

# Job Description for Professional Posts

<b>Position and Grade:</b>	Project Engineer (P-1/P-2)
<b>Organizational Unit:</b>	Systems Integration and Coordination Section Division of Technical and Scientific Services Department of Safeguards
<b>Duty Station:</b>	Vienna, Austria
<b>Type/Duration of Appointment:</b>	JPO/2 years

## Organizational Setting

The Department of Safeguards (SG) is the organizational hub for the implementation of IAEA safeguards. The IAEA implements nuclear verification activities for more than 170 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 Division of Technical and Scientific Services (SGTS) is the departmental branch for nuclear and other measurement systems applied in verification activities, containment and surveillance techniques and all verification logistics. The Division is structured into four sections responsible for Non-destructive Assay (NDA) Technologies, Unattended Systems, Systems Integration and Coordination, and Verification Logistics.

The Systems Integration and Coordination Section (TSI) acts as the Division's focal point for broad-based support needed by the Operation Divisions in instrumentation data processing and review, remote data collection, development and application of sealing, containment and instrument security technologies, as well as in development and deployment of complex and integrated equipment systems. The Section is also responsible for maintenance, enhancement and quality assurance of the divisional infrastructure for instrumentation development and authorization.

The Project Engineering Team (PET) is primarily responsible for coordinating the development and deployment of complex safeguards systems as required by the Operations divisions. The PET also serves as the central point-of-contact for other SGTS teams for coordinated approaches to address emerging instrumentation development needs across the department. The PET is also responsible for developing and maintaining the document quality management and equipment authorization processes for all safeguards equipment.

## Main Purpose

As a team member reporting to the Team Leader of Project Engineering, the Project Engineer contributes to the execution of projects by maintaining the status and schedule of the projects and maintaining the technical documentation associated to each project. He/she will also act as liaison with internal stakeholders in SGTS and SGO to gather requirements, assess suitability of technical solutions

to Safeguards challenges, and document and assess project risks. In addition, the Project Engineer will cooperate with the other engineers within the team in the performance of technical assessments and laboratory testing of measurement systems, compilation of laboratory data, and analysis of measurement results. The Project Engineer will also assist in the technical editing of divisional documents.

## **Role**

The Project Engineer is a substantive contributor, assisting in the implementation of non-destructive assay (NDA) and containment and surveillance systems (C&S) projects related to application of Safeguards in complex nuclear facilities and the management of measurement data. The Project Engineer also contributes technical expertise in the design, testing, documenting, and deployment of NDA and C&S systems. Additionally, the Project Engineer may also contribute to the management of measurement data.

## **Partnerships**

The Project Engineer works, as a part of a team with other staff from SGTS and various Safeguards Operations divisions, on assigned projects or tasks. The incumbent reports to the Project Engineering Team Leader, and coordinates his/her work with other teams within the SGTS, as well as other sections of the Department when necessary.

## **Functions / Key Results Expected**

- Act as a substantive contributor in the drafting and editing of technical documentation.
- Coordinate technical activities on assigned projects;
- Conduct and document assigned engineering tasks;
- Ensure effective communication and coordination on assigned projects between all project participants;
- Monitor work for compliance to applicable codes and accepted engineering practices;
- Review and test engineering deliverables, including designs, documentation, and equipment;
- Coordinate and perform testing of equipment, software, or systems as needed and provide summary reports and analysis.
- Maintain detailed records of all work performed.

## **Knowledge, Skills and Abilities**

- Excellent computer skills in Microsoft Office Suite and preferably with Adobe Acrobat;
- Familiarity with safeguards instrumentation technology and its application;
- Familiarity with usability and reliability engineering principles;
- Excellent communication and interpersonal skills with the demonstrated ability to establish and maintain effective working relations with Agency staff at all levels;
- Demonstrated ability to manage time, meet deadlines, and monitor and resolve project risks;
- Ability to work in a multicultural environment with sensitivity and respect for diversity.

## **Education, Experience and Language Skills**

- University degree in Nuclear or Electronics Engineering, System Design, Nuclear Physics, or related discipline with experience relevant to radiation measurement, or a technical degree with two years equivalent occupational experience;
- Education/training in technical editing would be beneficial;
- Experience in developing, editing, and revising specifications, test procedures, and user documentation for technical instrumentation would be extremely beneficial;
- Basic understanding of electronic technologies, electronic equipment, computer hardware, and software applications and programming languages;
- Experience in designing and evaluating various types of radiation detection equipment and measurement systems would be extremely beneficial;
- Fluency in spoken and written English is essential. Knowledge of any other official IAEA language (i.e., Arabic, Chinese, French, Spanish or Russian) or German is an advantage.