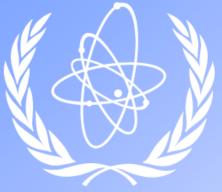
Job Opportunities at the International Atomic Energy Agency





Susan Pepper Nonproliferation and National Security Brookhaven National Laboratory







International Atomic Energy Agency

- Established in 1957, following President Eisenhower's "Atoms for Peace"
- U.N. system organization
- Headquarters located in Vienna, Austria

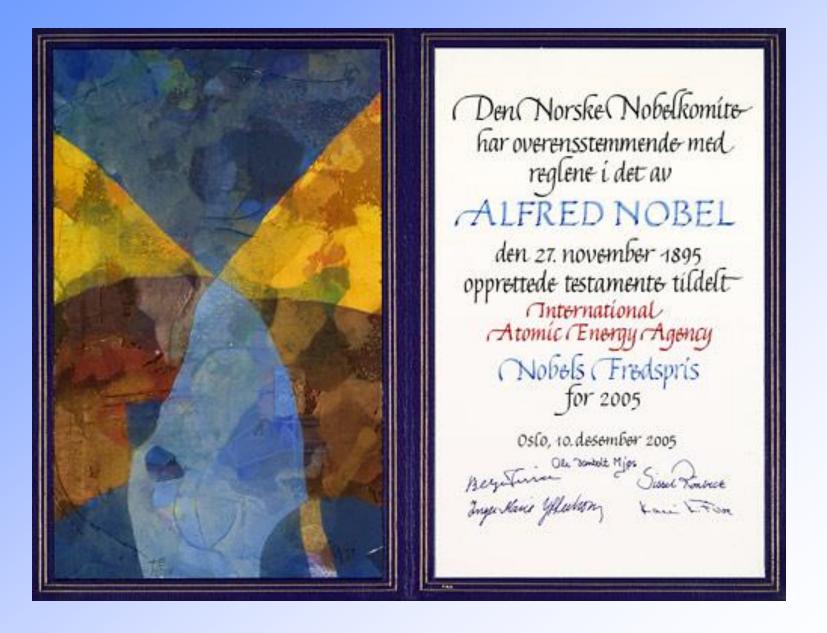


IAEA and former Director General Mohamed ElBaradei won the Nobel Peace Prize for 2005





Nobel Peace Prize for 2005 to IAEA and its Director General



International Atomic Energy Agency

Mission:



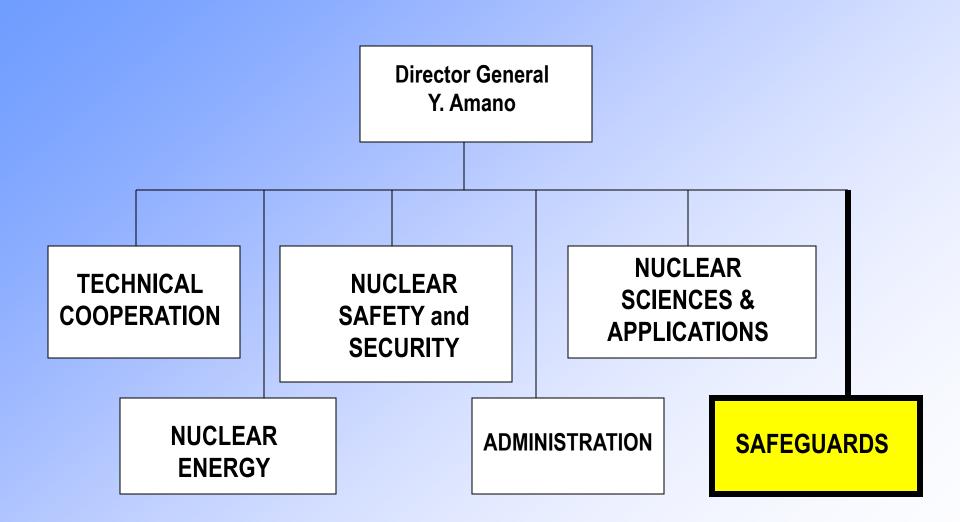
1) Promote the peaceful uses of nuclear technology

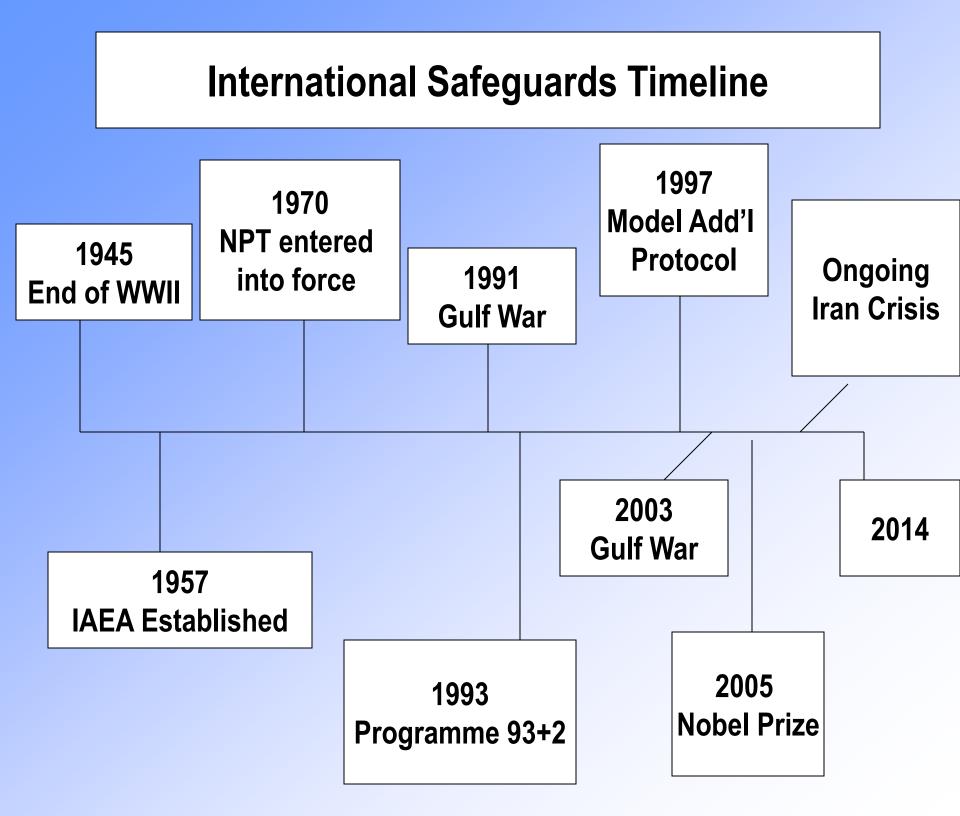
2) Promote a nuclear safety culture

3) Verify that nuclear material is being used exclusively for peaceful purposes



INTERNATIONAL ATOMIC ENERGY AGENCY





Department of Safeguards

Ensuring that nuclear material is not diverted from peaceful nuclear activities by confirming the correctness and completeness of Member State declarations

"Effective IAEA safeguards remains the cornerstone of the world's nuclear non-proliferation regime aimed at stemming the spread of nuclear weapons and moving towards nuclear disarmament."

- Olli Heinonen, Former Deputy Director General





What does the Dept of Safeguards Do?

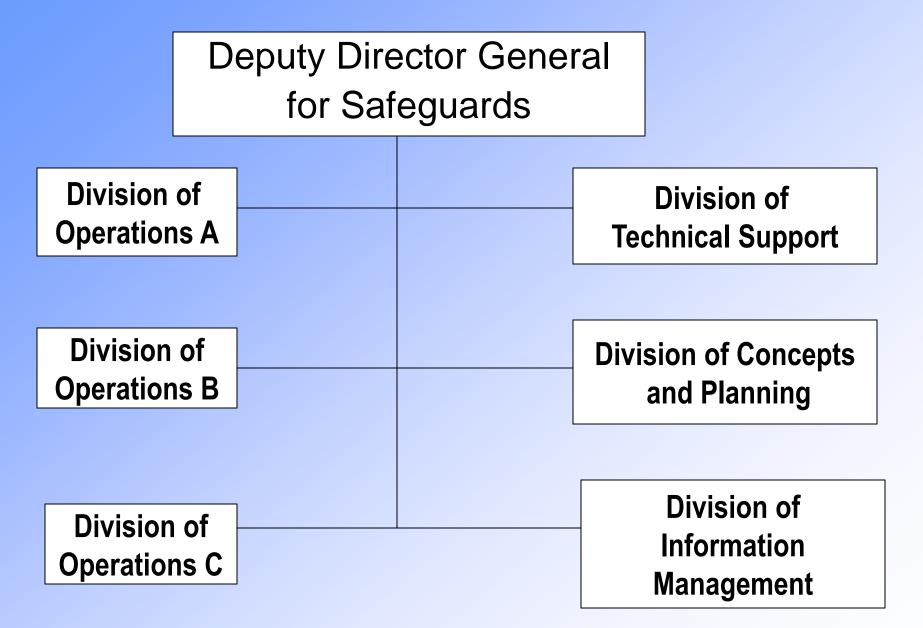
- Receive States' declarations
- Collect inspection data (materials and facilities)



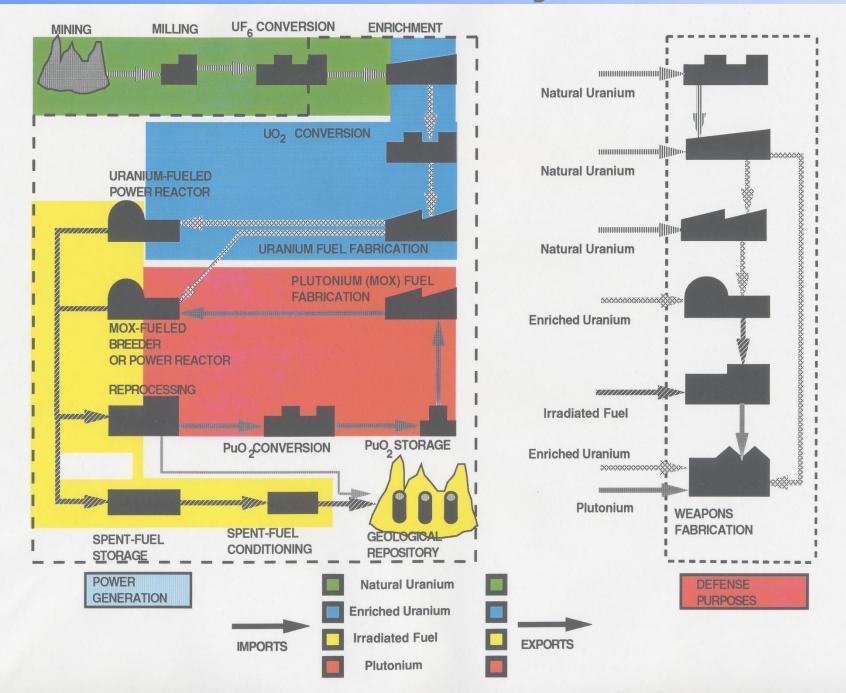
- Compare inspection data to State declarations
- Search for undeclared activities (open source information, satellite imagery, environmental sampling)



Department of Safeguards



Civilian (Power Generation) and Defense Nuclear Fuel Cycles



Safeguards Inspections - Facilities

Enrichment Plants





Safeguards Inspections - Facilities

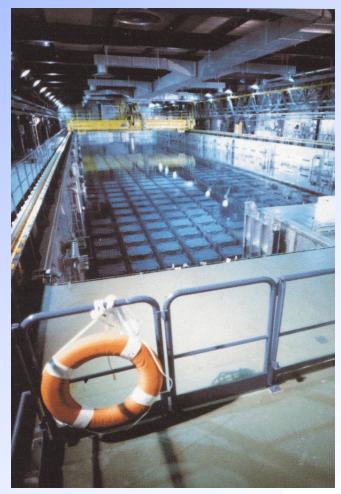
- Power Reactors
- Research Reactors



NATIONAL LABORATORY

Safeguards Inspections - Facilities

Reprocessing Plants





Safeguards Inspections -Preparation

Review Information:

- > Declaration
- Inventory Reports



> Open Source Information



Safeguards Inspections -Preparation





- Meet With Facility Operator Itemized inventory list, inventory change reports
- ► Dress Out
- Facility Dosimetry



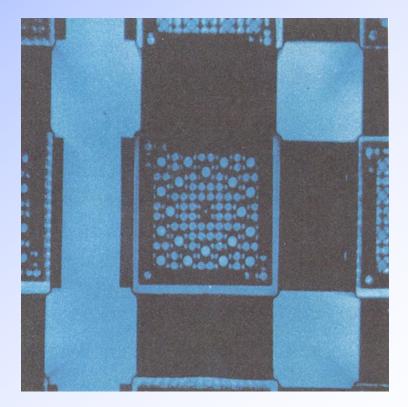
Surveillance Data Retrieval and Maintenance





Spent Fuel Verification







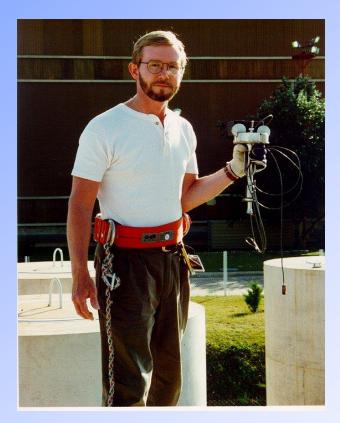
Removal and Re-application of Seals







Unattended and Remote Monitoring Systems







- Records and Reports Audit
- Ensure material balance





Safeguards Inspectors

- Up to 120 Days Per Year in the Field
- Equipment Requirements
- K Work Under Pressure
- International travel
- Prevent the spread of nuclear weapons





Safeguards Requirements Weapons States

- Non-Proliferation Treaty Requirements
- Voluntary Offers
- U.S. Eligible Facility List

Weapons States:

United States, United Kingdom, Russia, France, and China



Past Safeguards Inspections in the U.S.

- Reactor and Fuel Fabrication Facilities
- Excess Fissile Material Storage





IAEA Safeguards Staffing Needs

Chemistry

- Destructive Analysis
- Environmental Sample Analysis
- Reprocessing
- Process Monitoring
- > Calorimetry
- Nondestructive Assay
- Surveillance
- Tamper indicating seals
- Information architecture
- > Unattended and remote monitoring systems

- Open source information analysis
- Software development
- Satellite imagery
- Training
- Safeguards analysis
- Diversion Path analysis
- Safeguards approaches
- Procedures
- Quality management
- Technical writing
- ➢ Finance



General IAEA Employment Requirements

- University degree in relevant subject
- Relevant work experience
- Fluency in English (oral and written)
- Ability to work overseas in an international and technical setting
 Cultural sensitivity





Extra Special Requirements

- Language proficiency in more than one language
- International work experience
- Knowledge of IAEA mission, non-proliferation and international security
- > Hands on experience in a nuclear facility





Benefits of Employment

Salaries & benefits of UN Common System (Education grant, rental subsidy, dependency allowances) Relocation expenses Family support services (Housing, schooling, child-care center) 6 weeks annual leave & home leave Compensatory time off Medical insurance and pension plan Training and staff development Flexible working hours





Job Categories

Junior Professional Officers (JPOs)

Regular Staff Positions

Cost Free Experts (CFEs)





JPOs

- JPOs are entry-level employees that obtain professional experience while performing essential safeguards duties
- > One to two year assignments
- 8 current assignments
 ~35 since 2006
- Assignments are based on official IAEA requests that are advertised on the ISPO website
 Brookhaven Science Associates U.S. Department of Energy





Objectives

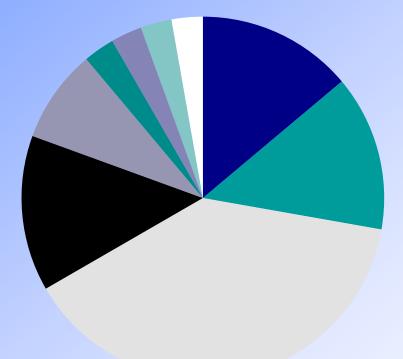
Introduce a new generation to international civil service and the nuclear industry

 Create entry level positions for students and recent graduates to obtain work experience
 Stepping stone to regular staff or temporary assignments with the IAEA and positions in the U.S. national laboratories and government agencies

> Assist IAEA with basic yet essential work



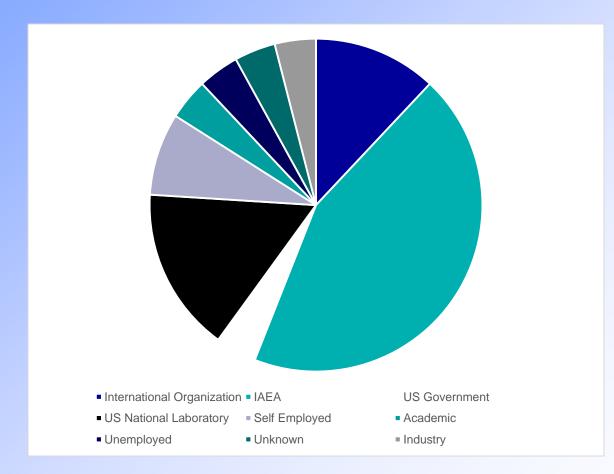
JPO Assignments



- Software Development
- Unat. Mon. Sys.
- Info. Collect. & An.
- Statistics
- NDA
- Legal
- Perf Monitoring
- Surveillance
- Tech Planning



Employment Following JPO Assignment





Specific JPO Requirements

- U.S. citizens or permanent resident aliens
- Degree in relevant field
- 0-2 years work experience
- Less than 32 years of age
- Availability for at least one year
- > Ability to work independently



IAEA Regular Staff

Mid- to late-career professionals who work at the IAEA from 5 to 7 years to help the IAEA carry out its mission.

- > Approximately 2000 IAEA staff members
 - ➢ 600 in the Department of Safeguards
 - ~12% from the United States
- > Positions are advertised on IAEA website www.iaea.org/phf/p_vacancies.asp



Specific Regular Staff Qualifications and Requirements

- > Advanced College Degree
- Five or more years experience
- Specific requirements for each vacancy
- > 3-year initial contract





Cost Free Experts

CFEs are sponsored by the U.S. government to address short term, technical projects required by the IAEA for which the IAEA does not have the necessary expertise or manpower

- Appointments from 2-5 years
- Over 200 experts placed since 1977
- Vacancies advertised at

www.bnl.gov/ISPO/CFE/cfe.asp





Specific CFE Qualifications and Requirements

- > Advanced College Degree
- Five or more years experience
- U.S. citizenship
- Specific requirements for each vacancy
- > 2-year initial contract



Living and Working in Vienna

- Vienna is a culturally rich city
- Very safe Low crime
- Working language is English
- Excellent public transportation
- Maintain American citizenship





For More Information

- > www.bnl.gov/ispo
- > www.bnl.gov/nns www.iaea.org

Recruitment Info....

Tanya Collins BNL - Bldg 197C P.O. Box 5000 Upton, NY 11973-5000 Phone: 631-344-2380 E-mail: tcollins@bnl.gov

