# **Orchestrating** a brighter world



Position Description				
Position Title	Electrical Systems Engineer	Group	Smart Transport	
Function		Department	Smart Transport	
Cost Centre		No. of Direct Reports / Total Reports	n/a	
Position Reports to	Head of Smart Transport - NZ	·		

## Primary Accountability

The Electrical Systems Engineer will play key role in the design, implementation and ongoing support and maintenance of complex systems and infrastructure within Smart Transport sector to ensure optimal performance, reliability and security.

The role will also:

- utilise strong analytical skills/debugging techniques and structured analysis to troubleshoot and resolve system issues through structured fault finding techniques
- perform root causes analysis of problems to identify root causes, and
- provide recommendations to the Smart Transport Product and Engineering teams to improve the reliability & availability of our system and services.

## Areas of Accountability/Key Responsibilities

**Diagnose Systemic Issues**: analyse complex systems, considering both hardware (mechanical components) and software (code, algorithms, etc.).

Identify and address systemic problems that affect the overall performance, reliability, and safety of the system.

Support Level 2 and Level 3 support teams by conducting remote and on site investigations.

I Integration and Optimisation: Support projects ensuring seamless integration between mechanical and software components, optimising the system's functionality.

Support Service Delivery teams to optimise systems by providing recommendations into the Smart Transport Product and Engineering teams.

Support all teams as a subject matter expert in resolving system issues to improve reliability and availability through remote and on site activities.

**Knowledge Management:** Develop and maintain system documentation, knowledge articles etc including system configurations and changes.

Become a Subject Matter Expert for System issues involving hardware and software.

- **I Problem Management**: Actively participate in problem management activities focussing on the identification root causes and outcomes to resolve the root causes.
- **I Continuous Improvement**: Take a holistic solution view to provide recommendations for system improvements and efficiencies.

Recommendations are to take into consideration hardware, software and customer use of the system and may include; software logic improvements, alternative devices, or process improvements.



- I Lifecycle Management: Provide lifecycle asset management plans for all aspects of the Smart Transport systems and services. Provide input to Product and Engineering teams regarding system and asset lifecycle design, from design to retirement.
- I Communication and Collaboration: Work internally with the Smart Transport Centre of Excellence (CoE): Product, Engineering, and Delivery teams (Delivery teams may be internationally based). In addition, work with Smart Transports external partners and vendors.

Provide technical support and guidance to internal teams and to the customers.

## Challenges

#### List 2 – 3 challenging aspects of the position

- Working within unpredictable environments that is ever changing. Required to be able to deal with changes to plans made and seek alternative solutions as required
- I Influencing customers of changes that are recommending for their services. This can be challenging as it means the customer may incur a cost.
- Working across different timezones given working with NEC Australia and other countries where Smart Transport systems and solutions are being utilised
- Ability to travel globally for 2-3 weeks at a time

## Qualifications/Industry Certifications

Essential	Desirable
Engineering Degree or equivalent, ie Electrical or Mechatronics	I ITIL V4 Foundation

#### **Professional Experience**

Professional work experience and skills relevant to the position

- Proven experience in an Electrical Systems Engineer role
- Proficiency in electrical and mechanical engineering principles and familiar with software development practices
- I Highly motivated to identify and implement ongoing system improvements
- Systems thinking, understanding how different components interact and impact the whole system. Strong understand of how field devices work with centralised (SaaS) software systems.
- Inquisitive and have demonstrated experience in recommending or implementing proactive initiatives to improve system performance
- Strong communication and interpersonal skills and ability to understand technical issues and clearly articulate solutions to customers
- Excellent analytical and problem solving skills
- I Highly organised and adaptable in a fast-paced environment
- Customer focussed
- I Must be able to travel internationally, for example, 2-4 weeks at a time
- Ability to work in our offices and on customer sites in New Zealand and abroad



Decision Making				
Decisions made independently by the role	Decisions/recommendations made after consultation with Manager			
I Strategic approach to resolve systemic issues to improve performance.	<ul><li>Esclated issues</li><li>Any changes to processes or procedures</li></ul>			
Selection of devices, in conjunction with the COE Global Product team, to improve reliability	, , , , , , , , , , , , , , , , , , , ,			
Suitable root cause outcomes for investigated problems				

## Key Relationships

Internal	External
<ul> <li>Smart Transport teams in Australia, New Zealand and globally</li> <li>COE Product and Engineering teams</li> <li>Delivery and Operations teams</li> </ul>	<ul><li>I Customers</li><li>I Vendors</li><li>I Suppliers</li></ul>

### Work Health & Safety Obligations

Your health, safety and wellbeing is important to us at NEC. It is therefore critical that all employees take responsibility for the health, safety and wellbeing of themselves and others. To ensure a zero-harm approach and the well-being of all our people, you must comply with our policies and frameworks and ensure your own health, safety and wellbeing while at work and that your actions or inactions do not harm others.

## **Our Vision**

To be the number one provider of technology to enable smart transportation services in the world

## **Our Intention and Values**

Diversify and grow customers, our people, and our capability and revenue streams.

I Innovation	Collaboration
I Customer Centric	I Excellence
I Courage	



## **NEC Group Code of Values**

The following core values are central to the organisations culture, attitudes and behaviour and it is expected that each employee will actively demonstrate their commitment to these values.			
<ul> <li>Look Outward. See the Future</li> <li>Think Simply. Display Clear Strategy</li> <li>Be Passionate. Follow through to the End</li> </ul>	<ul> <li>Move Fast. Never Miss an Opportunity</li> <li>Encourage Openness. Stimulate the Growth of All.</li> </ul>		