



Job Description Print Report

Print Date:

Position Review

Position Number		Position Type	Cost Free Expert	Subject to Radiation	No	Subject to GD	No
Hyperion Position Number		Fund Type	EBF	Parent Position	018456 Team Leader (SG-EDM)		
Organization	SGTS-Equipment Data Management Team	FTE	3	CCOG 1	1B07B		
Grade	P4	Duty Station	Vienna, Austria	CCOG 2			
Classified Grade		Position Title	Equipment Data Management Engineer	Proposed New Title			
Master Version		Master Status		Approval Date			

Job Description Review

Organization Settings

The Department of Safeguards (SG) is the organizational hub for the implementation of IAEA safeguards. The IAEA implements nuclear verification activities for some 180 States in accordance with their safeguards agreements. The safeguards activities are undertaken within a dynamic and technically challenging environment including advanced nuclear fuel cycle facilities and complemented by the political diversity of the countries.

The Department of Safeguards consists of six Divisions: three Operations Divisions: A, B and C, for the implementation of verification activities around the world; three Technical Divisions: Division of Concepts and Planning, Division of Information Management, and Division of Technical and Scientific Services; as well as three Offices: the Office for Verification in Iran, the Office of Safeguards Analytical Services and the Office of Information and Communication Services.

The Division of Technical and Scientific Services (SGTS) is responsible for measurement systems applied in safeguards verification activities, containment and surveillance techniques and all verification logistics.

The Section for Monitoring and Data Evaluation (TME) is responsible for the areas of unattended monitoring systems and managing equipment data. The Section comprises two specialized teams: Unattended Monitoring Systems, and Equipment Data Management (EDM).

Main Purpose

As a team member reporting to the SGTS-EDM Team Leader, the Equipment Data Management Engineer writes, modifies and maintains software codes related to remote data transmission and data review applications. These applications will work for various Safeguards equipment installed in the field.

Role		
<p>The Equipment Data Management Engineer is:</p> <p>(1) a programmer, maintaining and customizing remote data transmission and data review software, either as a leader or a member of a team.</p> <p>(2) a project manager, initiating, planning, executing, and controlling agreed work,</p> <p>(3) a Technical Lead, leading a development team, according to Agile methodology, learning the current SG enterprise IT infrastructure and its DevOps features, so to become able to apply these principles to the software developed by the team, and</p> <p>(4) a resource for the Section, taking part in various activities as required, such as quality assurance and continuous process improvements.</p>		
Partnership		
<p>The Equipment Data Management Engineer builds strong working relationships with colleagues from the seals, surveillance and radiation detection teams. He/she liaises with inspectors, other Safeguards staff, and staff from external partner organizations. Furthermore, the incumbent liaises with SGIS division to grant that the application developed in SGTS are following Safeguards IT standards.</p>		
Functions / Key results Expected		
<ul style="list-style-type: none"> • Maintain and upgrade any assigned remote data transmission and data review software applications, in order to improve communications, data transfers and data evaluation from specialized safeguards equipment at remote facilities. • Analyse and correct the requirements for any assigned new software systems and custom applications, especially the ones related to monitoring and review data from remote equipment, including the analysis of its State of Health (SoH) data. • Execute checks on the availability of Safeguards remote data transmission repositories on a 24/7 basis and provide assistance so that the system meets performance criteria. • Ensures proper practices are followed by providing user support to Operations Divisions, including the provision of (i) field support during inspections, (ii) instruction on the use of remote data transmission and data review software, and (iii) well-documented system operations procedures. 		
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
Client orientation	Associate	Establishes effective relationships with clients to understand and meet or exceed their needs. Finds ways to ensure client satisfaction.
Commitment to continuous process improvement	Associate	Identifies opportunities for process, system and structural improvement as well as improving current practices, increasing effectiveness, and achieving efficiency gains. Actively supports the application of sound quality management standards and process improvement.
Judgement/decision making	Associate	Consults with supervisor/manager and makes decisions in full compliance with the Agency's regulations and rules.
Expertise		
Expertise	Description	Asset
Information Technology Application Architecture	Disciplined, methodical approach to requirements analysis and system design. Practical experience in the integration of applications is an asset.	Y
Information Technology Computer Programming	Thorough knowledge of Web programming (JavaScript, AJAX/JSON, PERL, HTML) and knowledge of one or more of C/C++/C#, Java, XML, R, Perl. Thorough understanding of software engineering processes and the software engineering life cycle.	N
Information Technology Database Development	Thorough knowledge of relational database management system (e.g. SQL Server) and SQL.	N
Information Technology Network Security	Basic knowledge of TCP/IP, routing protocols, VPN, firewalls, telecommunications, and IT security techniques.	N
Safeguards Containment and Surveillance	Familiarity with the implementation and maintenance of Containment and/or Surveillance Systems, similar to those used in International Safeguards.	Y
Safeguards Non-destructive Assay	Familiarity with the implementation and maintenance of NDA Systems, similar to those used in International Safeguards.	Y
Safeguards Safeguards System, Basic	Familiarity with the concepts of IAEA Safeguards.	Y
Position Specific FC	Occupational Role	Definition
Position Specific Expertise	Description	Asset
Languages		
Languages	Asset Languages	
English	Arabic Chinese French Russian Spanish	

Qualification	
Qualification Title	Description
Master's degree	Advanced university degree in computer engineering, electrical engineering, computer science or other related field.
Bachelor's degree	A bachelor's degree in computer engineering, electrical engineering, computer science or other related field and an additional two years of relevant experience may be considered in lieu of an advanced university degree.
Experience	
<ul style="list-style-type: none"> • A minimum of seven years of combined experience in all of the mandatory areas of expertise is required. • Knowledge of Software Engineering, Database Management, and Network Engineering to levels specified above. • Experience with support and maintenance of safeguards equipment would be desirable. 	