



JOB DESCRIPTION

Post Details:

Post Title:	Solution Engineer	Organisational Element:	JISRC
		Job Family:	Application Engineering
Rank/Grade:	G15		
Military/Civilian:	Civilian	Location:	The Hague (NL)

Organization context:

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

To strengthen the Alliance through connecting its forces, the NCIA 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.

Organizational Element Statement of Functions:

This post is assigned to the Joint Intelligence, Surveillance and Reconnaissance (JISR) Centre, where the responsibility rests for accomplishing the full life cycle of assigned services. The JISR Centre's Vision is to assure information superiority for NATO. Our Mission is to deliver, support and protect valued Intelligence, Surveillance and Reconnaissance (ISR) capabilities, expertise and services, to maximise operational effectiveness for NATO.

In the function of Intelligence Surveillance and Reconnaissance (ISR) Solution Engineer, the successful individual will provide Subject Matter Expertise advice and support in the area of ISR sensors and the integration of their data and associated services into NATO networks and systems.

Job role description:

Solution Engineers are domain specific technical experts that translate capability requirements into implementation plans, designs and development activities. They select, design and implement solutions to requirements within a given application domain. They derive solution requirements and designs from capability requirements and architectures. Solutions, designs, and implementations encompass products, product components, encompassing software, hardware, network, data, documentation and development/test environments. They evaluate supplier's technical solution to manage selected interfaces of that solution.

Duties and Responsibilities:**Solution architecture**

- Contributes to the development of solution architectures in specific business, infrastructure or functional areas.
- Identifies and evaluates alternative architectures and the trade-offs in cost, performance and scalability.
- Determines and documents architecturally significant decisions.
- Produces specifications of cloud-based or on-premises components, tiers and interfaces, for translation into detailed designs using selected services and products.
- Supports projects or change initiatives through the preparation of technical plans and application of design principles.
- Aligns solutions with enterprise and solution architecture standards (including security).

Requirements definition and management

- Defines and manages scoping, requirements definition and prioritisation activities for small-scale changes and assists with more complex change initiatives.
- Follows agreed standards and applies appropriate techniques to elicit and document detailed requirements.
- Provides constructive challenge to stakeholders as required.
- Reviews requirements for errors and omissions.
- Prioritises requirements and documents traceability to source.
- Provides input to the requirements base-line.
- Investigates, manages and applies authorised requests for changes to base-lined requirements, in line with change management policy.

Systems development management

- Plans and drives systems development projects which support the organisation's objectives and plans.
- Selects, adopts and adapts appropriate systems development methods, tools and techniques.
- Ensures that stakeholders are aware of required resources and that they are made available.
- Facilitates availability and optimum utilisation of resources.
- Monitors and reports on the progress of development projects.
- Ensures projects are carried out in accordance with agreed architectures, standards, methods and tools and addresses security and privacy requirements.
- Develops road maps to communicate future development activity.

Network design

- Specifies the technical configurations and components required for a small network or a network segment in a more complex infrastructure.
- Follows organisational architectures and standards.

Sourcing

- Prepares pre-qualification questionnaires and tender invitations in response to business cases.
- Recognises the difference between open source and proprietary systems options.
- Applies standard procedures and tools to produce detailed evaluation criteria for complex tenders and to evaluate tenders.

Contract management

- Acts as a routine contact point between the organisation and suppliers concerning contract management.
- Supports the collection of contract performance data.
- Creates standard reports on contract performance.

Additional duties for this post:

Capability Development:

- Provide technical and operational contributions to the conception, development and execution of JISR related projects; this includes requirements definition, analysis, research, architecture development, experimentation, interoperability, testing, and support to military exercises and trials.
- Follow agreed standards and apply appropriate techniques to elicit and document detailed system requirements for ISR sensors.
- Define interfaces and identify standards for the integration of services in software architecture for data dissemination and command and control.
- Configure the hardware and software environment as required by the system being integrated.
- Diagnose faults and records and reports on the results of system support activities.
- Support prototyping and experimentation with new technologies, in areas such as data management.
- Contribute to the development of scientific reports.

Testing:

- Participate in requirement, design and specification reviews.
- Design and validate test plans and test conditions.
- Design test cases and test procedures under own direction, mapping back to pre-determined criteria, recording and reporting test outcomes.
- Review test documentation, conduct acceptance testing and support the development of test reports.
- Apply agreed standards to specify and perform manual and automated testing.
- Analyse and report on test activities, results, issues and risks.

Artificial Intelligence and Machine Learning:

- Investigates/facilitates the use of big data management techniques, automation and Artificial Intelligence (AI) and Machine Learning (ML) capabilities to enable NATO to efficiently process, analyse and classify increasing amounts of ISR data.

Sourcing:

- Supports the development of Invitation for Bid by contributing to ISR Sensor Requirement Specifications and assessing Bidders' proposals.
- Supports projects' implementation by reviewing contractual technical documentation, performing tests and validations.
- Supports the delivery of ISR capabilities to NATO, advising on the integration of data and services.
- Consults with NATO Commands and NCIA subject matter experts to assist in resolving issues and managing processes.
- Deputise for higher grade staff, if required.
- Perform other duties as may be required.

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

A minimum requirement of a Bachelor's degree at a nationally recognised/certified University in a technical 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 NCIA, that is, at least 6 years extensive and progressive expertise in duties related to the function of the post.

Experience:

- Strong knowledge of airborne, space, surface or ship-based ISR systems, including platforms, sensors, services, datalink networks, communication and software technologies.
- Strong knowledge of NATO owned and operated AEW/ISR platforms / capabilities and their roles and responsibilities in NATO Operations.
- Experience in roles requiring strong analytical skills and proven ability to analyse large amounts of information in a wide range of technical areas in order to inform decision making through the delivery of reports and advice.
- Knowledge of NATO JISR standards and processes, in addition to technical and operational interoperability aspects of NATO and national JISR processes and systems.
- Knowledge of NATO responsibilities and organization, including ACO and ACT.

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

- Recent practical experience in the following fields:
 - Testing, experimentation, trials, military exercises.
 - ISR related NATO Standardisation Agreements (STANAGs) and relevant industrial standards.
 - Developing and using system architecture diagrams and architecture frameworks (e.g. NAF, TOGAF).
- Knowledge of NATO C3 policies and Joint ISR doctrine.
- Prior experience of working in an international environment comprising both military and civilian elements

Behavioral competencies:

- *Relating and Networking* - Easily establishes good relationships with customers and staff; relates well to people at all levels; builds wide and effective networks of contacts; uses humour appropriately to bring warmth to relationships with others.
- *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.

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.
Travel:	<p>NOTE: Most of the work of the NCIA is conducted in the English language.</p> <p>Business travel to NATO and national (NATO and non-NATO) facilities as well as between the NCIA offices</p> <p>May be required to undertake duty travel to operational theatres inside and outside NATO boundaries</p>
Work Environment:	Normal office environment