



## Job Description Print Report

### Position Review

Position Number	160112	Position Type	JPO	Subject to Radiation	No	Subject to GD	No
Hyperion Position Number		Fund Type	EBR	Parent Position	010193 Team Leader (Statistical Analysis)		
Organization	SGIM-Nuclear Fuel Cycle Analysis Section	FTE	1	CCOG 1	1M02		
Grade	P2	Duty Station	Vienna, Austria	CCOG 2			
Classified Grade		Position Title	Associate Data Evaluation Officer	Proposed New Title			

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#### Organization Settings

The Department of Safeguards 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 two Offices: the Office of Safeguards Analytical Services and the Office of Information and Communication Services.

The main objective of the Department is to maintain and further develop an effective and efficient verification system in order to draw independent, impartial and timely safeguards conclusions, thus providing credible assurances to the international community that States are in compliance with their safeguards obligations. The departmental operating environment is interactive, participative and dynamic with continuous inputs received from the Board of Governors, the General Conference, policy- and decision-makers, as well as counterparts in Member States and in the international development community.

The Division of Information Management comprises four Sections and provides the Department of Safeguards with data processing services, secure information distribution, information analysis and knowledge generation necessary to draw independent, impartial and soundly based safeguards conclusions.

#### Main Purpose

Reporting to the Team Leader, the Associate Data Evaluation Officer contributes to the design and development of evaluation methodologies and software prototypes by researching, prototyping, testing, monitoring, and reporting on analytical, statistical and probabilistic analysis methodologies. He/she also contributes to the development of specialized technical datasets to facilitate external collaboration.

Role		
<p>The Associate Data Evaluation Officer is an analyst, contributing to the review and analysis of data submitted to the IAEA by States and measurement data collected during inspections at nuclear facilities or evaluation of laboratory analysis results of environmental samples. This involves interesting and challenging work to improve, test and report on the results of statistical analysis methodologies or use of analytical results and to contribute to the development and testing of specialized evaluation software and databases.</p>		
Partnership		
<p>The Associate Data Evaluation Officer collaborates with team members within the Section and staff in other Sections and Divisions in order to resolve inconsistencies in data, ensure adequate follow-up, clarify methodological and procedural aspects, contribute to the development and testing of software and databases, and, if necessary, deliver presentations.</p>		
Functions / Key results Expected		
<p>Contribute to the development and testing of methodologies for analysing incoming information from a variety of sources, such as data submitted by States to the IAEA and data collected by nuclear safeguards inspectors during inspections and visits to nuclear facilities.</p> <p>Develop prototypes and methodologies for statistical analysis using advanced programming (e.g. Python/R, SQL queries and graphical user interfaces) in order to contribute to the improvement of statistical analysis and environmental sampling evaluation software.</p> <p>Contribute to the development and maintenance of specialized evaluation software, including practical testing and the revision of work instructions.</p> <p>Prepare documents and calculations supporting rule-based stratification, uncertainty quantification, sampling plans and detection probability calculations, material balance evaluations, nuclear material flow evaluations and environmental sampling and material characterization evaluations.</p> <p>Research and recommend analysis methodologies.</p> <p>Draft presentations and documents for conferences and training courses.</p>		
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
Analytical thinking	Associate	Gathers and analyses information, identifying critical relationships and patterns among data and proposes workable solutions.
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   Computer Programming	Proficiency in statistical/mathematical software programming, for example, using R and Python.	N
Information Management / Information Analytics Expert Tools	Ability to work with complex databases and contribute to local testing of functionalities.	N
Management and Programme Analysis / Development of Analytical Methodologies and Processes	Ability to contribute to process improvements through the development of methodologies and application of complex algorithms.	Y
Statistics   Advanced Statistical Methods	Experience of statistical methods applied in analysing data.	N
Languages		
Languages	Asset Languages	
English	Arabic Chinese French Russian Spanish	
Qualification		
Qualification Title	Description	
Bachelor's Degree	University degree in mathematics, statistics, physics, chemistry, engineering or a related field.	
Experience		
<p>Minimum of two years of experience relevant to the statistical analysis of data. Experience in preparing report abstracts and draft summary documents.</p>		