

# International Safeguards Challenges and Issues

**Kenji Murakami**

Former Director of Safeguards Operations, IAEA  
Visiting Professor, Tokyo City University  
Visiting Researcher, JAEA

# International Safeguards – Challenges

- IAEA Safeguards have evolved through various events and enhanced its activities over the years.
- More challenges and heavy workload are expected to come in a future.
- There is a continuing need to strengthen its ability to provide credible assurance in global nuclear non-proliferation.

# Challenges and Issues

1. Global nuclear renaissance and increasing workload
2. Safeguarding innovative fuel cycle facilities and technological development
3. Global proliferation risk and proliferation network
4. Maintaining adequate and sufficient legal authority
5. Possible new verification roles and missions
6. Improve effectiveness and efficiency of verification capabilities and operations
7. Effective resource development and management

# 1. Global nuclear renaissance and increasing workload

- Growing number of facilities and quantities of nuclear material
- Ensuring reliable SSAC and nonproliferation compliance in new coming states
- Verifying decommissioning facilities and long term storages

## 2. Safeguarding innovative fuel cycle facilities and technological development

- Develop new and improved safeguards concept and approaches
- Enhance detection capabilities through acquisition of effective verification methodology
- Use of advanced verification technology and Safeguards by design

### 3. Global proliferation risk and proliferation network

- Effective and efficient verification of undeclared activities
- Enhance information acquisition and analysis capabilities
- Provide credible assurance by early detection of non-compliance

## 4. Maintaining adequate and sufficient legal authority

- Universal implementation of Safeguards Agreements, APs, and IS
- Fully implement existing legal framework and examine possible expansion of authority
- Safeguarding non-NPT states

## 5. Possible new verification roles and missions

- Verifying excess fissile materials
- Technical support to FM(C)T
- Respond to request for verification and technical assistance related to disarmament



## 6. Improve effectiveness and efficiency of verification capabilities and operations

- Enhancing information analysis driven safeguards
- Cooperation with States and SSACs/RSACs
- Applying quality management systems

## 7. Effective resource development and management

- Securing adequate financial resources
- Develop and implement human capital management strategy
- Maintain effective management team with trained and experienced staff