



**New Zealand Intelligence Community**

*Te Rōpū Pārongo Tārehu o Aotearoa*

[nzic.govt.nz](http://nzic.govt.nz)



# Position Description

## Infrastructure Engineer

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<b>Business unit:</b>	Infrastructure Operations Unit
<b>Position purpose:</b>	This role is responsible for the development and sustainment of a range of ICT capabilities. The role includes activities across a range of technology fields including automation, virtualisation, networking, storage, compute and security.
<b>Direct reports:</b>	None
<b>Financial delegation:</b>	None
<b>Directorate overview:</b>	<p>The Intelligence Directorate is responsible, within the provisions of the ISA, to access, exploit, analyse, report and share intelligence of value in accordance with New Zealand Government intelligence requirements.</p> <p>The unit is responsible for:</p> <ul style="list-style-type: none"><li>■ Developing and supporting complex ICT capabilities across a range of technical disciplines;</li><li>■ Research and development of infrastructure capabilities to support GCSB activities; and</li><li>■ Support as required to other directorates within GCSB, particularly with regards to specialist knowledge and expertise</li></ul>
<b>Business unit overview:</b>	

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## GCSB mission and values

### Our mission

*Protecting and Enhancing New Zealand's Security and Wellbeing.*

### Our values

*Respect, Commitment, Integrity, Courage.*

## Functional relationships

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### External contacts:

- NZIC Counterparts
- Industry Vendors
- Partner Agencies

### Internal contacts:

- R&D Unit Staff
  - R&D Unit customers and stakeholders
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## Objectives

The position of Infrastructure Engineer encompasses the following major functions and objectives:

- Developing and sustaining infrastructure capabilities;
- Applying engineering methodologies to capability development and sustainment; and
- Providing technical expertise

The requirements in the above objectives are broadly identified below:

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### Jobholder is accountable for:

#### Developing and sustaining infrastructure capabilities

- Developing new capabilities utilising a variety of technologies including, but not limited to, various host operating systems, networking platforms, virtualisation, automation, security platforms and ancillary technologies
- Sustaining existing capabilities to ensure that they are fit for purpose and available for use by clients

### Jobholder is successful when:

- New capabilities are developed within approved timeframes, quality guidelines to agreed organisational and unit standards
  - Existing capabilities are sustained to availability, quality and unit standards
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### **Applying engineering methodologies to capability development and sustainment**

- Selection and application of appropriate engineering and development methodologies to the development and sustainment of the capability. Including, but not limited to, the following aspects: requirements analysis, high level and detailed designs, prototyping, development, testing, integration, documentation, feedback and providing training
- New capabilities are developed within approved timeframes, quality guidelines to agreed standards
- Existing capabilities are sustained to availability, quality and unit standards

### **Providing technical knowledge and expertise**

- Providing expertise across a breadth and depth of technologies
  - Working with other staff to solve operational use cases
  - Designing future capabilities;
  - Participating in the development and sustainment of projects and programmes as directed
  - Mentoring and training less experienced staff in technical aspects of their roles
  - Researching new developments in technology including their potential benefits and ability for integration in to the unit
  - Being an advocate for technical innovation within the NZIC
  - Representing unit interests in wider development and sustainment activities
  - Development and implementation of technical standards
  - New capabilities are developed within approved timeframes, quality guidelines to agreed standards
  - Existing capabilities are sustained to availability, quality and unit standards
  - Improved technical skillsets within the unit
  - Continued improvement and innovation in technology areas
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### **Liaison with stakeholders and external partners**

- Liaison with commercial suppliers, vendors and other parties as required
  - Representing and advocating for GCSB in a range of domestic and international foras
  - Feedback provided on GCSB input into fora is positive
  - New capabilities are developed within approved timeframes, quality guidelines to agreed standards
  - Existing capabilities are sustained to availability, quality and unit standards
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Precise performance measures for this position will be developed in discussion between the jobholder and manager as part of the performance development and review process. It is also expected that you will undertake other duties that can be reasonably be regarded as relevant to the position, your experience and capability.

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## Person specification

*This section is designed to capture the expertise required for the role at the 100% fully effective level. (This does not necessarily reflect what expertise the current jobholder has.) This may be a combination of knowledge, experience, key skills, attributes, job specific competencies, qualifications or equivalent level of learning.*

### Qualifications

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<b>Essential:</b>	<b>Desirable:</b>
<ul style="list-style-type: none"><li>■ Computer science, information systems or network and system administration industry certifications</li></ul>	<ul style="list-style-type: none"><li>■ Bachelor's Degree in Information Technology, Computer Science, Engineering or equivalent</li><li>■ RedHat Certified Engineer</li><li>■ Cisco Certified Network Professional</li><li>■ VMware Certification (VCP)</li><li>■ Industry standard project management</li><li>■ IT security certification e.g. CISSP</li></ul>

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### Knowledge/experience

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<b>Essential:</b>	<b>Desirable:</b>
<ul style="list-style-type: none"><li>■ A minimum of three years ICT experience, preferably with at least one year undertaking the development of systems engineering projects</li><li>■ Experience designing and implementing a range of security-in-depth techniques</li><li>■ Experience in Linux systems administration at the RHCSA level or equivalent <u>and</u> one or more of the following areas is required:<ul style="list-style-type: none"><li>■ Virtualisation administration at the VCP/RHCVA level or equivalent</li><li>■ Infrastructure provisioning tools such as Puppet, Chef or Ansible</li><li>■ Network administration at the CCNA level or equivalent</li></ul></li><li>■ ICT systems design</li><li>■ ICT systems security experience</li></ul>	<ul style="list-style-type: none"><li>■ Experience in development methodologies for ICT capability development</li><li>■ Experience in the deployment and management of monitoring tools e.g. Nagios, Splunk</li></ul>

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## Personal attributes

- Be self-motivated, results focussed, innovative and able to work with minimal supervision.
- Be committed to undertaking high quality work.
- Display initiative and drive to ensure success of deliverables.
- Demonstrate the discretion required when working in a sensitive environment.
- Be able to accurately identify, analyse and resolve difficult problems.
- Be an effective written and oral communicator and committed to documentation standards.
- Proactively research and learn new knowledge and skills.
- Be committed to the adoption, implementation and evolution of business and technical processes to maintain effective capabilities.

## Core competencies

*Core competencies are based on and consistent with our values. They describe qualities that are common requirements for all GCSB staff at differing levels in the organisation, irrespective of their specialist skills or the particular requirements of their job. They are complemented by specialist competencies, which (where applicable) are set out in individual performance agreements.*

All employees are measured against the following core competencies as part of performance development and review:

- Security
- Teamwork and leadership
- Results focus
- Communication and knowledge sharing
- Professionalism
- Innovation
- Customer focus

## Changes to position description

Positions in the GCSB may change over time as the organisation develops. Therefore we are committed to maintaining a flexible organisation structure that best enables us to meet changing market and customer needs. Responsibilities for this position may change over time as the job evolves. Such change may be initiated as necessary by the manager of this position. This position description may be reviewed as part of planning for the annual performance cycle.

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## Health and safety

GCSB is committed to providing a healthy and safe work environment and management practices for all employees. Employees are expected to share this commitment as outlined in the current Health and Safety legislation by taking all practicable steps to ensure:

- a. The employee's safety while at work; and
- b. That no action or inaction of the employee while at work causes harm to any other person.

## Knowledge management

Employees are responsible for ensuring that all business records created are accessible and stored in the correct manner according to GCSB record keeping policy, standards, and procedures.

Employee: \_\_\_\_\_

Date: \_\_\_\_\_

Manager: \_\_\_\_\_

Date: \_\_\_\_\_

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