



Senior Signals Engineer

Position Description – Infrastructure

Team:	Signals	Location:	Auckland / Wellington
Reports to:	Engineering Team Leader Signals		
Role Type:	Permanent		

About Us

KiwiRail’s Role in Aotearoa, New Zealand

KiwiRail, a proud State-Owned Enterprise, delivers sustainable and inclusive growth for our customers, communities, and people.

For more than 150 years, rail in New Zealand has connected communities, delivered freight and passengers around the country, and showcased our spectacular scenery to the world. Our purpose—Hononga Whaikaha, Oranga mo Aotearoa (Stronger Connections, Better New Zealand)—speaks to connection with our customers and the future needs of their businesses, connection with the communities we serve and operate in, and connection with each other. KiwiRail is carrying this legacy into the future, delivering connected rail and shipping transport services that create economic, social, and environmental value for New Zealand and New Zealanders.

Our Workplace

At KiwiRail, our values define the behaviour we expect from everyone. We have a team of over 4500 people, and every connection we make with each other, our union partners, our customers and all our stakeholders must be of the highest standard.



Safety, health, and well-being are our number one priority, ensuring our people return home safe and healthy every day.

About the Role

Purpose of the role

KiwiRail is in a phase of significant transformation to modernise and grow our rail and Interislander ferry services in Aotearoa.

The Senior Signals Engineer plays a critical role in supporting KiwiRail's Planning & Engineering team by delivering technical excellence across signals infrastructure. This position contributes to long-term asset management, engineering design, and assurance, ensuring safe, reliable, and efficient rail operations. The role provides expert advice, develops design solutions, and mentors junior engineers, helping KiwiRail meet its strategic goals for infrastructure resilience and customer satisfaction.

Key Accountabilities

Within the area of responsibility, this role is required to:

- Develop and review design solutions for signals assets, ensuring compliance with technical standards.
- Provide specialist advice on maintenance, upgrades, and renewals of signals infrastructure.
- Support long-term asset management planning, including risk-based prioritisation and capital works identification.
- Lead and contribute to assurance activities, including inspections, investigations, and standards development.
- Mentor junior engineers and trainees, fostering technical capability and professional growth.
- Manage assigned projects, ensuring delivery within scope, budget, and timeframes.

Key challenges

- Balancing technical excellence with operational constraints and budget limitations.
- Managing complex stakeholder expectations across internal teams and external contractors.
- Ensuring compliance with evolving safety and regulatory standards while maintaining service continuity.

Key Relationships Here are the key relationships relevant to this role		Manage /Lead	Deliver to	Collaborate with	Advise or inform
Internal	Planning & Engineering Managers		✓		
	Regional Managers		✓		
	Field & Technical Engineers		✓		
	Operations Teams			✓	
External	Consultants			✓	✓
	Contractors			✓	✓
	Suppliers			✓	✓
	Relevant Authorities			✓	✓

What you will do to contribute

Health Safety and Wellbeing	• Prioritise safety in all engineering activities and decisions. • Identify and mitigate engineering safety risks across signals assets. • Ensure compliance with rail safety standards and statutory requirements. • Promote a safety-first culture and lead by example in field and office environments. • Report and respond to safety incidents and hazards promptly.
Customer Focus	• Provide responsive technical support that meets operational needs. • Collaborate with internal teams to ensure customer-focused engineering outcomes. • Deliver high-quality solutions that enhance service reliability and customer satisfaction. • Understand the impact of signals engineering on customer experience and operational performance.
High Performing Teams Skills	• Mentor and support junior engineers, fostering a collaborative learning environment. • Share technical knowledge and promote continuous improvement. • Engage respectfully with colleagues and stakeholders to achieve shared goals. • Demonstrate professionalism and integrity in all interactions.
Commercial Acumen	• Prepare and review financial proposals for engineering projects. • Analyse cost-benefit scenarios to support asset investment decisions. • Ensure project delivery aligns with budget forecasts and financial controls. • Contribute to procurement decisions by evaluating supplier capabilities and value.
Technical Excellence	• Lead the development and review of technical standards and documentation. • Provide expert input into train control system upgrades and interlocking design. • Conduct engineering inspections and contribute to quality assurance processes. • Participate in technical committees and contribute to strategic engineering direction.

Decision Making

The position is accountable for decisions regarding all project operational objectives and for the provision of advice to project team members and relevant stakeholders on day to day operational decisions.

Key decision-making requirements of the position include:

- Engineering design and documentation approvals
- Technical advice and risk assessments
- Project planning and expenditure forecasting
- Compliance and safety-related decisions within delegated authority

Human Resources Delegations	Nil
Direct reports	Nil
Finance Delegations	Nil
Budget (operating and capital)	Nil
Travel Delegations	Nil
Statutory powers	Nil

Physical demands and the nature of work

This role is mainly administration based but when carrying out site works it can be physically demanding and requires:

- prolonged sitting and high computer usage
- extended periods of standing and walking while performing manual tasks
- regular lifting and carrying of items weighing up to 20 kg independently
- working in various weather conditions and environments
- exposure to mechanical equipment, electrical systems, vibration and noise
- ability to work in confined spaces and at heights using ladders/lifts
- capability to respond to emergency callouts and work extended shifts
- manual dexterity and hand-eye coordination for operating tools/equipment
- protective equipment usage including safety boots, hard hats, eye/ear protection

Your role may include other tasks suited to your level, as your manager directs. This job description shows your current duties. We'll review and update it with you if your responsibilities change.

About you

Knowledge and experience

- You have 10+ years of experience in railway signals engineering.
- You're skilled in producing and reviewing technical documentation and standards.
- You understand asset management principles and risk-based planning.
- You're experienced in project management and stakeholder engagement.
- You're familiar with train control systems, interlockings, and axle counters.

Ways of working / Work-related qualities

- You prioritise safety and act with integrity in all situations.
- You communicate clearly and confidently with diverse audiences.
- You collaborate effectively and support team success.
- You stay calm under pressure and adapt to changing priorities.
- You seek continuous improvement and embrace learning opportunities.

Other Requirements

- You can pass regular drug and alcohol screenings.
- You hold a current and valid NZ driver's licence.
- You are willing to travel nationally as required.

Qualifications

- You hold a tertiary engineering degree in Electronics, Mechatronics, or a related field, equivalent to a Level 7 Bachelor's qualification in New Zealand and accredited under the Washington Accord.
- You hold or are working towards Chartered Engineer status or relevant postgraduate qualifications.
- Or you have equivalent extensive industry experience in rail signals engineering.

