### **Scientific Matters and Paper Submission**

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#### **Participation and Administrative Matters**

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Ms. Fumiyo Tanaka Nuclear Non-proliferation Science &Technology Center (NPSTC) Japan Atomic Energy Agency (JAEA) Tel: + 81-29-284-3490 FAX: + 81-29-284-3678 E-mail: <u>tanaka.fumiyo@jaea.go.jp</u> (For Japanese participants only) Time table

13 November Participant registration • Opening addresses • Special announcements • Invited papers • Presentations
14 November Presentations • Reception
15 November Final session • Official Closing
16 November Optional ½ day tour to: CLEAR Clean Laboratory for Environmental Analysis and Research J-PARC Japan Proton Accelerator Research Complex





JAEA-IAEA Workshop on Advanced Safeguards Technology for the Future Nuclear Fuel Cycle 13 – 16 November 2007

Techno Community Square Ricotti Tokai-mura • Ibaraki • Japan

Japan Atomic Energy Agency(JAEA) in cooperation with International Atomic Energy Agency(IAEA)



## **PROPOSED TOPIC AREAS**

- 1 Challenges for Safeguards in the near future
- The Integrated Safeguards Approach
- Improving Safeguards approaches for largescale plants, including:
  - Minor actinides
  - Design information verification
  - Evaluation simulator
- Safeguards data and information, including:
  - Collection
  - Processing
  - Analysis
  - Archival
  - Security
- 2 Advanced Safeguards concepts and Safeguards by design for the future nuclear fuel cycle
- Next generation power reactors and fuel reprocessing and fabrication facilities
- New approaches which combine various concepts of random inspection, zone approaches and others
- Safeguards concepts which are increasingly based on unattended and continuous monitoring (e.g. containment, surveillance, nuclear radiation, etc.) rather than traditional accountancy methods
- Monitoring the isotopic composition of nuclear fuel (e.g. for the presence of curium in fresh fuel)

- 3 New and novel Safeguards technologies
- Detection and analytic methods, including:
  - Destructive analysis (DA),Nondestructive analysis (NDA)
  - Near real time accountancy (NRTA)
  - Remote monitoring
  - Advanced sensors, including the outcome and recommendations resulting from the IAEA/POTAS April 2007 Workshop on advanced sensor technology
- Verification
  - Containment and sealing systems
  - Surveillance and other imaging systems
  - Design information verification (DIV)
  - Instruments for nuclear forensic investigations
- Detection of undeclared nuclear activities, facilities and materials, including:
  - Environmental sampling
  - Satellite imagery

## OBJECTIVE

This international workshop will address issues and technologies associated with safeguarding the future nuclear fuel cycle. The workshop will discuss issues of interest to the Safeguards community, facility operators and States' systems of accounting and control of nuclear materials.

#### **AUDIENCE**

This workshop will be of interest to individuals and organizations concerned with future nuclear fuel cycle technical developments and safeguards technologies. This includes representatives from the nuclear industry, R&D organizations, Safeguards inspectorates, States' systems of accountancy and control, and Member States' support programmes.

## PAPERS

Presentations and accompanying papers are invited from participants on any of the outlined topic areas. The number of presentations will be limited to allow adequate time for discussions. Papers are to be presented orally.

### REGISTRATION

There is no registration fee. Please register via the Workshop Web Site: www-pub.iaea.org/MTCD/Meetings/Meetings.asp

### **KEY DEADLINES**

Final registration	14 May 2007
Submission of synopsis	
(300 words)	28 May 2007
Power point presentation	
submission	30 October 2007
Submission of paper for	the state of the
the Workshop Proceedings	17 December 2007

# LANGUAGE

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The conference language will be English.