

# Position Description



Position Title	<b>Software and Systems Engineer</b>
Position No	00077527
Delegation Level	007
Job Designation	Operational Syst Eng (QR Net PT3)
Organisational Unit	Train Control Systems Engineering SEQ Assets
Work Centre	Brisbane
Position Type	Permanent
Rail Safety Worker	Yes
Medical Fitness Standard	NHS Cat 4 Other (No Medical Required)
Performance Plan Type	Tech Professional Expert
Shiftworker	No
Classification (Range)	PT3 .1 - PT3 .3
Pay Scale Type	ASPT
Reports to Position	Team Leader Train Control Systems - Data

## QUEENSLAND RAIL VALUES:

1 Queensland Rail - We do better together  
Treat others with respect - We appreciate everyone's contributions and differences  
Empower our people - We have confidence in our people  
Act Safely - We work safe, to go home safe  
Make a positive difference - We learn from today, to improve tomorrow

## Position Purpose

Provide operational systems engineering services to support the trackside system environment in delivering quality, commercially focused operational systems engineering solutions across Queensland Rail.

## Position Responsibilities

1. Plan, estimate, develop, test, document, implement and maintain the software, hardware, configuration and database aspects of our delivered computer based operational systems in accordance with operational systems Quality Assurance.
2. Provide second line assistance and support to technical/maintenance and operational staff who use our delivered operational systems (hardware, databases and software).
3. Formulate and implement approved software engineering standards and procedures for the design, coding, documentation, testing and maintenance of such software and systems in accordance with operational systems Queensland Rail standards, developing new methodologies as appropriate.
4. Maintain knowledge of developments in quality systems, software engineering, software languages, standards, testing procedures and computer systems and apply these where appropriate to our developed operational systems and contribute to the development of new methodologies.
5. Maximise commercial outcomes for Queensland Rail by initiating, developing and reinforcing strong stakeholder relationships and by applying high quality influencing, advocacy, resolution and communication (verbal and written) skills.
6. Plan, develop and implement training courses for professional, technical and user staff in the support and operation of our developed computer based operational systems (hardware, databases and

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software).

7. Design, develop and implement planning, testing and installation changes associated with the hardware, software and database elements of our developed operational systems in compliance with customer and our quality procedure requirements. The hardware elements include computer systems, interfaces, LAN and telemetry equipment.
8. Establish a working knowledge of our customers including other Groups and Divisions in Queensland Rail, especially in the maintenance, information technology and traffic operations areas.
9. Undertake other work as required and directed by the Line Manager.

## Additional Factors

The appointee will be required to :-

- Comply with Queensland Rail's Code of Conduct;
- Observe all legal and safety obligations of the organisation;
- Attend further training as required;
- Travel interstate and intrastate as required;
- Work outside normal working hours;
- Undergo annual performance appraisal.

## What is the key selection criteria

1. Substantial level of skill in computer languages, development utilities, operating systems, computer systems hardware, testing, configuration and databases.
2. Substantial level of skill in complying with software, database and system development, testing, simulation and documentation procedures in accordance with established quality systems and industry methodologies.
3. Substantial level of communication skills to effectively liaise with other divisions, contractors, suppliers, clients, users and trade staff in a professional manner.
4. Substantial knowledge of real time multi tasking systems, particularly remote control, SCADA and supervisory systems.
5. Substantial level of skill in undertaking professional work without direct supervision and to exercise initiative in the application of professional practices.
6. Substantial skill in managing a Software and Systems project and deliver business focused engineering outcomes.
7. Substantial skills in proposing, developing and implementing business improvements, technology development and innovation to generate commercial advantage and outcomes.
8. Knowledge of and willingness to commit to and work within Queensland Rail's Values and Behaviours.

## Pre-employment Checks:

Not Applicable

## Pre-employment Qualifications:

**What qualifications do I need to hold prior to applying for the position?:**

40010406 G\_Bach Eng (Electrical/Computer Science)

## Mandatory Qualifications (If not already held, I will gain these when in position)

40007588 All Aboard  
30000908 Safely Access the Rail Corridor (QNRP)  
40001627 Building Emergency Procedures

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40003802 Provide CPR 12 Mths  
40010410 Safety Comes First Always Workshop  
40009729 Delivering a Pre-Start Briefing Network  
40008658 NHS Cat 4 Other (No Medical Required)

## **Enterprise Qualifications (If not already held, I will gain these when in position)**

40009601 Code of Conduct Refresher  
09910159 TLIF2010A Apply fatigue management strat

## **Health, Safety and Environment Responsibilities**

Comply with the overarching document called Health, Safety and Environment Responsibilities MD-11-6843 located in the Safety and Environment Management System.

## **Personal Protective Equipment needs:**

Head and Face protection  
Eye Protection  
High Visibility Clothing  
Safety Footwear  
Miscellaneous

## **Safety Publications**

Civil Engineering Publications Safepol 5  
QR Weekly Notice  
QR SMS - Specifications (Complete Set)  
Annual Safety Plan  
C.E.O.'s Safety Statement  
Alcohol and Drug Policy Card  
C.E.O.'s General Safety Rules  
Professional Engineers Act  
QR SMS Policy (Complete Set)  
QR SMS Standards (Complete Set)

## **Please Note:**

Queensland Rail has a random alcohol and other drug testing program.  
Testing can occur anywhere, at any time, on any day.