Workshop Background and Objectives

The topics selected for the workshop aimed to address in a forward looking spirit, current issues on non-proliferation regime. The verification has to deal with the evolution of safeguard towards more efficiency and effectiveness. The workshop addressed inter alia the issues of: how to manage the proliferation crisis raised by Iran, Syria, North Korea, Pakistan, how to better integrate the lessons from the past crisis as Iraq and Libya and A.Q. Khan network, how to actually and effectively implement the state-level concept, how to improve the detection of undeclared activities and facilities, how to manage safeguards and security complementarities and the implementation of UNSCR 1540, how to address new verification issues as those raised by nuclear disarmament and the perspective of treaties on fissile material production and nuclear testing, how to address the issues of education and training in non-proliferation and security of the new generation and the new comers to nuclear energy. The following questions aimed to gather these issues to guide the debate of the working groups.

Questions addressed by the Working Groups

**Working Group 1: Future Directions for International Safeguards**

- What directions will be effective and more efficient international safeguards take under the State-level concept?
- How the IAEA could achieve the transitions from the historic criteria based Safeguards systems to the new one based on State-level approaches and further differentiate without discrimination.
- How could and should the IAEA implement its Long Term Strategic Plan, and R&D Strategic Plan.
- What larger role can State and Regional safeguards authorities play?
- How can safeguards be facilitated in future nuclear facilities?

**Working Group 2: Future Directions for Safeguards and Verification Technology and R&D**

- What developments are needed in information technologies, detection technologies and monitoring technologies?
- What verification technology and R&D are needed to deter the proliferation of nuclear weapons, by detecting early the misuse of nuclear material or technology?
- How can progress be made on detection of undeclared nuclear activities through environmental sampling, satellite imagery, open sources analysis and beyond?
- How could international verification be applied to material released from nuclear weapon programmes?

**Working Group 3: Broader Perspectives on Nonproliferation and Nuclear Verification**

- What can we learn from the existing non-proliferation regime and the effort to link safety, security and safeguards?
- Can we set standards and metrics for evaluation?
- Can these measures help in providing transparency and confidence when applied in context of nuclear weapons reductions?
- What lessons can be learned from existing verification regimes and how can they be applied to future challenges?
• Could IAEA’s role in non proliferation be broadened?
• What nuclear disarmament initiatives can be expected?
• How can tools and culture that have been developed in support of the global non proliferation regime by used to facilitate verification of future nuclear treaties?

**Working Group 4: Education and Training (E&T) for nuclear safeguards and security.**

• Do we fill the gap in the current nuclear safeguards and security E&T?
• How do we prepare best for the future nuclear safeguards and security E&T esp. in emerging nuclear countries?
• Which best practices, for E&T concepts, can be shared and transferred and how do they differ between academic and professional teaching?
• Which efficient E&T tools are used for which purpose, at different stages in the learning cycle and which ones remain to be developed?
• How can we address the multi-facetted challenge on Knowledge Management in view of E&T in nuclear safeguards and security?
• Which synergies can we valorise between safeguards and security E&T (possibly also looking at safety)?