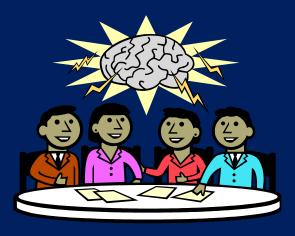
# Round Table Discussion 3 Multi-lateralization of Nuclear Fuel Cycle (MNFC)

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# Historical Aspect of MNFC

Pre – 1950 Baruch Plan (Acheson-Lilienthal Report) 1950:

- 1953 Atom for Peace & Uranium Bank
- 1957 EURATOM
- 1957 IAEA

1960:

• INFCIRC/66

### **Historical Aspect of MNFC**

#### 1970:

- INFCIRC/153
- Zangger Committee
- Nuclear Suppliers' Group (NSG)
- Regional Nuclear Fuel Cycle Center
- International Nuclear Fuel Cycle Evaluation (INFCE)
- 1980:
- International Plutonium Storage
- Committee on Assurances of Supply (CAS)

# **Historical Aspect of MNFC**

1990:

- International Monitored Retrievable Storage System
- ASIATOM, PACATOM, etc.
- International Interim Storage Scheme
- INFCIRC/540 AP

2000:

- El Baradei
- George W. Bush
- IAEA Expert Group on MNA

### **Recent Proposals on MNFC**

#### 12 Proposals on Assurance of Fuel Supply (AOS):

- U.S. Proposal on a Reserve of Nuclear Fuel (2005)
- Nuclear Threat Initiative (NTI) Fuel Bank (2006)\*
- Global Nuclear Energy Partnership (2006)
- Global Nuclear Power Infrastructure (2006)
- World Nuclear Association (WNA) Proposal (2006)
- Six-Country Proposal (2006) "Reliable Access to Nuclear Fuel"
- IAEA Standby Arrangement System (2006)
- UK Nuclear Fuel Assurance Proposal(2007)
- International Uranium Enrichment Centre (2007)
- Multilateral Enrichment Sanctuary Project (2007)
- Multilateralisation of the Nuclear Fuel Cycle (2007)
- Russian LEU Reserve Proposal (2009)

### **Recent Proposal on MNFC**

- Fuel Leasing Arrangement for the back-end: Russia agrees to take back spent fuel from Iran
  Back-end fuel cycle has become a source of uncertainty for nuclear investment due to:
  - Growing inventory of spent fuel in existing programs
  - Indefinite spent fuel storage
  - Availability of waste repository?

#### 1. Assurance of Fuel Supply (AOS)

- What is the current situation on AOS in IAEA?
- What is the current situation on AOS proposed by individual states?
- What were the results of the United Nations Institute for Disarmament Research on multilateralization of nuclear fuel cycle?
- What were the outcomes of the study by the US National Academy of Sciences/Russian Academy of Sciences?
- How relevant is AOS in case of disruption of fuel supply due to political reasons?
- Is AOS an effective incentive for states to give up on their inalienable right to develop enrichment and reprocessing capabilities?

#### 2. Multilateralization of Nuclear Fuel Cycle (MNFC), including the back-end

- Is MNFC an effective incentive for states to give up on their inalienable right to develop enrichment and reprocessing capabilities?
- How can "equality" be achieved in MNFC?
- Can MNFC contribute to solutions of nuclear non-proliferation challenges? What roles can it play?
- Can MNFC reduce safeguards and inspection costs?
- How can we make MNFC a reality?
- Are international negotiated solutions required or can likeminded states leading the way be sufficient?
- Would MNFC be best to pursue on a regional basis?
- What are the challenges and opportunities for MNFC?