



NSW's Transition to Smart On-Board Mass for PBS Mass Monitoring

31 August 2023



Today's moderators

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We acknowledge the Australian Aboriginal and Torres Strait Islander peoples as the first inhabitants of the nation and the traditional custodians of the lands where we live, learn and work. We pay our respects to Elders past, present and emerging for they hold the memories, traditions, culture and hopes of Aboriginal and Torres Strait Islander peoples of Australia.

Austrroads acknowledges and respects the Treaty of Waitangi and Maori as the original people of New Zealand.



About Austroads & TCA

Austroads is the collective of Australasian transport and traffic agencies

- Transport for NSW
- Department of Transport and Planning Victoria
- Department of Transport and Main Roads Queensland
- Main Roads Western Australia
- Department for Infrastructure and Transport South Australia
- Department of State Growth Tasmania
- Department of Infrastructure, Planning and Logistics Northern Territory
- Transport Canberra and City Services Directorate Australian Capital Territory
- Department of Infrastructure, Transport, Regional Development, Communications and the Arts
- Australian Local Government Association
- Waka Kotahi NZ Transport Agency

Transport Certification Australia (TCA) is a national organisation that provides assurance services relating to transport technologies and data to enable improved public purpose outcomes from road transport.

Key aspects of TCA include:

- An independent not-for-profit entity, with government oversight
- Administration of the National Telematics Framework, including its rules, specifications, agreements, digital infrastructure and other supporting services
- Assurance services that support but are appropriately separated from regulators, policy makers and enforcement activities, and underpin telematics applications and associated information and data services
- Advice that is based on evidence and a deep subject matter knowledge
- Trusted partner to both government and industry stakeholders, enabling a nationally consistent open market, with services covering all road vehicle types and associated digital infrastructure.



Housekeeping



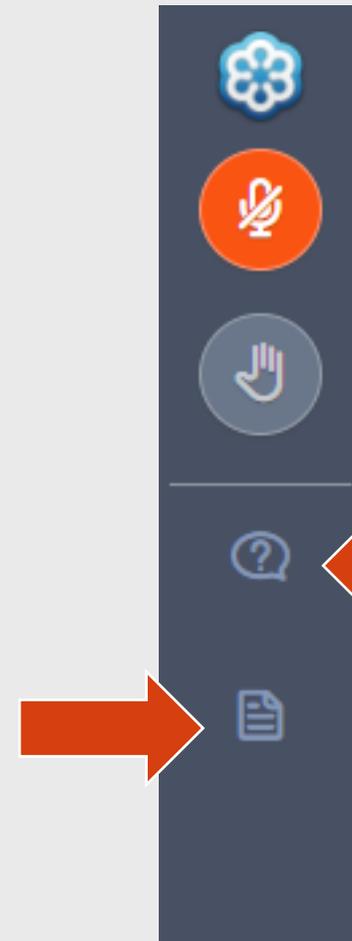
Presentation = 40 mins

Question time = 15 mins



**NSW's Transition to Smart On-Board Mass
for PBS Mass Monitoring**

31 August 2023



**Type questions
here**
Let us know the
slide number
your question
relates to



Today's presenters and agenda

Topic	Presenter
Using the National Telematics Framework to improve road outcomes	Gavin Hill
Outlining the differences between IAP and TMA Introducing Smart OBM	
NSW's Transition to Smart On-Board Mass for PBS Mass Monitoring	Brett Graham
Q&A	Both presenters



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Using the National Telematics Framework to improve road outcomes

Gavin Hill

General Manager | Strategy and Delivery

TCA



Harnessing the power of telematics

A significant number of commercial vehicles have some form of telematics ...

...resulting in unprecedented volumes of data being generated **every single day** on our road networks

Harnessing the power of telematics

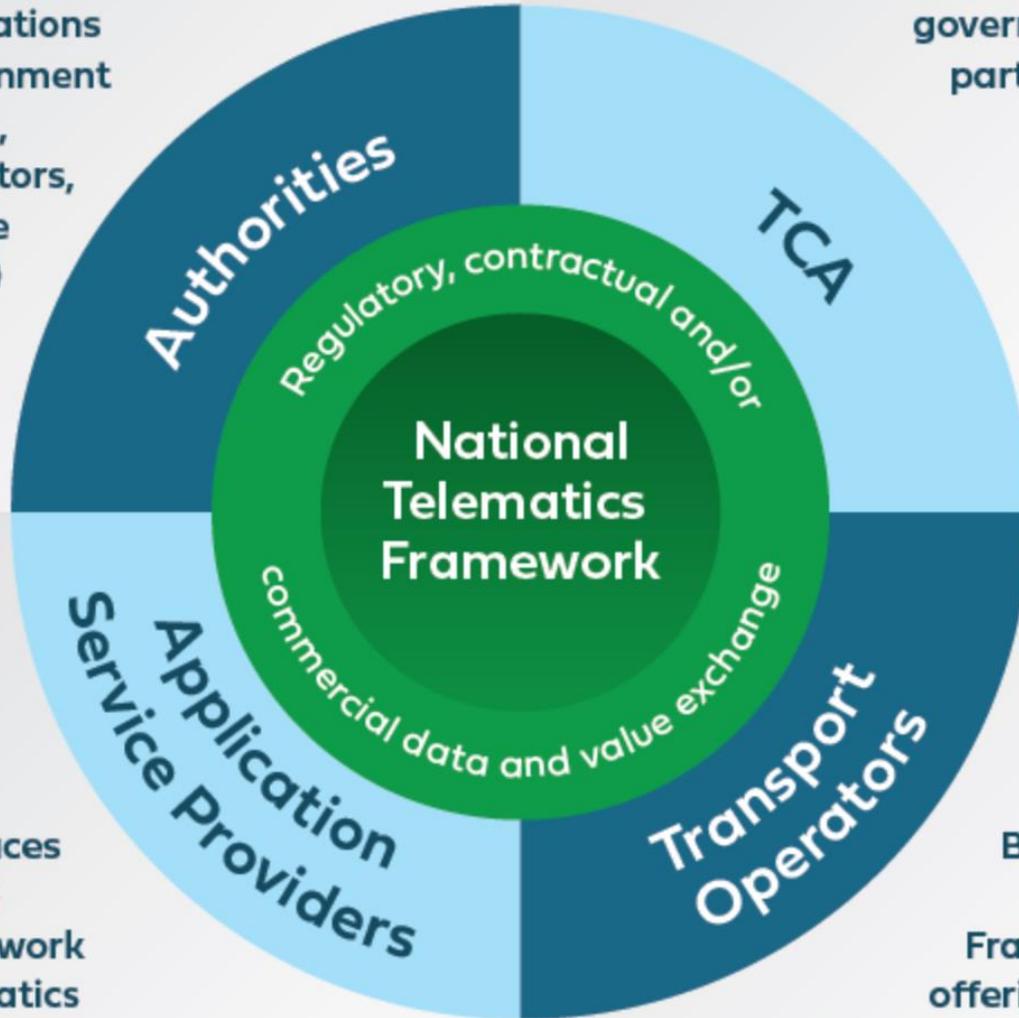
...but telematics data **is not** readily available to governments, road agencies and regulators

This is known as the problem of 'dark data'

The National Telematics Framework overcomes this problem

Creators of Framework offerings and applications (government bodies, regulators, private sector)

Administrator of the Framework and governance of participants



Interfaces for the Framework (telematics and intelligent technology service providers)

Buyers or users of Framework offerings and applications (operators, drivers, end-users)



UNDERSTANDING
THE FRAMEWORK



COMMON
FRAMEWORK
COMPONENTS



DIFFERENT
ASSURANCE
LEVELS FOR
APPLICATIONS



USE OF THE
FRAMEWORK



National Telematics Framework

- Multiple providers
- Multiple applications
- Multiple schemes
- *enabled through:*
 - Standards and specifications
 - Business rules
 - Legal agreements
 - Operational oversight
 - Privacy management
 - Cyber security

= Consumer choice

= Consumer protections and assurance

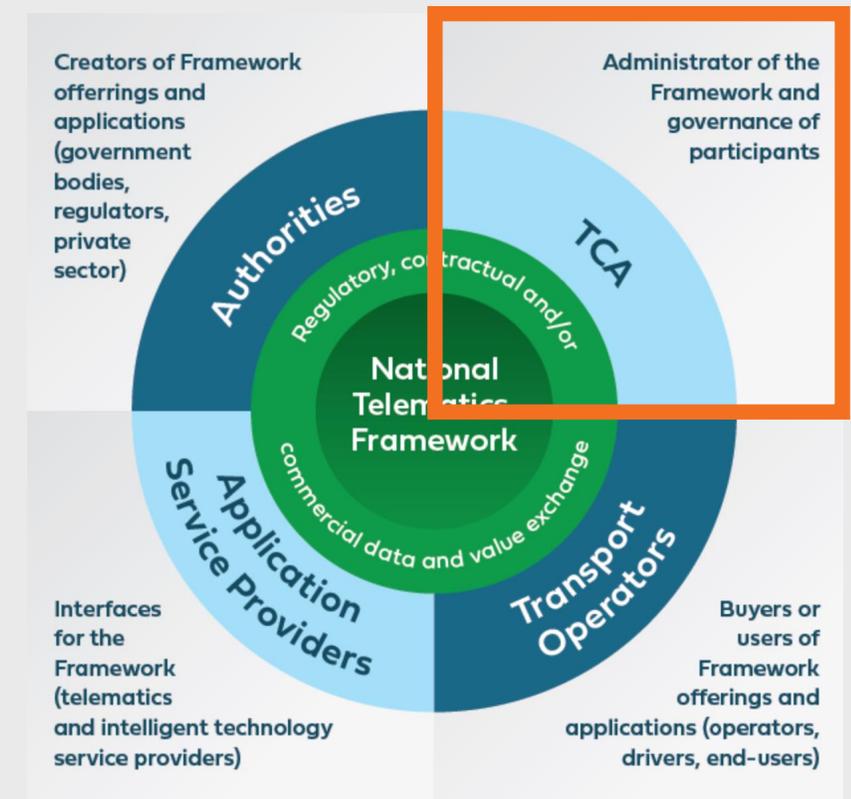
= Unlocks standardised data collection and reporting

National Telematics Framework

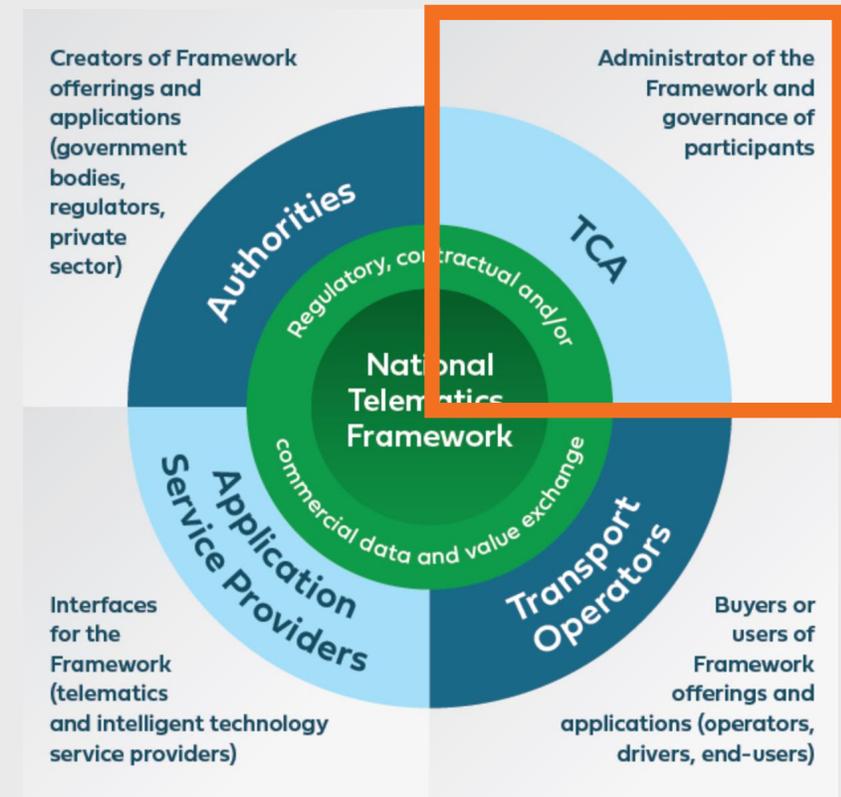
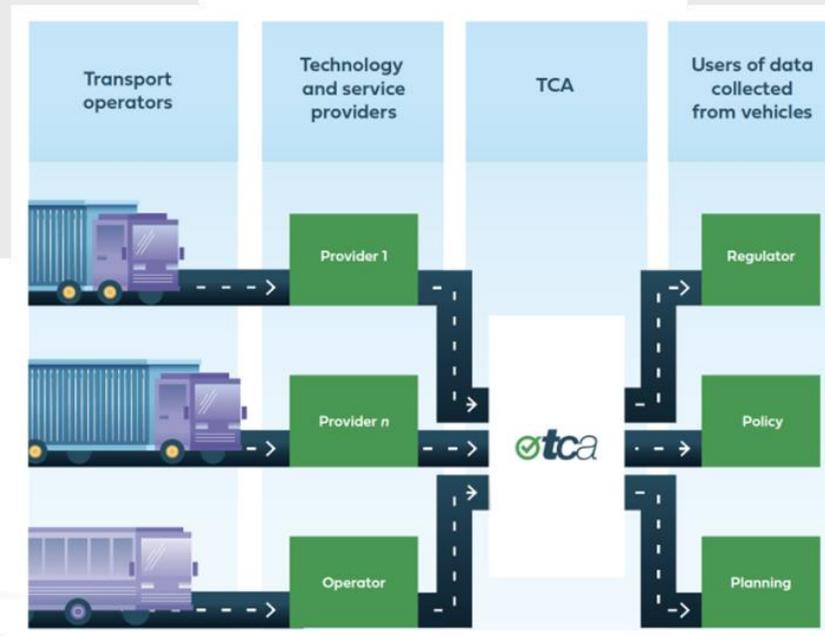
- Recognised as an international standard by the International Standards Organization (ISO)
- **ISO 15638**: Framework for cooperative telematics applications for regulated commercial freight vehicles (TARV)

Interactions within the Framework

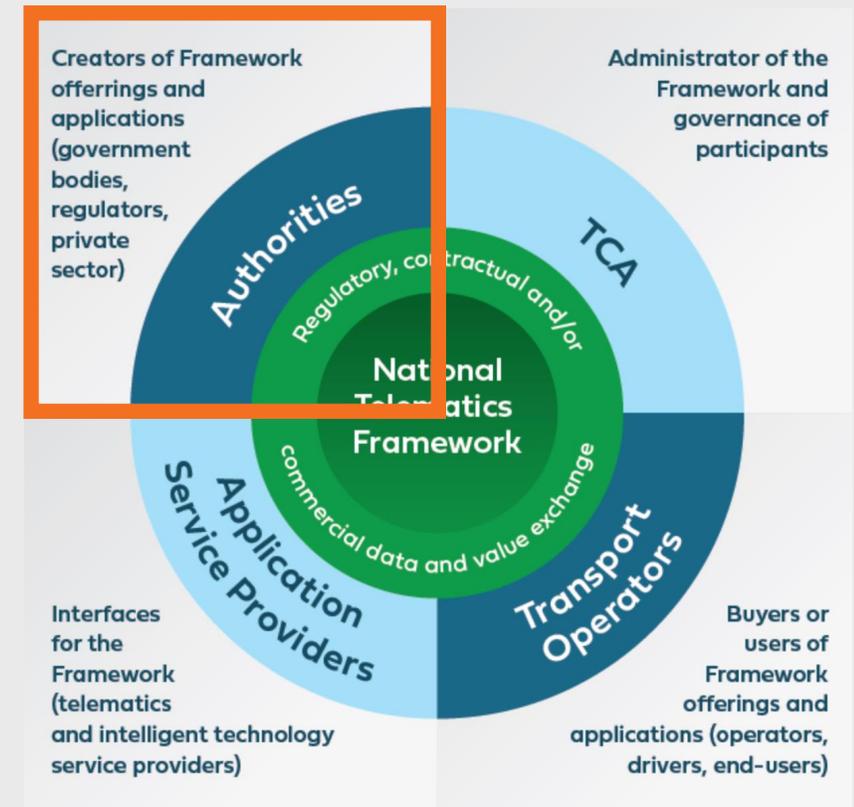
- We develop **performance-based** functional and technical **specifications**
- We **register and certify** Application Service Providers (depending on level of assurance)
- We **type-approve** hardware
- We **manage** the **interactions** of all parties in the Framework



Interactions within the Framework

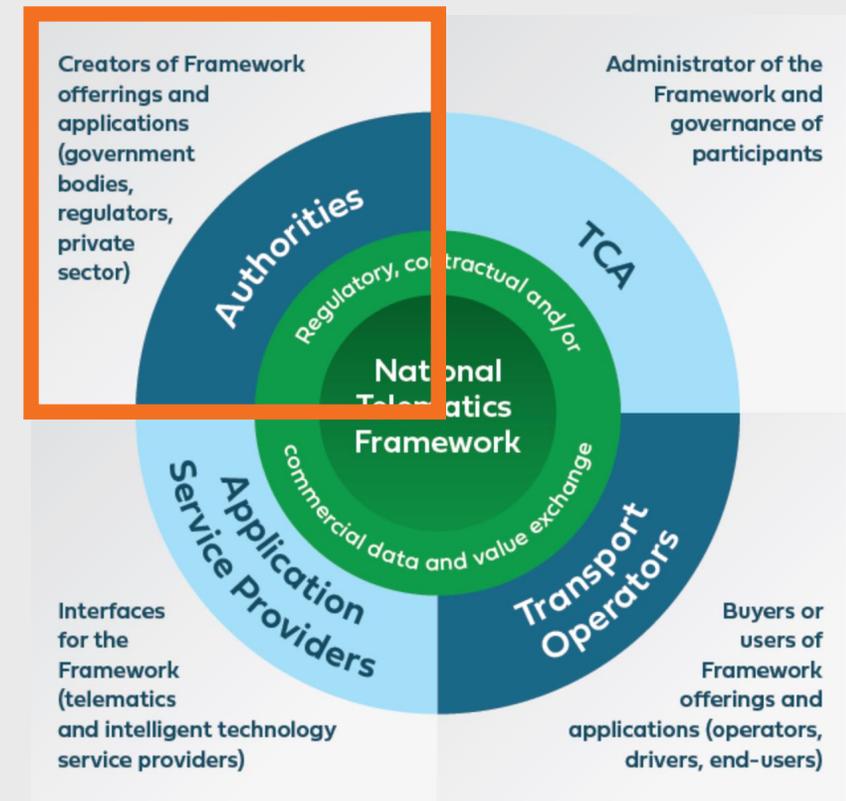


Interactions within the Framework



Interactions within the Framework

- Road agencies deploy productivity and safety schemes through the National Telematics Framework
- The Framework offers different tools for different jobs
- What we'll hear from Victoria shortly is how they're moving from IAP to TMA – so that they're using the right tool for the job



Outlining the differences between IAP and TMA

Introducing Smart OBM

Gavin Hill

General Manager | Strategy and Delivery

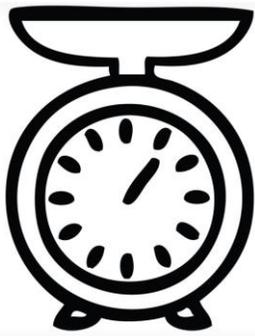
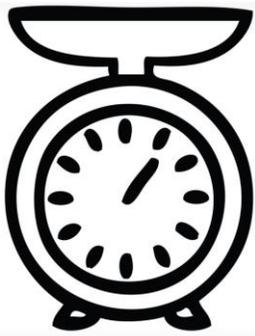
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Key differences between IAP and TMA

	Road Infrastructure Management (RIM)	Telematics Monitoring Application (TMA)	Intelligent Access Program (IAP)
Aggregated, de-identified data	✓	✓	✗
Identifiable vehicle data	✗	✓	✓
Evidentiary data for enforcement	✗	✗	✓
Cost (to transport operators)	←————→		
Serving suggestions	Use for road use analysis/planning	Use for lower-risk activities (education & regulatory improvement activities)	Use for higher-risk activities (direct compliance & enforcement)

Smart OBM



Smart OBM

Smart OBM systems are devices that use digital technology to collect and transmit mass data from vehicles in a reliable and standardised way

Different technologies can be used to deliver Smart OBM

Road agencies require Smart OBM for specific uses

All Smart OBM systems are type-approved by TCA

OBM may be referred to as:

- On-board scales
- On-board weighing
- Air pressure sensors
- Electronic Braking System (EBS)

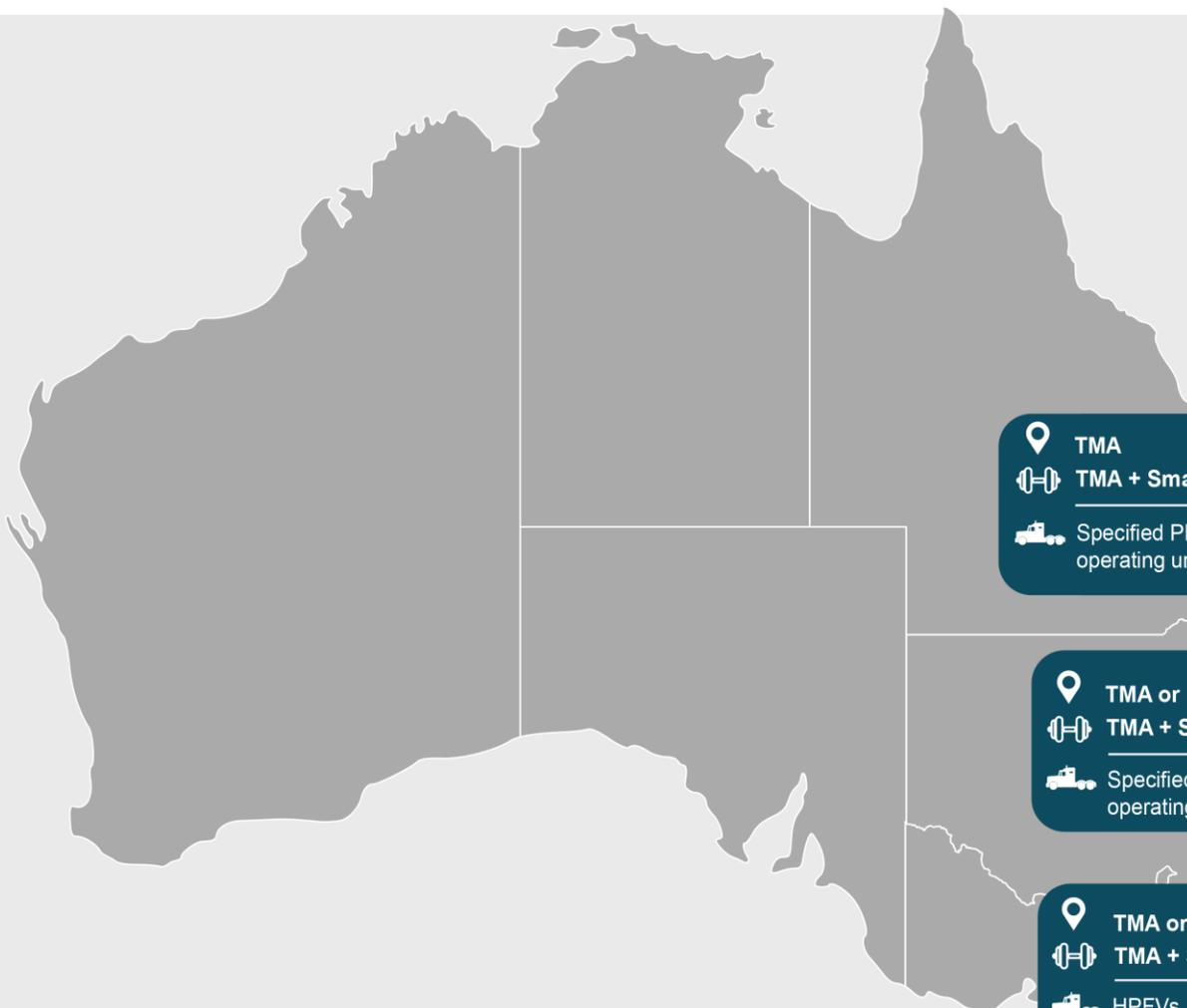
Smart OBM



INTEGRATED
VEHICLE
SOLUTIONS



 | Type-Approved™
Smart OBM System (Category B)



QLD

- TMA
- TMA + Smart OBM
- Specified PBS combinations operating under a specific scheme

Required for all new eligible vehicles from 1 December 2022
Transition for affected existing vehicles required by 1 June 2024

NSW

- TMA or IAP
- TMA + Smart OBM
- Specified PBS combinations operating under a specific scheme

Required for all affected vehicles by 1 June 2024

VIC

- TMA or IAP
- TMA + Smart OBM
- HPFVs, as defined by Victoria, operating under a specific scheme

Required for all affected vehicles by 30 June 2023

Currently required

TAS

- TMA
- TMA + Smart OBM
- Specified PBS combinations operating under a specific scheme

KEY

- Required location monitoring application
- Required mass monitoring application
- Affected vehicles these requirements apply to

Note: Please refer to individual jurisdictional guidelines when checking requirements for your specific vehicle and scheme enrolment.

NSW's Transition to Smart On-Board Mass for PBS Mass Monitoring

Brett Graham

Senior Manager for Road Access
Transport for NSW



Our mission – freight outcomes

Our mission is to give freight a louder voice earlier by raising the profile of freight as a fundamental customer of the transport system to enable the safe, sustainable and productive movement of goods.



Safe

Setting NSW on a path to zero trauma from the movement of freight by 2050



Sustainable

Freight transport that delivers net zero emissions by 2050



Productive

Optimised connected, end to end networks

Vehicles that require Smart OBM in NSW

- In NSW Smart OBM is applied as a condition of access where there is the opportunity to provide expanded access across infrastructure
- Several Performance Based Standards (PBS) vehicles are and have been operating in NSW with Interim and Smart OBM systems.

What are the benefits?

- Greater network access and heavy vehicle productivity
- Matching vehicle design and infrastructure
- Improved asset assurance for infrastructure managers

Building a resilient freight network for the future

A strong, and efficient network is underpinned by:

- **New technology**
- Real-time **network visibility** through telematics
- **Data-driven decision making** enabling real-time responses to freight operations
- **Targeted** non-infrastructure options, and improved maintenance
- Reduced **administrative burden** on road infrastructure managers and time delays for road operators through new technology
- A clear understanding of the future network: **end-to-end journey** from large-scale exports and imports to last mile deliveries to businesses and homes

What next?

- TfNSW is transitioning from Interim OBM to Smart OBM
- From 1 June 2024 all OBM systems will need to meet Smart OBM requirements
- From 1 June 2024 Smart OBM operators must be enrolled in a relevant TMA mass monitoring scheme
- Smart OBM enrolments are open in NSW

Questions?



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Upcoming webinars

Topic	Date
Australian 3G Network Shutdown	4 September
A National Approach to Measuring Non-Fatal Crash Outcomes: Stage 2	12 September
Guide to Road Safety Update – Practical Approaches for Managing Regional Road Safety Priorities	13 September
National Telematics Framework: Setting a Benchmark for Intelligent Access	20 September
Australia and New Zealand Roads Capability Analysis 2022-2032	22 September
2023 National Walking and Cycling Participation Survey	3 October
Update to the Guide to Road Design – Detailed Review of Supplements	5 October
Physical Infrastructure to Support Connected and Automated Vehicles	18 October
Austrroads Vehicle Classification Scheme – Heavy Vehicles	25 October
Austrroads Vehicle Classification Scheme – Light Vehicles	2 November
Austrroads Vehicle Classification Scheme – Measuring Active Transport	9 November

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