

## Position Description

---

<b>Position title:</b>	Electronics Hardware Engineer
<b>Reports to:</b>	Technical Systems Innovation Manager
<b>Direct reports:</b>	Nil
<b>Date:</b>	February 2022

---

## Organisational Context

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

Priority outcome areas enabled by TCA services include improved road safety, transport efficiency, freight productivity, asset management and sustainability.

TCA provides four broad categories of service:

- Assurance
  - Certification of service providers, telematics applications and data
  - Type approval of devices and systems, including telematics and on-board mass systems
  - Auditing of service providers, applications, and data
- Administration
  - Administration of the National Telematics Framework, including its rules, specifications, agreements, and digital infrastructure
  - Support for applications, schemes, and other initiatives on behalf of key stakeholders
- Analysis and reporting
  - Standardised and ad-hoc data analysis, reporting and data provision to support compliance, policy, planning, investment, and operational decision making
  - Managing the Telematics Analytics Platform to support user access to data and reporting services
- Advice
  - Provision of authoritative information and advice on current and emerging transport technologies and data, and associated services

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

We recognise the unique skills and abilities of each individual, who come from a wide range of disciplines and backgrounds. We support our people through ongoing development and learning opportunities and create a supportive team environment for all our staff. We strive to be an employer of choice.

TCA is a subsidiary of Austroads Ltd. The TCA office is based in Melbourne.

# The Role

## Purpose of the Role

The Electronics Hardware Engineer is a hands-on role that requires a broad technical background to deliver technical support and assistance through the provision of advice relating predominantly to the performance of specialised electronic devices and systems and data analysis from these devices and systems.

As part of the role, the Electronics Hardware Engineer undertakes a range of activities including devices and systems design reviews, testing, technical audits, data analysis and reporting. The role may include both a business as usual and project delivery responsibility.

## Major Responsibilities / Accountabilities

The Electronics Hardware Engineer will be required to provide support to specific projects and perform general engineering tasks including:

- Conducting tests and assessments of GPS and GNSS-based telematics devices, On-Board Mass (OBM) Systems and any other equipment in both laboratory and in-field settings
- Assisting in the delivery of technical projects
- Conducting design reviews of telematics devices, OBM Systems or any other electronic equipment against the requirements of the relevant Functional and Technical Specifications during type-approvals, re-certifications and audits of such devices and systems
- Investigating technical and operational issues and assisting in resolving them
- Developing specialised testing equipment, if required, to assess the devices and systems submitted to TCA
- Developing and using the existing data mining algorithms based on software used at TCA to enhance audit and type-approval methodologies
- Assisting in maintaining all test laboratory assets in operational state and making enhancements, when required
- Supporting and contributing to the design, development and maintenance of TCA's testing program, under the guidance of the Technical Systems Innovation Manager
- Developing, maintaining and adhering to Quality Systems processes and procedures associated with the role
- Working with multiple competing priorities in a changing environment.
- Exercising diligence when making decisions, adhering to the requirements outlined in the Delegations of Authority

## Key Stakeholder Interfaces

### Internal

- Technical Systems Innovation Manager
- Engineers
- Project Managers
- Audit Manager
- Operations Division
- Strategy and Delivery Division and Corporate Operations Division

### External

- Road and transport agencies
- Certified Service Providers, Suppliers and Applicants
- Regulators
- Law enforcement agencies
- Transport operators
- Technical and advisory bodies

## The Person

### Qualifications, Knowledge and Experience

#### Essential

- Relevant tertiary level engineering qualifications
- Significant (at least three years) experience in a technical position
- Experience in the design or testing of electronic devices or systems based on software/hardware
- Experience in creating quality system documentation
- Excellent written and oral communication skills

#### Desirable

- Experience in the use of data analysis software.

### Personal Qualities

- Demonstrated readiness to make decisions, take initiative and originate action
- Ability to deal with ambiguity, successfully adapting to changing demands and conditions
- Ability to exhibit impartiality by taking a balanced approach to dealing with conflicting perspectives
- Confidence and preparedness to adapt
- Demonstrated ethical behaviour