

# Role description

## Principal Systems Engineer



Customer  
Service

|                           |  |
|---------------------------|--|
| Cluster                   | Customer Service   |
| Agency                    | Department of Customer Service                             |
| Division/Branch/Unit      | Digital.NSW and Customer Service ICT / NSW Telco Authority |
| Classification/Grade/Band | Clerk Grade 11/12  |
| ANZSCO Code               | 263312   |
| PCAT Code                 | 1336892  |
| Date of Approval          | April 2020   |

### Primary purpose of the role

Design and manage the development of telecommunications infrastructure and provide systems design expertise focussed on providing input, direction and governance on systems design matters, and improving guidelines and compliance associated with telecommunications IT infrastructure.

### Key accountabilities

- Lead and manage the delivery of projects and programs which meet and comply to design guidelines and standards to enable the delivery of a robust service
- Lead and manage cost-effective design solutions for the network to deliver on Service Level Agreements
- Provide technical input, analysis and recommendations to internal and external stakeholders on planning, design and operational aspects of the network to ensure they meet service standards and requirements and deliver on the required outcomes and timeframes
- Drive an environment of continuous improvement by identifying and assessing new and innovative products/features to promote new or improved capability to the network and ensure service accessibility for customers
- Develop and maintain collaborative relationships within a matrix team environment (internally and with external partners) to provide knowledge, input and advice to support the achievement of organisational objectives and delivery of services
- Monitor, evaluate and report on services, programs and procedures to identify and respond to trends and emerging technology to promote improved capability, support decision making and ensure continuous improvement of services

### Key challenges

- Maintaining knowledge and understanding of the NSW Government's critical communication needs in a rapidly changing environment
- Working in a matrix team environment with internal teams and external partner organisations to prioritise work packages and take appropriate action given differing needs
- Applying industry experience in and in-depth knowledge of key Australian Standards for design and licencing to resolve complex issues to deliver critical communications standards of coverage in a complex and evolving regulatory, policy and technical environment

## Key relationships

| Who                       | Why  |
|---------------------------|--|
| <b>Internal</b>           |  |
| Work Team                 | <ul style="list-style-type: none"><li>• Collaborate on projects and/or project specific tasks and provide technical input and designs in accordance with project schedules</li><li>• Share information, consult, give and seek advice</li><li>• Act as the subject matter expert where appropriate</li><li>• Maintain effective working relationships to promote collaboration</li></ul> |
| Manager                   | <ul style="list-style-type: none"><li>• Provide advice and consult with</li><li>• Participate in meetings, escalate sensitive issues and collaborate with to determine approach on strategic issues</li><li>• Keep informed, advise, and provide guidance and instructions on network operational and service provider management issues</li></ul>                                       |
| Customer/Stakeholders     | <ul style="list-style-type: none"><li>• Articulate needs and requirements and collaborate with to negotiate solutions, provide expert advice and regular updates</li><li>• Manage the flow of information, seek clarification and provide customer focused advice and responses to ensure prompt resolution of issues</li></ul>  |
| <b>External</b>           |  |
| Other Government agencies | <ul style="list-style-type: none"><li>• Liaise with and provide customer focused advice and information on radio site design matters</li><li>• Work collaboratively with to deliver cost-effective solutions</li></ul>   |
| Contractors               | <ul style="list-style-type: none"><li>• Govern contractors to ensure designs meet Design Guidelines and Standards</li><li>• Develop and maintain effective working relationships and open channels of communication</li></ul>  |

## Role dimensions

### Decision making

This role has autonomy and makes decisions that are under their direct control as directed by their Manager. It refers to a Managers' decisions that require significant change to program outcomes or timeframes or are likely to escalate or require submission to a higher level of management. This role is fully accountable for the delivery of work assignments on time and to expectations in terms of quality, deliverables and outcomes. This role submits reports, business cases and other forms of written advice with minimal input from the manager.

### Reporting line

Manager, Engineering

### Direct reports

This role has no direct reports

## Budget/Expenditure

As per the Customer Service Delegations

## Essential Requirements

Relevant qualifications and/or experience

## Capabilities for the role



The [NSW public sector capability framework](#) describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.


The capabilities are separated into **focus capabilities** and **complementary capabilities**.

## Focus capabilities

*Focus capabilities* are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.

| FOCUS CAPABILITIES   |  |  |          |
|--|--|--|----------|
| Capability group/sets  | Capability name  | Behavioural indicators   | Level    |
| <br>Personal Attributes | <b>Act with Integrity</b><br>Be ethical and professional, and uphold and promote the public sector values                    | <ul style="list-style-type: none"><li>• Represent the organisation in an honest, ethical and professional way and encourage others to do so</li><li>• Act professionally and support a culture of integrity</li><li>• Identify and explain ethical issues and set an example for others to follow</li><li>• Ensure that others are aware of and understand the legislation and policy framework within which they operate</li><li>• Act to prevent and report misconduct and illegal and inappropriate behaviour</li></ul> | Adept    |
| <br>Relationships       | <b>Communicate Effectively</b><br>Communicate clearly, actively listen to others, and respond with understanding and respect | <ul style="list-style-type: none"><li>• Present with credibility, engage diverse audiences and test levels of understanding</li><li>• Translate technical and complex information clearly and concisely for diverse audiences</li><li>• Create opportunities for others to contribute to discussion and debate</li><li>• Contribute to and promote information sharing across the organisation</li></ul>   | Advanced |

|  |   |       |
|--|---|-------|
|  | <ul style="list-style-type: none"> <li>• Manage complex communications that involve understanding and responding to multiple and divergent viewpoints</li> <li>• Explore creative ways to engage diverse audiences and communicate information</li> <li>• Adjust style and approach to optimise outcomes</li> <li>• Write fluently and persuasively in plain English and in a range of styles and formats</li> </ul>  |       |
| <b>Commit to Customer Service</b><br>Provide customer-focused services in line with public sector and organisational objectives  | <ul style="list-style-type: none"> <li>• Take responsibility for delivering high-quality customer-focused services</li> <li>• Design processes and policies based on the customer's point of view and needs</li> <li>• Understand and measure what is important to customers</li> <li>• Use data and information to monitor and improve customer service delivery</li> <li>• Find opportunities to cooperate with internal and external stakeholders to improve outcomes for customers</li> <li>• Maintain relationships with key customers in area of expertise</li> <li>• Connect and collaborate with relevant customers within the community</li> </ul> | Adept |
| <b>Work Collaboratively</b><br>Collaborate with others and value their contribution  | <ul style="list-style-type: none"> <li>• Encourage a culture that recognises the value of collaboration</li> <li>• Build cooperation and overcome barriers to information sharing and communication across teams and units</li> <li>• Share lessons learned across teams and units</li> <li>• Identify opportunities to leverage the strengths of others to solve issues and develop better processes and approaches to work</li> <li>• Actively use collaboration tools, including digital technologies, to engage diverse audiences in solving problems and improving services</li> </ul>   | Adept |
|  <b>Plan and Prioritise</b><br>Plan to achieve priority outcomes and respond flexibly to changing circumstances | <ul style="list-style-type: none"> <li>• Consider the future aims and goals of the team, unit and organisation when prioritising own and others' work</li> <li>• Initiate, prioritise, consult on and develop team and unit goals, strategies and plans</li> <li>• Anticipate and assess the impact of changes, including government policy and economic conditions, on team and unit objectives and initiate appropriate responses</li> </ul>  | Adept |

|   |   |  |                |
|---|---|--|----------------|
|   |   | <ul style="list-style-type: none"> <li>• Ensure current work plans and activities support and are consistent with organisational change initiatives</li> <li>• Evaluate outcomes and adjust future plans accordingly</li> </ul>  |                |
|   | <b>Think and Solve Problems</b><br>Think, analyse and consider the broader context to develop practical solutions   | <ul style="list-style-type: none"> <li>• Undertake objective, critical analysis to draw accurate conclusions that recognise and manage contextual issues</li> <li>• Work through issues, weigh up alternatives and identify the most effective solutions in collaboration with others</li> <li>• Take account of the wider business context when considering options to resolve issues</li> <li>• Explore a range of possibilities and creative alternatives to contribute to system, process and business improvements</li> <li>• Implement systems and processes that are underpinned by high quality research and analysis</li> <li>• Look for opportunities to design innovative solutions to meet user needs and service demands</li> <li>• Evaluate the performance and effectiveness of services, policies and programs against clear criteria</li> </ul> | Advanced       |
|  | <b>Technology</b><br>Understand and use available technologies to maximise efficiencies and effectiveness   | <ul style="list-style-type: none"> <li>• Champion the use of innovative technologies in the workplace</li> <li>• Actively manage risk to ensure compliance with cyber security and acceptable use of technology policies</li> <li>• Keep up to date with emerging technologies and technology trends to understand how their application can support business outcomes</li> <li>• Seek advice from appropriate subject-matter experts on using technologies to achieve business strategies and outcomes</li> </ul> Actively manage risk of breaches to appropriate records, information and knowledge management systems, protocols and policies   | Advanced       |
| <b>Occupation specific capability set</b>   |   |  |                |
|  | <b>Development and Implementation, Systems Development, Systems Design</b><br>The design of systems to meet specified requirements, compatible with agreed systems architectures, adhering to corporate standards and | <ul style="list-style-type: none"> <li>• Adopts and adapts appropriate systems design methods, tools and techniques selecting appropriately from predictive (plan-driven) approaches or adaptive (iterative/agile) approaches, and ensures</li> </ul>  | DESN – Level 5 |

within constraints of performance and feasibility. The identification of concepts and their translation into a design which forms the basis for systems construction and verification. The design or selection of components. The development of a complete set of detailed models, properties, and/or characteristics described in a form suitable for implementation. The adoption and adaptation of systems design lifecycle models based on the context of the work and selecting appropriately from predictive (plan-driven) approaches or adaptive (iterative/agile) approaches.

they are applied effectively. Designs large or complex systems.

- Undertakes impact analysis on major design options and trade-off.
- Makes recommendations and assesses and manages associated risks.
- Reviews others' systems designs to ensure selection of appropriate technology, efficient use of resources, and integration of multiple systems and technology.
- Ensures that the system design balances functional and non-functional requirements.
- Contributes to development of systems design policies and standards and selection of architecture components.

#### **Delivery and Operation, Service Operation, Radio Frequency Engineering**

The deployment, integration, calibration, tuning and maintenance of radio frequency (RF) and analogue elements of IT systems.

- Develops maintenance schedules and procedures.
  - Approves equipment upgrades and modifications.
- Monitors system performance, recommends equipment modifications and changes to operating procedures, servicing methods and schedules.


RFEN Level 5

## **Complementary capabilities**




*Complementary capabilities* are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as 'not essential' for this role are not relevant for recruitment purposes however may be relevant for future career development.

### **COMPLEMENTARY CAPABILITIES**

| Capability group/sets   | Capability name                | Description  | Level        |
|---|--------------------------------|--|--------------|
|  | Display Resilience and Courage | Be open and honest, prepared to express your views, and willing to accept and commit to change         | Adept        |
|   | Manage Self                    | Show drive and motivation, an ability to self-reflect and a commitment to learning                     | Adept        |
|   | Value Diversity and Inclusion  | Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives | Intermediate |

## COMPLEMENTARY CAPABILITIES

| Capability group/sets  | Capability name                     | Description  | Level        |
|--|-------------------------------------|--|--------------|
|   | Influence and Negotiate             | Gain consensus and commitment from others, and resolve issues and conflicts                        | Adept        |
|  | Deliver Results                     | Achieve results through the efficient use of resources and a commitment to quality outcomes        | Adept        |
|   | Demonstrate Accountability          | Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines     | Adept        |
|  | Finance                             | Understand and apply financial processes to achieve value for money and minimise financial risk    | Intermediate |
|  | Procurement and Contract Management | Understand and apply procurement processes to ensure effective purchasing and contract performance | Adept        |
|  | Project Management                  | Understand and apply effective planning, coordination and control methods                          | Adept        |

## Occupation specific capability set



|  |  |
|--|--|
| Strategy and Architecture, Technical Strategy and Planning, Methods and Tools                      | The definition, tailoring, implementation, assessment, METL Level 4 measurement, automation and improvement of methods and tools to support planning, development, testing, operation, management and maintenance of systems. Ensuring methods and tools are adopted and used effectively throughout the organisation. |
| Development and Implementation, Installation and Integration, Systems Installation/Decommissioning | HSIN Level 4   |