

Nuclear Arms Control and the Global Order: A View from New Delhi

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The Current Conundrum

The construction of the bipolar nuclear arms control architecture took place over long and tedious negotiations between officials from both nations who came to be known as arms control careerists. These individuals invested hard work and patience in devising innovative solutions to, at least, manage, if not really control, nuclear arms racing. The agreements were made possible since both sides saw better sense in accepting reciprocal concessions rather than getting sucked into an unbridled offence-defence spiral. Especially in the 1960s, after the experience of the Cuban missile crisis, both Washington and Moscow found mutual interest in ensuring creation of mechanisms that could assure strategic stability. Consequently, many bilateral arms control agreements were concluded such as the Anti-Ballistic Missile (ABM) Treaty, the many versions of Strategic Arms Limitation Talks (SALT), Strategic Arms Reduction Talks (START), and the Intermediate Nuclear Forces (INF) Treaty to name a few.

However, over a period of time starting roughly from the turn of the millennium, the painfully crafted nuclear arms control (NAC) instruments have been withering away. In fact, the US and Russia currently stand at the delicate threshold where their bilateral nuclear arms control is held together by the slender thread of only the New START Treaty. This too could snap in 2021 unless the two sides agree to extend the treaty. Signs of this happening at the time of this writing appear quite unclear.

On the other hand, what looks absolutely clear is the rather grim nuclear arms control scenario as old mechanisms fade out and no new ones are in sight. USA and Russia are going through a low phase in their relationship and neither is showing any interest in engaging on nuclear issues. Meanwhile, the number of nuclear players has increased from only these two. Multiple nuclear dyads (US-Russia, US-China, US-DPRK, China-India, India-Pakistan) and the spillover of developments in capability taking place in each dyad onto the other,

creating nuclear chain relations, is a new phenomenon. To further exacerbate the situation, emerging technologies are threatening to intersect with nuclear deterrence in novel ways and none of the nuclear armed states is showing any inclination to manage these developments or even acknowledge the need for doing so. Lastly, a further complication is being created by the re-emergence of old ideas, such as those of low yield weapons for nuclear war fighting, or of limited nuclear war. These concepts had long ago been abandoned as unfeasible and dangerous, but they seem to be staging a comeback into nuclear doctrines. The result of all these developments is a complex and extremely stressed global nuclear conundrum with severe regional implications.

The Long View from New Delhi

New Delhi is one capital that has traditionally been far away from the world of arms control. As a non-nuclear weapons possessor until 1998, and as a country that actively campaigned for the complete elimination of nuclear weapons as a way of safeguarding its national security, India considered bilateral NAC between the US and USSR/Russia as one way, though not necessarily an optimal way, of eventually moving towards nuclear disarmament. It was perceived as a mechanism that had a largely bilateral significance but which, nevertheless, helped reduce nuclear risks, arrested the offence-defence cycle and hence had a benign influence on international security. However, New Delhi was always conscious of the fact that China, whose nuclear capability impinged on its security, was not party to any such controls. Yet, the hope was sustained that the nuclear threat from China would be addressed through universal nuclear disarmament, realised through the Non-proliferation Treaty (NPT). This hope, however, was dashed when the NPT was granted an indefinite and unconditional extension in 1995. Meanwhile, around the same time, pressures on India to join the Comprehensive Test Ban Treaty (CTBT) as a non-nuclear weapon state increased. Keeping its security compulsions in view, India felt pressured to demonstrate its own nuclear weapons capability and establish nuclear deterrence. But, in the process, India's faith in the ability of bilateral arms control or multilateral non-proliferation instruments to attain nuclear disarmament was lost.

Since the possession of nuclear weapons, India is more awake to the more realistic utility of nuclear arms control as an arms race management instrument or a risk reduction instrument. It is for this reason that the ongoing developments in NAC should matter for India, even if these are taking place in the US-Russia bilateral domain. They do impact the global nuclear order, will have implications for China, and thereby also on India. Whether the future trajectory of NAC will result in positive consequences or adverse ones for New Delhi will depend on many factors, including how these are handled. This article highlights four main issues that will have implications at the global and regional levels, for India in particular.

Loss of an NAC model

The nuclear arms control arrangements between the US and USSR/Russia, most of which were underwritten by verification mechanisms, presented themselves as a template for

others to follow. They could be described as a model (even if less than adequate from the disarmament point of view) or an anchor of successful arms race management and their effective implementation provided an incentive for other nuclear dyads to adopt and adapt. In the current circumstances, however, the abandonment of most of these bilateral treaties has led to the loss of an example or mould of nuclear arms control that could have been used bilaterally or multilaterally. While a copy of the written text of the agreement would, of course, be always available, the spirit seems lost. The historical experience of how to arrive at such agreements in an atmosphere of deep mistrust would be lost eventually too, as the habit of nuclear engagement fades away in the case of US and Russia, even before it has been born in the case of other nuclear dyads. Therefore, despite all its imperfections, the NAC architecture was a framework whose loss will have implications for international security.

Presence of Nuclear Cacophony

The vacuum created by the loss of NAC has been filled by an atmosphere of 'free for all' or nuclear cacophony that is allowing a free run towards an offence-defence spiral as countries pursue the concept of absolute security. The idea of mutual vulnerability that underwrote nuclear deterrence, and which sought to be enshrined through the NAC, appears to be a casualty of the process. This can be prominently seen in the context of US-Russia and US-China threat perceptions of one another and their consequent capability build up. Russia and China have long expressed their concern about how the US ballistic missile defence (BMD) would undercut their nuclear deterrence. To address the perceived instability that would be so created, they have moved ahead with the deployment of MIRVed missiles, cruise missiles, and the development of hypersonic glide vehicles (HGV) to defeat the BMD.

In response to these developments, the most recent American Nuclear Posture Review and the BMD Review of 2018 have indicated a new American capability build up. Even though a lot of the ongoing American nuclear modernisation was initiated by President Obama when he approved spending of around \$1.2 trillion between 2017-2046 for upgrades of warheads, delivery systems, command and control systems¹, President Trump's emphasis on new low yield capabilities has added the conversion of some SLBM warheads into lower yield variants and the development of a new sea launched cruise missile. The sentiment in Washington is that while the US was committed to arms control and reductions, Russia and China had raced ahead. Russia had not only MIRVed its missiles, worked on new SSBNs but also revealed plans for the Poseidon underwater nuclear powered drone, a nuclear powered long range cruise missile, and the nuclear capable Avangard HGV. Besides, of course, there were allegations that it was developing a land-based intermediate range missile, prohibited under the bilateral INF treaty. Not surprisingly, therefore, President Trump decided to abandon US commitment to the treaty and announced a clear desire to develop and deploy land-based intermediate range missiles. Another factor of concern for the US is China's possession of such missiles. In fact, nearly 90% of Chinese missiles are in the range of 500 km to 5,500 km.

¹ Benjamin Zala, "How the Next Nuclear Arms Race will be Different from the Last One", *Bulletin of Atomic Scientists*, vol. 75, no.1, p.37.

The result of all this is that the three countries are in the process of acquiring a mix of offensive and defensive capabilities, each responding to the perceived developments being made by the other. Ironically, each is justifying its own build-up as arising from a fear of falling behind the other and hence portraying its own actions as attempts at restoring the strategic balance! In the absence of any nuclear engagement or even a dialogue over doctrines, misperceptions are inevitable as adversaries make the worst case assumption of each other's intentions in an atmosphere of high decibel nuclear noise. India could fall prey to the same as China's nuclear modernisation is perceived as a threat to its own security. The current R & D on MIRVing of missiles and hypersonic technologies is a response to the developments across the border. How far these developments go, and whether they get deployed or not, will depend on what turn the global scenario takes.

New Arms Race about Technologies, Not Numbers

Emergence of new technologies is currently under no kinds of control. Many of these technologies, such as increased use of cyber for networked systems, hypersonic glide vehicles (HGVs), autonomous vehicles for nuclear delivery, and command and control systems using artificial intelligence (AI) etc, will impact nuclear deterrence in unprecedented ways that are not even completely understood yet. For instance, the use of an HGV that can fly at speeds of Mach 5-20 through the upper atmosphere and brings together the attributes of speed, range, manoeuvrability and accuracy would not only be difficult to detect but nearly impossible to track or intercept. This would keep the adversary guessing as to the target of the missile and the kind of warhead it might be carrying. This ambiguity would provide tremendous potential for misunderstanding and could spark inadvertent escalation. The reduction in decision-making time given the speed of the HGVs could compel nations to move towards launch on warning or launch under attack postures which would further raise risks of inadvertence. As articulated by an analyst, "Movement toward the deployment of boost-glide weapons by the US may convince Chinese leaders to consider shifts in strategic posture, including a transition from keeping all nuclear forces at low levels of alert during peacetime in favor of adopting launch-on-warning for at least a portion of its force. Such a "mixed" posture would introduce greater potential for miscalculation."²

While China and Russia justify their own hypersonic programmes as a way of stabilising a situation that had been upset by the American efforts at CGPS and BMD, their hypersonic programmes have made the US feel the need for deployment of space-based sensors and even interceptors for improving its BMD, especially the capability of boost phase interception. This could eventually lead to steps being taken by all to follow in the same direction to defend against hypersonic missiles.

An arms race looks inevitable as countries respond to nuclear modernisation with even non-strategic defensive and offensive technologies such as BMD, anti-satellite, anti-submarine weapons, precision strike missiles, cyber and AI capabilities. These symmetrical and

² Joshua Pollack, "Boost-glide Weapons and US-China Strategic Stability", *Non-proliferation Review*, vol.22, no.2, 2015, pp155-156

asymmetrical responses, especially when used in combination, would create fears that a country's nuclear weapons could be wiped out in a non-nuclear strike. An additional complication is pointed out by one analyst in cases where "nuclear armed states rely on dual use technology such as satellites and communication networks to power both nuclear and conventional missions."³ Fear of loss of such capabilities could push countries towards early use of nuclear weapons. This problem of entanglement is also well explained by other nuclear scholars.⁴

Nations, nevertheless, are pushing ahead in these directions. In fact, the new arms race in these technologies will be even more difficult to control since it is all about asymmetric responses to enhance deterrence as compared to the earlier control over nuclear warhead numbers or delivery systems. Long before such an arms race had broken out, well known nuclear strategists Barry Buzan and E Herring had defined an arms race as a situation where "winning is the objective of the exercise in terms of one party achieving a decisive change in the balance of military power."⁵ This action-reaction dynamic between nations and between strategic and non-strategic technologies is evident today. Each is trying to create uncertainty to enhance its deterrence; but in moments of crisis, it could increase pressures, panic and lead to undesirable actions. This would particularly increase the unease of a nation with small nuclear forces and could tempt them towards nuclear pre-emption. The chances of stumbling into a nuclear war, therefore, are significantly heightened in the presence of such technologies.

India will have to take these developments into account and craft its own responses. For a country that is cash strapped and wishing to focus on economic growth and development, such distractions will be costly. Yet, the nation may feel compelled to respond given that technological disparity in weapon systems that will certainly come into play in China sooner rather than later, would be seen to have a detrimental impact on its own nuclear deterrence. The risk of getting sucked into an arms race is, therefore, real and now.

Absence of Shared Sense of Risks of Strategic Instability

The Cuban missile crisis brought home to Washington and Moscow the risks of deterrence instability. Thereafter, conscious attempts were made by both sides to create mechanisms for handling the two dimensions of such instability: crisis instability, which could tempt nuclear use due to miscalculation or misperception; and arms race instability which arose from a desire to stay ahead of the adversary. NAC was consequently seen as an endeavour in mutual interest to enable mutually agreed measures to alleviate mutually perceived risks.

The shared sense of risks of strategic instability and hence a shared interest in mitigating them, however, has withered away in recent times. In fact, if current nuclear doctrines are an indication, more nuclear armed states seem to be seduced by the benefits of strategic instability. States like Pakistan or North Korea have anyway long believed that a sense of

³ Zala, n.1, p. 41

⁴ James Acton, Escalation through Entanglement: How the Vulnerability of Command and Control Systems Raises the Risk of an Inadvertent Nuclear War", *International Security*, Vol 43, Issue 1, Summer 2018 pp. 56-99

⁵ Barry Buzan & E Herring, *The Arms Dynamic in World Politics* (Boulder & London: Lynne Reiner, 1998), p. 77

instability created through nuclear brinkmanship or irresponsible behaviour enhances their nuclear deterrence. This was well explained by an American analyst when he wrote Pakistan is “not searching for nuclear stability but for managed instability. The purpose of this instability is to keep India off balance, to resist agreement, to underpin uncertainty, and to generate ambiguity.”⁶ But in the present moment, even the USA under President Trump or Russia’s President Putin has shown a propensity towards similar behaviour. Their pronouncements on the use of low yield nuclear weapons to force de-escalation fall into this category.

The seeming popularity of doctrines that rest on ambiguity and encourage the creation of risks as a way of enhancing credibility of deterrence in the belief (false and dangerous though it is) that instability can be managed, could impact India’s continued commitment to a doctrine that is currently based on transparency, clarity and no first use. This could come under attack from the hyper-nationalists who begin to believe that India’s nuclear doctrine is a misfit in the current nuclear context.

Should India be Interested in NAC?

Over the last two decades India has been engaged in the operationalisation of its concept of credible minimum deterrence. This process has involved taking steps such as building a survivable warhead stockpile, establishing robust command and control and testing and deploying reliable delivery vehicles of requisite ranges. Amid this flurry of activity, nuclear arms control has hardly been on the minds of India’s policy makers. In fact, no official statements on India’s view on multilateral or bilateral nuclear arms control, in which it might be itself involved, have been forthcoming over the last two decades, except on the FMCT or the PAROS in the CD. But, it may be time now to assess the value of nuclear arms control, especially in a bilateral context with China, in order to increase nuclear stability while rationalising its own arms build-up.

The challenges to this proposition, however, could come from two quarters. The first, of course, would be a lack of understanding within the country about the potential merits of nuclear arms control. Many, in fact, are even questioning the need for it given that the country is still building the arsenal. Moreover, having seen the arms control process only from a distance and having perceived it as an inadequate tool for nuclear disarmament, it is not surprising that India does not have a very favourable view of NAC. Neither has there been investment any serious research and analysis, either at the governmental or non-governmental level, on the actual value of arms control as a risk reduction or a stability enhancing measure that would add to and not detract from national security.

The second challenge can be seen in China’s attitude towards NAC in general, and towards nuclear India in particular. Premier Xi Jinping has made it amply clear to the US president that he is not interested in any such negotiations. In April 2019 a spokesperson for China’s

⁶ Shaun Gregory, “Pak Toxic Chaos Plan Changes Nuke Debate”, *Times of India*, 06 Mar 2011.

Foreign Ministry categorically stated that his country “will not participate in any negotiation to a trilateral nuclear disarmament agreement.”⁷ The argument against such participation is premised on the Chinese arsenal being much smaller than that of the US and Russia. And, having refused it to the US, certainly no keenness on such negotiations with India can be expected given that China has refused to take any action that appears to legitimise India's nuclear weapons. From India's perspective, however, the only meaningful NAC is possible between India and China, which could have a benign impact on the India-Pakistan relationship too. But, China still rhetorically maintains its loyalty to UNSCR 1172 that seeks a rollback and elimination of India's (and Pakistan's nuclear weapons). This is unlikely to happen and both China and India are engaged in an active game of nuclear deterrence and capability build up with all its attendant risks as described in the earlier section. In fact, it is most likely that as India's nuclear capability grows and is more credibly deployed against China, Beijing will see sense in risk reduction measures. For the time being though, its eyes are set on the US and it does not want to bind itself to any agreements that might constrain its future capability.

Irrespective of how China reacts to the idea, it should be in India's interest to augment its understanding of NAC as a security enhancing process that can help transcend zero sum relationships. By its very nature, nuclear arms control requires negotiations with an adversary and the greater the hostility, the more urgent but also the more difficult it is to engage meaningfully to arrive at constructive results. In order to resolve this dilemma, political statesmanship is needed which can look beyond momentary benefits in favour of long term interests.

Nuclear arms control is not so much about eliminating a weapon system as it is about shaping a predictable nuclear relationship through a kind of managed transparency that helps avoid strategic planning based on worst case scenarios, miscalculations and perceptual errors. Nuclear arms control negotiations, even if they do not yield any concrete outcomes, can still help inculcate habits of engagement, produce insights into each other's strategic thinking and help foster a shared understanding of key concepts and dangers.

Some Ideas for Future NAC Possibilities

Prospects for NAC look particularly dim at this juncture. However, there is every reason to be optimistic that leaders in the future will see sense in accepting mutual restrictions that mitigate risks and arrest the arms race which is bound to drain resources of all. Though the tweeterrances of President Trump are not a particularly reliable guide to US policy, it is evident that he has expressed some desire for NAC, especially in a trilateral format. As and when this becomes possible, some ideas must be readily available for nations to adopt. It is with this objective in view that the following section outlines a few ideas for future NAC possibilities.

⁷ Wu Riqiang, “Trilateral Arms Control Initiative: A Chinese Perspective”, *Bulletin of Atomic Scientists*, Sep 4, 2019

1. Initiation of strategic dialogues to understand each other's threat perceptions and nuclear doctrines. This could start simply with an exchange of views to explain one's threat perceptions, doctrines and force postures. This would go a long way towards reducing misperceptions that get generated due to non-engagement and as both sides hedge against presumed adversary capabilities. Greater engagement on nuclear doctrines and force structures would be useful for achieving strategic stability.
2. Acknowledgement of mutual vulnerability as a pre-requisite for deterrence. Public renunciation of the concept of absolute security would help all sides accept mutual restraints on strategic offensive and defensive systems. This would be akin to the famous Reagan–Gorbachev statement of Reykjavik that had led to the renunciation of the concept of nuclear war fighting. Acceptance of measures being taken by the adversary to ensure his nuclear force survivability to cause unacceptable damage, and hence mutual vulnerability to each other's damage will have to be the key to credible, and easy to establish, deterrence. Arms control should be able to guarantee this much.
3. Crisis stability can be significantly increased by formalising low alert levels. Fortunately, the arsenals of China, India and Pakistan are already in such a state. An agreement that formalises this would be a useful step towards crisis stability especially once new technologies compress response timelines.
4. Joint studies or movies on effects of deterrence breakdown in order to fire the popular imagination in this field can be a supplementary effort to build domestic constituencies that support NAC. One can today sense a large amount of complacency or apathy among the general public on the issue of nuclear war, unlike the decades of the Cold War when regular drills, nuclear alarms and exercises kept the population apprised of the dangers.
5. Formalisation of no first use (NFU) as a treaty. Currently, only China and India have publicly declared such a doctrine. This is dismissed by others as a declaratory posture while the USA argues that its extended deterrence commitments do not allow it to accept NFU. However, the strategic or pure military logic of the NFU is often missed or ignored. Use of nuclear weapons by any country that faces an adversary with a secure second strike capability could only result in having to face nuclear retaliation, a situation that would not ease any problems for the first user. Therefore, there is an utter dearth of scenarios where first use of the nuclear weapon could bring political dividends and make the use worthwhile. NFU makes even more sense when one faces an adversary with a small nuclear arsenal who is likely to be extremely sensitive to the survival of his capability to cause unacceptable damage. In such a case, granting him the confidence that the adversary would not interfere with that capability would let him stay away from the nuclear trigger rather than putting him on the edge with a first use threat. Lastly, the NFU is likely to become the default strategy, even if undeclared, as the blurring of conventional and nuclear lines with the increasing trend towards dual-use systems takes centre stage.

Besides India, China too has proposed a multilateral NFU treaty, or at least a trilateral statement that includes USA, Russia and China. China wants USA and Russia to join it in this endeavour which “could build confidence and reduce the role of nuclear weapons in national security policy, and therefore would be a worthwhile goal for trilateral arms control.”⁸ While no positive response has been forthcoming from either nation, there has been the emergence of incipient debates in Beijing and New Delhi on whether their NFU commitments need a revision – not towards nuclear first use but towards an injection of greater ambiguity. No official changes have yet been announced, but the expressions are perhaps an indication of being influenced by the predominant trends that seem to favour declared first use doctrines. If any such changes were to come about in the nuclear doctrines of China and India, it would be a regressive, dangerous and militarily foolish step to take. But it would also prove the power of nuclear cacophony and why nuclear behaviour can be contagious. A universal NFU, therefore, could be a worthwhile objective to pursue.

The above list is by no means exhaustive. None of them is easy to do either, especially in the current political climate. In fact, some could even criticise these possibilities for not being truly nuclear arms control. Perhaps, that is the case. But, given the changed contours of the global nuclear order, purist NAC of the Cold War times may not be possible. New pathways to nuclear risk reduction and those that decrease the salience of nuclear weapons could also be seen as arms control of sorts. Therefore, it is essential to continue to explore thoughts on the matter that can be thrashed out for their acceptability by nuclear armed nations. The first mindset change that is necessary is the acceptance of the advantages of NAC for enhancing predictability, transparency and constraint, so as to avoid exacerbation of political conflicts. And this would be most useful at a time when inter-state trust deficits are high. NAC can also be seen as an interim measure until universal nuclear disarmament is realised.

During the journey to an NFWF, which is likely to be long and arduous, NAC can provide a useful resting place. All nuclear armed states will have to be party to this endeavour. Each will have to find its own reasons to engage with the process. India would be most comfortable in accommodating NAC when it is crafted as an instrument that reduces risks in the short term, and pushes the case for nuclear disarmament in the long term.

⁸ Ibid.

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