#### INTRODUCTION

Since the 2010 Safeguards Symposium, the IAEA's Department of Safeguards has published its Long-Term Research and Development Plan, 2012–2023. The objective of the 2014 Symposium is to foster dialogue, exchange information and promote cooperation with IAEA stakeholders using this R&D plan to make progress towards achieving the Department's strategic objectives.

### **STRUCTURE**

Continuing from the R&D Plan, the symposium will hold forward looking safeguard sessions with oral and poster presentations, discussions and exhibitions. It will be held over five days at the Vienna International Centre — the IAEA's headquarters.

## **TOPICS**

#### **CONCEPTS AND APPROACHES**

- Strategic planning;
- Keeping abreast and making use of scientific and technological innovation;
- Further evolving safeguards implementation;
- Developing approaches to fully utilize State and regional authority data;
- Expanding implementation and development support.

#### **COOPERATION WITH STATES**

- Strengthening State and regional systems of accounting and control;
- Enhancing IAEA and State cooperation;
- Promoting the interface between nuclear safety, security and safeguards.





# DETECTION OF UNDECLARED NUCLEAR MATERIAL AND ACTIVITIES

- Identifying appropriate signatures and indicators;
- Increasing the ability to detect undeclared nuclear material and activities;
- Developing instruments and associated techniques to detect the establishment and operation of nuclear fuel cycle activities.

#### SAFEGUARDS EQUIPMENT AND COMMUNICATION

- Developing and deploying improved tools for measurements of nuclear material at enrichment and reprocessing plants;
- Developing and deploying tools and techniques to enable timely detection of HEU production in LEU enrichment facilities;
- Developing more sensitive and less intrusive alternatives to existing NDA instruments;
- Deploying secure and authenticated communications for safeguards equipment;
- Developing secure and authenticated techniques to enable the use of operator systems.

# INFORMATION TECHNOLOGY, COLLECTION, ANALYSIS AND SECURITY

- Using safeguards information in a fully integrated and secure environment;
- Developing software tools for use by State and regional authorities in creating and submitting accountancy reports and additional protocol declarations;
- Integrating information sources to detect inconsistencies;
- Recovering from an IT failure.







#### **ANALYTICAL SERVICES**

- Expanding the use of the Network of Analytical Laboratories:
- Developing elemental and isotopic signatures of fuel cycle activities and their application to environmental sampling and nuclear material analysis;
- Developing techniques, methods and equipment to detect signatures of nuclear activities in environmental samples;
- Improving capabilities to characterize nuclear material and to determine its origin.

#### SAFEGUARDING FUTURE NUCLEAR FUEL CYCLES

- Safeguarding advanced nuclear facilities and innovative fuel cycles;
- Encouraging proliferation resistance and safeguards by design;
- Conducting further nuclear verification missions.

#### TRAINING

- Developing and maintaining the expertise of safeguards professionals;
- Developing training to reflect new facilities and technologies:
- Deploying new training tools using advanced methods, such as virtual reality, immersive learning and web based training.

## **EXHIBITS**

Equipment and services, including commercially available products will be exhibited during the symposium. Enquires should be addressed to the exhibit coordinator.



### **KEY DEADLINES**

31 May 2014 Submission of Grant Application

Form (Form C)

31 May 2014 Submission of Form for Submission

of a Paper (Form B) and abstract

6 July 2014 Notification of acceptance of

papers

20 October 2014 Submission of accepted full paper

(8 pages max.)

## **CONFERENCE LANGUAGE**

The conference will be held in English.





### **CONTACT INFORMATION**

## **Symposium Address**

International Atomic Energy Agency

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Email: safeguards2014@iaea.org

## Symposium Web Site

Includes detailed information on administrative procedures, including participation, submission of papers, registration and grants.

http://www-pub.iaea.org/iaeameetings/2014

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## **Symposium on International Safeguards**

# Linking Strategy, Implementation and People

20-24 October 2014





in cooperation with

