

# Telematics Industry Group Forum

*Hosted by*  
**Transport Certification Australia**

29 September 2021



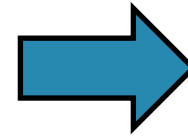
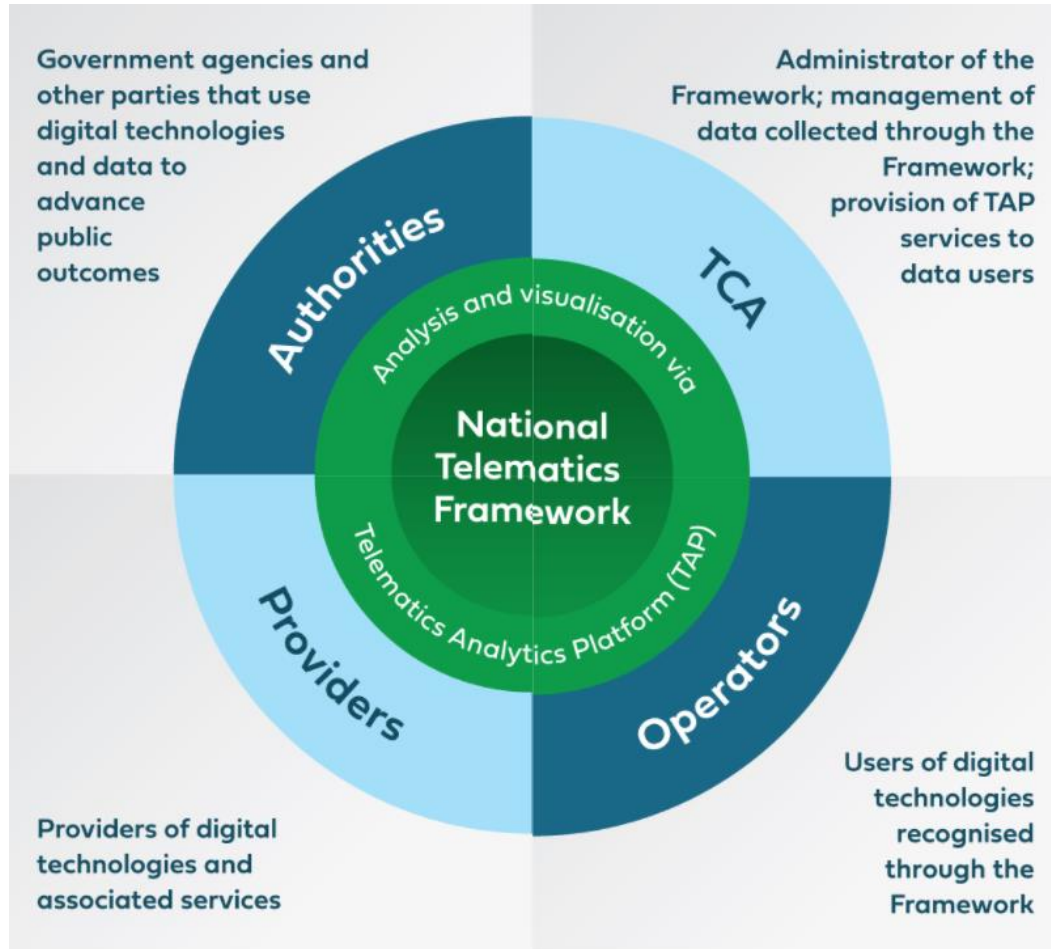
# Introductions and welcome

- Welcome to the September 2021 Telematics Industry Group
- Please be respectful of others, raise your hand to ask questions or make comments, and keep your microphone muted when not speaking.
- We have a range of speakers and attendees from around Australia and some exciting developments.
- We will be recording the meeting for those who can't attend.

# Agenda

1. Welcome
2. National Transport Commission (NTC) update
3. Latest developments from around the country
4. Smart OBM – managing deployments
5. Dynamic turn-by-turn route guidance (for RAVs)
6. TMA Live pilots

# National Telematics Framework



[tca.gov.au/ntf](https://tca.gov.au/ntf)



# An Australian export to the world...

交通先行 承载未来

第 16 届国际重型车辆运输技术大会

THE 16<sup>th</sup> INTERNATIONAL SYMPOSIUM ON HEAVY VEHICLE TRANSPORT & TECHNOLOGY

2021 年 9 月 7 日至 9 日  
7<sup>th</sup> - 9<sup>th</sup> September 2021

中国·青岛  
Qingdao, China

## APPLYING A RISK-BASED APPROACH TO ROAD ACCESS TELEMATICS



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Strategy and Delivery  
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### Abstract

The safe and efficient movement of freight on public road networks is critical to the productive movement of goods and produce and the functioning of an economic system. The management of vehicles operating under restricted access arrangements, which involves special purpose vehicles, multi-combination configurations and higher productivity, has relied on traditional methods of managing (and monitoring) access to the road.

These traditional requirements and routes that had limited resources (RAVs) across

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The paper ex further advan

**Keywords:**  
Infrastructure

作者/Author  
Hill and Greenow

*Evolution of Intelligent Access in Australia - A case study in stakeholder engagement*

## EVOLUTION OF INTELLIGENT ACCESS IN AUSTRALIA – A CASE STUDY IN STAKEHOLDER ENGAGEMENT



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**JOHN GORDON**  
Manager Strategic  
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### Abstract

During 2018 Australia's Transport Ministers directed Transport Certification Australia (TCA) to identify and lead improvements to Intelligent Access arrangements in Australia.

Since it first became operational and available in 2008, the Intelligent Access Program has become an essential component of Australia's heavy vehicle regulatory framework now widely used by road infrastructure managers and regulators to balance productive infrastructure and safety outcomes.

A founding concept of the IAP was to use digital technology and data to provide assurances that 'the right truck is on the right road'. By using a combination of the Global Navigation Satellite System (GNSS), the Global System for Mobile communications (GSM) and other Information and Communication Technologies (ICT), the IAP was designed to identify and report on situations where a vehicle has travelled on parts of the road network which it has not been approved. The IAP's emphasis on exception-based reporting has enabled infrastructure and safety risks by managing compliance with road transport law.

Different kinds of Intelligent Access were identified during stakeholder engagement. In response, new variants of Intelligent Access known as Road Infrastructure Management (RIM) and the Telematics Monitoring Application (TMA), have been introduced in Australia. The paper highlights the importance of keeping abreast of changing needs and demands from stakeholders, and how strong engagement and support from stakeholders can accelerate the implementation of otherwise challenging reforms.

**Keywords:** Heavy Vehicles, Asset Management, Digitalisation, Regulatory Framework, Traffic Management, Road Infrastructure Utilisation, Stakeholders, Intelligent Access.

## TRUCKS MATTER! SUPPORTIVE REGULATORY AND COMPLIANCE FRAMEWORKS TO EXTEND THE LIFE OF ROAD ASSETS



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Obtained an Honours  
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Obtained B.Sc.  
B.E (hons) and M.E.  
from University of  
Auckland and PhD  
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**PAUL NORDENENG**  
Obtained his PhD in  
the area of PBS for  
heavy vehicles in  
2013. He has been  
involved in the  
development of  
various infrastructure  
asset management  
systems in various  
countries in Africa  
IFRTT Board Member  
and Past-President.

### Abstract

Transport agencies in both developed and developing economies face problems with ageing infrastructure and budgetary constraints. Furthermore, competition for scarce public resources often inhibits the Promising Evolution of Intelligent Access: From Australia to Europe



The Promising Evolution of Intelligent Access: From Australia to Europe

## THE PROMISING EVOLUTION OF INTELLIGENT ACCESS: FROM AUSTRALIA TO EUROPE



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### Abstract

This paper considers the diversity of applications for Intelligent Access systems as well as the economic and other applications bring to road network management and the transport task. The evolution of approaches to Intelligent Access. Drawing on the European experience the paper considers what lessons might be applied to further implementation of regulatory arrangements to drive greater environmental efficiencies in the transport sector using Intelligent Access. An important analysis is identifying the main parties involved in progressing the development of Intelligent Access systems. Understanding the interest influences the direction and design of future policy and regulatory reform.

**Keywords:** Vehicle-infrastructure communications; Efficient transport; reduction; Enforcement strategies; Infrastructure and space planning

# HVTT17 – book it in your calendars!

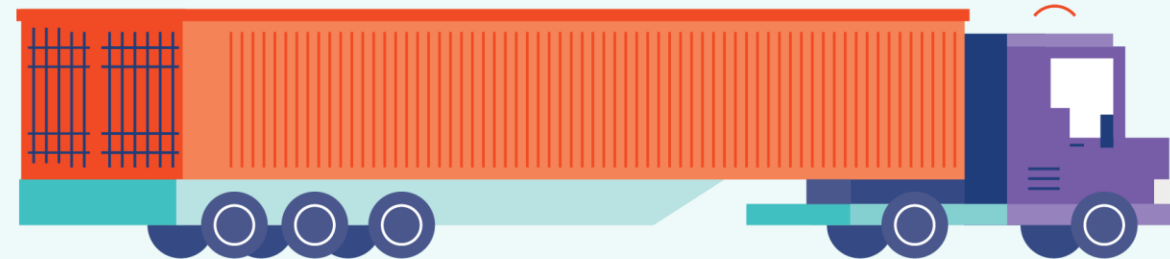
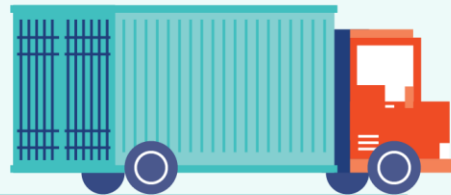




National  
Transport  
Commission



Leading change<sup>™</sup>



# Heavy Vehicle National Law

 Implementation Update | 2021-23

## Our goal

Minimise harm through all components that make up the journey





# ■ A vision for a better law

## Safe drivers

- Fit for work
- Authorised
- Alert
- Operating safely

## Safe, efficient vehicles

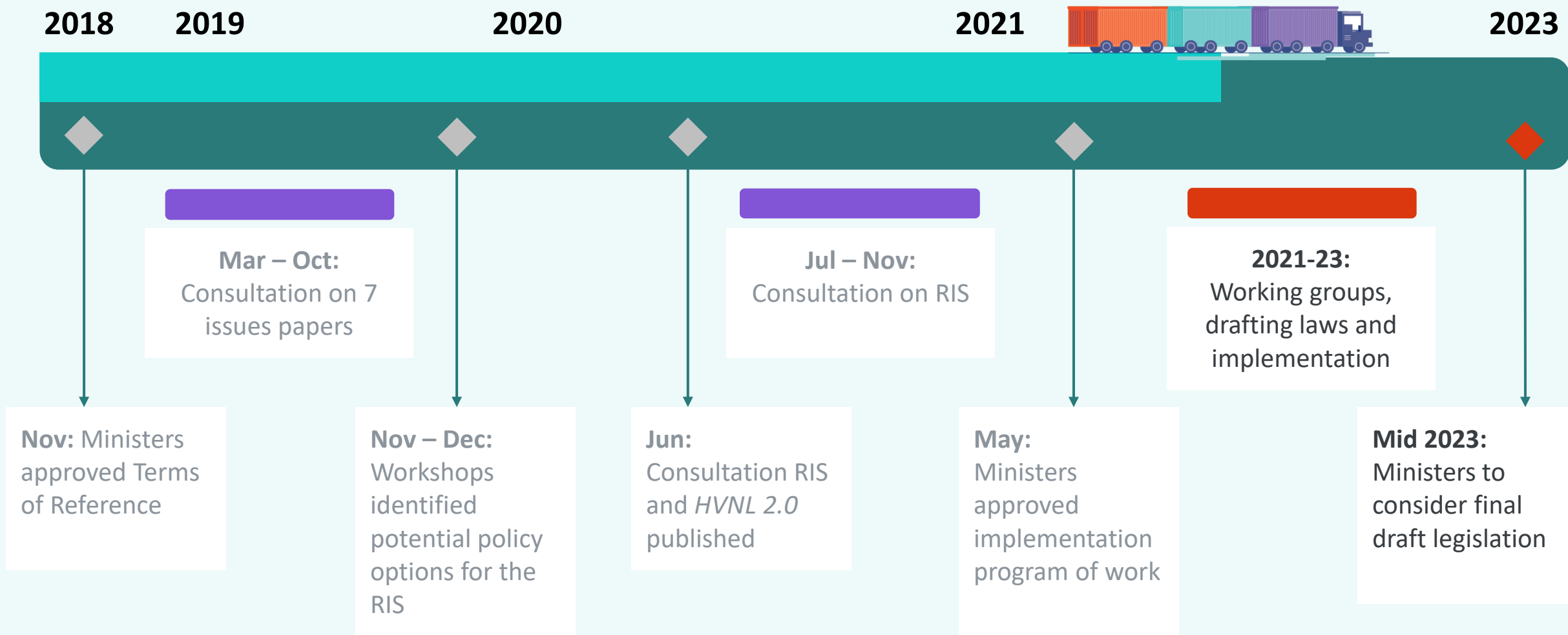
- Authorised
- Safely loaded
- Meets standards
- Roadworthy

## Suitable routes

- Mass and dimension
- Public safety
- Productive and safe use of road infrastructure



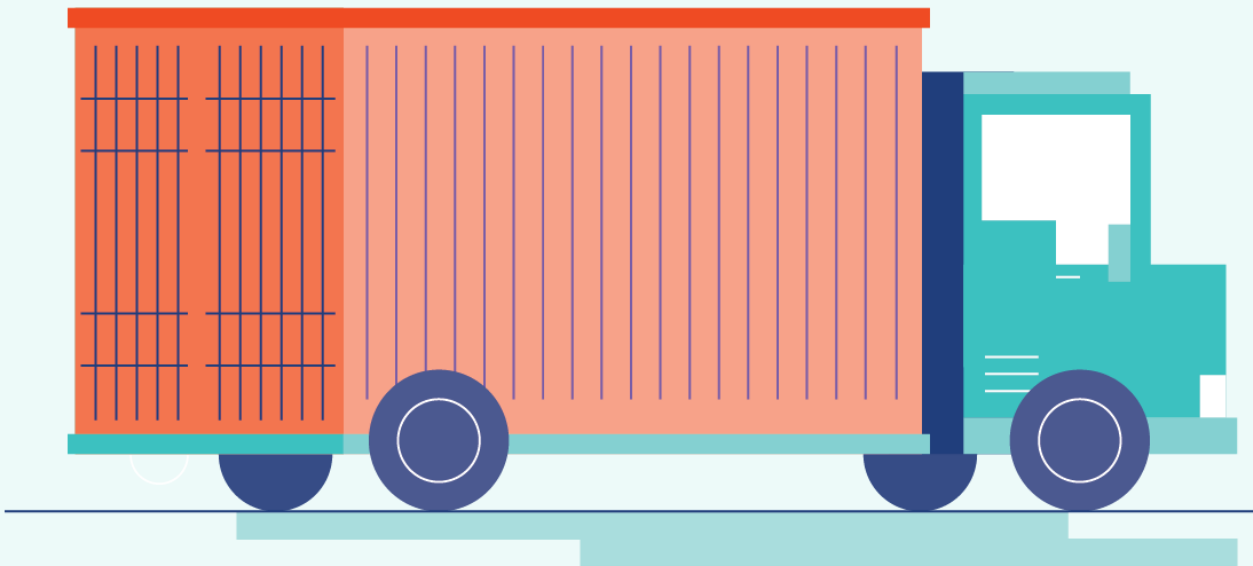
# Where are we in the process?



# What's next for the Heavy Vehicle National Law?

Our implementation activities will cover six key areas.

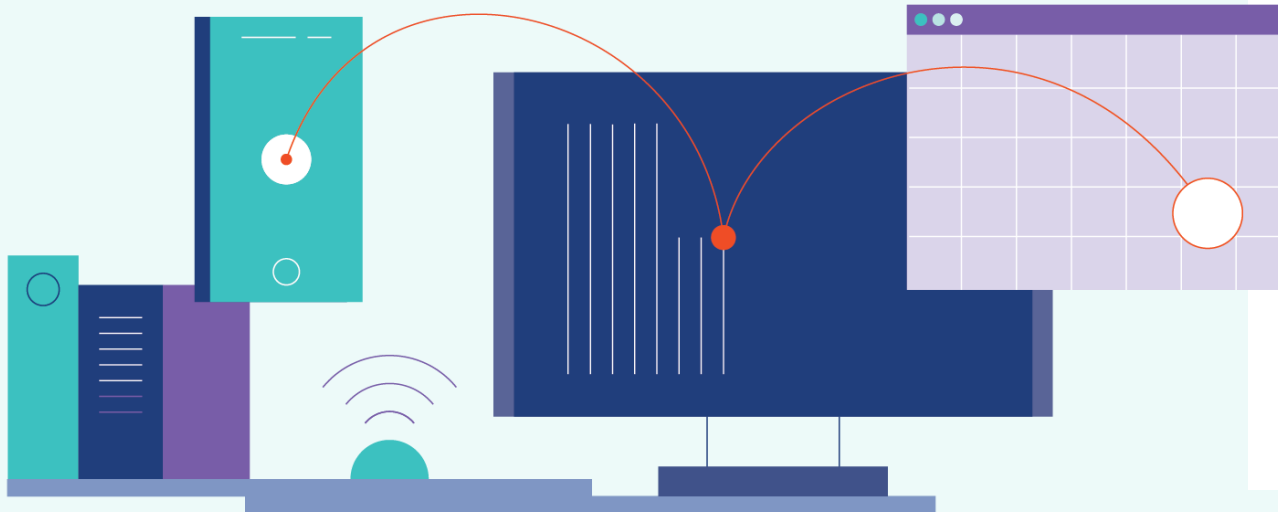
- Assurance (accreditation)
- Technology and Data
- Duties
- Fatigue management
- Vehicles and Access
- Legislative approach



# Technology and data

We'll be working on these key items from now until mid-2022.

- Data & technology assurance framework
- Establishing roles and responsibilities
- Models and levels of assurance
- Privacy and data protection for government/regulator use of vehicle generated data
- Prioritised technology and data sets





## **Key focus - Nov 2021 and May 2022**

1. Legislative architecture of modernised, tiered HVNL
2. Architecture of risk-based operator assurance
3. Technology and data framework to inform digital infrastructure
4. New tiered fatigue requirements
5. Ambitious access scope to support and improve productivity



## Contact

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# Latest developments from around the country



# HPFV - OBM Requirements update

- Smart OBM is now a requirement for access to the HPFV network in Victoria and for specific vehicles in NSW.
- IAP to TMA transition for HPFVs and Cranes (voluntary only) in Victoria

## Transition Period



There is a transition period that started from 1 Feb 2021, and ends on 31 October 2021.



This transition period was designed to give operators time to install type approved Smart OBM onto their fleet from registered suppliers.



From 1 November 2021 all operators accessing the HPFV network will need Smart OBM installed as a condition for access.

## What Smart OBM system is required?



- A Category B Smart OBM system that is Type-Approved by TCA will be required.



# Smart OBM – managing deployments

- The first Smart OBM deployments are now underway:
  - High Productivity Freight Vehicles (HPFVs) in Victoria
  - Performance Based Standards (PBS) vehicles in Tasmania
- Smart OBM is also being introduced in for NSW for specific vehicles
- Some ‘fake news’ has crept into the dialogue amongst stakeholders, so let’s dispel some myths from the facts...

# Roll-out of Smart OBM

## Myth #1:

Transport operators only need to have a Smart OBM fitted to their vehicles to meet requirements

## Fact #1:

Transport operators need to have Smart OBM systems **fitted** and **“paired”** with a certified service provider



# Roll-out of Smart OBM

## Myth #2:

Vehicles already fitted with an OBM system don't need to do anything for Smart OBM

## Fact #2:

Vehicles need to be fitted with a type-approved Smart OBM system (Category B or C)

Depending on what's already installed, existing OBM systems *may be upgradable* to Smart OBM

# Roll-out of Smart OBM

## Myth #3:

TCA prescribes 6 monthly calibrations for Smart OBM systems

## Fact #3:

The frequency of calibrations is determined by the suppliers of Smart OBM systems (not TCA)

TCA recognises the recommended calibration frequency (from the supplier) through type-approval



# Roll-out of Smart OBM

## Myth #4:

Calibration records need to be sent to jurisdictions and TCA



## Fact #4:

Calibration records need to be retained by the OBM supplier

TCA may request calibration records via the certified ASP as part of its oversight and audit of ASPs



# Roll-out of Smart OBM

## Myth #5:

Existing arrangements between ASPs and OBM suppliers are automatically recognised by TCA

## Fact #5:

All “pairings” between OBM suppliers and certified ASPs need to be formally recognised by TCA



# Roll-out of Smart OBM

## Myth #6:

Category A type-approved OBM systems are recognised as Smart OBM

## Fact #6:

Category A type-approved OBM systems **are not** Smart OBM systems

Only Category B or C type-approved OBM systems are recognised as Smart OBM systems

# Dynamic turn-by-turn route guidance (for RAVs)



TCA is working with road managers to facilitate the provision of machine readable RAV maps through the NTF for application services providers.

These maps will support in-vehicle routing to legal networks.

TCA is establishing a nationally consistent approach for updates to machine readable RAV maps.

**If you're interested in being part of a pilot, contact David Rowe  
([davidr@tca.gov.au](mailto:davidr@tca.gov.au))**



## TMA Live pilots

Proof-of-concept projects to collect, standardise, visualise and allow for the transmission of near-real time data to road and infrastructure managers.

Two-way ecosystem to create value for road transport operators and service providers.

Safety alerts for example near rail level crossings and low clearance bridges or tunnels as key safety case.

**If you're interested in being part of a pilot, contact David Rowe  
([davidr@tca.gov.au](mailto:davidr@tca.gov.au))**

# Questions?



**Thank you**

Further info at:  
**[tca.gov.au](http://tca.gov.au)**