Dear Ms O'CIanain

RE: NATIONAL FREIGHT DATA HUB DISCUSSION PAPER 1

I write in regard to the National Freight Data Hub Discussion Paper 1 that has been released by the Department of Infrastructure, Transport, Cities and Regional Development (the Department). I am pleased to provide this letter as an input to the establishment of the data hub, and to complement our previous discussions in relation to the data hub and data sharing more broadly.

Transport Certification Australia (TCA) is the Australian entity responsible for providing assurance in the use of telematics and related intelligent technologies and is responsible for the administration of the National Telematics Framework (NTF).

The operational administration of vehicle monitoring applications through the NTF represents a well-established national source of a heavy vehicle movement data that could be leveraged when designing and developing the data hub.

National Telematics Framework

The NTF is a digital business platform that supports an open marketplace of telematics and related intelligent technology providers. It was established following a series of decisions made by responsible Ministers between 2003 and 2008. Key aspects of the NTF including the following:

- Provides a nationally consistent platform for the use of telematics and related intelligent technologies, and for the collection, analysis and reporting of telematics data
- Supports a range of applications and data across regulatory, contractual and commercial needs
- Supports different levels of assurance
- Is outcome-focused, adaptable, and enables innovation.

The NTF comprises a range of elements to enable achievement of the above, several of which (such as the Data Dictionary) were developed at the explicit instruction of the Transport and Infrastructure Council (TIC). This includes, but is not limited to:

- Functional and technical standards which support accreditation and audit of telematics service providers and certification of telematics applications and type approval of in vehicle units
- Telematics data dictionary, data protocols and data exchange specifications
- Business rules and operating procedures including template agreement documents for telematics service providers and transport operators
- Digital infrastructure to ingest and store telematics data, with appropriate security, complemented by database management and data analysis software and applications and data exchange interfaces, including the Telematics Information Exchange (TIX)
- The Telematics Analytics Platform (TAP), which enables end-user access to analysis and reporting.

These elements of the NTF are all in place today, and have proven essential to the establishment and evolution of a nationally consistent and interoperable ecosystem for data sharing.

Another key aspect that has been critical to the NTF's ability to capture and share telematics data is establishing and maintaining trust with participants, including transport operators, service providers and government agencies. It will be important with the development of the hub that existing arrangements and relationships are leveraged, and that we avoid any duplication or conflict.

**Telematics data**

The telematics data from heavy vehicles that is received and assured by TCA is continuing to grow. Currently TCA receives approximately 120 million position records per month, from over 6,000 vehicles, across about 1,000 transport operators. With the uptake of new telematics applications, this growth is forecast to increase over the coming years. The range of vehicle types should also increase with the deployment of new applications and features of the NTF, following approval a business case requested by TIC during 2018.

Key attributes of the telematics data ingested include vehicle ID, vehicle type, position, date and time. Many telematics applications also enable data on routes driven and vehicle speed. Going forward data will also be captured for certain vehicles regarding mass. There are also projects in flight looking at data regarding dangerous goods and waste movement, and these will collect information on the type of freight carried.

Telematics data ingested by TCA is assured, to different levels of assurance depending on the application. Experience has proven that not all telematics data is fit for all purposes, with varying levels of accuracy, quality and completeness. With the design and establishment of the new hub, it would be wise to consider what level of data assurance is acceptable for the hub's intended purposes, and how different levels of data assurance could be catered for.

TCA is presently working with a variety of stakeholders to generate valuable insights including mapping key freight routes, dangerous goods movements in NSW (including common rest stops, and allowing analysis by class of dangerous goods), high productivity freight vehicles in Victoria and Tasmania, waste movement in South East Queensland, and construction and container freight vehicles in greater Sydney. These monitoring schemes are built upon the platform of the NTF and allow interactive analysis of roads and assets for road managers at present through the Telematics Analytics Portal (TAP) or through other mechanisms.

TCA has worked closely with the Bureau of Infrastructure, Transport and Regional Economics (BITRE) in the delivery of some of this work and is also currently in discussions with the Department to support the delivery of Stage 2 the National Heavy Vehicle Charging Pilot.

**Data sharing and privacy**

To establish arrangements for telematics data from heavy vehicles to be captured, a range of agreement documents have been used. These range from contractual agreements for higher level of assurance applications, through to consent forms or standard terms and conditions for lower level of assurance applications. These agreements are essential to clarify data sharing arrangements, rights regarding what the data can (and cannot) be used for, and how privacy will be addressed.
As highlighted earlier, establishing trust is essential to support data sharing. The separation of duties that TCA has from government regulators and policy makers has proven critical in this regard. Many transport operators have expressed the importance of this separation of duties, suggesting that they would be reluctant to share raw data directly with government entities. This highlights the value of a hub-and-spoke architecture for the new hub, building on existing privacy-by-design models that separate data that could be considered sensitive from perceptions of misuse. This may be a key consideration to avoid eroding current trust relationships.

There will be limitations in what data can be shared, due to both regulatory and contractual reasons. For example, the Heavy Vehicle National Law (HVNL) places restrictions on access to and use of information from the Intelligent Access Program (IAP). Privacy regulations and agreements with operators will also restrict access to and use of personally identifiable information. This will need to be appropriately considered with the hub.

TCA does provide access to aggregated and de-identified data and information that has proven to be of significant value to a range of stakeholders. A key tool for enabling user-access to analysis and reporting is the Telematics Analytics Platform (TAP). Role-based access to TAP ensures that users can get access to the data that they are allowed to but are restricted from accessing any data that they do not have rights to. Such a tiered, role-based access approach might be a consideration for the hub.

Next steps

This letter provides summarised information and key points to assist the Department with its planning and design of the National Freight Data Hub. There is much more detailed information and assistance that TCA can provide. This could include TCA providing access to certain data or applications, such as the TAP web portal, to assist with any planning, design or pilot activities.

TCA is supportive of this important initiative and stands ready to assist where appropriate. Please do not hesitate to contact me or myself if you have any queries or wish to discuss further.

Yours sincerely

[Signature]

Stuart Ballingall
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Transport Certification Australia