



# Heavy Vehicle Management – The Intelligent Access Program

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# TCA's Role





#### To deliver public outcomes

Government agencies and regulators are increasingly using telematics and related intelligent technologies to deliver public outcomes – across transport modes



### **TCA** function

TCA delivers advice and administers programs, on behalf of Australian governments, that provide assurance

Aligning with the Transport and Infrastructure Council key priority: Embracing innovation and technology in transport and infrastructure

# **Open Technology Market**



TCA's role ensures an open market approach to the delivery of public and private outcomes through the use of telematics an related intelligent technologies



### **TCA is a cross-cutting organisation**

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- Developed between TCA and Australian Governments
- Performance-based and outcome driven
- Privacy by design
- Permits (encourages) the co-existence of commercial and regulatory applications
- Recognised as world's best practice, recognised as an ISO standard (ISO 15638)



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# **Australian Road Freight Task**



At a glance:

- Road freight task has grown six-fold 1971-2011 (with strong growth forecast to 2030)
- Freight carried per vehicle has doubled
  - articulated trucks responsible for 90% of the productivity gains
- Future freight productivity growth is likely to be more muted
  - without further improvements in network access

# **The Intelligent Access Program**

**A National Telematics Framework App** 





- The IAP provides road authorities with greater confidence that heavy vehicles are complying with the agreed road access conditions that make the road network safer, smarter and more productive
- The IAP uses GNSS to monitor heavy vehicles' road use, giving transport operators flexible access to the Australian road network to suit their specific business and operational needs

### IAP – How does it work?



Transport Operators participating in the IAP engage a certified Service Provider to monitor their vehicles against IAP Conditions comprising:

- Spatial compliance
- Temporal compliance
- Speed compliance
- Self Declaration



### The IAP model

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# **IAP: TCA provides assurance**



- We have developed and maintain a performance based functional and technical specification
- We certify service providers and type-approve hardware
- We 'regulate' providers of technology by ensuring technology and systems work as intended...

...and continue to work in service



## IAP – An Open Technology Market

### IAP SERVICE PROVIDERS

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### TELETRAC NAVMAN



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### IAP – What road authorities see





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EDCLIFFE

- 160 km
  Toowoomba to
  Port of Brisbane
- Containerised
  grain freight task
- 56 tonne payload (37% increase)





### **IAP in action: Super Quads**



- 60m long Super Quad Road Trains in Western Australia, with a payload of 199 tonnes
- Using the IAP for route and speed management (a speed limit of 90km/h is applied)
- In-vehicle telematics is also being used to manage compliance with 'Headway' conditions (200m) and Overtaking restrictions (no overtaking)



## **Road network usage using IAP**





## **Road network usage using IAP**







Location: Ron Camm Bridge, Mackay QLD

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# **Find out more**

Visit our website:

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#### INTELLIGENT ACCESS PROGRAM



OVERVIEW OF THE IAP FUNCTIONAL AND TECHNICAL SPECIFICATION

