# **Transport and Main Roads Heavy Vehicle Telematics Strategy 2016**

#### **Integrated Application, Critical Investigation and Early Adoption**

As Queensland's transport network becomes increasingly inter-connected governments and industries will need to be agile in their adoption of emerging technologies to maximise safety, productivity and access outcomes. As a process of continuous improvement, the Department of Transport and Main Roads (TMR) will support INNOVATION in heavy vehicle telematics by:

- Collating data from multiple technologies (Big Data) to strengthen analysis
- Connecting stakeholders (Open Data) to add value and demonstrate transparency
- Evaluating privacy implications to ensure compliance with relevant legislation
- Enabling Performance Based Standards (PBS) to achieve efficiencies
- Understanding Intelligent Transport System (ITS) trends to best position TMR •
- Encouraging industry innovation and the researching and trialling of new technologies to maximise opportunities
- Streamlining processes (including procurement) to remove barriers.

#### **Enforcement by Exception**

Adding balance to the increased safety, productivity and access benefits of telematics in heavy vehicles is the requirement for assurances. TMR will deliver regulatory COMPLIANCE outcomes in line with the National **Compliance Framework\*\* by:** 

- Applying telematics data to enhance access and mitigate risks to the network and its users
- Utilising intelligence generated by integrated data to target enforcement •
- Working with stakeholders to achieve a culture of compliance.

Consistent with the national in-vehicle telematics PARTNERSHIP approach<sup>\*</sup>, TMR is committed to removing policy and market barriers, promoting standards and interoperability protocols, identifying growth opportunities and rigorously assessing regulatory applications by:

- Encouraging and sponsoring interactions to foster a shared vision
- encourage investment
- Promoting and recognising contributions and celebrating successes to • validate benefits
- Managing stakeholder expectations and reinforcing TMR's role.

## **OUR VISION**

P S

**Connecting heavy** vehicles using telematics to an accessible and safer network

POLICY &

RIPHANCE

### **Streamlined Administration and Evidence-Based Reporting**

TMR's role in the development and implementation of telematics is to provide certainty by setting the regulatory framework, creating an environment for business to invest with confidence. TMR will deliver best-practice POLICY and GOVERNANCE in line with the National Telematics Framework<sup>\*\*\*</sup> by:

- and maximise service delivery
- information to support informed decision making
- \* National Transport Commission, National in-vehicle telematics strategy: The road freight sector July 2011
- \*\*\* Transport Certification Australia, National Telematics Framework



Simple. Easy. Safe. **Transport Regulation Branch** 

### **Focussed and Meaningful Stakeholder Engagement**

Identifying and facilitating mutually beneficial collaboration opportunities to

Simplifying burdensome processes and requirements to encourage participation

Influencing and guiding options analysis and providing all stakeholders with clear

Designing and delivering reporting to support diverse stakeholder requirements.

\*\* National Transport Commission, Compliance and enforcement framework for heavy vehicle telematics November 2014



# **Creating our future**

# OUR MISSION — Improved safety, productivity and network outcomes for the community, industry and government enabled by telematics

Short Term 2–5 Years	<b>Conduct</b> an <b>On Board Mass</b> ( <b>OBM</b> ) <b>Over Size Over Mass</b> ( <b>OSOM</b> ) <b>trial</b> on multi-axle, hydraulic suspension platforms to address weighing variances across jurisdictions	Mandate Intelligent Access Program (IAP) on heavy mobile cranes to realise productivity gains and cost savings, and mitigate risks to the network	<b>Inform</b> TMR activities around <b>integrated mapping</b> to assist route planning for heavy vehicles under network access conditions (i)	<b>Provide</b> Bridge Construction, Maintenance and Asset Management with <b>enhanced</b> <b>reporting</b> to guide options analysis and support informed decision making, particularly around priorities for critical maintenance investment	National Implementation of voluntary Electronic Work Diaries (EWD) to reduce fatigue related crashes (i, ii)	<b>Conduct</b> data analytic software <b>testing</b> to understand the value, benefits of combining from (other) Cooperat Intelligent Transport S (CITS)
Medium Term 3–8 Years	<b>Increase</b> the number of <b>IAP/OBM schemes</b> linked to higher productivity and high risk vehicles to achieve efficiencies (i, ii)	Explore potential OBM monitoring (complimentary to the mandated IAP condition) on heavy mobile cranes	<b>Investigate</b> and <b>inform</b> the <b>development</b> of <b>integrated</b> <b>mapping tools</b> and applications to encourage participation and maximise service delivery	Identify and collaborate with (other) stakeholders to support diverse stakeholder requirements particularly around evidence-based reporting	<b>National implementation of mandatory EWD</b> to reduce fatigue related crashes (i, ii)	Apply tested analytics software to develop evidence-based repor to guide enhanced ac investment, planning compliance
Long Term 7–9 Years	Inform the broader (national) investigation into more efficient models of revenue collection (iv)	<b>Investigate</b> requirements for <b>permits</b> for vehicles <b>under</b> <b>IAP/OBM conditions</b> to streamline administration processes, encourage participation and maximise service delivery	<b>Investigate</b> and <b>inform</b> the <b>development</b> of <b>interactive</b> , <b>real-time mapping</b> (tools and applications) to encourage participation and maximise service delivery	<b>Investigate</b> the development of information access/ exchange architecture ( <b>big</b> <b>data</b> and <b>open data</b> ) to strengthen analysis, add value and demonstrate transparency ( <b>i</b> , <b>i</b> v)	<b>Investigate complimentary</b> <b>technologies</b> to assist with fatigue detection and reduce fatigue related crashes (ii)	<b>Investigate</b> the develop of information access exchange architecture ( <b>big data</b> and <b>open da</b> to strengthen analysis value and demonstrat transparency (ii, iv)



#### NOTES

- i TMR Compliance Plan 2013–16
- ii TMR Delivering heavy vehicle safety solutions together. Queensland's Heavy Vehicle Action Plan 2016–18
- iii TMR Moving Freight A strategy for more efficient freight movement (2013)
- iv Transport and Infrastructure Council, National Policy Framework for Land Transport Technology, Action Plan: 2016–2019

nduct data analytics tware **testing** to derstand the value/ nefits of combining data m (other) Cooperative elligent Transport Systems rs)

Encourage and expand the use of telematics as members of stakeholder groups and investigate opportunities to utilise technology in relation to heavy vehicles (ii, iii)

#### ply tested analytics

tware to develop dence-based reporting guide enhanced access estment, planning and npliance

Actively participate and advocate for safer heavy vehicle technology across stakeholder groups in the broader CITS environment (ii)

estigate the development nformation access/ hange architecture g data and open data) strengthen analysis, add ue and demonstrate

Investigate potential synergies between commercial and regulatory telematics applications for the mutual benefit of stakeholders