



## JOB DESCRIPTION

### Post Details:

Post Title:	Engineer (Digital Infrastructure)	Organisational Element:	NATO Infrastructure Service Centre
		Job Family:	NCIA – Digital Backbone Engineering
Rank/Grade:	G15		
Military/Civilian:	Civilian	Location:	Naples (Lago Patria) - Italy

### Organisation context:

This is a position within the NATO Communications and Information Agency (NCI Agency), an organization of the North Atlantic Treaty Organization (NATO).

To strengthen the Alliance through connecting its forces, the NCI Agency delivers secure, coherent, cost effective and interoperable communications and information systems in support of consultation, command & control and enabling intelligence, surveillance and reconnaissance capabilities, for NATO, where and when required. It includes IT support to the Alliances' business processes (to include provision of IT shared services) to the NATO HQ, the Command Structure and NATO Agencies.

### Organisational Element Statement of Functions:

The NATO Infrastructure Service Centre (NISC) Business Area Lead (BAL) is accountable for planning and executing the full lifecycle management activities (design, transition and operations) for the identified area of responsibility. NISC provides generic, domain independent, technical functionality that enables and facilitates the operation and use of Information Technology resources. NISC services (including: subject matter expertise; acquisition; project management, operations and maintenance; and, disposal) are provided in the following technical domains: Network Services (to include routing, switching and transmission services), infrastructure hosting, storage and processing, infrastructure networking, HW and SW management, databases and web platform services, as well as identity management. Services are provided throughout the lifecycle to both internal and external customers in both static and deployable settings.

### Job role description:

A Digital Infrastructure Engineer is responsible for implementing, testing and overseeing the installation of hardware and infrastructure equipment that ensure the smooth functioning of servers, storage systems, data centers, enabling seamless secure data processing and systems reliability. They troubleshoot issues, perform regular maintenance, and collaborate with other cross-functional ICT teams to address technical issues promptly, integrate emerging technologies, supporting the organization's digital transformation goals

and ensuring efficient, resilient, scalable, and secure digital infrastructure.

## **Duties and Responsibilities:**

### **Sustainability**

Providing advice, assistance and leadership to enable the organisation to minimise negative environmental impact.

- Assesses and reports on how different tactical decisions affect sustainability.
- Evaluates factors and risks (political, legislative, technological, economic, social) that impact on operational processes and strategic direction.
- Evaluates and reports on the implementation of sustainability measures in specific areas.

### **Systems and software life cycle engineering**

Establishing and deploying an environment for developing, continually improving, and securely operating software and systems products and services.

- Collaborates with those responsible for ongoing systems and software life cycle management to select, adopt and adapt working practices.
- Supports deployment of the working environment for systems and software life cycle working practices.
- Provides effective feedback to encourage development of the individuals and teams responsible for systems and software life cycle working practices.
- Provides guidance and makes suggestions to support continual improvement and learning approach.
- Contributes to identifying new domains within the organisation where systems and software life cycle working practices can be deployed.

### **Network design**

Designing communication networks to support strategic and operational requirements and producing network strategies, architectures, policies and related documentation.

- 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.

### **Hardware design**

Specifying a hardware design model for a defined system architecture.

- Designs hardware components, taking account of target environment, performance, security, safety, reliability and sustainability requirements.
- Translates logical designs into physical designs and delivers technical prototypes of proposed components for approval and production.
- Designs the tests to measure the performance of prototypes and production output against specification and inform iterative development.

### **Safety engineering**

Applying appropriate methods to assure safety during all life cycle phases of safety-related systems developments.

- Contributes to identifying, analysing and documenting hazards and safety risks using agreed methods and procedures.
- Contributes to the specification of safety requirements.
- Analyses and documents safety validation results during system development and implementation.
- Contributes to developing and maintaining project safety assurance plans, and gathers safety assurance evidence for safety case preparation.

### **IT infrastructure**

Deploying, configuring and operating IT Infrastructure.

- Provides technical expertise to enable the correct application of operational procedures.
- Contributes to the planning and implementation of infrastructure maintenance and updates.
- Implements agreed infrastructure changes and maintenance routines.
- Uses infrastructure management tools to determine load and performance statistics.
- Configures tools and/or creates scripts to automate the provisioning, testing and deployment of new and changed infrastructure.
- Maintains operational procedures and checks that they are executed following agreed standards.
- Investigates and enables the resolution of operational issues.
- Provides reports and proposals for improvement, to specialists, users and managers.

### **Systems installation and removal**

Installing and testing, or decommissioning and removing, systems or system components.

- Undertakes or supervises complex installations and de-installations of systems or components, including handover to the client.
- Develops procedures and standards for installation and handover to maintain and improve the installation service.
- Schedules installation work around client priorities and resource availability.
- Ensures adherence to established safety and quality procedures.

### **Security operations**

Delivering management, technical and administrative services to implement security controls and security management strategies.

- Monitors the application and compliance of security operations procedures.
- Reviews actual or potential security breaches and vulnerabilities and ensures that they are promptly and thoroughly investigated.
- Recommends actions and appropriate control improvements.
- Ensures that security records are accurate and complete and that requests for support are dealt with according to agreed procedures.
- Contributes to the creation and maintenance of policy, standards, procedures and documentation for security.

**Additional duties for this post:**

- Manage NISC datacentre resources and responsibility to liaise with third parties on the provision/control of shared resources.
- Participate in datacentre design activities.
- Participate in DC capacity requirements management and reviews.
- Act as Hardware Inventory Accountholder and perform Asset Management tasks accordingly.
- Central enterprise administration of infrastructure storage and compute resources.
- Maintain Disaster recovery procedures.
- Migration, adaptation, operation, maintenance and tuning for all IaaS inside the classified/unclassified NATO and new upcoming networks.
- Identification operational problems and contribution to their resolution.
- Lead small team of Engineers/Technicians.
- Develops and maintains Standard Operating Procedures (SOPs) for routine system administration.
- Participate in full ITIL-based methodology for Change Control, Problem Management, Service Management, and Capacity Management.
- Support Cloud migration activities.
- Participates in outsourcing initiatives.
- Vendor and contract management activities.
- Deputises for higher-grade staff if required.
- Performs other duties as may be required.
- Occasional need to work on scheduled maintenances, service-affecting activities and contingency work outside of regular business hours

**Education, Experience and Training (essential):****Education:**

A minimum requirement of a Bachelor's degree at a nationally recognised/certified University in a related discipline and 2 years post-related experience.

Or exceptionally, the lack of a university degree may be compensated by the demonstration of a candidate's particular abilities or experience that is/are of interest to NCI Agency, that is, at least 6 years extensive and progressive expertise in duties related to the function of the post.

**Experience:**

- In-depth knowledge of business application technologies, platforms, and IT service management best practices.
- Proficiency in incident and problem management methodologies.
- Experience in service level management and continuous service improvement.
- Familiarity with ITIL or other IT service management frameworks.
- Excellent communication, negotiation, and customer relationship management abilities.
- Strong analytical and problem-solving skills, with the ability to make data-driven decisions.
- 5 years of experience in the following areas:
  - VMWARE Esxi installation, configuration and administration
  - VMWARE VSAN installation, configuration and administration
  - Dell storage installation, configuration and administration
  - Network configuration and administration
  - Backup software configuration and administration

**Education, Experience and Training (desirable):**

- Experience on working in a service provisioning organization.
- IT Architecture and design and knowledge of design/architecture tools and methodologies.
- Knowledge of Cyber Security techniques to protect information.
- Knowledge of Cloud Technologies.
- Prior experience of working in an international environment comprising both military and civilian elements.
- Knowledge of NATO responsibilities and organization.

**Training/Certifications**

Data center management certification.

**Behavioral competencies:**

- *Delivering Results and Meeting Customer Expectations* - Focuses on customer needs and satisfaction; sets high standards for quality and quantity; monitors and maintains quality and productivity; works in a systematic, methodical and orderly way; consistently achieves project goals.

- *Adapting and Responding to Change* - Adapts to changing circumstances; tolerates ambiguity; accepts new ideas and change initiatives; adapts interpersonal style to suit different people or situations; shows an interest in new experiences.
- *Achieving Personal Work Goals and Objectives* - Accepts and tackles demanding goals with enthusiasm; works hard and puts in longer hours when it is necessary; seeks progression to roles of increased responsibility and influence; identifies own development needs and makes use of developmental or training opportunities

**Language:**

A thorough knowledge of one of the two NATO languages, both written and spoken, is essential and some knowledge of the other is desirable.

**NOTE:** Most of the work of the NCI Agency is conducted in the English language.