NCI AGENCY

Duty Location: **The Hague, NLD**

JOB DESCRIPTION
Engineer (Interoperability, Verification and Validation)
Service Strategy – Independent Verification and Validation
Grade: G15

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

The NCIA has been established with a view to meet to the best advantage the collective requirements of some or all NATO nations in the fields of capability delivery and service provision related to Consultation, Command & Control as well as Communications, Information and Cyber Defence functions, thereby also facilitating the integration of Intelligence, Surveillance, Reconnaissance, Target Acquisition functions and their associated information exchange.

The Service Strategy Directorate, as design authority for NATO C4ISR, is responsible for the technical coherence of all Agency capabilities and services and their effective and efficient management across the life-cycle. Service Strategy has overall responsibility across the Agency for service strategy and innovation, technical and architectural coherence, quality, risk, and compliance management, testing and validation, metric reporting, and cross Service Line coherence and project management support.

The Independent Verification and Validation (IV&V) service line is responsible for the agency-wide governance of all verification and validation aspects across the full service and capability life-cycle; and, for the provision of IV&V services and facilities to support other service lines and programme offices in IV&V-related activities such as quality and change management. The IV&V service line supports other agency service lines with independent verification (executed on service line facilities or a common NCI Agency facility) and validation on IV&V facilities.

The Independent Verification and Validation, Interoperability Verification and Validation Branch is responsible for verifying and validating interoperability between NATO and/or national capabilities likely to operate in a NATO or coalition mission environment. Interoperability V&V is part of non-functional requirements validation and, like security V&V, has a significant importance in the NATO environment. The successful candidate will be working within a highly motivated and cross-functional team, touching upon a different numbers of activities around interoperability, FMN and verification and validation within a multinational environment.

The ideal candidate will show leadership skills and willingness to learn, and excel on analytical and problem solving skills, being able to think critically regarding systems, and what and how to test. He/she will be comfortable performing different type of tasks, able to speak up their mind as well as listen to others.

Duties:

Under the direction of Branch Head Interoperability V&V, and for services the Service Delivery Manager; the incumbent shall perform duties such as the following:

- Analyse user and non-functional requirements and translate these into new or modified functionality with the existing NCI Agency IO Toolset;
- Assume the role of Lead Engineer for the NCI Agency IO Toolset regarding Interoperability Test Automation;
- Participate in validation and verification events by providing training and support for the use of the NCI Agency IO Toolset;
- Analyse complex functional and non-functional test scenarios based on operational use cases, extract the test conditions, design tests cases and implement necessary automated UI tests and end-to-end tests where possible;
- Participate in interoperability testing events and leads planning and execution of events she/he is responsible for;

- Lead interoperability verification and validation activities in NATO exercises, like Steadfast Cobalt or CWIX;
- Participate in Coalition Interoperability Assurance and Validation (CIAV) Working Groups for the different initiatives, like FMN or NRF;
- Coordinate, plan, schedule, execute and report on Interoperability V&V activities. Estimate the resources and financial requirements. Produce the Event Test Plan and ensures the plan is executed;
- Analyse complex test scenarios based on operational use cases, extract the test conditions, design tests events;
- Manage the execution of the events and its reporting;
- Contribute to the management and maintenance of the AV&V repository, including services, service functions, test requirements, test cases and use cases;
- Create test definition for automating tests and validate its implementation;
- When required, executes duties of a service delivery provider;
- Maintain necessary documentation and audit trail of all activities conducted;
- Contribute to NATO and the NCI Agency IV&V strategy, policies and plans, and execution;
- Ensure interoperability tools are used consistent and process/procedural guidance;
- Identify skills requirements and training needs for IV&V Staff;
- Assist with recruitment of staff for the IV&V Service Line as required.
- Deputize for higher grade staff, if required;
- Perform other duties as may be required.

Experience and Education:

- A minimum requirement of a Master'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/college 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 the duties related to the function of the post;
- Experience with:
  - GIT, CI/CD and automated testing as part of the software development pipeline;
  - Automated testing of CIS Infrastructure;
  - UI testing frameworks such as Cypress;
  - JavaScript and Typescript and JSON;
  - C# and Python;
  - JIRA for issue management and resolution;
  - SQL, preferably Microsoft T-SQL.
- Working level knowledge of PowerShell and bash;
- Working-level knowledge of MS-Office, Project, Visio and SharePoint;
- Experience in various areas of Software Engineering including some of the following:
  - Requirements elicitation and management;
  - Software design, implementation and testing;
  - Programming techniques and methodologies;
  - Agile software development methodologies;
  - Working-level knowledge of different software architectures and design patterns;
  - Working-level knowledge of holistic system architectures including all common server aspects, networking.

Desirable Experience and Education:

- Advanced certification in the area of testing and testing management;
- Knowledge of the IO Toolset, Tidepedia, and JIRA;
- Experience testing NCIA applications like ICC, JTS, FAST, NCOP, LOGFAS, TOPFAS, etc…;
- Experience with cryptographic equipment;
- Experience with MS-Exchange and SharePoint;

– Experience in the implementation of ITIL Service Management;
– Prior experience of working in an international environment comprising both military and civilian elements;
– Knowledge of NATO responsibilities and organization including ACO and ACT.

Language Proficiency:

– 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.

Competencies or Personal Attributes:

– **Adhering to Principles and Values** - Upholds ethics and values; demonstrates integrity; promotes and defends equal opportunities, builds diverse teams; encourages organisational and individual responsibility towards the community and the environment.
– **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.
– **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.
– **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.

Travel:

– Business travel to NATO and national (NATO and non-NATO) facilities as well as frequent travel between the NCIA offices;
– May be required to undertake duty travel to operational theatres inside and outside NATO boundaries.