# STRATEGIC PLAN

Transport Certification Australia

2016-2019



#### **ABOUT TCA**

TCA is a national government body responsible for providing assurance in the use of telematics and related intelligent technologies, to support the current and emerging needs of Australian Governments.

TCA is a 'cross-cutting' organisation which works across different policy streams, surface transport modes, and government and industry sectors.

The TCA Strategic Plan recognises and acknowledges:

- The transformational, disruptive influences of technology to surface transport, where traditional stakeholder roles and responsibilities are changing
- New applications of disruptive technologies (as well as applications of existing technologies)
- The rapid pace at which technologically-driven changes are influencing public policy deliberations and government decision making
- The growing need for governments to provide robust, sustainable and technology-based public purpose outcomes through policy development, program management and service delivery
- The need to promote innovation, and nonconventional approaches to current and emerging challenges of achieving safe, productive and efficient mobility outcomes
- The number and diversity of stakeholders with whom TCA are working is growing, both nationally and internationally – presenting new opportunities for TCA to share its vision, and to align its strategic orientation with those of its Members and other government organisations

and

• The need for assurance in the use of telematics and related technologies.

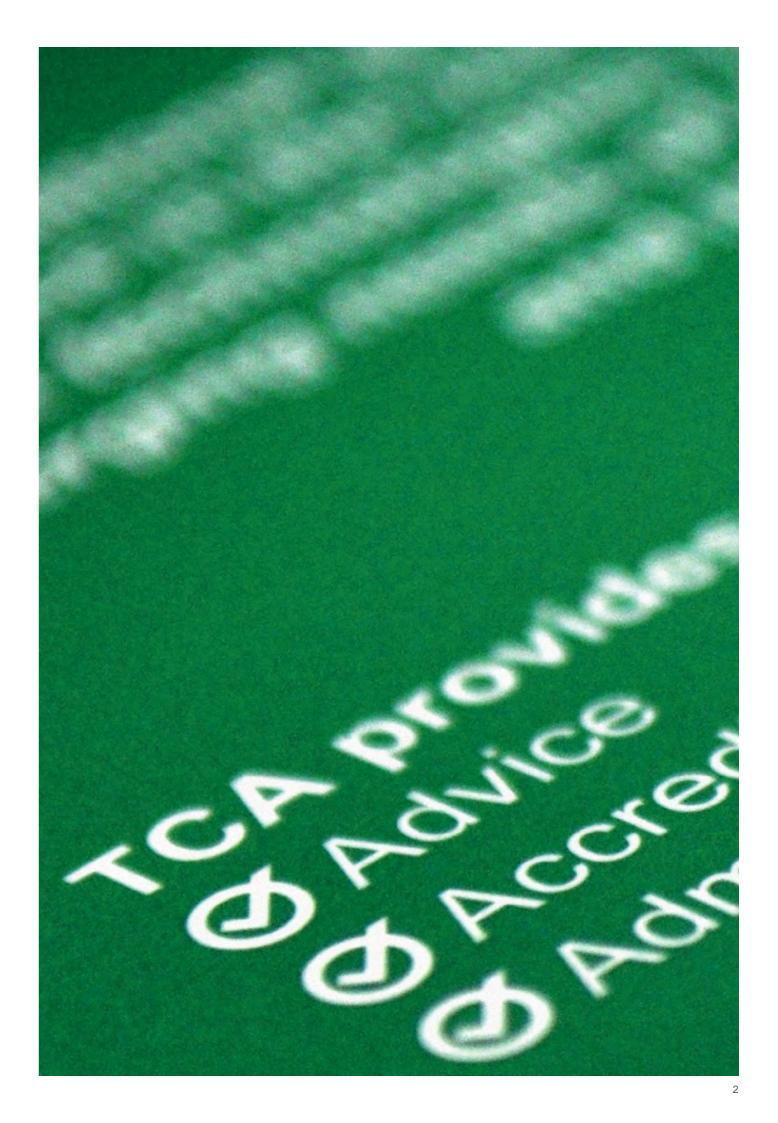
The Strategic Plan responds to these evolving challenges and opportunities, and ensures that TCA's Members and other stakeholders obtain assurance through the provision of independent Advice, Accreditation and Administration services which uphold the principles contained in the Policy Framework for Intelligent Transport Systems in Australia.

Governments can rely on TCA to represent their interests when developing and implementing policy reforms which depend on the use of technology.

TCA works with governments to 'get it right' as new technologies are developed – not after they become available in the market, or when they are deployed.

By working closely with industry, standards developers and other stakeholders, TCA facilitates innovation, unlocking productivity and new, sustainable business environments.

In recognising that policy, commercial and operational sustainability is a mindset, not just an outcome, TCA distinguishes itself as a leading Australian provider of a critical intersection between technology providers and governments, to ensure sustainable public purpose outcomes.



#### WHAT IS TELEMATICS?

The term 'telematics' refers to integrated systems of information, communications and sensors to exchange data and information between vehicles and other locations, including:

- Vehicle to infrastructure (V2I) applications
- Vehicle to vehicle (V2V) applications
- · Vehicle to elsewhere (V2X) applications

The application of telematics and related intelligent technologies is increasingly being used across surfacebased transport to improve the mobility of people and freight by improving safety, productivity and efficiency outcomes. This includes:

- · Monitoring and reporting of vehicles and infrastructure
- Providing information to and from vehicles
- Connected and cooperative vehicles
- Automated and autonomous vehicles

#### **OUR VISION**

TCA's vision is to be the Australian leader of Advice, Accreditation and Administration services, and to be an essential partner to government organisations to achieve public outcomes through the use of telematics and related intelligent technologies.

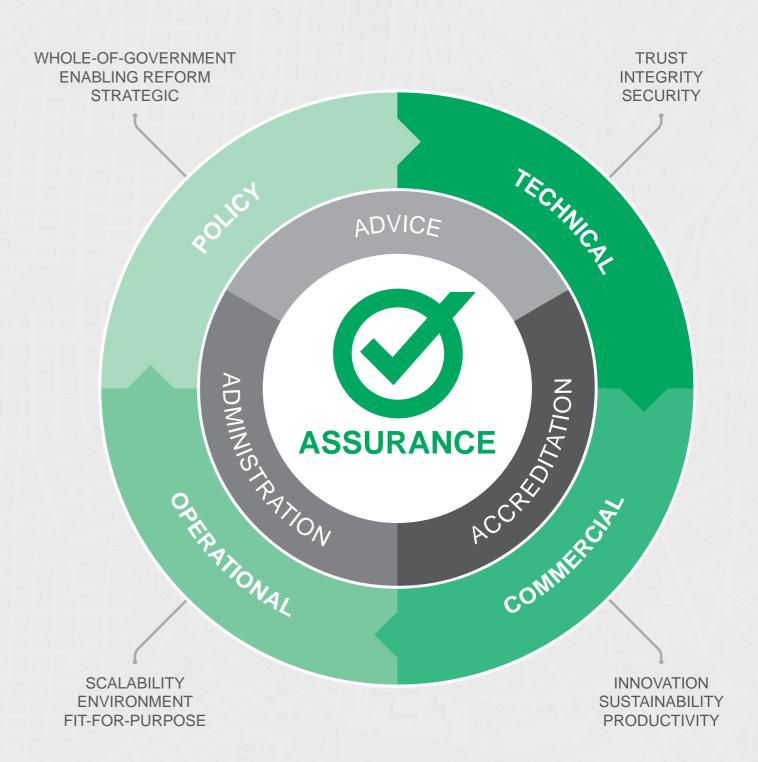
#### **OUR VALUES**

Throughout all our work, TCA strives to uphold our four core values of our organisation:

- Integrity honesty, impartiality, confidentiality and fairness
- Professionalism passion and a commitment to excellence, teamwork and delivery of high-quality services
- Innovation a forward thinking commitment to research, development and continual investment in learning
- Accountability caring about the needs of others, a focus of achieving outcomes, and a commitment to timeliness and financial responsibility.

#### **OUR MISSION**

TCA provides assurance through the provision of Advice, Accreditation and Administration, recognising the intersection of policy, technical, commercial and operational elements.



# TCA PROVIDES ASSURANCE BY...

#### **IDENTIFYING:**

- Current and anticipated needs that inform governments and strategic policy environments
- State-of-the-art national and international developments and strategic implications that inform current and emerging public policy needs
- Gaps in standards, security and capability that may compromise safety, operational performance, user acceptance and policy intent
- Requirements that address public and private outcomes.

#### **DELIVERING:**

- Independent qualified domain expertise
- Trusted advice that is informed by an understanding of public and private spheres of influence, strategic policy directions of government, and international development and best practice principles
- Specifications and associated collateral that address public and private outcomes.

#### **DEPLOYING:**

- Fit for purpose business and operational models that deliver assurance
- Administration and managerial services
- Accreditation services

#### **OUR PEOPLE**

TCA actively seeks people with the talent and enthusiasm to contribute to an emerging area of strategic importance to Australian Governments.

We strive to be an employer of choice.

TCA promotes a culture of professionalism, innovation and integrity, with a commitment to accountability, quality and excellence in the delivery of all TCA services.

We recognise the unique skills and abilities of each individual that joins the TCA team, all of whom possess a wide range of experience and expertise that is vital to the success of our organisation.

We promote an inclusive workplace which encourages the exchange of rich insights, fresh perspectives, and innovative thinking between individuals, which deliver powerful synergies to TCA's Members and other government organisations.

We support our people through ongoing development and learning opportunities, and create a supportive team environment for all our people.



#### THE NATIONAL TELEMATICS FRAMEWORK

TCA administers the *National Telematics Framework* for Australian Governments.

The foundations of the *National Telematics*Framework were established by Australian
Governments between 2005 and 2008, when
decisions were made about the Intelligent Access
Program (IAP) – and future applications of
telematics driven by the policy needs of government
– to enable a sustainable approach to the use of
telematics and related intelligent technologies
in Australia.

The principles of the *National Telematics Framework* include:

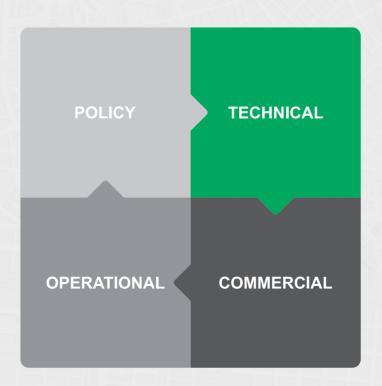
- A multi-application, multi-provider operating model
- Performance-based functional and technical specifications
- An independent, national certifier and auditor of telematics systems and services
- A deliberate separation between technology and policy
- A framework that defines roles and responsibilities of participants and stakeholders.

These principles are now widely recognised as a world's best practice approach to facilitate the sustainable use of telematics and related technology applications.

The National Telematics Framework has been recognised by the International Standards Organization (ISO 15638), with TCA's work in deploying operational applications through the Framework considered a world's best practice approach to facilitate the sustainable use of telematics and related intelligent technologies.

The Framework provides a nationally-agreed, sustainable environment to support the current and emerging needs of government, industry sectors and end-users, and supports the principles of the *Policy Framework for Intelligent Transport Systems in Australia.* 

The Framework recognises the relationships between four interconnected elements essential to advance the use of telematics and related intelligent technologies.



The Framework provides a critical intersection between public and private interests by:

- Providing a central point of reference for the deployment of telematics and related intelligent technologies in Australia
- Enabling the market to develop and deliver innovative technical, commercial and operational outcomes
- Ensuring public purpose outcomes are delivered through the use of telematics and related intelligent technologies by aligning policy and end-user intent
- Being technology agnostic and capable of being extended as needed to new applications as necessary.

This means that 'bottom-up' solutions are not needed to respond to policy challenges and/or opportunities, allowing policy makers to focus on outcomes, rather than technology inputs.

TCA performs roles and functions which transcend multiple layers of activity in the area of telematics and related intelligent technologies – both nationally and internationally – as highlighted below.

|                          | Policy Framework for ITS in Australia |                                 |                                |                                                                                                                  | Guiding principles for the deployment of ITS in Australia endorsed by the Transport and                                                                                    |
|--------------------------|---------------------------------------|---------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Policy                   |                                       |                                 |                                |                                                                                                                  | Infrastructure Council  Principles promoted and upheld by TCA                                                                                                              |
| Platform                 | Natio                                 | National Telematics Framework   |                                |                                                                                                                  | Administered by TCA  Fit for Purpose  Administration / Licensing  Privacy Management  Consistency  Sustainable Technology and Operations  Business and Commercial Settings |
| Standards                | Vehicle to<br>Elsewhere<br>(V2X)      | Vehicle to Infrastructure (V2I) | Vehicle to<br>Vehicle<br>(V2V) | In-Vehicle<br>Technologies                                                                                       | Global standard setters including TCA<br>Interoperability<br>Interconnectivity<br>Harmonisation                                                                            |
| Applications<br>(sample) | EWD IAP OBM ISC CTS Bu                | Safety C                        | y Level<br>Crossing<br>plogies | IVU OBM Security Cameras ISM Alcohol Interlocks Camera- based speed detection systems (NATA accredited services) | End use policy (and as applicable) regulation, set by:  Member Agencies  Other Government Agencies  National Regulators  Policy Makers  Industry Sectors                   |

**EWD** - Electronic Work Diary

IAP - Intelligent Access Program

ISC - Intelligent Speed Compliance

IVU - In-Vehicle Unit

**OBM -** On-Board Mass

**ISM -** Intelligent Speed Management

**CTS -** Certified Telematics Services

# ALIGNMENT WITH OTHER GOVERNMENT POLICIES, FRAMEWORKS AND STRATEGIES

The National Telematics Framework aligns with and upholds the principles, strategies and long term outcomes of existing frameworks and strategies.

By interfacing with nationally and internationally focussed initiatives, the Framework facilitates whole-of-government approaches and linkages with Australia's policy landscape.

| Policy, Strategy, Framework                                              | Custodian                                              | Key alignments                                                                                                                                                                                                             |
|--------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Policy Framework for Intelligent Transport Systems in Australia (2012)   | Standing Council on Transport and Infrastructure (Cth) | ITS development and implementation must deliver demonstrable benefits to individuals, the community and business.  The policy environment in which ITS                                                                     |
|                                                                          |                                                        | are developed and implemented must be robust and dynamic.                                                                                                                                                                  |
| Compliance and enforcement framework for heavy vehicle telematics (2014) | National Transport Commission                          | 10 principles relating to privacy, accessibility, transparency, standards, safety, consistency and interoperability.                                                                                                       |
| National Digital Economy Strategy (2011)                                 | Department of Communications and the Arts (Cth)        | Smart management of the environment and infrastructure.                                                                                                                                                                    |
|                                                                          |                                                        | Using sensors to enable more efficient use of existing infrastructure and transport systems and reduce pressure for new infrastructure.                                                                                    |
| National Land and Freight Strategy (2012)                                | Standing Council on Transport and Infrastructure (Cth) | An efficient, productive and competitive national land freight system.                                                                                                                                                     |
|                                                                          |                                                        | A sustainable land freight system that responds to growth and change.                                                                                                                                                      |
|                                                                          |                                                        | Land freight policy is aligned and coherent across governments.                                                                                                                                                            |
| National Road Safety Strategy 2011-<br>2020 (2011)                       | Australian Transport Council (Cth)                     | Safe roads. Safe speeds. Safe vehicles. Safe people.                                                                                                                                                                       |
|                                                                          |                                                        | Make greater use of technological aids, including the new and emerging range of intelligent transport systems, as well as the untapped potential of established technologies that can support behaviour-change objectives. |
| Australian Infrastructure Plan (2016)                                    | Infrastructure Australia (Cth)                         | Intelligent transport systems can triple the utilisation of an asset – through better management of the road network and the use of vehicles.                                                                              |
|                                                                          |                                                        | Better freight data to identify network constraints and plan investments to maximise the growth; greater confidence to improve supply chain efficiencies and expand operations.                                            |
|                                                                          |                                                        | Low-cost in-vehicle transponders and satellite tracking open up parts of road network to suitably-specified trucks, realising productivity improvements of up to 100 per cent, and reductions in fuel and emissions.       |
|                                                                          |                                                        | Projects and technologies that make better use of existing infrastructure.                                                                                                                                                 |
|                                                                          |                                                        | Generate, collect and use data to drive greater productivity in infrastructure service delivery.                                                                                                                           |
|                                                                          |                                                        | New ways of generating, collecting, sharing and analysing data to help guide investment.                                                                                                                                   |

#### STRATEGIES AND CAPABILITIES

Australian Governments continue to pursue improvement outcomes in transport safety, efficiency and sustainability.

The use of telematics and intelligent technologies – including Cooperative Intelligent Transport Systems (C-ITS) applications involving connected and automated vehicles – present opportunities for policy makers to innovate and advance outcomes across surface transport modes, and beyond traditional portfolios of government. However, these opportunities can only be realised if the complex interaction of policy, technical, commercial and operational elements are progressed in a coordinated manner.

These elements form the foundation principles of the *National Telematics Framework* established and administered by TCA, and are central to its provision of Advice, Accreditation and Administration to Members and other stakeholders.

TCA's Strategic Plan identifies new alignment opportunities for TCA to provide better services and for Members and other stakeholders to leverage TCA's capabilities.

TCA provides value to Members, other stakeholders and the Australian community by:

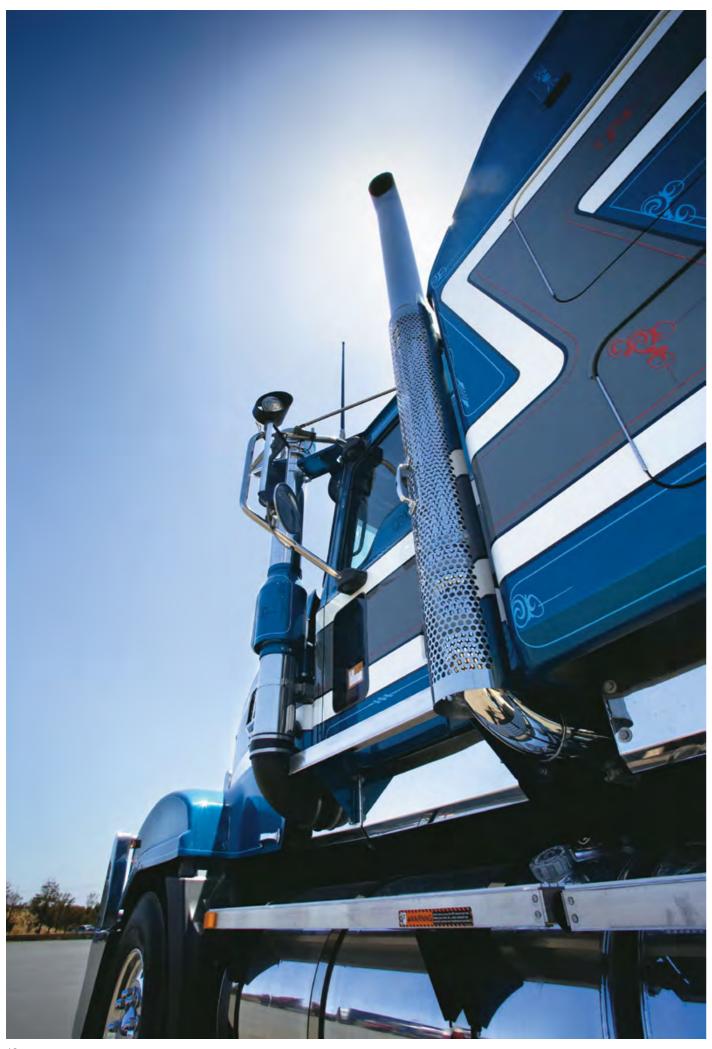
- Facilitating the creation of new sustainable commercial and operational environments, in which business models are not limited by technological decisions, such as proprietary systems and prescriptive decision making.
- Putting into practice the philosophy that innovation is not exclusive to new technology, but includes forging working partnerships, leveraging existing assets, and creating new ways of doing business.
- Providing clarity by translating complex technical knowledge into policy options and operational outcomes.
- Anticipating and minimising potential risks, and preparing to maximise the benefits of new technologies and systems as they are being developed, to ensure that international products work as seamlessly and simply as possible in the Australian environment.
- Assisting governments to respond to changes, disruptions and developments in technology with agility, innovation, and a clear strategy and purpose.
- Being proactive, showing leadership and taking a hands-on approach to critical matters

   including safety, security, environment, end-user confidence and commercial and operational sustainability – that could otherwise be assumed, overlooked or underdeveloped – resulting in unintended consequences.
- Collaborating internationally with key organisations on emerging technology and policy issues to ensure that Australia's interests are reflected as they develop, and that Australia is positioned to engage and influence in the long term.
- Ensuring privacy by design dealing with the critical public policy issues, including the separation of powers between policy/regulator and administrator in the use of information.

- Recommending, implementing and deploying security solutions – in cyber and physical layers, and in the roles and responsibilities across operational environments and system architectures – to ensure longevity and integrity, improve safety, and drive user uptake.
- Assisting governments to avoid significant costs often associated with technology-based initiatives, projects and programs, by moving beyond traditional procurement models to reduce the technology and operational input costs associated with implementation.
- Preventing silos, unnecessary duplication, short-term thinking and 'quick fixes' by providing a nationally – and, when required, internationally – oriented, sustainable and scalable approach to telematics and related intelligent technologies.
- Publishing information papers on key issues of interest to lead strategic thinking across government portfolios and industry sectors.

#### TCA does not:

- Develop or provide technology-related services (this is the role of the market)
- Drive government policy
   or
- Do business for the private sector.



#### **TCA SERVICES**

TCA is committed to the provision of high quality services to its Members and other stakeholders.

TCA provides three broad categories of service, providing opportunities to realise positive outcomes through the deployment of telematics and related intelligent technologies.

TCA's Strategic Plan is underpinned by a transparent cost and service allocation model.

Known as the 'Triple A' (Advice, Accreditation and Administration) service model, TCA's budget is based on the recovery of costs based on the services provided.

This provides TCA's Members and other government organisations with the flexibility to obtain Advice, Accreditation and Administration services in response to their current and emerging needs.

Operational costs are also apportioned to thirdparty providers of telematics and related intelligent technologies.

#### ADVICE

TCA provides advice that:

- Enables public purpose outcomes to be achieved through the use of telematics and related intelligent technologies
- Informs TCA's Members and other government organisations on the opportunities for policy makers to advance outcomes across surface transport modes
- Assists governments to gain a better appreciation of the complex interaction of policy, technical, operational and commercial elements when developing new policies and programs and revisiting those in existence
- Achieves a whole of government approach to the deployment of telematics applications.

#### **ACCREDITATION**

TCA gives confidence to governments in the use of telematics and related intelligent technologies by working with stakeholders to provide assurance through the deployment of quality systems in an operational environment.

TCA's accreditation services include:

- Development of functional and technical specifications
- Assessment of conformance against functional, technical and business requirements
- Development of standards
- Management of government pilots, initiatives and reforms that utilise telematics and related intelligent technologies.

#### **ADMINISTRATION**

TCA's administration of telematics and intelligent technology applications and programs provides assurance to governments, industry sectors and end-users. This includes:

- Type-approval of hardware
- Certification and audit of Service Providers
- The operational, end-to-end management of government programs and applications which utilise telematics and related intelligent technologies.

TCA performs a critical role in supporting the appropriate adoption of telematics and related intelligent technologies – from a whole-of-government perspective – limiting the potential for governments and policy makers from pursuing initiatives which can:

- Delay progress
- Create duplication
- Stifle innovation
- Multiply costs
- Contribute to a fragmented approach to telematics and related intelligent technologies.

### STRATEGIC FOCUS AND KEY RESULT AREAS (KRA)

TCA's Strategic Plan identifies seven KRAs.
These KRAs align with and deliver the objectives and strategies of TCA's Members and other stakeholders.

# 1. LEADERSHIP IN TELEMATICS AND RELATED INTELLIGENT TECHNOLOGIES

Raise awareness, and inform thinking on the opportunities available to Members and other stakeholders through the use of telematics and related intelligent technologies – and C-ITS applications – across surface transport modes to advance public purpose outcomes.

# 2. BUILD KNOWLEDGE SHARING AND RELATIONSHIPS

Build strong relationships with Members and other national and international stakeholders to create improved learning, understanding and innovation to support end-use policy development and decision making.

#### 3. PROVIDE ASSURANCE

Provide Members and other stakeholders with assurance in the use of telematics and related intelligent technologies – and C-ITS applications – to advance surface transport productivity, safety and efficiency outcomes, through the provision of Advice, Accreditation and Administration services.

# 4. ADMINISTER TELEMATICS AND RELATED INTELLIGENT TECHNOLOGY PROGRAMS

Administer programs which utilise telematics and related intelligent technologies for, and on behalf of, Members and other stakeholders, to ensure ITS policy, technical, operational and commercial outcomes align with end-use policy intent.

## 5.MANAGE LEGISLATIVE AND LEGAL REQUIREMENTS

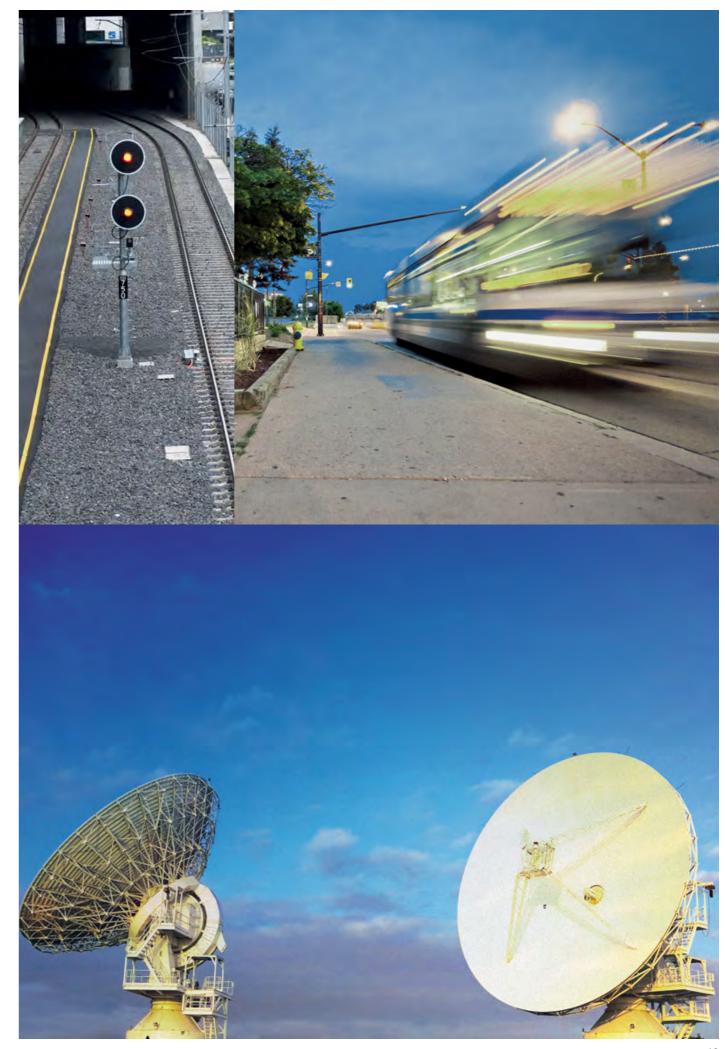
Manage an operational environment which ensures all the roles, functions and obligations assigned to TCA in legislation are met – including security and the management of privacy – and the protection of data derived from telematics and related intelligent technology programs administered by TCA.

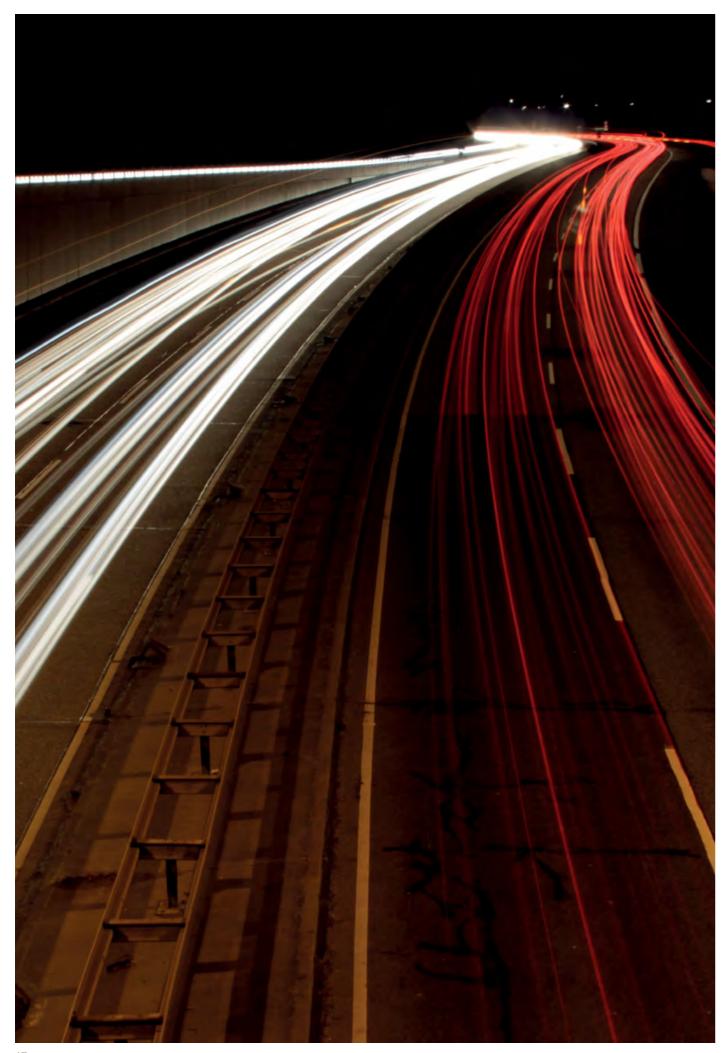
#### 6. GENERATE PUBLIC VALUE

Generate public value to Members and other stakeholders through the administration of the National Telematics Framework, upholding the principles of the Policy Framework for ITS in Australia – and other related government policies, frameworks and strategies – working with global standards setters to be at the forefront of international developments, managing the intersection of ITS policy, technical, commercial and operational issues, and achieving financial sustainability.

# 7. PROMOTE POSITIVE VALUES AND WORK ENVIRONMENT

Maintain a positive work environment which promotes a culture of inclusiveness, and upholds TCA's values of Integrity, Professionalism, Accountability and Innovation to deliver TCA's strategic vision.





#### **CORPORATE STRUCTURE**

TCA is a public company limited by guarantee established under the Corporations Act (Cth).

The Memorandum of Understanding and Constitution of TCA have been structured to deliver services to Members consistent with sound administration of public policy.

#### TCA's Members are:

- · Access Canberra, Australian Capital Territory
- Department of Infrastructure and Regional Development, Commonwealth
- Department of Planning, Transport and Infrastructure, South Australia
- Department of State Growth, Tasmania
- Department of Transport, Northern Territory
- Department of Transport and Main Roads, Queensland
- Main Roads Western Australia
- Roads Corporation (VicRoads), Victoria
- Roads and Maritime Services, New South Wales

#### GOVERNANCE

TCA is governed by a Board of Directors, comprising senior officials from each Member agency, and an independent Chair appointed by the Board.

The Board has responsibility for providing strategic direction to TCA management, approves the annual work program and budget, and oversees TCA's performance against its Strategic Plan and Business Plan.

The Board has a program of ongoing evaluation and development. This includes matching Board needs to Directors' expertise, aimed at delivering a well-rounded membership.

The Chief Executive Officer is responsible for the day-to-day management of TCA.



### **CONTACT US**

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