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**Challenges and Opportunities  
for Integration of Non-NPT States  
into the Non-Proliferation Regime:  
The Case of India**

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*The views presented are the author's,  
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# INTRODUCTION

- Original topic suggested was -
  - Australia, uranium supply to India, and the Raratonga Treaty**
  - but there is a wider context, which this presentation will discuss:
  - **how to integrate the non-NPT states into the non-proliferation and disarmament regime?**

# OVERVIEW

## 1. NPT and non-Parties

- full-scope safeguards
- other NPT principles
- NSG and the *India exception*.

## 2. Bilateral agreements

- US India agreement - *a lost opportunity*
- other agreements.

## 3. Other multilateral agreements/mechanisms – current and prospective

- engaging the non-NPT states (*are they willing*)?

## 4. Issues relating to India

## 5. Conclusions

# 1. NPT and non-Parties

- **NPT recognises 5 NWS – US, Russia, UK, France, China**
  - states that exploded a nuclear device before 1 January 1967.
- **All other states considered to be NNWS**  
( though NPT does not specifically define NNWS ).
- **Four other states have conducted nuclear tests, or are believed to have nuclear weapons:**
  - India (1974), Pakistan (1998), DPRK (2006), and Israel
    - India, Pakistan and Israel never joined NPT
    - DPRK joined 1985, announced withdrawal 1993/2003.

## Full-scope safeguards

- **NNWS parties commit to accept IAEA safeguards on all nuclear material**
  - was called **full-scope**, now **comprehensive**, safeguards.
- **Many parties interpreted NPT as requiring full-scope safeguards for nuclear supply to any NNWS**
  - i.e. any state other than the 5 recognised NWS
  - effectively, limiting supply to **NPT parties**
    - a major **incentive** to join
  - but this was never the **universally accepted** legal interpretation.
- **NSG adopted the **policy** of full-scope safeguards for supply to any NNWS in 1992.**

## Full-scope safeguards (2)

- Full-scope interpretation made sense when aim was to **universalise** NPT membership
  - but now **only 4 non-parties**
    - these states unlikely to disarm and join NPT as NNWS in near term
  - now a **different approach** is needed.
- Today the general interpretation, for supply to a non-party, is that the NPT only requires safeguards on **transferred** material/items
  - NSG's 2008 decision to exempt India from its full-scope safeguards policy (the **India exception**) is consistent with this interpretation.

## Applicability of other NPT principles to non-parties

- **Clearly nuclear-armed states cannot join NPT as NNWS**
  - not practical to amend definition of NWS, obvious dangers in re-opening NPT text.
- **But other NPT provisions *could be* adopted by these states:**
  - not to assist others to acquire nuclear weapons (Art. I)
  - to require safeguards on nuclear transfers (Art. III.2)
  - to commit to pursue negotiations on cessation of the nuclear arms race, nuclear disarmament and general disarmament. (Art. VI)
- **In addition NPT has *implicit* principles, e.g.:**
  - *separation* of military and civil programs
  - effective control of *sensitive nuclear technology*
  - effective *security* for nuclear materials (physical protection).

## Non-proliferation and disarmament principles

- Also there are important NPT RevCon statements
  - esp. **moratorium** on nuclear tests and support for **FMCT**.
- How to get non-parties to accept **legally-binding** commitment to these principles?
  - one possibility is a **protocol** to the NPT
    - but there is no such proposal, and no indication this would have support
    - India maintains NPT is discriminatory, unlikely to support any protocol.
- **More viable approach - to pursue these various commitments through other treaties and mechanisms - *bilateral and multilateral* - as opportunities arise.**

## 2. Bilateral agreements

- **Bilateral agreements provide an opportunity to influence the NPT non-parties**
  - e.g. in 2005 **Bush/Singh statement** India undertook to:
    - separate civil and military programs and place civil facilities under IAEA safeguards, and to conclude an AP **for civil facilities**
    - continue unilateral test moratorium
    - work towards FMCT
    - strengthen export controls
  - consequently India has concluded an expanded IAEA safeguards agreement covering 14 out of 20 existing reactors, related facilities, and future facilities **designated** civil
  - and has now concluded an AP - *though this does not meet the commitment to cover civil facilities* (only to report exports).

## Bilateral agreements (2)

- **Opportunity missed**
  - the 2007 US-India agreement does not include major commitments from the 2005 statement (e.g. the test moratorium), nor most of the NPT principles mentioned earlier
    - this agreement has set the bar low for other agreements.
- **Subsequent agreements** - e.g. Russia, France, UK, ROK, Mongolia, Namibia, Argentina, Canada, Kazakhstan - **do not cover these broader issues.**
- **Now, little leverage to cover these issues with India**
  - but they could be pursued with other non-NPT states (Pakistan, Israel), if nuclear supply to these states were considered.
- **Bilateral cooperation could bring indirect influence**
  - discussed later.

## 3. Other multilateral agreements

Relevant agreements and mechanisms include:

- **CPPNM and 2005 Amendment**
- **IAEA safeguards agreements**
- **CTBT**
- **NSG**
- **Proposed FMCT**
- **Arms control agreements**

## Nuclear security - CPPNM and 2005 Amendment

- **1980 CPPNM applies primarily to international transport - 149 parties.**
- **2005 Amendment extends commitments to **domestic** programs, sets out fundamental principles**
  - not yet in force, requires 100 ratifications, currently 77.
- **India and Israel are parties to both**
  - Pakistan is party to CPPNM but not 2005 Amendment
  - DPRK party to neither.
- **International governance weak, compared with safeguards or safety**
  - no binding international standards, accountability mechanisms
  - difficult to assess standards in the non-NPT states
    - out of 25 states with weapons-usable materials, on available indicators NTI Index ranks Israel 21, Pakistan 22, India 23, and DPRK 25
  - can they be encouraged to do more?

## Separating military and civil programs: IAEA safeguards agreements

- Safeguards not **mandatory** for nuclear-armed states, but can clearly indicate separation
  - US and UK - all civil facilities and material under VOA
  - France – VOA covers facilities and materials under bilateral agreements
  - Russia and China – VOA covers facilities considered useful to safeguards
    - plus facilities/material subject to bilateral agreements
  - IAEA inspections in NWS are limited (around 5% total safeguards effort)
  - UK and France - Euratom inspections apply to all civil facilities.

## Safeguards (2)

- **India has undertaken to separate military and civil**
  - IAEA safeguards apply to most civil facilities
  - unlike in NWS, IAEA inspects all facilities designated for safeguards
  - but important “civil” materials and facilities remain outside safeguards
    - at best, causing ambiguity
    - and some facilities are officially described as **dual purpose**.
- **Pakistan and Israel – safeguards apply to supplied facilities and materials.**
- **DPRK – currently no safeguards.**

## Nuclear testing - CTBT

- **CTBT not yet in force**
  - ratification outstanding by 8 specified states:
  - China, Egypt, Iran, **Israel** and US - have signed, not yet ratified
  - **India, Pakistan and DPRK** - have not signed.

## Nuclear supply/export controls - NSG

- **NSG coordinates export controls** – though not legally-binding
  - India has undertaken to harmonise with NSG Guidelines (this does not require membership)
  - US undertook to promote Indian membership
    - not yet agreed, NSG divided.
- **Indian membership contentious** – NSG was established in response to India's misuse of supplied technology (1974 "PNE")
  - key question - how India would use membership?
    - NSG operates by consensus – would India block changes to supply guidelines, block new members (e.g. if Pakistan proposed)?
- **Possibility of Pakistan and Israel joining not under consideration**
  - given AQ Khan's proliferation activities, could Pakistan demonstrate credible export controls?

## Proposed FMCT

- **Verifiable stop to fissile material production for nuclear weapons an essential step towards deep nuclear cuts and eventual disarmament**
  - Pakistan frustrating efforts to start FMCT negotiations in CD
  - if Pakistan cannot be persuaded to stop blocking, essential to find another way to start negotiations.
- **Pakistan clearly concerned about India's withholding of "civil" stocks and facilities from safeguards, and its expanding fissile production capabilities (reprocessing, fast breeder program, enrichment)**
  - addressing **South Asian arms race** is central to FMCT prospects, this should be a key priority for P5.

## Arms control agreements

- To date formal arms reduction agreements have been bilateral between US and Russia
  - as US and Russia reduce (New START limits deployed strategic warheads to 1,550 each), smaller arsenals become more significant
    - especially where these are **increasing** (China, India, Pakistan)

France	290	Israel	80-200
China	250	Pakistan	90-110
UK	160	India	80-100
		DPRK	< 10

- essential to engage all nuclear-armed states in future negotiations (whether collectively or in appropriate groupings).

## 4. Issues relating to India

- **Important to bring India into the nuclear “mainstream” –**
- **On the civil side:**
  - India has huge and growing electricity demand – if met largely by coal, major impact on environment and climate
  - India has questionable nuclear safety record – mutual benefit in allowing access to modern technology
  - need to provide alternative to India’s Three-Stage fuel cycle strategy (using FBRs to produce weapons grade plutonium to fuel thorium reactors)
    - serious **proliferation risks** (provocative to Pakistan) and **terrorism risks**
  - developing modern commercial nuclear power sector will establish moderating influence on India’s nuclear behaviour.
- **On military side:** essential to take steps to prevent escalating arms race.

## Problem areas

- **Inadequate separation of civil and military**
  - **dual purpose** facilities, withholding civil stocks.
- **Plans to produce weapons-grade materials for “civil” use.**
- **Expanding military production.**
- **Safeguards** - India’s IAEA agreement has positive aspects – active inspections, irreversibility – but some shortcomings:
  - India designates whether facility comes under safeguards, important facilities and stocks remain outside
  - AP does not apply to Indian facilities, contrary to commitment given
  - imported material not automatically under safeguards, requires specific agreement or arrangement.
- **Indian *exceptionalism*** – is India prepared to follow global norms?
  - e.g. bilateral safeguards, nuclear liability, limiting sensitive nuclear technology, proliferation resistance.

## Issues for specific suppliers

- **Australia and Raratonga Treaty**

- Australia currently negotiating nuclear agreement with India
- Raratonga Treaty excludes supply of nuclear material or equipment to **any NNWS** unless *subject to the safeguards required by Article III.1 of the NPT* (i.e. **full-scope safeguards**)
  - Article III.1 applies only to NNWS **party to the NPT** – Raratonga appears to limit supply to these states (or to NWS)
  - question (1) – is India a NNWS under the Raratonga Treaty?
  - question (2) – is a legal challenge (*domestic or international*) possible?

- **Kazakhstan and Semipalatinsk Treaty**

- this treaty much more explicit – no supply to any NNWS without a **comprehensive safeguards agreement** and AP
- Kazakhstan is supplying India – how can this be consistent with Semipalatinsk Treaty?

## 5. Conclusions

- **The non-proliferation regime – *including nuclear disarmament* – is based on legally binding commitments accepted by all NPT parties**
  - the four non-NPT parties – all nuclear-armed – benefit from the regime without contributing to it.
- **Essential to draw these states into the regime -**
  - **deep cuts and eventual disarmament require **universality**.**

## Conclusions (2)

- **Drawing in the non-NPT states requires nuclear cooperation, rather than isolation**
  - but **reciprocity** needed – cooperation should be based on constructive participation in regime commitments
  - some commitments – *support for non-proliferation, effective export controls, separation of military and civil programs, moratorium on testing* – should be readily acceptable
    - only question is **form** – how to give commitment legal effect
  - other commitments – *capping fissile production and warhead numbers* – will require regional tensions to be addressed
    - needs active engagement by other states, especially P5
    - all states will benefit through these issues being resolved.