



Job Description Form

Our Purpose

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

Position Title

Senior Signals Systems Engineer

Level

6

Position Number

35380

Division/Directorate

Network & Infrastructure

Branch/Section

Signals

Effective Date

February 2020

Health Task Risk Assessment Category

3

Reporting relationships

Superordinate: Principal Signals Engineer – Design and Projects, Level 7

Subordinates: No Direct Reports

Key role of this position

- Leads in ensuring safe, reliable, cost effective, quality signalling and train control, and wayside signalling systems and services, that comply with regulations and standards are provided to meet business needs.
- Leads the development, modification and monitoring of signalling train control, and command systems and all associated wayside signalling systems and infrastructure including preparation, checking and reviewing of designs.

Core duties and responsibilities

Maintenance and Asset Management

- Reviews maintenance staff work practices and procedures.
- Assists with training, directing and guiding staff to ensure safe, reliable and efficient operations.
- Monitoring to ensure that maintenance plans are carried out in a safe, reliable and cost effective manner and resources are available to meet technical requirements.
- Carries out inspections and tests, reviews, investigates, checks and analyses equipment/systems failures and incidents, prepares technical reports and assists with the development of solutions and improvements as necessary to guide maintenance activities, either individually or as a member of a team.
- Undertakes audits on the signalling train control and command systems, including wayside signalling systems and related infrastructure for the Public Transport Authority's (PTA) rail network.
- Develops, reviews and updates asset management plans for train control and command including wayside signalling systems
- Develops, reviews and manages maintenance activities and system performance associated with signalling train control and command, including wayside signalling systems.

Technical

- Leads commissioning of new equipment, systems and technology, including testing train control and command systems including wayside signalling systems, as Test Engineer or as Witnessing Engineer for Contractor's testing and commissioning.
- Carries out signalling designs to comply with the PTA's design principles and codes.
- Reviews signalling designs, ensures adherence to codes of practice, safety standards and industry standards.
- Provides relevant technical guidance, assistance and training to other staff.
- Reviews, develops and applies signal standards, codes of practice, technical specifications, engineering maintenance instructions, service schedules, work practices, type approvals, technical training manuals, drawings and associated signal systems documentation to ensure safe, reliable and efficient operations.

Financial and Projects

- As assigned, manages signalling projects of medium complexity, including related supervision of work teams and contract work.
- Assists with monitoring and reporting on budgets and expenditure for the signalling section's components of the Urban Systems capital and operating work programs.
- Manages assigned projects of medium complexity to ensure projects are completed on time, within budget and comply with electrical industry standards and the PTA's safety requirements.
- Assists with reviews and approval of tender submissions.

Other

- Represents and acts on behalf of the Signalling Branch management as and when required.
- Completes delegated tasks to assist with the management of day-to-day maintenance activities and system performance associated with signalling and level crossing warning systems on the PTA's rail network.
- Carries out as required, such work related tasks and functions that are within the limits of the employee's skills, competence and training.

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.
- Demonstrated recent experience in the design and commissioning of train control and command systems, wayside signalling systems and their associated installation and testing.
Demonstrated recent experience in fault finding of train control and command systems including wayside signalling systems on power signalling, interlocking systems and associated field equipment.
- Demonstrated experience in determining root cause of failures and incidents in train control and command systems including wayside signalling systems.

2. 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.

3. Conceptual, Analytical and Problem Solving

- Well developed analytical and problem solving skills.

4. Organisation

- Relevant experience in project management.

5. Computer Literacy

- Demonstrated experience in the use of relevant computer applications used in train control and command, wayside signalling systems associated technology.

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. This requirement continues for the duration of employment in this position and from time to time production of the licence on request by the PTA may be required.
- 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 an agreed period of time. Cancellation of the appointment will occur where an applicant does not meet the special requirements with an agreed period of time after appointment.
 - Individual Access (IA) Track Access Permit
 - Basic Workplace First Aid Level 2 Senior First Aid Certificate
 - OHS Training for Managers
 - Earthing and Bonding procedures for Electrified Area.

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

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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