Improving INFCIRC/549

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Workshop on Practical Measures to Reduce Risks from Fissile Material
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Some context

- Producing fissile material = long-term responsibilities
  - Safety, security, safeguards

- Several approaches to implementing those responsibilities
  - Unilateral actions
  - Agreements, initiatives
  - Treaties (bilateral, multilateral)

- Narrow (regional) or broad (global) focus
For INFCIRC/549

- Roots in optimism
  - End of Cold War; declarations of material excess to defense needs

- Roots in pessimism
  - Growth in stockpiles of civilian plutonium 219 MT by 1997

- Four aims:
  - underscore the commitment of each state to existing standards of security and safeguards;
  - spur strategic management of plutonium;
  - improve transparency; and
  - enhance controls on international transfers (for example, implementing end-user certificates).
Approaches

- **UNILATERAL**
- **BILATERAL AGREEMENTS**
- **MULTILATERAL (AGTS OR TREATIES)**
Approaches

- **Unilateral (Japan, US, UK)**
  - Many different reasons to build confidence

- **Agreements/Initiatives (PMDA, INFCIRC/549)**
  - Confidence-building (e.g., exchanges of information, agreements not to attack, negative security assurances, de-alerting)
  - Norm-setting, such as moratoria on nuclear testing or no peaceful nuclear explosions

- **Treaties (FMCT)**
  - Limits on numbers, location or capabilities
  - Elimination (HEU?)
Specific Challenges

- Ease of action versus longevity
- Confidence-building versus accuracy (a particular problem with fissile material)
- Transparency versus secrecy
- Regional rivalries versus global norms
A long history of trying to control the atom

- Bombings of Hiroshima and Nagasaki prompted many proposals to control both nuclear weapons and atomic energy
  - August 9, 1945: President Truman announced that the US would seek the means “to control the bomb so as to protect ourselves and the rest of the world from the danger of total destruction.”
  - November 1945: Truman, King, Attlee proposed a commission to look at controlling atomic energy to ensure its peaceful purposes, eliminating nuclear weapons and establishing effective safeguards & inspections
Before stockpiles even emerged, efforts to control “ingredients” were proposed

- Acheson-Lilienthal report recommended international ownership, operation of all “dangerous” nuclear activities, including virtually the entire nuclear fuel cycle.
- Baruch Plan (June 1946) recommended international managerial control or ownership of all atomic-energy activities potentially dangerous to world security.
- First UN Atomic Energy Commission report (Dec 1946) to UNSC calls to establish international agency to dispose of fissile material stocks.
- 1957 first UNGA resolution specifically calling for a cutoff of fissile material production for nuclear weapons.
“Improving” INFCIRC/549

- If it ain’t broke, don’t fix it
  - No changes necessary
- Improve current implementation of reporting
  - More, better data
- Expand membership*
Why expand reporting?

- Those with stockpiles = advanced nuclear states
  - If you believe nuclear energy is important in the “war on climate change, better (accurate) information about nuclear energy and fuel cycle plans could help gauge ability of nuclear to contribute to climate change mitigation.
  - Potential for international recycling (Russia, China) important to know

- Good data!!
  - Consistent sets of data allow for comparisons = greater understanding

- Build on HEU reporting
  - Help an eventual FMCT

- Nuclear security leadership
States outside NPT

- India, Pakistan and Israel are all members of the IAEA but not NPT
  - North Korea is an obvious outlier
- No venues outside of the NPT Revcon process for discussion
- Nothing inherent in INFCIRC/549 that precludes non-NPT declarations
Procedural implications

- Declaring material excess to defense needs is____________
  - Sensitive?
  - Undesirable?
  - Impossible?

- Not necessary to place under safeguards, although desirable. But if it’s already under safeguards, why not declare?
Roadmap for Implementation

- **INFCIRC/549 reinvigoration**
  - Existing “member” states could choose to expand discussions, meet for more time
  - Overall, many more pressing security issues. But, not many are very amenable to resolution, so maybe this is something easy to do

- **NPT Revcon**
  - US could choose to make transparency issues part of the Creating the Environment for Nuclear Disarmament (!)
  - Others could choose to enhance/support as part of peaceful uses of nuclear energy initiatives

- **NSG discussions**

- **Let’s not forget North Korea**
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