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Duty Location: **The Hague, NLD**

JOB DESCRIPTION

Principal System Engineer (Mission Planning) Air and Missile Defence C2 - Engineering Branch Grade: A-4

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

The NCI Agency has been established with a view to meeting 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.

Directorate Air and Missile Defence Command and Control (AMDC2), as part of the NCI Agency, ensures the harmonised planning, implementation, deployment, evolution and support of the Air Command and Control System (ACCS) and other AirC2 assigned programmes, in a way that satisfies the operational requirements and minimizes the military risk, taking into account the NATO political, economic and schedule requirements and using the most suitable industrial and technological solutions. Directorate AMDC2 is the procurement and implementation body of the NCI Agency, charged with the effective planning, execution, delivery into service, evolution and through-life logistic support of NATO's and assigned national AirC2 systems.

The Engineering Branch (ENB) manages, controls, guides and orchestrates all technical aspects of all AirC2-related internal and contracted projects throughout their lifecycle. It provides estimation of the required effort for each project/task and staffs, plans, allocates and manages engineering resources according to agreed priorities. ENB executes overall design responsibility to ensure and harmonize the integrity, technical coherence and interoperability across all AirC2-related based projects throughout product lifecycles (requirements, design, implementation, test support and site support) and across assigned projects. ENB also maintains close coordination with Service Strategy and other key stakeholders across the Agency for technical roadmaps and engineering matters.

The System Engineering for Acquisition Section (SYS-ACQ) manages, controls, guides and coordinates all system engineering aspects (requirements, architecture/design, implementation, test support) and system engineering resources allocated to the procurement of all AirC2-related projects. By relying on the provided System Engineering process expertise, strategic speciality engineering and domain expertise, the customer can assess feasibility (cost and schedule), suitability and coherence of bids, proposed solutions and changes, contractual deliverables, baselines and roadmaps.

Duties:

The Principal System Engineer leads the effort of defining and implementing CAOC capabilities from a system engineering perspective during project implementation, test, acceptance, and verification validation phases of NATO AirC2 Projects. These capabilities focus primarily on Mission Planning and Tasking (i.e.: Force Management including mission planning and tasking, Current Operations within CAOC, Airspace Management, System Configurations and Planning) subsystem of ACCS Combined Air Operations Centre (CAOC) and other NATO AirC2 Near Real Time (NRT) legacy system interoperability activities with ACCS.

Under the direction of Head of System Engineering Acquisition Section (H-SYS-ACQ), the incumbent will perform duties such as the following:

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- Provide operational and system engineering expertise in the definition and implementation of contracted requirements and capabilities;
- Elicit and develop new requirements in coordination with the Operational User in his/her assigned domain and ensure that requirements adequately capture operational needs;
- Monitor and assess implementation of these requirements and supporting acceptance;
- Ensure that operational, functional, ergonomic (HMI and workflow) and performance requirements for the Mission Planning and Tasking subsystem are addressed;
- Liaise with representatives of User Communities for assessing the impact of operational decisions in the Mission Planning subsystem of all AirC2 related system;
- Advise on methods of verification and validation with regard to specified requirements, ensuring that documented requirements are correctly addressed in test plans and procedures, and test results are produced and analysed to support verification and validation;
- Deputize for higher grade staff, if required;
- Perform other duties as may be required.

Experience and Education:

- A Master's degree at a nationally recognised/certified University in a related discipline and 5 years post-related experience, or, a Bachelor's degree with 8 years post related experience;
- Experience in development of complex software-intensive command-and-control systems and/or decision aids;
- Management experience in analysis, design, implementation and test complex software-intensive systems;
- Operational knowledge of NATO Air operations at the CAOC level or above, or equivalent national experience;
- Proven ability to effectively communicate orally and in writing, with excellent briefing skills and the ability to produce clear and concise reports.

Desirable Experience and Education:

- A good understanding of Non Real Time programme and procedures for planning, acquisition, programming and implementation of AirC2 projects as well as Operation and Maintenance of these capabilities;
- Knowledge of ACCS CAOC capabilities, design, workflows and interfaces;
- Knowledge of current system engineering practices and an appreciation of how these can be applied to a complex, geographically distributed NATO Air C2 system;
- 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:

- Applying Expertise and Technology - Applies specialist and detailed technical expertise; uses technology to achieve work objectives; develops job knowledge and expertise (theoretical and practical) through continual professional development; demonstrates an understanding of different organisational departments and functions.

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- 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.
- Formulating Strategies and Concepts - Works strategically to realise organisational goals; sets and develops strategies; identifies, develops positive and compelling visions of the organisation's future potential; takes account of a wide range of issues across, and related to, the organisation.
- Presenting and Communicating Information - Speaks fluently; expresses opinions, information and key points of an argument clearly; makes presentations and undertakes public speaking with skill and confidence; responds quickly to the needs of an audience and to their reactions and feedback; projects credibility.
- Writing and Reporting - Writes convincingly; writes clearly, succinctly and correctly; avoids the unnecessary use of jargon or complicated language; writes in a well-structured and logical way; structures information to meet the needs and understanding of the intended audience.

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.