

Position Description



Position Title	Software and Systems Engineer
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



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)

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.

Position Description



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.