



## Job Description Form

### Our Purpose

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

**Position Title**

Signals Systems Engineer

**Level**

5

**Position Number**

34737

**Division/Directorate**

Network & Infrastructure

**Branch/Section**

Signals

**Effective Date**

June 2020

**Health Task Risk Assessment Category**

3

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### Reporting relationships

Superordinate: Senior Signals Systems Engineer, Level 6

Subordinates: No Direct Reports

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### Key role of this position

Assists in ensuring safe, reliable cost effective, quality train control and command, including wayside signalling systems, comply with regulations and standards provided to meet business needs. The role also assists in 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.

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### Core duties and responsibilities

#### Maintenance and Asset Management

- Assists with reviewing maintenance staff work practices and procedures.
- Assists with training, directing and guiding of staff to ensure safe, reliable and efficient operations.
- Assists with 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, review, investigate, check and analyse equipment/systems failures and incidents, prepare technical reports and assists with 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.
- Assists with management of day-to-day maintenance activities and system performance associated with signalling and train control and command systems on the PTA's rail network.

#### Technical

- Participates in the 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.
- Assists with the review, development and application of signal standards, codes of practice, technical specifications, engineering maintenance instructions, service schedules, work practices, type approvals, technical training manuals, drawings and associated documentation to ensure safe, reliable and efficient operations.

#### **Financial and Projects**

- As assigned, manages projects of medium complexity, including related superintendence of work teams and contract work.
- Assists with monitoring and reporting on budgeting and expenditure for 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 review and approval of tender submissions.

#### **Other**

- 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.
- Demonstrated experience in determining root cause of failures and incidents in train control and command systems including wayside signalling systems.
- Relevant experience in project management.

### **2. Communication and Interpersonal**

- Well developed communication skills (written, verbal and interpersonal) including the ability to work in a team environment, including with field staff.

### **3. Conceptual, Analytical and Problem Solving**

- Well developed conceptual and analytical skills, including the ability to analyse information and data and provide reports relating to the findings.

### **4. Organisation**

- Well developed skills in completing day to day work and other assignments effectively with minimal direction and supervision.

### **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 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
  - 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**

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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**

