

Position Description

Digital Architect

This position description is designed to give an overview of the type of work and performance required for this role and may include other duties as required.

Who We Are

The Civil Aviation Authority of New Zealand is the country's aviation safety and security regulator. We are a Public Service Crown entity responsible through our Board to the Minister of Transport. We regulate a wide range of aviation activities, from commercial airlines to private pilots, ensuring that all aspects of the industry meet the highest standards of safety and security. Our important work not only saves lives but also facilitates travel, recreation, commerce, and protects the environment. By ensuring a safe and secure aviation system, we provide confidence and safeguard the reputation of New Zealand, benefiting our country as a whole.

Our Vision and Purpose

Everything we do is related towards the achievement of 'a safe and secure aviation system – so people are safe, and feel safe when they fly'.

Our Pathways

We have three pathways that lead us to delivering our vision and purpose:

1. Leadership and Influence

Through regulatory leadership we influence a safe and secure civil aviation system for New Zealand.

2. Active Regulatory Stewardship

We monitor and care for the civil aviation regulatory system through our policy and operational responsibilities.

3. Professional Regulatory Practice

We act to identify risk and reduce it through intelligence-led intervention.

Our Values

Our organisation's Values support how we work to keep New Zealand skies safe and secure.

Collaboration - *Me mahi tahi*

We work together to achieve and succeed

Transparency - *Me mahi pono*

We are open and honest communicators

Integrity - *Me mahi tika*

We do the right thing

Respect - *Me manaaki*

We treat all people with consideration and kindness

Professionalism - *Kia tu rangatira ai*

We act in a way that brings credit to ourselves and our organisation



These feathers symbolise our Values, which are inspired by the sacred huia bird – a revered symbol of friendship, respect, leadership and mana.

Each feather in the Values has a different hue to reflect different aspects of the diversity, leadership, talent and experience our people bring to their work every day.

Our Values are us – we are many cultures, languages, genders, unique personalities and perspectives working together to achieve our Vision and Purpose.



Role Purpose

The Digital Architect is accountable for designing and architecting the digital and ICT solutions required to support the CAA's business needs across all domains, systems, applications, and hardware. This includes ensuring the successful delivery and implementation of new technologies, such as screening equipment, while aligning solutions with CAA's objectives. The Digital Architect plays a central role in shaping the digital infrastructure and ensuring it is robust, scalable, and efficient.

The Digital Architect is responsible for analysing business requirements and recommending appropriate digital and ICT solutions. This involves evaluating the CAA's current use of technology, providing detailed analysis of various solutions, and presenting the costs and benefits of each. The Digital Architect will also propose systems, programs, and hardware that best meet the CAA's evolving needs and future goals.

The Digital Architect will create comprehensive architectural plans and documentation for new applications and hardware, ensuring clear guidelines for development and implementation. They will oversee the design, build, and testing of new computing solutions, working closely with cross-functional teams to ensure that all systems meet required specifications and function seamlessly within the organization.

Key Dimensions

| | | |
|---------------------------------|---|---|
| Group: | Corporate Services | |
| Team: | Digital | |
| Reports to: | Manager, Digital Analysis and Architecture | |
| Location: | Wellington | |
| Salary Band: | Band 17 | |
| Financial: | Nil | Delegation Level = Nil |
| People: | Direct Reports = Nil | Delegation Level = Nil |
| Key Relationships: | Internal: <ul style="list-style-type: none"> Digital teams Corporate Services group Business and system owners SMEs | External: <ul style="list-style-type: none"> Vendors/service providers Cross Government functional groups |
| Essential requirement/s: | Nil | |

Shared Accountabilities

- We work professionally, aligned with our Values, Code of Conduct and guiding CAA policies.
- We foster a safe, inclusive culture by respecting and embracing the diverse perspectives, experiences, and backgrounds of all.
- We ensure our work is aligned to our strategy, vision and purpose in our approach to delivering intelligence led, risk-based safety and security outcomes.



- We carry out work and conduct our relationships in a way that supports the CAA's commitment to the Te Tiriti o Waitangi.
- We work together to create an environment that keeps ourselves and others safe by following the responsibilities laid out in our people policies and our Health, Safety and Wellbeing Commitment statement.

Key Accountabilities

- Contributes to development of solution architectures in business, infrastructure and functional areas.
- Determines and documents architecturally significant decisions.
- Contributes to, and at times leads, the development and delivery of projects and key pieces of work through the preparation of technical plans and application of design principles. Aligns solutions with enterprise and solution architecture standards (including security).
- Produces detailed design specifications to form the basis for the construction of systems. Reviews, verifies and improves designs against specifications.
- Obtains input from, and agreement to requirements from a diverse range of stakeholders. Negotiates with stakeholders to manage competing priorities and conflicts.
- Engages with internal and external stakeholders to identify and evaluate alternative architectures and undertakes short-listing of options and feasibility assessment.
- Supports preparation of business cases including cost/benefit, impact and risk analysis for each option.
- Supports with the assessment of impacts, threats and opportunities to the organisation based on emerging technologies.
- Creates reports and technology roadmaps and shares knowledge and insights with others.
- Understands the work of the Digital Analysis and Architecture team, and actively looks for opportunities to improve practises.

Domains of specialisation can include:

System Design

- Designs system components using appropriate modelling techniques following agreed architectures, design standards, patterns and methodology.
- Identifies and evaluates alternative design options and trade-offs. Creates multiple design views to address the concerns of the different stakeholders and to handle functional and non-functional requirements.
- Models, simulates or prototypes the behaviour of proposed system components to enable approval by stakeholders.

Data Modelling and Design

- Investigates enterprise data requirements based upon a detailed understanding of information requirements.
- Applies analysis, design and modelling techniques to establish, modify or maintain data structures and their associated components.
- Manages the iteration, review and maintenance of data requirements and data models.

Network Design

- Designs specific network components using agreed architectures, design standards, patterns and methodology.
- Translates logical designs into physical designs that meet specified operational parameters for capacity and performance.
- Reviews and verifies network designs against non-functional requirements, including validation and error correction procedures, access, security and audit controls.



- Contributes to the development of recovery routines and contingency procedures. Contributes to alternative network architectures, networking topologies and design options.

The Authority's Smart Competencies

Get Smart – Knowledge & Context: Level 2 ■■□

Understands the role of the Authority within the aviation sector, and has a holistic understanding of the regulatory environment, the structure and interrelated operating practices of the Authority. Follows the guidance and processes expected of all Authority employees as a modern, adaptive regulator, set out in policies, legislation, aviation rules and other internal documents.

Think Smart – Sound Judgement: Level 2 ■■□

Makes appropriate and transparent decisions by analysing relevant information, takes into consideration different points of view, demonstrating the ability to make difficult and/or sensitive decisions. Has flexibility to both adopt a course of action and change it when required by the situation.

Work Smart – Achieves Results: Level 2 ■■□

Drives change and results through effective planning, collaboration, and communication. Builds trust, fosters teamwork, and demonstrates self-awareness to achieve shared goals and continuous improvement.

Act Smart – Personal Effectiveness: Level 2 ■■□

Is adaptable and resilient to meet changing needs and expectations. Displays self-awareness and is respectful of diversity. Takes responsibility for self-learning and development. Demonstrates behaviours consistent with the Code of Conduct and Authority Values.

Skills and Experience

- Relevant tertiary qualification
- 5+ years of in an architectural position (ideally within the New Zealand public sector)
- Proven design and architectural skills and experience in developing and maintaining design documentation
- TOGAF certification and familiarity with the Government Enterprise Architecture NZ Capability Framework desirable
- Current knowledge of trends and emerging technologies
- Strong relationship building skills.
- Strong written and verbal communication skills, including cost benefit analysis and writing business cases

