	17	20	$3871
2017	151	62	15	7	$3049
2018	96	14	14	1	$2847

NB: Information provided by for the calendar years listed.

Mandating Telematics

The concept of mandating telematics is a growing trend that is being repeated primarily in the transport, construction and some levels of government (State and Local).

Major construction companies that enter into Primary Contractor Status for projects and some provincial councils are seeing symbiotic benefit through this practice with subcontractors. The reasons for this appear to fall into three main categories:

- Governance of contractors performing the contracted work;
- Contractors adopting this technology to improve their own operations and profitability (less fuel, FTC benefits), and;
- Management of vehicles at major construction sites, including route selection and waste disposal.

As a result of our close working relationship with those major civil construction companies, Teletrac Navman has developed a specific solution, Site 360, to meet this growing demand. The solution could also be applied to many other state and local government agencies that are managing projects.

Site 360 allows to better manage the supply chain by delivering visual insights into on-site and off-site traffic. Because the solution is in real time:

- Records of all vehicle movements onsite
- Declarations of all load types and mass
- Records of all tip site entry/exit
- Driver guidance & communications

Full visibility of all project assets whether on site or off site.

- Objective evidence based data ensures that CoR obligations are met.
- Real time tracking - single source of truth for proof of delivery and delivery to correct locations of spoil, waste fulfilling environmental protection requirements.
- Automation of despatch and scheduled arrivals reduces the need for marshalling of traffic on site.

Information is relayed to drivers and operators automatically ensuring that the sites run at optimal efficiency. Site360 delivers multiple benefits to major projects. Transport contractors and the community benefit through better safety outcomes, greater efficiency, and reduced impact on local roads. This is one example of how vehicle technology is delivering benefits.

Vehicle Tracking – illegal operation

Because fleet vehicles can be tracked 24/7, data recorded on a second-by-second basis, and the use of geo-fences (ability to capture alerts when vehicle travel through digital boundaries – i.e. depots, bridges, work sites) Teletrac Navman has been able to quickly identify if vehicles are used illegally.

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For example, some customers geo-fence depots or work sites and if a vehicle leaves a site after a particular time, an alert can be triggered that brings attention to that asset for further investigation.

The ability to geo-fence can also allow data to be collected within the fence. For example, vehicles with on-board scales would be able to send data of their weight, which is important for bridge crossings.

Immobilisation

Immobilisation is a feature that is possible through our technology. It requires configuration of hardware and software which can occur at manufacturing or post-manufacturing with the asset owner. From an industry perspective, there are two types of immobilisation, remote immobilisation and start immobilisation.

We believe that in certain circumstances there are opportunities for immobilisation, but tight controls and processes are required to ensure that advantages outweigh disadvantages. At present our position, is one of reluctance for wide-spread use, particularly for assets on public roads or highways. As the supplier of the technology, there is possible litigious risk that may be brought which could result in penalties for misuse or accidental immobilisation of a vehicle.

Remote immobilisation

The ability to remotely immobilise an asset. This solution is technically possible and requires hardware to be installed and configured to the vehicle. This form of immobilisation also introduces many additional requirements – such as who has the authority to remotely immobilise a vehicle. Risk and consequences if assets were to be immobilised on public highways also need to be considered.

Start Immobilisation

This is the more common form of immobilisation. Our experience is mainly in countries such as England, where vehicles can only be started if a driver has been authorised and has ensuing credentials. That is, drivers carry an additional piece of hardware – which could be an RFID Card or RFID dots on a card have been configured to allow specified drivers to operate the vehicle.

A special reader in the cabin of the vehicle matches the credentials of the driver trying to start the vehicle with the credentials in the database and if the credentials agree, the vehicle can start.

These vehicles are usually in the Heavy Vehicle or specialised category where a two-factor authorisation is required before the asset can start. If the driver does not have the correct endorsements on their RFID card, then the vehicle will not start.

Our company works with organisations that require immobilisation on vehicles that operate on non-public areas…e.g., a waste compactor that is used for waste management on a tip site and may never venture on a public road.

Having a two-factor authorisation results in only accredited drivers operating that specific machinery. It prevents unauthorised or illegal use.

Immobilisation brings with it a number of risks and requires clear guidelines about who and when has the authority to remotely immobilise a vehicle.

Scenarios exist about the urgent need to start an asset during an emergency event when the authorised driver is not on site. An example of this is what happens and who is responsible should a vehicle need to be moved to prevent damage because of a fire or some other unexpected scenario.

Recent Events

The notion of mandatory telematics in heavy vehicles is a concept that is raised from time to time. In mid-March, the Australian Logistics Council called for the mandatory use of telematics in all heavy vehicles.

https://www.austlogistics.com.au/wp-content/uploads/2021/03/PRESS-RELEASE-Mandatory-Telematics-Through-The-National-Operating-Standard-Ensures-HVNL-Compliance-.pdf

Teletrac Navman recognised that more regulatory and industry organisations are moving towards greater mandating of this technology.

Our position is supportive but should be expanded to all fleets. Fleets that adopt telematics solutions obtain a healthy ROI, meet regulatory obligations, have safer work forces and are environmentally cleaner. One of our council customers has obtained more than $4m in revenue from the disposal of underutilised assets. This equates to 500% ROI and ongoing benefits in other areas is adding to the overall benefit.

Conclusion

As a global company and the largest supplier of telematics in the Australia/New Zealand region, our company is working with public and private organisations to improve safety and their operations through the use of vehicle technology.

In that regard, Teletrac Navman is at the forefront in a number of developments that is changing how vehicles operate in Australia. Because of the benefits of telematics, it is our position that the more organisations that include the technology, the more benefits occur not only for the fleet owner, but also for other road users who will benefit from more accountable and safer drivers. This has a positive flow on affect into areas such as health and emergency services.

In areas such as safety, there has been demonstrated benefits – drivers drive differently. Fleets that use telematics has less collisions and safer drivers. This has a flow on effect for many organisations and is underpinning new insurance models. Telematics can serve as the platform for usage-based insurance, pay-per-use insurance, pay as you drive (PAYD) insurance, and pay how you drive (PHYD) programs for fleet insurance.

The technology is proven and off-the-shelf. It continues to evolve as Governments at a regulatory level and customers seek better ways to operate – greater efficiency, better compliance and governance, less risk, and a safer work force.

Teletrac Navman appreciates the opportunity to comment on this important Inquiry.

Recommendations

1. Technology in the form of telematics is allowing Fleet operators in both the government and private sector to improve the safety of our roads and can do so in most instances through a positive return on investment, (Fuel Tax Credits, Fuel usage, asset utilisation and improved maintenance), telematics should be mandated.

2. This call for mandatory telematics in certain areas/industry is reflected in recent announcements for example the Australian Logistics Council. It is our belief that fleets in both the Government and private sectors that have more than 30 motorised and registered assets should be considered.

3. The introduction of telematics into fleets can lead to a safer workforce if proactively managed. Programs as to how telematics is resulting in safer workforce and a reduction in personal and property claims need to be developed.

4. Both Remote Immobilisation and Start Immobilisation are technically possible, but both bring with it a need to manage risks for all parties and address scenarios mentioned in the paper. Our preference would be to have better controls over starting certain vehicles to ensure that only accredited operators can start those assets. This technology is off-the-shelf.

5. The introduction of technology is resulting in organisations developing new skills sets around data. This can have broader benefits as data analytical skills have been identified as a key "job for the future".

Yours Sincerely

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