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Next Generation Safeguards Initiative Workshop On Enhanced Recruiting for International Safeguards

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NEXT GENERATION SAFEGUARDS INITIATIVE
WORKSHOP ON ENHANCED RECRUITING FOR INTERNATIONAL SAFEGUARDS

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ABSTRACT

Brookhaven National Laboratory (BNL) hosted a Workshop on Enhanced Recruiting for International Safeguards October 22 and 23, 2008. The workshop was sponsored by DOE/NA-243 under the Next Generation Safeguards Initiative (NGSI). Placing well-qualified Americans in sufficient number and in key safeguards positions within the International Atomic Energy Agency's (IAEA's) Department of Safeguards is an important U.S. non-proliferation objective. The goal of the NGSI Workshop on Enhanced Recruiting for International Safeguards was to improve U.S. efforts to recruit U.S. citizens for IAEA positions in the Department of Safeguards. The participants considered the specific challenges of recruiting professional staff, safeguards inspectors, and managers. BNL's International Safeguards Project Office invited participants from the U.S. Department of Energy, the IAEA, U.S. national laboratories, private industry, academia, and professional societies who are either experts in international safeguards or who understand the challenges of recruiting for technical positions. A final report for the workshop will be finalized and distributed in early 2009. The main finding of the workshop was the need for an integrated recruitment plan to take into account pools of potential candidates, various government and private agency stakeholders, the needs of the IAEA, and the NGSI human capital development plan. There were numerous findings related to and recommendations for maximizing the placement of U.S. experts in IAEA Safeguards positions. The workshop participants offered many ideas for increasing the pool of candidates and increasing the placement rate. This paper will provide details on these findings and recommendations.

INTRODUCTION

Former U.S. Secretary of Energy Samuel Bodman announced at the 2007 IAEA General Conference that the Department of Energy (DOE) would launch the Next Generation Safeguards Initiative (NGSI), to strengthen the United States' ability to support International Atomic Energy

Agency (IAEA) Safeguards. Bodman stated: "IAEA safeguards must be robust and capable of addressing proliferation threats. Full confidence in IAEA safeguards is essential for nuclear power to grow safely and securely. To this end, the U.S. Department of Energy will...seek to ensure that modern technology, the best scientific expertise, and adequate resources are available to keep pace with expanding IAEA responsibilities."

NGSI objectives include the recruitment of international safeguards experts to work at the National Nuclear Security Administration (NNSA) in Washington, D.C., U.S. national laboratories, and the IAEA. The IAEA effort will involve enhancing the DOE's existing efforts to place well qualified U.S. citizens in a sufficient number of key safeguards positions within the IAEA's Department of Safeguards.

The International Safeguards Project Office (ISPO) at Brookhaven National Laboratory (BNL) convened a Workshop on Enhanced Recruiting for International Safeguards (ERIS) on October 22 and 23, 2008, in support of this objective. ISPO invited participants from the U.S. DOE, the IAEA, the U.S. national laboratories, private industry, academia, and professional societies who either are experts in international safeguards or understand the challenges of recruiting for technical positions. The 44 participants represented eight national laboratories, four universities, three government organizations, two international organizations, two professional organizations, and three small companies.

BACKGROUND

ISPO is responsible for recruiting U.S. citizens for staff positions in the IAEA's Department of Safeguards and for cost-free expert (CFE) and junior professional officer (JPO) positions, under the U.S. Support Program to IAEA Safeguards (USSP). ISPO sought feedback on its recruitment efforts and innovative suggestions for improvement, by hosting the ERIS workshop. The justifications for convening this workshop extended beyond improving ISPO's recruiting efforts for the USSP. Numerous experts in safeguards, the nuclear industry, and the technical workforce have expressed concern over the declining number of skilled candidates available to fill essential positions in various sectors of the U.S. Government and industry. Therefore, the broader issue was how to increase the pool of qualified U.S. candidates who are eligible for safeguards positions in the U.S. Government and the IAEA, so that the United States can meet its obligations to the U.S. public and to the world community.

The IAEA's Director General Mohammed ElBaradei addressed the 49th IAEA General Conference in 2005 as follows: "[T]he recruitment of staff members, particularly in the scientific and technical areas, is becoming increasingly difficult. The aging workforce in the nuclear field and pending retirements of current Secretariat staff will exacerbate the situation. It is only through the active participation of Member States in identifying suitable well-qualified candidates and the concerted efforts of the Secretariat that it can be assured that the Agency is adequately and appropriately staffed with individuals of the highest competence, managerial capability and integrity." More than one-third of senior IAEA staff is expected to retire in the next three years,[i] and the Commission on Eminent Persons reported that "half of the top management and its senior inspectors are expected to…retire in the next five years."[ii]

Shirley Ann Jackson, President of Rensselaer Polytechnic Institute addressed the issue as a keynote speaker at the October 2005 USSP Workshop on Safeguards Tools for the Future. She believed the world is facing a "quiet crisis." A convergence of trends – the aging workforce, fewer U.S.-born students studying science and engineering, and the decline in U.S. Government funding for basic research - threatens the strength of our research and development efforts, and indirectly reduces the number of candidates that the United States can offer for IAEA positions. A smaller pool of candidates "...means that the IAEA must compete with private enterprise and national governments in hiring individuals with the proper skills."[iii]

WORKSHOP OVERVIEW

The ERIS Workshop addressed targeted and overall recruitment. The participants discussed means for increasing awareness of the IAEA as an employer, the issues that discourage prospective candidates from applying for safeguards positions at the IAEA, gaps between the skills of U.S. candidates and the requirements for IAEA safeguards positions, identification of new pools of candidates, and ascertaining tools and techniques for recruiting. The participants focused on three Department of Safeguards job categories: Technical Professional Support (because the IAEA requires subject matter experts in a broad range of technical areas), Safeguards Inspector (because candidates require specialized skills, recruitment is more frequent, and staff recruited for these mid-level positions are promoted into senior inspection and management positions), and Management (because vacancies are less common and generally require subject matter expertise as well as management experience).

The workshop organizers made use of a workshop format developed earlier in collaboration with Sonalysts, Inc., that has been used successfully for the USSP's technology road-mapping sessions. The first day began with a series of presentations by representatives of DOE, BNL, the IAEA, and private industry. The presentations oriented the participants to the challenges of recruiting candidates for IAEA positions, to how the United States presently organizes and conducts its recruiting efforts, and to the situation private industry faces in recruiting nuclear engineers and scientists. The presentations are summarized in detail in the workshop report.[iv]

The participants formed three working groups, following the presentations. Each working group participated in three breakout sessions, with each breakout session focused on a different recruiting challenge. A facilitator was assigned to each working group, to keep the discussions on track and to encourage brainstorming. Designated note takers documented the discussions in each session. The working groups were tasked as follows:

- Recruitment Challenge 1: Professional Technical Support Staff
  Each working group focused on a different topic:
  - Awareness (how to increase awareness of the IAEA in the United States)
  - Capability Gaps (identify the technical areas in which the United States has difficulty in identifying experts)
  - Obstacles (logistical issues that discourage U.S. citizens from applying for or taking IAEA positions).

- Recruitment Challenge 2: Safeguards Inspectors
  Each group focused on the same topic: Recruiting qualified candidates for safeguards inspector positions

- Recruitment Challenge 3: Management Positions
  Each group focused on the same topic: Recruiting qualified candidates for Division Director, Section Head, and Unit Head vacancies.

After the breakout sessions were completed, individuals prepared a workshop summary that was presented to the NNSA Office of International Regimes and Agreements (NA-243) at the conclusion of the workshop. The next day, the meeting organizers and note takers met to review and analyze the findings and begin work on the final report.

SUMMARY OF WORKSHOP DISCUSSIONS AND RECOMMENDATIONS

Workshop data analysis was conducted in three phases. The first phase occurred immediately following each breakout session when each working group summarized the results of its discussions and presented them to the other groups in a plenum session. It is worthwhile noting that although none of the groups shared their conclusions with the other groups until the plenum session, each group identified many of the same issues for improving the effectiveness and efficiency of the U.S. recruiting effort. The working groups thereby validated each other. The second analysis phase occurred when a workshop representative summarized all of the participants' conclusions and recommendations during the presentation to NA-243. The third phase occurred after the workshop concluded when the BNL staff, facilitators, and note takers (hereafter referred to as the report writing team) reviewed the data again, consolidating similar recommendations and grouping them into short-term, medium-term, and long-term recommendations. The report writing team also identified broad themes that emerged during the breakout sessions. It is important to note that the work of the report writing team was not validated by all workshop participants.

The following sections address the key issues identified by the workshop participants, the themes that emerged from the breakout sessions as identified by the report writing team, and the recommendations made by the workshop participants and prioritized subsequently by the report writing team.

<u>Key Issues:</u>

1. Developing an integrated recruitment strategy
2. Thinking and acting strategically when recruiting
3. Improving the process for preparing candidates for jobs at the IAEA, preparing their families for relocation to Vienna, and easing their repatriation when they complete their assignment
4. Assisting candidates with the application and interview process
5. Grooming high-potential candidates for IAEA jobs
6. Coordinating recruiting activities among key recruitment stakeholders
7. Dedicating more resources to recruiting.

Themes:

1. Develop an integrated recruitment plan. An integrated recruitment plan is needed that accounts for pools of potential candidates, the stakeholders from various government and private agencies, the IAEA's needs, and the NGSI's plans for developing human capital. Institutional, legal, and political issues should be identified early, and appropriate means to address them should be incorporated into the plan. A large number of individual actions were identified. Many are related and may require coordination among the agencies, universities, and private industry. The elements of the plan must be integrated into a cohesive program, for efficient implementation and effective problem solving. Assigning a single organization responsibility for IAEA Safeguards recruitment would facilitate this process. Participants envisioned that this organization would encompass the following key capabilities: recruiter, career developer, and information collector. It would be valuable to add an NGSI-sponsored, full-time equivalent at the U.S. Mission Vienna, to work closely with the organization and to be responsible for supporting recruitment efforts and the NGSI's Human Capital Development work.

2. Achieve the maximum placement of U.S. experts in IAEA Safeguards positions. There are two important avenues to achieving this goal: (1) Increasing the number of qualified candidates, and, (2) increasing the placement rate. A successful program will have an adequate number of well-qualified applicants from which the IAEA can select the best candidate. The participants identified benchmarks that should be tracked for self-assessment: (1) the number of applicants, and (2) the number and percentage of well-qualified ones.[v,vi]

Recommendations:

The recommendations are categorized as near-term, medium-term, or long-term based on the priority, the potential impact, the ease with which the U.S. Government could implement the recommendation, and whether the recommendation will result in an increased number of candidates, increased quality of candidates, or both. A timeframe for implementation is given as a rough guide for NA-243 planning purposes.

Near-Term Recommendations (0-12 months)

A. Develop an integrated recruiting plan that includes all stakeholders and their activities.
B. Identify positions in the IAEA's Department of Safeguards that are important to U.S. interests. Create a timeline showing their likely availability, and the probability of success for U.S. applicants. Develop a "ready list" of candidates who could fill those positions within a twenty-year horizon. Ensure that relevant U.S. Government agencies and their managers are aware of steps that could enhance competitiveness.

C. Poll U.S. citizens currently working in the IAEA's Department of Safeguards to see where they learned about the IAEA and how they found out about their position and gather other information relevant to U.S. recruitment efforts.
D. Continue to hold "alumni" sessions during the Institute for Nuclear Materials Management (INMM) Annual Meeting, to discuss U.S. citizens' experiences with IAEA recruitment and assignments. Invite spouses to attend. Consider other venues for these meetings (such as the meetings of the American Nuclear Society and INMM Chapters.)
E. Compile a list of questions asked during interviews for IAEA positions (from exit interviews of the candidate), and distribute them to future candidates for preparing for interviews.
F. Identify steps that could be taken with the IAEA to increase the transparency of the recruitment process to the U.S. Government and to the applicants.

Medium-Term Recommendations (6 months to 24 months)

A. Increase coordination of U.S. recruiting efforts. Establish a central unit for overseeing all recruitment activities related to IAEA Safeguards positions.
B. Increase the level of recruiting efforts.
C. Address issues of inconsistent treatment of national laboratory and Federal employees who wish to take assignments with the IAEA. These issues include leaves of absence and retention of security clearances. Educate national laboratory management on the importance and value of IAEA assignments and experience.
D. Prepare a report to document career ladders and the education, training, and special assignments that support them.
E. Prepare or improve brochures on the following issues:
    1. Spousal employment
    2. Benefits
    3. Job requirements for IAEA positions
    4. Preparing for interviews
F. Develop a formal program to assist re-entry of U.S. citizens into the U.S. workforce when they complete their IAEA assignments.
G. Obtain projections of IAEA posts from UNVIE and circulate them to U.S. contacts. Identify those jobs likely to be open to U.S. citizens.
H. Increase efforts to recruit candidates from outside of the national laboratories by developing points-of-contact at professional societies and government agencies other than the DOE.
I. Using the "ready list" (Near-Term Recommendations B), groom candidates for important positions to ensure that they meet the necessary requirements for the targeted position.
J. Document best recruiting practices.
K. Provide opportunities for candidates to practice interviewing by using videoconferencing systems.
L. Poll U.S. candidates who would like to work at the IAEA to see where they learned about the IAEA, and how they found out about their position. Gather other infor-

mation important to U.S. recruitment efforts. Include people who considered working with the IAEA but did not apply in the survey.

M. Study U.S. perceptions about the IAEA's compensation package to determine which issues are of real concern. Determine how to explain compensation and benefits in clear terms.
N. Investigate novel tools (i.e., those not currently used by ISPO, ANL, or others) that could improve outreach and recruitment (i.e., YouTube).
O. Develop and maintain a current list of skill sets required by the IAEA.
P. Begin tracking USSP Junior Professional Officers and NGSI interns, so that they can be contacted in the future about jobs in international safeguards.
Q. Begin the process of working with the IAEA on the transparency for better understanding of employment benefits, for example, by taking advantage of the IAEA's benefits calculators.

Long-Term Recommendations (18 months to 5 years)

A. Develop a family orientation program based on the orientation that ISPO presented for new recruits (CFEs and regular staff), and programs like those conducted by State for foreign assignments.
B. Prepare a report on job opportunities for accompanying spouses in Vienna and elsewhere in Europe.
C. Develop a network of current and past IAEA employees and spouses who will serve as ambassadors to help orient prospective candidates and recent recruits. Formalize the host family program (this could become an employment opportunity for an accompanying spouse).
D. Develop a program to help prospective candidates obtain the knowledge and skills that they need to be selected for IAEA assignments. The program should use training developed under the USSP and other programs; develop additional training as required, and establish exchange programs between the national laboratories, industry, government, and other member states.
E. To raise candidates' visibility within the IAEA and, therefore, improve their chances of being selected for a position, provide financial assistance from the USSP or other sources so that the candidates can attend meetings of experts and consultants at the IAEA. Consider how to use CFE positions for the same purpose.
F. Establish a mentoring program for candidates for management positions to help develop difficult-to-teach management skills.
G. Establish a position within UNVIE to address NGSI issues, including recruitment and human capital development, on a very detailed level.
H. Develop a campaign to increase the visibility of the IAEA within the United States, by using a celebrity spokesperson or a public-service announcement.

One issue that the participants did not consider was the need to understand or identify the IAEA's human-resource requirements. During the workshop, an IAEA representative presented information on this, and several workshop participants provided input. To develop a strategy to meet the need, it must be defined more clearly. This issue should be addressed in conjunction with the near term recommendation to develop an integrated recruiting plan.

PROGRESS TOWARDS IMPLEMENTING RECOMMENDATIONS

ISPO has begun to implement some of the ERIS workshop recommendations, as of May 2009. NA-243 agreed to provide funding to upgrade the ISPO recruitment position to full-time, as a result of this workshop. ISPO advertised the position as a BNL administrative staff position, after considering options for staffing this position. The new staff member will be responsible for preparing an integrated recruitment plan to address the overall results of the ERIS workshop. He or she will work with ISPO's recruitment partners to implement the plan and to continue with ISPO's traditional recruiting activities as appropriate.

ISPO has begun informally to identify the positions in the IAEA's Department of Safeguards that are the most important to U.S. interests. There have been discussions with the U.S. Mission Vienna about the positions that should be considered. One IAEA Safeguards position that will be vacant in the next six months is under consideration as a position of interest to the United States, and candidates are being identified. Director level positions will always be of the highest importance to U.S. interests. P-3 inspector positions are also important because they are the main route to obtaining senior inspector and Section Head positions in the Divisions of Operations. Several workshop participants noted that this creates an intrinsic tension in identifying positions to target. One option is to emphasize filling higher visibility vacancies with seasoned candidates as they occur. Another option would be to emphasize filling more junior, less visible, positions today with the view that well qualified candidates selected now would be promoted from within into the visible and more influential positions later. This is a policy decision that was outside the scope of the workshop.

ISPO has spoken to representatives of the U.S. Mission Vienna about polling U.S. citizens working currently in the IAEA's Department of Safeguards about their experiences. It was decided that a questionnaire would be prepared to collect standardized information and that professional assistance would be sought for the development of the questionnaire.

ISPO is planning a second IAEA "alumni" meeting during the 50th Institute for Nuclear Materials Management (INMM) Annual Meeting in Tucson, Arizona, in July 2009. Current and former IAEA employees will be invited to attend. The recommendations of this workshop will be discussed, and assistance from the alumni will be sought, for implementation of some recommendations, e.g., developing a network of current and past IAEA employees and spouses who will serve as ambassadors to help prospective candidates and recent recruits.

Since the ERIS workshop, ISPO has conducted exit interviews with several candidates who were interviewed for IAEA Safeguards positions. Using this information, ISPO compiled sample question sets for several jobs and distributed the questions to candidates preparing for interviews. While the questions are not the same for all interviews, the types of questions and the interviewing style are becoming standard. The interviewees can prepare themselves for the types of questions that are likely to be asked. In one case, ISPO helped a candidate by conducting a mock interview and providing feedback on the candidate's answers.

CONCLUSIONS

Participants agreed upon the recommendations that are reported above and discussed in detail in the workshop report,[vii] despite the diversity of the participants and their separation into three independent working groups.

Global and domestic trends are placing stress on the traditional safeguards recruiting process. Modern safeguards regimes rely heavily on technology, information management, satellite imagery, and all-source information analysis. More than ever before, safeguards inspectors must be "nuclear detectives," who are able to integrate diverse data streams and make safeguards decisions on a State level. The need for exceptionally talented, skilled, and intelligent individuals who can work in an international workplace is increasing dramatically. All of this is happening against the backdrop of the nuclear renaissance, which means that the U.S. Government must compete with private corporations for a small pool of people who possess the skills in demand by the nuclear and technical marketplace. Accordingly, traditional U.S. recruiting practices must change to provide the IAEA with the skills that are necessary to implement modern safeguards regimes. This will require new approaches for communicating with key demographic groups, such as social networking and internet-based advertising.

The present recruiting process for international safeguards aims to provide the IAEA with well qualified U.S. candidates for most of the positions advertised. The organizations responsible for recruiting for IAEA safeguards positions are doing a good job and, in most cases, are meeting the needs of the United States and the IAEA. In the short term, the United States will continue to propose well-qualified candidates for jobs at the IAEA's Department of Safeguards. However, there are actions that the United States should take for continuous improvement, to be competitive in current and future markets, and to ensure the long-term viability of its recruiting efforts.

One of the ultimate goals would be to provide the foundation for a competitive recruiting process. This process should lead to competitive compensation systems, job continuity, improved job security, accommodations for the disruptions that families experience when moving overseas for short-term assignments, and training opportunities to ensure that U.S. candidates obtain and maintain the skills that are valued by the IAEA and the U.S. Government. NA-24 is sponsoring a half-time staff member at BNL to implement this report’s proposals. Together with the half time staff member already funded under the USSP, ISPO will be able to increase its activity in safeguards recruitment and be more effective in meeting U.S. objectives.

Endnotes:

[i] Cooley, Jill, Presentation to the Next Generation Safeguards Initiative International Workshop, Washington, D.C., September 2008.

[ii] Report of the Commission of Eminent Persons on the Future of the Agency, GOV/2008/22-GC(52)INF/4, May 23, 2008, p.29.

[iii] http://www.rpi.edu/president/speeches/ps101005-iaea.html

[iv] Pepper, S.E., M.D. Rosenthal, L.G. Fishbone, D.M. Occhiogrosso, C.J. Carroll, M. Dreicer, R. Wallace, and J. Fankhauser, "Next Generation Safeguards Initiative Workshop on Enhanced Recruiting for International Safeguards," December 2008, BNL-82124-2009-CP.

[v] It is understood that there are factors in the IAEA's selection process beyond the control of the U.S. Government, and indeed, DOE. Simply offering a well-qualified candidate does not ensure success. Furthermore, it is apparent that in the foreseeable future the percentage of IAEA employees from the United States will not come close to matching the percentage of the IAEA's regular budget that the United States pays through its annual assessment (or voluntary contributions) to the Secretariat, and few U.S. citizens will get jobs in the IAEA's Department of Safeguards.

[vi] Some actions could be taken that would improve success in both categories. For example, increasing the exposure of potential qualified candidates to the IAEA by offering consulting and/or expert assignments through the USSP would encourage them to apply for future vacancies (increasing the number of candidates), provide them with relevant experience (increasing their qualifications), and provide direct contact with the IAEA's staff (enhancing prospects compared to "unknown quantities").

[vii] Pepper, op. cit.