Professor Ramesh Thakur is Director of the Centre for Nuclear Non-Proliferation and Disarmament (CNND) in the Crawford School of Public Policy, The Australian National University. Most of his work in the Centre is in relation to the **Asia–Pacific Leadership Network on Nuclear Non-Proliferation and Disarmament (APLN) (**<u>www.a-pln.org</u>). Nuclear weapons pose an existential threat to humanity and indeed to all forms of life on planet Earth. Efforts to achieve a world free of the existence and the threat of use of nuclear weapons are at a critical stage. Serious threats persist from the use or misuse of weapons, whether by design, accident or system malfunction, by nuclear-armed states and terrorist actors, and from the misuse of the civil fuel cycle.

With heightened tensions between Russia and the United States (who between them possess over 90 per cent of all nuclear weapon stocks), steps to reduce stockpiles have stalled, restraint on missile and anti-missile deployments have been abandoned, cooperation on securing surplus plutonium stocks has been abruptly halted, and some leaders have once again dared to threaten the use of nuclear weapons. The 2015 Nuclear Non-Proliferation Treaty (NPT) Review Conference was a failure. There is little prospect of the Comprehensive Test Ban Treaty (CTBT) entering into force, of a treaty to prohibit further production of fissile material for nuclear weapons being negotiated, of denuclearizing North Korea, or of a significantly strengthened non-proliferation treaty regime. The Asia–Pacific region impacts every dimension of the global nuclear agenda, with acute tensions and risks remaining in Northeast Asia and South Asia in particular, accompanied by the steady growth in the size and sophistication of regional nuclear arsenals and the means of their delivery, sparking in turn potentially destabilizing defensive systems.

The APLN has about 85 members from 15 countries across Asia and the Pacific, consisting of former political, official and military leaders in senior executive positions as well as opinion leaders and shapers from other sectors of society. As an advocacy group, the APLN aims to inform and energise public opinion, especially high-level policymakers, to take seriously the very real threats posed by nuclear weapons, and to do everything possible to achieve a world in which they are contained, diminished and eventually eliminated. The APLN works in concert with comparable leadership networks in Europe, Latin America and the United States, all of which are strongly supported by the Washington-based Nuclear Threat Initiative (NTI). APLN members contribute to the nuclear debate by making public statements from time to time, engaging in direct advocacy with regional governments as both public and private opportunities arise, commissioning research and hosting regional seminars and conferences as resources permit.

# Containing, Reducing and Eliminating Nuclear Threats

Ramesh Thakur

Toda Peace Institute Colloquium (March 28, 2017)

## I. The Structural Bias against Nuclear Peace

Former US Defense Secretary William Perry warns that "the danger of a nuclear catastrophe today is greater than during the Cold War." The nuclear peace has held so far owing as much to good luck as sound stewardship. Nuclear weapons may or may not have kept the peace among various groups of rival states; they could be catastrophic for the world if ever used by both sides in a war between nuclear-armed rivals; and the prospects for their use have grown since the end of the Cold War with rising geopolitical tensions in several high-risk theatres involving nuclear powers in eastern Europe, the Middle East, South Asia, the Korean Peninsula, and the South China Sea.

On balance, consequently, nuclear weapons endanger international security more than they provide national security, but nuclear weapons possessing states are trapped in the prism of basing nuclear policies on national calculations only. The overarching context for any discussion of nuclear weapons policy is three sobering reflections:

- For nuclear peace to hold, deterrence and fail-safe mechanisms must work every single time. For nuclear Armageddon to break out, deterrence or fail safe mechanisms need to break down only once. This is not a comforting equation.
- Deterrence stability depends on rational decision-makers being always in office on all sides: a dubious and not very reassuring precondition. How reassured would the world's people feel – including Americans – if the world's nuclear peace depended on Donald Trump's and Kim Jong-un's fingers on nuclear buttons?
- Deterrence stability depends equally critically on there being no rogue launch, human error or system malfunction. As more states acquire nuclear weapons, the risks multiply exponentially with the requirements for rationality in all decision-makers, robust command and control systems in all states, 100 percent reliable fail-safe mechanisms and procedures against accidental and unauthorized launch of nuclear weapons, and unbreachable security measures against terrorists acquiring nuclear weapons. This is an impossibly high bar.

### II. Nuclear Policy Challenge & NPT

**Nuclear Policy Challenge**: How to harness nuclear energy for peaceful uses and development within acceptable safety, security and safeguards parameters

**International Community's Answer**: NPT regime (NPT Treaty, associated treaty-based regimes like CTBT, informal groups and arrangements like NSG, PSI).

But: **NPT flawed** (e.g. 2015 RevCon) **and increasingly limited utility** (e.g. four non-NPT nuclear possessing states)

## III. Second Nuclear Age

- First nuclear age:
  - o overarching ideological rivalry of the bipolar Cold War protagonists,
  - o competitive nuclear arms build-up & doctrines of two superpowers,
  - o development of mechanisms for maintaining strategic stability
  - practice of strategic nuclear policy dialogues among US & allies; and between US allies and former Soviet Union.
  - none of these apply to Asia–Pacific.
- Second nuclear age:
  - multiplicity of nuclear powers with criss-crossing ties of cooperation and conflict,
  - o fragility of command and control systems,
  - $\circ$  threat perceptions between three or more NAS simultaneously,
  - o asymmetric perceptions of military & political utility of NW,
  - o greater complexity of deterrence relations between the nine NAS
  - changes in nuclear posture of one = cascading effect on several others, e.g. India–Pakistan–China (conceptually, politically, strategically),
  - eroding strategic boundaries between nuclear-conventional, regionalglobal, and tactical-strategic weapons,
  - o similarly blurring boundary between cyber, space and nuclear domains,
  - o site of great power rivalry: Europe to Asia
- Fewer nuclear weapons, lesser role in shaping Russia–US relations
- But greater risk of nuclear war:
  - o weaker command and control systems,
  - o more unstable regions possessing these deadly weapons,
  - $\circ$  terrorists wanting them and
  - vulnerability to human error, system malfunction and cyber attack.

## IV. Asia–Pacific in the Second Nuclear Age

- Global nuclear risks & threats also present in Asia, sometimes more acutely
- 4/9 NAS (1/5 NWS but ¾ non-NPT NAS)
- Full spectrum of nuclear weapon status in relation to the NPT:
  - o one NPT-licit nuclear weapon state (China),
  - o two non-NPT nuclear-armed states (India, Pakistan),
  - the world's only NPT defector state (North Korea),
  - three umbrella states (Australia, Japan, South Korea),
  - o vast majority of non-NWS States Parties to the NPT,
  - One P5 (UNSC the global enforcement authority vis-à-vis nuclear peace)
- All nine NAS pay lip-service to NW 'ultimate' elimination, contradicted by actions of all.
- Asian NAS combined stockpiles = 3% of global nuclear arsenals, but warhead numbers growing in all four and in none of the other five

- Sub-continent: toxic cocktail of growing nuclear stockpiles, expanding nuclear platforms, irredentist territorial claims, jihadist groups
- Northeast Asia: three NWS plus North Korea as NAS and South Korea, Japan and Taiwan as major US allies
- Nuclear Power and Asia:
  - $\circ~$  28/25% of no. of global reactors in operation/amount of nuclear electricity
  - o 58/51% of reactors under construction/planned
  - $\circ~$  57/65% percent of share of nuclear electricity from reactors under construction/planned.

## III. An Agenda for Action

The nuclear policy goals can be summarised as: cap and contain, delegitimise, reduce, prohibit, and eliminate. In this five-part agenda, only those possessing nuclear weapons can undertake the first, third and fifth tasks. But the non-nuclear weapon countries, who constitute the overwhelming bulk of the international community, can pursue goals 2 (delegitimisation) and 4 (prohibition) on their own both as an affirmation of global norms (standards as distinct from prevailing patterns of behaviour: that which ought to be, regardless of that which actually is); and as one of the very few means available to them of exerting pressure on the possessor states to pursue the other three goals. This is where the ban treaty comes in.

### Action by NAS:

- Cap and Contain
- Reduce
- Eliminate

### Action by non-NWS (e.g. ban treaty conference starting Wednesday 27<sup>th</sup>):

- Delegitimise
- Prohibit