



IAEA

Atoms for Peace

الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence Internationale de l'énergie atomique

Международное агентство по атомной энергии

Organismo Internacional de Energia Atómica

Vienna International Centre, PO Box 100, 1400 Wien, Austria

Phone: (+43 1) 2600 • Fax: (+43 1) 26007

Email: Official.Mail@iaea.org • Internet: <http://www.iaea.org>

Ms B. Hoffheins

US SP Coordinator

US Mission to the International Organizations in
Vienna (UNVIE)

Wagramer Strasse 17-19

A-1220 VIENNA

In reply please refer to: M2.05-USA

Dial directly to extension: (+431) 2600-21814

Barbara

2014-07-04

Dear Ms Hoffheins,

With reference to the United States Support Programme, I am pleased to provide the attached new Junior Professional Officer task proposal with a copy of the relevant job description for your consideration.

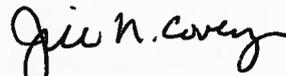
The Department of Safeguards would appreciate the nomination of more than one candidate. This will allow the Department to perform an evaluation of candidates that will result in the most suitable candidate being selected for the task. So that this process may proceed on a timely basis, I have submitted the proposal below along with a closing date for nominations and expected start date. Also in order to facilitate the selection process, I would like to ask you to send the candidates' Curricula Vitae and IAEA Personal History Forms with the nomination. Of course all information will be treated as confidential.

SP-1 Number	Title	Expected Start Date	Closing Date for Nominations
14/ISI-002	Junior Professional Officer - Geospatial Analyst	As soon as possible	As soon as possible

I will inform you of the result of the evaluation as soon as a decision is made. The Support Programme Coordination Team will liaise with the Division of Human Resources to complete the recruitment process for the successful candidate.

I would also like to take this opportunity to express the appreciation of the IAEA for the valuable contribution provided by the U.S. Support Programme to the IAEA's safeguards efforts.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Jill N. Cooley". The signature is written in a cursive style with a large initial "J".

Jill N. Cooley

Director

Division of Concepts and Planning

Department of Safeguards

Enclosure

**SP-1
TASK PROPOSAL PART**

1. Task Proposal

- 1.1 Task Proposal ID:** 14/ISI-002 **Date received in SPA:** 2014-02-20
- 1.2 Task Title:** Junior Professional Officer - Geospatial analyst
- 1.3 Requester / Division / Section:** Steinmaus / SGIM / ISI
- 1.4 Is this a CFE task?** No
- 1.5 Task Category:** D
- 1.6 Is this a joint task for MSSPs?** No
- 1.7 Is multiple acceptance required?** No

If 1.6 or 1.7 is yes, indicate the reason:

2. Project

- 2.1 Project ID:** SGIM-002 **Project Type:**
- 2.2 Project Title:** Commercial Satellite Imagery
- 2.3 Project Manager / Division / Section:** Steinmaus / SGIM / ISI

3. Safeguards Requirement Identification

3.1 What is needed, why and when:

The evaluation of nuclear activities within a State and the process required to draw safeguards conclusions requires the collection and analysis of a wide and diverse information base. SGIM supports the State evaluation process by collecting and analysing the full spectrum of information available. The Junior Professional Officer (JPO) will be located within SGIM's State Infrastructure Analysis Section (ISI). Under the supervision of the ISI Section Head and daily direction from the support team lead, the JPO will focus on implementing geospatial technologies in the Section. The primary responsibility will be to implement and execute a strategy for exposing open source geospatial data such as the Open Street Map project and Geonames within the Integrated Safeguards Environment. Other responsibilities include the creation and maintenance of nuclear facility site plans. The JPO must have a strong background in Geographical Information Systems (GIS) and a working knowledge of remote sensing theory.

3.2 How will the task results be used and by whom:

The JPO will work closely with analysts within SGIM/ISI in order to design and implement geospatial technologies within the Section. The tasks completed by the JPO will be available to analysts and inspectors within the Department of Safeguards. The task will allow SGIM to develop enhanced capacities for exploiting geospatial information across the Department of Safeguards.

3.3 Consequences if task is not performed:

In response to increasing demands for analysis products and services, combined with anticipated increases in the number of nuclear sites under safeguards and the advanced nuclear technologies to safeguard, the Department needs make more geospatially aware datasets available to analysts and inspectors. Without this support, the Department of Safeguards will not have the adequate analytical resources to support further exploitation of geospatial information.

4. IAEA Proposed Work Outline

4.1 Major task stages with timing:

1. Gain familiarity of SGIM/ISI imagery and geospatial analysis workflows (1 month)
2. Review the Geospatial Exploitation System (GES) design and technical infrastructure with special attention to integration points for open-source geospatial information (1 month)
3. Design requirements and specifications for implementing open-source geospatial information within the GES (4 months)
4. Implement plan for open-source geospatial information exploitation and integrate into the GES (6 months)

4.2 Support Division(s) / Section(s): SGIT / IIS

4.3 End User Division(s) / Section(s): SG / ALL

4.4 Estimated duration in months: 24

5. Safeguards Approval Process - not displayed

6. Acceptance by MSSP(s)

6.1 MSSP(s) to which the task is proposed:

Date accepted:

Agency Task ID:

FIN
FRA
GER
JPN
ROK
USA

Job Description for Professional Posts

Position and Grade:	Junior Professional Officer P2
Organizational Unit:	State Infrastructure Analysis Section Division of Information Management Department of Safeguards
Duty Station:	Vienna
Type/Duration of Appointment:	Junior Professional Officer/ 1 year minimum

Organizational Setting

The Department of Safeguards is the organizational hub for the implementation of IAEA safeguards. The IAEA implements nuclear verification activities for more than 160 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 Information Management (SGIM) comprises four sections and provides the Department of Safeguards with services of data processing, secure information distribution, information analysis and knowledge generation necessary to draw independent, impartial and credible safeguards conclusions.

Within SGIM, the State Infrastructure Analysis Section (ISI) is responsible for the analysis and exploitation of commercial satellite imagery and the provision of in-depth technical appraisals of nuclear sites and facilities. Analysts in ISI collect, process, and exploit information in support of both inspection-related activities and the Department-wide State evaluation process. ISI's product line includes site-focused satellite imagery analysis reports, imagery-derived maps and geospatial information, and technical assessments.

Main Purpose

The Junior Professional Officer will be responsible for implementing and executing a strategy for exposing open source geospatial data such as the Open Street Map project and Geonames within the Integrated Safeguards Environment in support of the Section's mission in assisting the Department's objective with regard to nuclear verification evaluation.

Role

The Geospatial Analyst is: 1) an *analyst* - conducting imagery and spatial analysis. This involves pre-processing imagery, digitizing vector features, generating site plans, and producing geospatial products for nuclear sites worldwide; 2) a *technical expert* in the areas of spatial analysis, GIS standards and map product generation. This also involves presenting methods and analytical techniques at conferences, workshops and training courses; and 3) a *coordinator* - working closely

with the Section Head and imagery analysts in the Section on spatial data and products, and with Department staff on requirements for spatial data.

Partnerships

The Junior Professional Officer will contribute to the geospatial analysis within ISI. The position requires regular communication with other analysts within the Section to identify and understand the geospatial requirements of the Section.

Functions / Key Results Expected

In cooperation with other geospatial analysts and under the leadership of the Section Head, the Junior Professional Officer will contribute to the expansion of the geospatial capabilities within the Section in support of the Divisions of Operations within the Department of Safeguards. The incumbent is responsible for the following:

- Clearly document the availability of open-source map data and the possibilities for use within the Department of Safeguards;
- Prepare draft project plan for the implementation of open source map data for the Integrated Safeguards Environment;
- Integrate gazateer databases, such as Geonames, into the Geographic Exploitation System;
- With minimal supervision, create and maintain digital site plans within the Geospatial Exploitation System;
- Contribute to the development of standard operating procedures for GIS related workflows within the ISI Section;
- Present analytical findings within the Division and Department, as requested;
- Participate with Department staff on the development of integrated analytical products.

Knowledge, Skills and Abilities

The successful candidate in this post requires:

- Working knowledge of Geographic Information Systems (GIS);
- Knowledge of commercial satellite imagery and raster exploitation software;
- Knowledge of geospatial server technology and Open Geospatial Consortium (OGC) standards for streaming data from server to client applications.

Education, Experience and Language Skills

- University degree in Remote Sensing, Geography, Information Technology or closely related field;
- Two years of work experience in GIS and spatial analysis;
- Knowledge of nuclear fuel cycle preferred;

RESTRICTED

- Excellent verbal and written communication skills in English, including the ability to draft technical documents, analytical reports, and publications;
- Fluency in written and spoken English. Knowledge of another official IAEA language (i.e. Arabic, Chinese, French, Russian or Spanish) desirable.

Internal Human Resources use only:	
Effective Date:	
Occupational Group(s):	
Post Number:	

RESTRICTED