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SSAC Support (training, advisory service)

Rebecca Stevens
IAEA, Vienna
Austria

Strada Costiera 11, 34151 Trieste, Italy - Tel.+39 040 2240 111; Fax +39 040 224 163 - sci_info@ictp.it

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Support for SSACs

Rebecca Stevens
SGCP/CTR

IAEA
International Atomic Energy Agency

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Safeguards Obligations : Why?

NPT preamble (extract)

- **“Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples”**

NPT Article III
Comprehensive Safeguards Agreements

Non-nuclear-weapon States to:

- ***accept safeguards, as set forth in an agreement with the IAEA, for the verification of the fulfillment of obligations assumed under the NPT with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.***

- ***safeguards to be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of the State, under its jurisdiction, or carried out under its control anywhere.***

State Obligations under Comprehensive Safeguards Agreement (CSA)

- To accept safeguards on all nuclear material (para 1 of INFCIRC/153)
- Agency and State shall co-operate ('to facilitate the safeguards implementation' - para 2 of INFCIRC/153)
- To establish and maintain a **S**tate **S**ystem of **A**ccounting for and **C**ontrol of nuclear material ~ SSAC (para 7 of INFCIRC/153)
- To provide information to Agency (para 8 of INFCIRC/153)
- To provide access to Agency inspectors ('to ensure that inspectors can effectively discharge their functions' – para 9 of INFCIRC/153)

State Obligations under Additional Protocol (AP)

- To provide additional information to Agency (Art. 2 of INFCIRC/540)
- To provide additional access to Agency inspectors (Arts. 4-9 of INFCIRC/540)

INFCIRC/153 Requirement for SSAC

- **Safeguards Agreement (INFCIRC/153) calls for (Art. 7) "..... State shall establish and maintain a system of accounting for and control of all nuclear material subject to safeguards under the Agreement ....., the basic elements of which are set forth in Article 32 of that Agreement.**

SSAC

Term “SSAC” has traditionally been used to denote:

- **The State authority, office or persons designated as the formal technical interface for safeguards implementation with the Agency and facility operators; and**
- The system of nuclear material accountancy procedures laid down by the State authority and implemented by “facility” operators.

State Authority ~ Continuity of Compliance

Compliance with NPT through the IAEA safeguards imposes a very accurate knowledge of the entire industrial, research and commercial status of nuclear activities and its evolution within the state, not to mention adequate conditions offered to the IAEA inspectors to perform their duty.

This can only be achieved with a well established, informed and powerful State Authority

Such an Authority is the first element of a **continuous chain** for a successful fulfilment of the national and international commitments towards nuclear non-proliferation.

International Objectives of the SSAC

Most common examples of an international objective:

- **nuclear materials accountancy and control to meet IAEA safeguards obligations;**
- **regional or bilateral safeguards commitments to another States.**

National Objectives ~ a Domestic Level

A possible objective for a State Authority:

Making sure that
no one within the State
or under its control
is circumventing
the national safeguards requirements
"intentionally"* or *"non-intentionally"

Project N.2.15 - SSAC

In synergy with the Nuclear Security Action Plan, covers the following areas:

- **Developing SSAC Guidelines and Recommendations**
- **SSAC Advisory Services (ISSAS Missions)**
- **SSAC Technical Support and Upgrades**
- **SSAC Training**

SSAC Guiding Documents

- Handbook on Nuclear Law
- SSAC Guidance
- Nuclear Material Accounting Handbook
- Guidelines Preparation and Submission of Additional Protocol Declarations
- ISSAS Guidelines
- guidelines on NDA and DA procedures and techniques when making measurements as part of SSAC requirements
- technical documents covering a comprehensive SSAC self-assessment

SSAC Technical Support

- On the basis of SSAC self-assessment and evaluation missions to provide necessary equipment at the State or facility level
- Capital equipment to include computer hardware and software, NDA equipment, and communication equipment

SSAC Training

- Provide a comprehensive SSAC training programme at the international, regional, and national levels
- Training courses and workshops to be offered to States on a regular basis for SSAC personnel at the State and facility levels

Advisory Services

- **Advisory service on the establishment of the legal framework (safeguards related legislation as a part of a general nuclear law)**
- **Integrated Nuclear Infrastructure Review Missions ~ INIR (for States embarking nuclear power programme)**
- **IAEA SSAC Advisory Service Missions ~ ISSAS (for all States with CSA in force)**

ISSAS Missions

- There are variations in SSAC practices between different countries due to the number and types of nuclear facilities and quantities of nuclear materials.
- State is ultimately responsible for the SSAC
- However, an international expert team can
  - review the implementation of the NPT obligations
  - compare it with the existing international good practices elsewhere
  - pass judgement on a national SSAC system
- Peer review activity

Key ISSAS Mission Objectives

- **Evaluate the legal, regulatory, administrative and technical systems of the SSAC in light of**
  - **the types and amounts of NM present**
  - **the size and nature of the nuclear fuel cycle**
  - **the activities related to the Additional Protocol**
- **Evaluate the SSAC's performance in meeting the State's safeguards obligations**
- **Identify good practices and possible areas for further increased co-operation**
- **Recommend how any shortcomings could be rectified or further co-operation implemented**

Summary

- **Effective SSACs are key components of the non-proliferation regime**
- **The IAEA SSAC Project is to assist Member States in strengthening the effectiveness of their national SSACs**
- **Such SSACs can significantly contribute to the effective and efficient implementation of safeguards as required by the NPT**