

Telematics Industry Group Forum

15 May 2025



Austroads and TCA 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.

Austroads and TCA acknowledge and respects the Treaty of Waitangi and Maori as the original people of New Zealand.

Today's Agenda



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Welcome

Gavin Hill General Manager, Strategic Engagement and Performance, Austroads

The big picture



Jurisdictions in Australia and New Zealand are increasingly turning to the use of data for improved:

- road safety
- transport efficiency
- freight productivity
- asset management
- sustainability



New frontiers

- An Austroads report released in February 2025 on Zero Emission Heavy Vehicles and Road Pavements highlights emerging challenges.
- The report highlights some of the tensions that exist when balancing decarbonisation goals with infrastructure sustainability.





New frontiers

Options include:

- 1. **Maintain payload** Increase permissible mass limits to accommodate heavier tare weight without reducing payload capacity.
- 2. **Maintain gross mass** Keep total mass limits unchanged, requiring operators to accept lower payloads.
- Allow axle group mass substitution Provide flexibility in redistributing weight across axles without exceeding total gross vehicle mass.

Each option presents trade-offs, requiring decision-makers to carefully evaluate infrastructure constraints, economic implications, and environmental objectives. Download the report and watch a free webinar at: austroads.info/ap-r725-25







State of the industry

John Gordon Strategic Engagement Manager, Austroads

TCA recognised telematics service providers

Image: Second Strain Strai

Providing services for: IAP, TMA, RIM:





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Providing services for: TMA, RIM:





Providing services for: RIM:













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Providing services for their own fleet:





TCA recognised Smart OBM system suppliers



Providing devices suitable for schemes requiring Smart OBM, in conjunction with certified service providers:



Providing Smart OBM devices for their own fleet:



Growth in the regulatory telematics enrolments

Over **18,000 heavy vehicles** enrolled in the various applications of the National Telematics Framework and sharing telematics location data with TCA as of March 2025.

Over **3,050 heavy vehicles** enrolled in TMA sharing mass data with TCA through Smart OBM systems.



TCA now receives approximately 17 million position records per month for IAP and over 385 million position records per month for TMA and RIM from Service Providers.

IAP Records



TMA, RIM Records



Month-by-month position records and number of vehicles enrolled in IAP, TMA or RIM.



3G Network Shutdown

Important information from the NHVR – 3G network shutdown

- All enrolments using 3G devices have been cancelled.
- Austroads is now supporting the NHVR in following up with vehicles that were/are not fitted with operational equipment, were/are not enrolled, but operating under telematics conditions.





Developments from around the country

Updates from Austroads member representatives



Update on the MRWA trailer configuration data study

John Gordon Strategic Engagement Manager, Austroads

What does trailer configuration mean?

- Refers to the overall setup of a vehicle, including the prime mover and all connected trailers.
- Many heavy vehicles are already fitted with telematics devices that can capture which trailers are connected to the prime mover, as well as information about the trailers.
- TCA will work with service providers to standardise, ingest and visualise this data for road managers.
- Vehicle configuration insights support road managers, compliance, policy-making, and investment decisions.





What does trailer configuration mean?





Industry participation

- TCA has identified the common vehicle configurations for the study.
- Transport operators are being invited to participate via a Consent Form.
- One ASP has volunteered to support the study and has identified four potential transport operators. Other ASPs have been engaged to facilitate broader participation.
- A draft *Data Reporting Guide for Studies* outlines additional data requirements for trailers and prime movers.

Vehicle Configuration	Common Name	Maximum Length	Maximum Statutory Mass Approved Network	Maximum Mass under AMMS 1 Approved Network	Maximum Mass under AMMS 2 Approved Network	Maximum Mass under AMMS 3 Approved Network
mainroads	PBS Prime Mover & Quad Axle Semi-trailer	<mark>≤ 20.0</mark> m	48.5t	53.0t	56.0t	58.0t
			PBS Q1.1	PBS Q1.1	PBS Q1.2	PBS Q1.3
Company Company Company	Truck & Dog	≤ 25.0m	68.5t	72.0t	74.0t	76.5t
			Tandem Drive N2	Tandem Drive N2.1	Tandem Drive N2.2	Tandem Drive N2.3
Balaroads Smalaroads	B-Double	≤ 27.5m	68.5t	72.0t	74.0t	76.5t
			Tandem Drive N2	Tandem Drive N2.1	Tandem Drive N2.2	Tandem Drive N2.3
mainroads mainroads	A-Double	< 27 5m	88.5t	93.5t	96.5t	100.0t
		- 21.011	Tandem Drive N4	Tandem Drive N4.1	Tandem Drive N4.2	N4.3
mainroads mainroads	PBS A-Double	≤ 30.0m	88.5t	93.5t	96.5t	100.0t
			PBS 2B.1	PBS 2B.1	PBS 2B.2	PBS 2B.3
Comoto Total Comoto Total	PBS Quad Axle A-Double	≤ 32.0m	92.0t	103.0t	111.0t	116.0t
			Endorsement	Endorsement	Endorsement	Endorsement
A mainroads	A-Double	≤ 36.5m	88.5t	93.5t	96.5t	100.0t
			<u>N6</u>	N6.1	N6.2	N6.3
Comaincoads Comaincoads Comaincoads Comaincoads Comaincoads	B-Triple	≤ 36.5m	88.5t	93.5t	96.5t	100.0t
			N6	N6.1	N6.2	N6.3
mainroads mainroads	AB-Triple	≤ 36.5m	108.5t	115.0t	119.0t	123.5t
			N7	<u>N7.1</u>	N7.2	<u>N7.3</u>
maloreads gradoreads gradoreads	BA-Triple	≤ 36.5m	108.5t	115.0t Tandem Drive	119.0t	123.5t
			<u>N7</u>	<u>N7.1</u>	N7.2	<u>N7.3</u>
Commente Commente Commente	Truck & 2 Dogs	≤ 36.5m	108.5t Tandem Drive	115.0t Tandem Drive	119.0t Tandem Drive	123.5t Tandem Drive
			<u>N7</u>	<u>N7.1</u>	N7.2	N7.3
	PBS A-Triple	≤ 42.0m ≤ 53.5m	132.0t	141.Ut	147.0t	153.Ut
			129.51	136.51	141 5t	147.0t
			Tandem Drive	Tandem Drive	Tandem Drive	Tandem Drive
PI O mitrach O mitrach	PBS Quad Axle A-Triple	≤ 53.5m	132.0t	148.5t	160.5t	168 Ot
			PBS TDQ4.1	PBS TDQ4.1	PBS TDQ4.2	PBS TDQ4.3
Compared Semiloroads Semiloroads Semiloroads	AAB-Quad	≤ 53.5m	148.5t	158.0t	164.0t	170.5t
			Tandem Drive	Tandem Drive	Tandem Drive	Tandem Drive
21 0 000 000 000 000 000 000 000	PBS A-Quad	≤ 60.0m	172.0t	184.0t	192.0t	200.0t
			PBS TD4B.1	PBS TD4B.1	PBS TD4B.2	PBS TD4B.3
21 Quinteral Qui	PBS Quad Axle BAA-Quad	≤ 60.0m	152 Ot	175 Ot	192 Ot	201 5t
			PRS TDO4R 1	PRS TDO4R 1	PRS TDO4R 2	PBS TDO4B 3
			172.01	104.0	210.01	220.04
21 0 minute 20 minute 0 000 000 000 000 000 000	PBS Quad Axle A-Quad	≤ 60.0m	172.00	194.00	210.00	220.00
			PBS TDQ48.1	MBS TDQ48.1	PBS TDQ48.2	PBS TDQ48.3

> Maximum mass based on a vehicle combination with a twin steer prime mover with 12 tonnes on the steer axles.

> All vehicle combinations shown must operate in accordance with a Main Roads Permit or Order.

Findings to date

Technology options available

A variety of technologies (e.g. tyre pressure monitoring, TIDs) may support improved trailer identification and vehicle configuration tracking.

Smart OBM as a common ground

All volunteer transport operators have Smart OBM systems. To simplify and accelerate progress, this proof-of-concept will focus on this data.

Consent process needs streamlining

The current paper/PDF-based consent method is cumbersome. A more user-friendly approach to encourage participation.







The National Heavy Vehicle Intelligent Access Program Strategic Overview

Kim Denyer Director, National Compliance Services, National Heavy Vehicle Regulator (NHVR)

Background

- April 2024 Queensland transition to the NHVR – national approach to the regulation of Intelligent Access Programs
- Intelligent Access Program Compliance Framework released for industry consultation in March 2024. Approved in July 2024.
- Changes to road managers enrolment preferences means that TMA (with or without OBM) and RIM enrolments have risen significantly, while IAP enrolments have declined.



Active telematics schemes across jurisdictions



Notes:

- This information is accurate as of May 2025. Please refer to jurisdictional guidelines when checking the requirements for your specific vehicle and scheme enrolment.
- 2. The below schemes are available across all Australian jurisdictions:
- RIM Express Scheme
- RIM Industry-Led Data-Sharing Schemes (AUS)

- IAP Road Train Monitoring Scheme (VIC)
- IAP SPV Schemes (VIC)

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- TMA HPFV Monitoring Schemes (VIC)
- TMA Class 3 LZEHV Monitoring Scheme (VIC)
- TMA Road Train Monitoring Scheme (VIC)
 <u>TMA SP</u>V Monitoring Schemes (VIC)
- TMA HPLV Monitoring Scheme (VIC)

RIM

RIM HPLV Monitoring Scheme (VIC)

IAP SPV Schemes (QLE

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- TMA Class 3 Truck and Dog Trailer Monitoring Scheme (QLI
- TMA Higher Mass Limits Scheme (QLD)
- TMA PBS Vehicle Monitoring Scheme (QLD)
- TMA PBS Vehicle Mass Monitoring Scheme (QL
- TMA ZEHV Monitoring Scheme (QLD)

IAP Higher Mass Limits Schemes (NSW)
IAP General Mass Limits Schemes (NSW)
IAP SPV Schemes (NSW)

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TMA Higher Mass Limits Scheme (NSW)
TMA SPV Monitoring Schemes (NSW)
TMA Class 3 Truck and Dog Trailer Monitoring Scheme (NSW)
TMA Hill Descent Monitoring Schemes (NSW)
TMA PBS Vehicle Monitoring Schemes (NSW)
TMA PBS Vehicle Mass Monitoring Scheme (NSW)
TMA ZEHV Monitoring Schemes (NSW)

🔁 RIM

RIM Class 3 Truck and Dog Trailer Monitoring Scheme (NSW)
RIM Farm Gate Access Schemes (NSW)
RIM Oversize Overmass (OSOM) Vehicle Movement Scheme (NSW)
RIM PBS Vehicle Monitoring Schemes (NSW)
RIM Port Botany Container Movement Efficiency Scheme (NSW)
RIM Safety, Productivity, Construction and Environment Transport Scheme (SPECTS) (NSW)
RIM ZEHV Monitoring Scheme (NSW)

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TAS

- TMA PBS Vehicle Monitoring Scheme (TAS)
- TMA SPV Monitoring Scheme (TAS)



NHVR Role (s659)

- Monitor compliance with the HVNL
- Investigate contraventions or possible contraventions of provisions of the HVNL, including offences against the HVNL
- Encourage and promote safe and productive business practices of persons involved in the road transport of goods or passengers by heavy vehicles that do not compromise the object of the HVNL
- Managing the impact of heavy vehicles on the environment, road infrastructure and public amenity.



Compliance Objectives

- 1. Encourage and promote safe and productive business practices by encouraging industry adoption of intelligent access programs.
- 2. Manage the impact of heavy vehicles on the environment, road infrastructure and public amenity by using intelligent access program information to ensure compliance with the requirements of road manager as outlined in the Notice or permit that allows additional access to the road network.
- 3. Monitor compliance with the HVNL; Informing, Educating and Enforcing where non-compliance is detected, applying an escalating range of regulatory interventions to change and promote positive behaviour.
- 4. Use data to monitor trends that may assist in resource allocation (e.g., SCOs in certain areas based upon trends in non-compliance over time) and the investigation of potential systemic offending under the HVNL.

Regulate enrolment

- The NHVR will use its data sources and collaborate with jurisdictions to monitor vehicles which are not enrolled in the required intelligent access program. Vehicles not enrolled in the required program are considered non-compliant with conditions of road access.
- The NHVR will incentivise these noncompliant operators to enroll in the appropriate intelligent access program application using the "inform, educate and enforce" model aligning with the NHVR's risk-based intervention strategy.

Protection of the Road Network

 The NHVR will monitor targeted locations on the road network – including those that may be nominated by road managers – such as bridges, curfewed roads, and level crossings (road managers consider these road assets to be high risk and in need specific protection).

Deliver productivity for industry

- The NHVR will use intelligent access program information to help identify transport operators with higher rates of noncompliance and take appropriate regulatory action in line with published NHVR policies.
- The NHVR will monitor intelligent access program information to inform intelligence gathering activities. This will in turn be used to inform and direct on-road compliance resourcing, education and stakeholder engagement activities.
- The NHVR will use secondary data to confirm non-compliance.

Monitor behavioural change and escalate

After each intervention, the NHVR will monitor and report on the effectiveness of the interventions.

If the non-compliant behaviour has not ceased after the implementation of the appropriate intervention, the NHVR will escalate.

Alignment of data to verify noncompliance

Industry perspective

Greg Forbes Transport Policy and Legislation Advisor, Heavy Vehicle Industry Association of Australia (HVIA)

Service Delivery Update Acting on feedback from Smart On-Board Mass participants

Paddy Goodall General Manager, Service Delivery

Austroads program updates

Joanne Vanselow Program Manager, Environment and Sustainability Program Manager, Vehicles and Technology Matin Nabavi Senior Road Safety Project Manager

Accessibility guidelines for LZEV charging infrastructure CAV6450

Goal: To support industry and governments in the transition to Low and Zero Emission Vehicles by developing guidelines for charging infrastructure that ensure the EV charging experience is a positive one for all users, including people with disabilities and older people.

Joanne Vanselow

Guidelines for implementing EV charging in remote and rural areas CAV6426

Goal: To provide guidance on implementing EV infrastructure in rural and regional areas including addressing key challenges such as limited power and communication coverage, off-grid areas, charging for vehicles with trailers and security concerns.

Joanne Vanselow

Guidance for Developing Standardised Transport Data Exchange for Australia and New Zealand CAV6376

Goal: To document a development path and guidance for road authorities to grow an agency's Data Provision Capability from 'Day 0.5' to 'Day 1'. Concentrating on cloud provided services harmonised with the European National Access Point platform.

Joanne Vanselow

Research Climate Resilience Needs and Guidance Approaches ESC6516

Goal: To improve road network resilience by incorporating climate change resilience in asset management processes.

Joanne Vanselow

Development of carbon measurement and reporting tool ESG6515

Goal: To provide a single Australia-New Zealand tool to enable agencies to meet growing obligations to quantify, consider and report carbon emissions associated with infrastructure construction and maintenance activities.

Joanne Vanselow

E-Call- possible approaches for Australia and New-Zealand CAV6424

Goal: To better understand the extent to which Automatic Crash Notification (ACN) technologies such as eCall can help support improved safety outcomes on Australian and New Zealand roads, and what interventions are needed to support or enable their implementation in Australia and New Zealand.

Joanne Vanselow

MOBILE SPEED CAMERA AHEAD

New Guidelines for Mobile Pointto-Point Enforcement SAG6409

Goal: To develop guidelines for best-practice implementation of mobile point-to-point (MP2P) speed cameras for managing driver speed choice.

Matin Nabavi Senior Project Manager Road Safety

Implementing the National Driver Distraction Roadmap SAG6417

Goal: To support implementation of the National Driver Distraction Roadmap (the Roadmap). Implementation of the Roadmap is a commitment in Australia's National Road Safety Strategy 2021-2030. Learn more on the Austroads website:

Matin Nabavi Senior Project Manager Road Safety

National Heavy Vehicle Driver Competency Framework – Design and Implementation Phase 2 PDP6559

Goal: To develop and implement nationally consistent training and assessment standard for heavy vehicle drivers.

John Kenyon

Project Director, National Heavy Vehicle Driver Competency Framework Austroads

National Heavy Vehicle Driver Competency Framework – Design and Implementation Phase 2

What is changing?

The new frameworks will mean:

- A new, national standard for training and assessment, including online, allowing increased flexibility and reduced costs.
- Behind-the-wheel training time will be increased, meaning drivers are more skilled, prepared and confident on the road.
- Faster pathways for licence progression, meaning increased efficiency and earning capacity for drivers.

What is next?

Austroads is working closely with all Australian states and territories, in consultation with industry stakeholders, to develop and implement the nationally consistent training and assessment standard for heavy vehicle drivers.

Implementation of these changes is anticipated to begin in 2026.

For more information, scan the QR code or visit: austroads.info/NHVDCF-review

Q&A

Open to questions and comments from all attendees

Thank you for attending

We look forward to seeing you in future TIG Forums!

To receive notifications about future TIG Forums, scan the QR code or visit: austroads.info/TIG