Nuclear weapons have been a major issue area of global governance since 1945. The question of how to tame nuclear energy and harness it for development, energy and other peaceful purposes, while simultaneously trying to put the genie of nuclear weapons back into the bottle and holding the line on their spread to countries beyond the initial small group, has preoccupied scholars and policymakers alike for almost seven decades. Their efforts notwithstanding, the world remains poised precariously on the very edge of the nuclear precipice. The disturbing reality is that the nuclear peace has held so far owing as much to good luck as to sound stewardship by the major nuclear powers.

There are still almost 18,000 nuclear weapons distributed among the world’s nine nuclear-armed states (Table 1), almost 2,000 of them in a state of high operational readiness. With luck, we could remain safe from their re-use for another six-seven decades. More likely, the numbers of actors with nuclear weapons will grow in the absence of their total elimination and they will be used again – by design, accident, miscalculation or unauthorized launch – with catastrophic consequences for all forms of life on planet Earth.

Global Nuclear Architecture

The architecture of global governance for regulating the possession, use and elimination of nuclear weapons includes the nonproliferation regime centred on (1) the Nuclear Nonproliferation Treaty (NPT, 1968); (2) ad hoc summits to deal with specific components of the problem, with the most recent example being the Nuclear Security Summits (NSS); and (3) blue ribbon international commissions, the most recent of which was the Australia-Japan sponsored International Commission on Nuclear Non-Proliferation and Disarmament (ICNND). These three have provided authoritative roadmaps to walk the world back from the nuclear cliff to the relative safety of a less heavily nuclearized world in the short and medium terms and a denuclearized world in the long term.

In all sectors of global governance, monitoring and enforcing compliance is deeply problematical. The ICNND had recommended the creation of a Centre for Nuclear Non-Proliferation and Disarmament (CNND) which would, as a priority, publish regular...
“State of Play” reports. The CNND was established at the Australian National University in 2011 and published its first report in 2013, just ahead of the NPT Preparatory Committee (PrepCom) meeting in Geneva in April. CNND is a concrete example of the growing numbers, activism, role and influence of civil society organizations as actors in global governance in conducting research, engaging in advocacy, monitoring state performance against international norms, and in myriad of other ways shaping and influencing policy and behaviour of states as the primary actors in world politics.

The 268-page CNND report entitled “Nuclear Weapons: The State of Play” looks like and has the feel of a proper book. But it is neither a research monograph nor a series of individual essays in the form of chapters. Nor is it a set of policy recommendations and prescriptions for action. Rather, it is a report on the implementation of the commitments and action agenda of the NPT Review Conference of May 2010, plus the two NSS that have been held so far in Washington in 2010 and Seoul in 2012, and the ICNND recommendations.

The report compiles a total of 76 agreed outcomes from the NPT Review Conference, 61 from the two Nuclear Security Summits and 76 recommendations from the ICNND, for a grand total of 213 agreed commitments and recommendations to be monitored. Because the ICNND was not governmental but a collection of specialists with some active interest in the subject, it can be expected to set the bar the highest of the three sources. The NPT includes all five nuclear-weapon states (NWS) but has a majority of non-NWS. One would expect it to reflect the balance of interests of the non-NWS majority but not to the point where the nuclear-weapon states veto agreement. The Nuclear Security Summits included almost all relevant state actors with an active nuclear power program but no other participants. It would most likely therefore settle for a lowest common denominator approach and set the bar the lowest of the three sources. States would come prepared to announce “concessions” on matters not of vital interest to them, on which they were already working or believed they could commit to and implement without too much difficulty.

Figure 1 confirms all three assumptions. The two Nuclear Security Summits were occasions for plucking low-hanging fruit and compliance with their outcomes is the highest of the three. The International Commission on Nuclear Non-Proliferation and Disarmament recommendations were the most demanding and compliance with them is the lowest. The NPT Review Conference outcomes fall somewhere between the two.

But what of the actual substance instead of merely looking at the outcomes and recommendations by source? These are analysed under the four broad themes of nuclear disarmament, nuclear non-proliferation, nuclear security and security risks of peaceful uses. The data show pockets of progress that are, however, overshadowed by the persistent drag of historical inertia in sustaining nuclear weapons programs.

Nuclear Disarmament

The stalled nuclear disarmament agenda is shown in Figure 2. Most of even the apparent progress is largely with respect to rhetorical or symbolic undertakings. The “fully implemented” list includes, for example, the 2010 NPT RevCon call for the five nuclear-weapon states to commit to respect their existing commitments on security assurances and to maintain the moratorium on nuclear testing pending the entry into force of the Comprehensive Nuclear Test Ban Treaty (CTBT). Similarly, a good example of “significant progress” is the call on all states that have ratified the CTBT to promote its entry into force.
agreement on further cuts is likely while divisions over missile defence and conventional weapons remain. France and Britain have met their limited disarmament objectives but in China, India and Pakistan nuclear arsenals are growing.

There have been no significant shifts in nuclear doctrine in recent years, although US doctrine has given some acknowledgement to President Barack Obama’s 2009 undertaking to “reduce the role of nuclear weapons in national security strategy,” and an interagency review is examining revised constructs of deterrence and stability. The picture is the same on nuclear force posture. Apart from the reductions in deployed US and Russian strategic weapons under New START, the only significant changes in deployment practice elsewhere have been aimed at enhancing the survivability of nuclear weapons in case of attack. “No progress” has been made in reducing the dangerously high launch-alert status of 2,000 US and Russian weapons.

Nuclear-armed states pay only lip-service to the ultimate elimination of nuclear weapons, and none has committed to any “minimization objective” – let alone abolition. On the evidence of the size of their weapons arsenals, fissile material stocks, force modernisation plans, stated doctrines and known deployment practices, all nine nuclear-armed states foresee indefinite retention of nuclear weapons and a continuing role for them in their security policies.

**Nuclear Nonproliferation**

On nonproliferation too, some of the individual commitments and recommendations that were fully implemented or showed significant progress (Figure 3) turn out to be not very consequential. The best example of this is the call for a conference on a Middle East Nuclear-Weapon-Free Zone (NWFZ) to be convened in 2012. A facilitator and a host government were identified, but the conference itself was indefinitely postponed.

“No Progress” was achieved on safeguards and verification issues and on providing modest additional resources to the International Atomic Energy Agency (IAEA). Additional Comprehensive Safeguards Agreements and Additional Protocols (AP) have entered into force but there is still strong resistance by some states to the idea of making APs obligatory. The IAEA’s evolving state-level approach to safeguards has been criticized – not compellingly – as discriminatory by some who want to return to traditional nuclear material accounting. Many countries are making use of multilateral guidelines in developing national export controls. But the Nuclear Suppliers Group’s 2008 decision to exempt India from its comprehensive safeguards requirement and China’s determination to supply more nuclear reactors to Pakistan, have damaged this key mechanism’s credibility, and no progress has been made towards adopting a criteria-based approach to cooperation agreements with states outside the NPT.

“Minimal Progress” was made on Nuclear-Weapon-Free Zones, nuclear testing and fissile materials. Voluntary moratoria on nuclear tests remained in place until the end of 2012 but North Korea, which never subscribed to the moratorium, conducted its third test in February 2013. Efforts by the five permanent members of the UN Security Council and Germany to negotiate a resolution of the stand-off with Iran have made no real progress. Negotiations on a global ban on the production of fissile material for nuclear weapons purposes are stalemated.

**Nuclear Security, Peaceful Uses**

“Significant progress” was made on national nuclear security regulations. UN Security Council Resolution 1540 has stimulated a substantial increase in the number of states with legislative measures to prohibit proliferation of nuclear weapons. “Some Progress” – the dominant category in nuclear security (Figure 1) – was made on global nuclear architecture; but much of it lacks any means to judge whether commitments are being met. International standards, transparency and accountability are lacking. Significant international cooperation is taking place in detecting and thwarting illicit trafficking, but this needs to be expanded as gaps are identified. Some progress has been made also on sensitive nuclear materials, nuclear forensics, nuclear security culture and advancing the role of nuclear industry.

“Some Progress” also best describes the state of affairs on mitigating proliferation risks of peaceful uses of nuclear energy. Most states are meeting their NPT peaceful use commitments, but non-compliance cases – Iran, North Korea – are cause for concern. Issues of nuclear latency and hedging are not being addressed. The spread of sensitive nuclear technology and the prospective spread of fast breeder reactors...
and plutonium fuels will present serious challenges unless addressed.

Conclusion

Nuclear weapons are the common enemy of humanity. Like chemical and biological weapons of mass destruction, they cannot be disinvented. But like them, nuclear weapons can be controlled, regulated, restricted and outlawed under an international regime that ensures strict compliance through effective and credible inspection and verification. A multi-phased roadmap to abolition would prioritize these steps in the first few years:

- Robust firewalls to separate possession from use of nuclear weapons;
- Significant cuts in existing nuclear arsenals and a freeze on production of fissile materials;
- Further constraints on the deployment of nuclear weapons on the territories of other states, for example through regional Nuclear-Weapon-Free Zones;
- An enforceable international nuclear weapons convention to totally and verifiably destroy all nuclear stockpiles in our lifetime.

The nuclear status quo is not an option. We must make the transition from a world in which the role of nuclear weapons is central to maintaining national and international security, to one where they become progressively marginal and eventually unnecessary. The existence of nuclear weapons is a sufficient guarantee of their proliferation and, some day again, use. Nuclear weapons could not proliferate if they did not exist. Because they do exist, they will proliferate. Conversely, nuclear disarmament is a necessary condition of nuclear nonproliferation. If we want nuclear nonproliferation, we must prepare for nuclear disarmament. And if we fail on disarmament, we must be prepared for proliferation cascade and nuclear weapons use.

Author

Ramesh Thakur | Director of the Centre for Nuclear Non-Proliferation and Disarmament at the Asia-Pacific College of Diplomacy of the Australian National University (ANU) in Canberra. Former vice rector of the United Nations University and Assistant Secretary-General of the United Nations. Co-author of The Responsibility to Protect (2001).

Further information