



Job Description Print Report

Position Review

Organization	SGTS				
Grade	P4	Duty Station	DS - IAEA VIENNA	CCOG 2	
Classified Grade		Position Title		Proposed New Title	Equipment Specialist
Master Version		Master Status		Approval Date	
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Organization Settings

The Department of Safeguards carries out the IAEA's duties and responsibilities as the world's nuclear inspectorate, supporting global efforts to stop the spread of nuclear weapons. The primary role of the Department is to develop and implement IAEA safeguards to ensure that there is no diversion of declared nuclear material from peaceful activities and no indications of undeclared nuclear material or activities in a State as a whole.

The Department comprises nuclear safeguards inspectors, responsible for carrying out inspections and verifications of all-safeguards relevant information for nuclear facilities in over 180 States; and technical staff responsible for a wide range of activities including: developing concepts and approaches for implementing safeguards; developing and maintaining safeguards equipment; providing analytical and laboratory services for sample analysis; collecting, evaluating and analysing safeguards-relevant information; providing information and communication technology infrastructure and services; and providing programme coordination support.

The Division of Technical and Scientific Services ensures the provision of state-of-the-art equipment and related expertise for the accomplishment of the Department of Safeguards activities. Within this mandate, the Division is responsible for procurement, testing, provision, inventory control, performance monitoring and maintenance of safeguards equipment and supplies required by SGO Divisions; management of equipment development and engineering activities to meet quality and safeguards requirements; development and provision of documentation, procedures, instrumentation methods and techniques; provision of specialized technical and scientific support to inspectors and inspection activities in the field and at headquarters; and, radiation contamination monitoring of returned equipment and timely write-off of obsolete or contaminated equipment. The Division also coordinates departmental health and safety activities.

Main Purpose

Reporting to the Team Leader, the Equipment Specialist leads complex projects for the development and evaluation of safeguards equipment and technologies to ensure the IAEA has access to the latest tools needed to fulfill its safeguards mandate. Through identifying emerging technologies and assessing commercial and custom-made products for their suitability, the Equipment Specialist plays a vital role in advancing the technology and equipment available to the IAEA to enhance safeguard operations worldwide.

Role

The Equipment Specialist is: (1) an engineer, leading the design, development, and/or construction of new safeguards equipment and technologies; (2) a technical expert, exploring, evaluating and integrating hardware, designing and testing components suitable for challenging operational environments, planning and managing vulnerability and design reviews, and ensuring that the design of the equipment to be used is fit for purpose; (3) a project manager, initiating, planning, executing and controlling the development process while managing project teams; and (4) an advisor, ensuring that safeguards equipment meets stringent requirements to effectively and efficiently support the IAEA's safeguards mandate.

Partnership		
The Equipment Specialist works closely with other SGTS staff, including managing temporary project teams, with the Operations Divisions, the Office of Procurement Services (MTPS) and the Office of Legal Affairs (OLA), senior IAEA staff, Member State Support Programme staff, Regional Safeguards Authorities, and facility operators to further enhance safeguards equipment according to the needs of the Department. Furthermore, the Equipment Specialist works with the team's Systems Security Engineers and Specialists and liaises with R&D laboratories/organizations and commercial partners both on equipment development and related vulnerability reviews and assessments.		
Functions / Key results Expected		
<ul style="list-style-type: none"> • Lead and/or participate substantively in the planning, development, and authorization of new safeguards equipment and technologies, to support the needs of the Operations Divisions. • Evaluate commercial off-the-shelf and custom-designed products to determine their compatibility for safeguards use. • Provide specialized expertise for the procurement, implementation and support of current and new equipment, including design reviews, field trials, assessments of potential threats, and recommendations of mitigation strategies. • Prepare quality controlled technical documents, including technology evaluation reports, technical and security specifications, testing procedures and technical project roadmaps. • Liaise with R&D specialists in Member States regarding technologies and equipment under development. • Organize and lead vulnerability reviews of IAEA equipment systems, elaborate solutions for the mitigation of newly identified vulnerabilities, and coordinate vulnerability assessments/reviews with third party experts and equipment manufacturers. • Provide expert support, technical guidance and advice to members of all SGTS teams and the Operations Divisions, and develop and provide training related to new equipment and technologies as needed. <p><i>The incumbent may perform his/her work in areas involving exposure to radioactive materials. Therefore, as an Occupationally Exposed Worker, he/she must be medically cleared by VIC Medical Service and is subject to an appropriate radiation and health monitoring programme, in accordance with the IAEA's Radiation Safety Regulations.</i></p>		
Generic JD Remarks		
Competencies		
Core Competencies		
Competency	Occupational Role	Definition
Communication	Individual Contributor	Communicates orally and in writing in a clear, concise and impartial manner. Takes time to listen to and understand the perspectives of others and proposes solutions.
Achieving Results	Individual Contributor	Takes initiative in defining realistic outputs and clarifying roles, responsibilities and expected results in the context of the Department/Division's programme. Evaluates his/her results realistically, drawing conclusions from lessons learned.
Teamwork	Individual Contributor	Actively contributes to achieving team results. Supports team decisions.
Planning and Organizing	Individual Contributor	Plans and organizes his/her own work in support of achieving the team or Section's priorities. Takes into account potential changes and proposes contingency plans.

Functional Competencies		
Competency	Occupational Role	Definition
Judgement/decision making	Specialist	Consults with supervisor/manager and takes decisions in full compliance with the Agency's regulations and rules. Makes decisions reflecting best practice and professional theories and standards.
Partnership building	Specialist	Identifies and builds partnerships. Develops and maintains long lasting partnerships to strengthen relationships. Delivers programmatic outputs and acquires resources in support of Agency goals.
Technical/scientific credibility	Specialist	Ensures that work is in compliance with internationally accepted professional standards and scientific methods. Provides scientifically/technically accepted information that is credible and reliable.
Expertise		
Expertise	Description	Asset
Information Technology Information Security	Experience in evaluating system designs in order to ensure that they meet specific standards for physical security and/or data confidentiality, authenticity, integrity and availability.	N
Other Technical Engineering General Engineering	Expertise in the application and knowledge of: computer aided design tools, modelling designs for various extreme conditions, the rapid prototyping of designs, and the final fabrication of mechanical and/or electrical components.	N
Safeguards Quality Management	Experience in producing the technical documentation necessary to support the implementation of new engineering solutions and to support end-users in the use of new systems.	N
Management and Programme Analysis Project Management	Demonstrated experience in project management (PM), and the use of PM tools. Familiarity with formal project management principles as described by PRINCE2, PMI or equivalent formal project management methodology required; PM certification an asset.	Y
Languages		
Languages	Asset Languages	
English		
Qualification		
Qualification Title	Description	
Master's Degree	Advanced university degree in mechanical engineering, electrical engineering, nuclear science, physics, applied physics or a similar technical area.	
Bachelor's Degree	University degree in a relevant field with two years of additional relevant working experience may be considered in lieu of an advanced degree.	

Experience

Minimum of seven years of relevant working experience in one or more of the areas outlined in the Expertise section (see above).

Experience in the production of technical documentation necessary to support end-users in the use of new systems.

Experience working in design, development, evaluation, and/or implementation in one or more of the following areas:

- Emerging technologies;
- Systems requiring security-related considerations;
- Containment/surveillance systems;
- Nuclear instrumentation.

Job Description Remarks