



Job Description Form

Our Purpose

To provide safe, customer-focused, integrated and efficient transport services.

Position Title

Senior Engineer – Operational Technology

Level

6

Position Number

35158, 35388

Division/Directorate

Operational Systems and Technology

Branch/Section

Operational Technology

Effective Date

August 2022

Health Task Risk Assessment Category

3

Reporting relationships

Superordinate: Manager Operational Technology, Level 7

Subordinates: Engineer – Operational Technology, Level 5

Engineering Officer - Operational Technology, Level 4

Key role of this position

Responsible for providing engineering design, development, modification and monitoring services for operational technology and other infrastructure asset management, systems ensuring compliance with regulations and standards.

Core duties and responsibilities

Technical

- Leads the planning and implementation of new systems and technology, including testing of equipment as Test Engineer or as Witnessing Engineer for Contractor's testing and commissioning.
- Leads and manages assigned projects of medium complexity for the design and commissioning of new operational systems and Supervisory Control & Data Acquisition (SCADA) equipment and technology including compliance with technical, time, budget, standards and safety requirements.
- Prepares system designs to comply with the Public Transport Authority's (PTA) design principles and codes.
- Reviews systems designs, ensures adherence to codes of practice, safety standards and industry standards.
- Provides relevant technical expertise, guidance and training to other staff, and professional engineering support of Infrastructure Control Systems and Supervisory, Control and Data Acquisition systems across the network.
- Prepares, reviews and develops technical specifications, engineering maintenance instructions, service schedules, work practices, type approvals, technical training manuals, drawings and associated systems documentation.
- Assists with reviews, development and application of signal standards and codes of practice.

Maintenance and Asset Management

- Carries out inspections and tests, review, investigate, check and analyse equipment/systems failures and incidents, prepare technical reports and assist with development of solutions and improvements as necessary to guide maintenance activities, either individually or as a member of a team.
- Monitors that maintenance plans to ensure they are carried out in a safe, reliable and cost effective manner and resources are available to meet technical requirements.
- Prepares and reviews maintenance staff work practices and procedures.
- Undertakes audits on control systems equipment and related infrastructure for the PTA's rail network.
- Contributes to the development of the Asset Management Plans for Operational Technology.
- Assists with management of day-to-day maintenance activities and system performance associated with signalling and train control systems on the PTA's rail network.

Financial and Projects

- Assists with monitoring and reporting on budgeting and expenditure for the Section's components of the capital and operating work programs.
- As a technical specialist on the tender review team, prepares tender documentation, reviews and evaluates submissions and provides input to the approval process.
- Manages third (3rd) parties who are delivering services to the operational technology section.

Other

- Represents and acts on behalf of the Information Technology Management Team as required.
- Carries out as required, such work related tasks and functions that are within the limits of the employee's skills, competence and training.
- Stays abreast of latest industry technology trends in relation to Operational Technology.

SELECTION CRITERIA

1. Core Competencies

- Possession of an appropriate Engineering Degree that would satisfy the admission requirement for corporate membership to the Institution of Engineers Australia OR an appropriate Engineering Diploma qualification and extensive relevant railway engineering experience.
- Detailed knowledge and recent experience in the design and commissioning of PLC (Programmable Logic Controller) installations and SCADA systems.
- Substantial experience in train control systems including fault finding of train control systems, SCADA systems, PLC installations, power signalling and associated field equipment.

2. Leadership and Management

- Well developed leadership and management skills, including the ability to empower individuals and to provide support that enables the organisation to succeed.

3. Communication and Interpersonal

- Demonstrated ability to work in a team environment, including the ability to provide clear advice and direction to field staff, and on occasion work with minimal supervision.
- Well developed interpersonal, communication and negotiation skills.

4. Conceptual, Analytical and Problem Solving

- Well developed analytical and problem solving skills.
- Demonstrated ability in identifying root cause for complex systems

5. Organisation

- Relevant experience in project management.

6. Special Requirements

- Satisfactory completion of required medical examinations to verify physical fitness to perform the duties of the position.
- Provision of a current National Police Clearance certificate, dated 3 months or less from the date of application for the position.
- Possession of a current Western Australian 'C' or 'C-A' Class Driver's Licence or equivalent.
- Ability to work unsociable hours, including callouts, travel and staying away from home station, sometimes at short notice.
- Applicants must meet the special requirements shown below within and agreed period of time. Cancellation of the appointment will occur where and applicant does not meet the special requirements with an agreed period of time after appointment.
 - Individual Access (IA) Track Access Permit
 - OHS Training for Managers
 - Earthing and Bonding procedures for Electrified Area.
 - Basic Workplace First Aid.

Certification

The details contained in this document are an accurate statement of the duties, responsibilities and other requirements of the position.

Managing Director / Executive Director / General Manager

.....
Signature

.....
Date

Employee

I have read and accept the responsibilities of the Job Description Form.

The position's duties are to be performed in accordance with the PTA's Code of Conduct and the PTA's Values.

.....
Signature

.....
Date

