Nuclear Arms Control and CBMs: Prospects and Challenges

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Over the last 15 years, India and Pakistan have engaged in operationalizing their respective strategies of ‘credible minimum deterrence.’ Thus, they focused on building stockpiles of nuclear warheads and testing and inducting delivery systems of varying ranges. The two countries are believed to have accumulated a roughly equal number of nuclear warheads—though Pakistan’s stockpile is believed to contain a couple dozen more than India’s. Regarding nuclear delivery systems, while Pakistan has tested missiles ranging from 60 km to 2,500 km, India has done the same for 150 km to 5,000 km. These vectors, however, are at different stages of operationalization. A look at the pattern of testing reveals that Pakistan focuses on either very short range (Nasr and Abdali) or long range missiles of over 2,000 km. In India, the spotlight currently appears set on IRBMs (Agni IV and V).

In this process of capability enhancement, little if any thought has been given to nuclear arms control (NAC), which would include explicit unilateral or negotiated measures designed to regulate some aspect of capability or potential capability. In fact, the India-Pakistan relationship suffered from a huge trust deficit from 1999-2009. Soon after the nuclear tests in 1998, both governments crafted a number of very forward looking confidence building measures (CBMs) as part of their February 1999 bilateral memorandum of understanding (MoU) signed in Lahore. Most of the CBMs, however, were never implemented. Within three months of the MoU agreement India found that Pakistan mounted a covert operation across the line of control (LoC) in Kargil. In the summer a mini-war broke out between the two countries in which scores of Indian soldiers lost their lives. The biggest casualty of the crisis was the trust built up earlier in Lahore. A trust deficit has always dominated relations between India and Pakistan, especially after the repeated acts of terrorism planned in and supported by Pakistan—the latest being in Mumbai in November 2008.

India’s problems thus are that it must face China, which is modernizing its military forces and compels parallel Indian modernization. Yet, on the other hand India must contend with an asymmetric strategy emanating from Pakistan. A further perceived danger is the possibility, however remote, of a two-front war enabled by Sino-Pak cooperation. Under these circumstances constructing an arms control regime is a huge challenge for India.

Given this background of mistrust and parallel military modernization programs, it is hardly surprising that Pakistan and India have not placed serious thought on NAC. In fact, the first reaction to suggestions of NAC amongst many in Delhi’s strategic circles, and possibly Islamabad’s, is to question whether their country has enough nuclear weapons or capabilities. The general belief is that building credible deterrence remains a work in progress. Hence arms control is viewed as premature.

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1 The regulations or restrictions may apply to the location, amount, readiness, use or types of weapons.
A second reaction that dismisses NAC is the lack of conducive political conditions. Of course, the
dilemma over whether the right political atmosphere exists to foster arms control or whether arms
control can create cordial conditions has never been resolved conclusively—not even during the Cold
War. Several analysts concluded that efforts toward arms control during the 1970s and mid-1980s
never made much progress because of the “depth of disagreement between East and West. There
were constant antagonisms between NATO and the Soviet Union, with frequent allegations of
violations of the existing CBMs that hindered and detracted from relations between the two blocs.\(^2\)
The situation changed only in April 1986 with new initiatives from Soviet President Mikhail
Gorbachev. These initiatives radically altered the political atmosphere and opened the way for
nuclear and conventional arms control. If the above is true, how can the countries of South Asia be
expected to engage in NAC and CBMs with such strained political relations?

This article argues that nuclear learning in South Asia has been affected by the absence of any
progress in arms control and suggests that irrespective of the state of political relations between
India, Pakistan, and China, the time for creation of NAC and CBMs architecture has arrived. The
deeper the political mistrust, the greater the need for NAC in order to minimize, if not obviate,
chances of miscalculation or accidental escalation. As Hedley Bull pointed out in the 1960s, the
United States and Soviet Union being locked in a political and ideological conflict “did not mean that
they could not recognize common interests in avoiding a ruinous nuclear war, or cooperate to
advance these common interests.”\(^3\)

Given that nuclear weapons are here to stay until universal nuclear disarmament can occur, and given
that existential risks of their inadvertent use and concerns over nuclear security accompany nuclear
weapons, it is only prudent that countries try to identify and accept measures that can help alleviate
these concerns to the extent possible. This is even more necessary as countries move towards
acquisition of a mix of offensive and defensive capabilities, where every act of one side evokes a
response from the other. Consequently, as arsenals grow, capabilities increase, and infrastructure
expands, so will the risks of events triggered by improper leadership judgment and involuntarily
offence-defense spirals. NAC can provide one way of stabilizing deterrence by redressing crisis
instability caused by pre-emptive pressure and arms race instability.

This paper examines the need, rationale, and mechanics of NAC. It is broadly divided into three
sections. The first examines the purpose and prerequisites of NAC in a general manner derived from
Cold War experiences of the superpowers. The second applies these generic conclusions to the
specific context of the India-Pakistan nuclear relationship. This section establishes the
unquestionable relevance of NAC and examines the significant challenges standing in its way, which
has stymied positive nuclear learning. Finally, the paper concludes with some suggestions on
possible future nuclear CBMs and arms control measures, which will augment the learning curve for
the region.

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\(^2\) For details see Kevin Wright, *Arms Control and Security: The Changing Role of Conventional Arms Control in

\(^3\) Hedley Bull, *The Control of the Arms Race: Disarmament and Arms Control in the Missile Age* (New York:
**Purpose and Prerequisites of Nuclear Arms Control**

Countries build nuclear weapons to deter against an adversary’s nuclear weapons through the threat of retaliation. However, deterrence stability is prone to two problems – probabilities of nuclear use and prospects of nuclear arms race. The first problem derives from a doctrine of deliberately use and the risk of an inadvertent use through miscalculation or misperception. The second problem arises from a desire to stay ahead of an adversary’s offensive or defensive nuclear capability, which eventually leads to an unstable arms race.

NAC can be an effective tool to address these two problems because it enables mutually agreed measures to alleviate mutually perceived risks. NAC can range from efforts at increasing transparency such as through an exchange of doctrines, to more specific elimination of classes of weapons or their uses, or even a regulation of certain military activities or deployments. The basic objective is to enhance the understanding of each other’s nuclear doctrines and capabilities, reduce the aspects of unpredictability, and help avoid nuclear war. In fact, the very process of arms control negotiations creates better communication and understanding, reduces hostilities, and helps improve political relationships. For successful implementation of NAC, certain pre-conditions are necessary. One of the most important is a shared interest between negotiating nations on the need to avoid deterrence breakdowns and recognize that nuclear war brings no benefits. In the absence of a shared mutuality of interest, NAC is certain to flounder.

A second prerequisite is the acceptance of NAC as a worthy objective by national leaderships. In a democracy, this would imply a broad consensus between the major political parties to acknowledge NAC as a matter of the highest national interest and accord it requisite priority. This acceptance is critical if negotiations are to steer clear of party politics. At the same time, political consensus is also essential to imbue the arms control process with a certain confidence that outlasts changes in government. In a more military-dominated system, acceptance of the logic and rationale for arms control as a worthwhile pursuit is equally important. By their very nature militaries are reluctant to limit their fighting capabilities. Therefore, forging consensus within diverse political parties as well as convincing national military leadership to accept the centrality of arms control is an uphill task. Unless all stake-holders consider it worthwhile, NAC can quickly degenerate into a futile exercise.

Thirdly, having accepted NAC as a national objective, the nation must exhibit a readiness to invest in negotiations and decision-making. NAC is negotiated in relationships that are difficult and even hostile, which is certain to make the exercise a complex, drawn-out process. Hence, the state must commit time and manpower to maneuver through political negotiations and technical issues. The following paragraphs apply these lessons to the context of India-Pakistan nuclear relations. As will become evident, the need for NAC between these two countries is unquestionable. The risks that afflict this relationship demand the highest level of priority in their mitigation, but the challenges are numerous and difficult.
Challenges to Indo – Pak NAC

India and Pakistan share a six-decade-long history of confrontation. Territorial disputes remain unresolved and without a clear-cut demarcation of the international boundary, border skirmishes occur frequently across the line of control. The danger of these escalating to a larger conflict always exists. In fact, chances of conflict are exacerbated and the prospects of arms control are dampened if there is a pervasive belief that states are complicit in the use of terrorism as an instrument of state policy. Continuation of such acts has the potential of breaching India’s tolerance threshold, which would lead to a viscous circle of escalation. India’s concept of ‘limited war’ or the calibrated use of military force is amongst the several options that India might be forced to choose as result of India’s persistent hypothesis of Pakistan’s complicity. But the presence of nuclear weapons obviously makes the military option a risky game.

The challenges to South Asian NAC appear enormous and can be divided into two categories: general and nuclear specific. Amongst the general problems, the most obvious is the deep rooted mistrust that has existed between the two countries since partition. The wars in 1947, 1965, 1971, the Kargil conflict in 1999, and major terrorist incidents in 2001 and 2008—in addition to the myriad smaller ones—have only aggravated this mistrust.

Meanwhile, there is a long history of failed CBMs. Yet, both countries are not new to the concept of confidence building. They negotiated at least two significant documents in the last 65 years. The first was the Simla agreement in 1972, which established the “commitment to peaceful coexistence, respect for each other’s territorial integrity and sovereignty and non-interference.” Both sides also agreed to “refrain from [the] threat or use of force,” to respect the LoC and not to “unilaterally alter the situation.”

In 1999, more specific nuclear CBMs were concluded as part of the Lahore MoU but have ultimately not been executed. Among others, these included agreements to exchange information on nuclear doctrines and security concepts, provide advance notification of ballistic missile flight tests, provide prompt notification of nuclear accidents or unauthorized or unexplained incidents, engage in bilateral consultations on security, disarmament and non-proliferation, and establish communication hotlines to avert crisis situations. The only Indo-Pak agreement not yet violated is the 1988 agreement prohibiting attacks on each other’s nuclear facilities. Every year on January 1 both sides exchange a list of their nuclear installations. The overall atmosphere, however, is still one of low trust and confidence.

Yet another challenge to NAC arises from divergent threat perceptions. Pakistan has often expressed concern with India’s size and the Pakistani military harbors a sense of injustice regarding the

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4 In India, there is widespread belief that a Pakistan’s Inter-Service Intelligence (ISI) has facilitated acts of terrorism. In some worse-case threat perceptions, it is feared that Pakistan may either be incapable of controlling extremist forces within its territory or may even use these forces for deliberate nuclear terrorism against India. Thus, India’s responses stem from such a pervasive belief.

allocation of resources and military assets at partition. Put simply, Pakistan resents India for having forced it to “start its independent career as a weak nation.”\(^6\) Hence, for the last six decades Islamabad has looked for ways to equalize its perceived power asymmetry with India. Over the years Pakistan even used this sentiment to keep the threat of India alive as the socio-economic, technological, and political trajectories of the nation veered in opposite directions. This tendency distracts Pakistan’s population from the dismal state of affairs within their country. Today, this dynamic not only seriously damages Pakistan’s own progress and economic growth but also dims the prospects for bilateral arms control.

In the nuclear-specific domain, challenges to NAC are linked with five asymmetries. The first is an asymmetry in the role of nuclear weapons. Indian nuclear doctrine defines a narrow role for nuclear deterrence, where weapons are meant to safeguard the country against nuclear coercion and blackmail but not seen as useful for other purposes. On the other hand, India believes Pakistan’s weapons are less for deterrence and more meant to provide immunity so the country can pursue other modes of conflict including covert aggression through sub-conventional means. Deterring Indian use of nuclear weapons is actually the least important function of Pakistan’s weapons, which are meant more as a shield against conventional attack. Therefore, nuclear weapons provide Pakistan with immunity to indulge in aggressive military strategies that harbor political ambitions.

A second asymmetry exists amongst Indian and Pakistani nuclear doctrines. India’s written doctrine opts for a retaliation-only policy. Deterrence in this case is premised on the threat of assured retaliation causing unacceptable damage and enables India to adopt a more relaxed force posture. By placing the onus of escalation on the adversary while retaining the initiative of punitive nuclear retaliation, India abjures nuclear brinkmanship and even releases the adversary from pressures to use its nuclear forces quickly lest they be lost due to pre-emption. In contrast, India believes Pakistan professes a first use doctrine. Pakistan is focused on developing tactical nuclear missiles as a “quick reaction weapon.”\(^7\) In order for Pakistan’s weapons to provide any advantage they must be used first; however, a decapitating or disarming first strike is made virtually impossible as each side has a credible second-strike capability. Nonetheless, Pakistan’s doctrinal perception pressures it to acquire more warheads and establish a more delegated C2 structure that can incorporate battlefield nuclear weapons. This doctrinal asymmetry carries the risk of pushing both countries into crisis and arms race instability.

Thirdly, there is an asymmetry in the desire for strategic stability. This is a huge challenge since a common desire for stability is an essential pre-requisite for NAC. Yet, Pakistan perceives greater utility in keeping its nuclear relationship with India unstable. As put by one analyst, 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.”\(^8\) Besides targeting India, instability is meant equally to magnify fears within the international community by

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\(^7\) This is how the press statement issued by Pakistan Inter Services Public Relations Directorate described the Nasr missile after its maiden test on April 19, 2011.

suggesting the possibility of a nuclear exchange. The Pakistani Army presumes that a concerned international community (especially the United States) would restrain India from using military force. Evidently, Pakistan’s confidence in managing instability is far greater than India’s.

A fourth asymmetry lies in the objective sought from arms control by the two countries. While India seeks strategic stability by addressing weapons or capabilities that exacerbate first strike fears and crisis instability, Pakistan perceives a greater threat from India's conventional superiority and is keener to link conventional arms control to NAC. Islamabad has always argued that since India’s conventional capability is superior to that of Pakistan, it has no option but to increase its reliance on nuclear weapons to deter India. In such a situation, it seeks parallel conventional arms control. However, a new twist has been added since India’s threat perception of China impinges on its calculation of required conventional capability. Moreover, the Sino-Pak strategic nexus adds to India’s security concerns. In fact, the complex state of the political relationship between China, India, and Pakistan produces a tough case for creating a tripartite arms control agreement. Constructing NAC that simultaneously addresses threats at all levels of conflict—sub-conventional, conventional, and nuclear—has never before been attempted.

Lastly, there is an asymmetry in the decision-making authorities of India and Pakistan. In India, the democratic political establishment controls all foreign policy. India’s military is only asked to provide inputs where necessary and execute tasking. In Pakistan, on the contrary, all decisions related to nuclear policymaking and especially those related to India are taken by the military.

**Suggestions for NAC and CBMs in South Asia**

The current state of nuclear affairs in South Asia leaves much to be desired. In fact, the challenges enumerated on earlier can only be surmounted if the relevant participants share an equal sense of the dangers presented by nuclear weapons and urgency of lengthening the fuse of any crisis. It is with the hope that such a day will dawn, sooner rather than later, that some suggestions are offered below. These range from reciprocal measures aimed at enhancing confidence by facilitating conceptual clarity, to more specific suggestions on weapon systems. Each recommendation would be useful for addressing either first strike instability, arms race instability, or both.

**Clarity on Nuclear Doctrines and Force Structures**

While India formulated a written nuclear doctrine and put it in the public domain in 1999, Pakistan never reciprocated. Greater transparency in nuclear doctrines and force structures can be useful for achieving arms race stability. Confidence in understanding the nature and direction of the other side’s forces provides a certain amount of transparency and predictability. Thus, it alleviates concerns of arms racing. For instance, the character of India’s nuclear forces, per its doctrine, is “effective, enduring, diverse, flexible, and responsive.” Such a clear statement provides notice on the capabilities and aims to remove ambiguity. It announces that India focuses on operationalizing its delivery capabilities via mobile long range missiles, including SLBMs, and the establishment of a robust command and control system. As countries improve their space surveillance technology, a certain transparency of the force structure is inevitable. But a negotiated approach is useful to
understand the future trajectories of development plans so that both sides need not hedge against presumed adversary capabilities.

**Transparency in Survivability Measures**

A secure second-strike capability forms the bedrock of stable deterrence. Hence, development of, and transparency regarding, survivable capabilities, can alleviate pressures for preemption. This improves crisis stability by credibly promising assured retaliation. The construction of missile silos, operationalization of sea based deterrence, and increased C2 robustness for also do so. Countries moving in the direction of these developments and maintaining a certain transparency about them foster strategic stability and lower the chances of deterrence breakdown.

**Formalizing Low-Alert Statuses**

Washington and Moscow’s NAC agenda includes measures that lower the alert levels of their nuclear arsenals. Since both countries maintain a significant part of their force on hair-trigger alert, de-alerting and de-mating warheads increases crisis stability. Fortunately, China, India, and Pakistan’s arsenals are already in such a state. However, an agreement that formalizes the low-alert status of each country’s arsenal could be a further step towards stability. If verification could be part of the agreement, it would also be a huge confidence booster. Yet, the political and logistical feasibility of such an agreement poses significant hurdles.

**Exchange of Information on Nuclear Safety and Security**

Given that the threat of nuclear terrorism looms large over the region, South Asia’s nuclear states have an opportunity to enhance confidence by exchanging information on their practices and procedures for maintaining nuclear safety and security. Adherence to the many international conventions in these areas as well as a joint regional center focused on the threat is a possibility worth exploring. This center could distribute region wide information on safety and security best practices.

**Joint Study on Effects of Nuclear Explosions**

No significant attention has been paid to the likely effects of a nuclear weapons exchange in any of the three countries identified above. Given the regions’ high population density and the fact that modern mega cities use material that could maximize the thermal and blast effects of a nuclear explosion, it may be useful to conduct a joint study to assess the damage that nuclear arsenals would inflict on population centers. Such a study could be an effective method of calculating the cost-benefit aspects of nuclear war. This would enhance deterrence by making China, India, and Pakistan understand and appreciate the likely extent of damage if nuclear weapons were used.

**Limits on BMD**

Defense and deterrence have long been thought mutually exclusive. The ability to defend against another’s nuclear strike is believed to lessen its sense of vulnerability, tempt it toward nuclear pre-
emption, and thereby degrade the other’s deterrence. Consequently, during the Cold War years, the United States and Soviet Union agreed to keep each other mutually vulnerable by severely restricting their deployment of anti-ballistic missile (ABM). For instance, the ABM treaty of 1972 mandated that both sides defend no more than one site each with no more than 100 interceptors.

Turning to South Asia, one sees that BMD is beginning to make its presence felt. Given Pakistani doctrine and the danger of inadvertent use, India perceives BMD as an insurance measure to reduce damage should the worst happen. At the same time, China’s ABM capability is deployed with America’s nuclear arsenal in mind. This development obviously casts a shadow over Indian doctrine and makes Indian BMD a sort of necessary evil. In Islamabad, however, the Indian step has been perceived as destabilizing: it degrades Pakistan’s nuclear deterrence posture and fears arise that BMD enables India to engage in limited nuclear war. Pakistan’s obvious response has been to increase the number and sophistication of its missiles so as to saturate Indian BMD. In turn, Pakistan’s actions raise Indian threat perceptions, especially given the reality of the Sino-Pak strategic nexus. This three way nuclear relationship and the induction of BMD complicates the situation.

Despite BMDs complicating effects, NAC can still be attempted. At one level with China, an ABM treaty that allows BMD over a fixed number of mutually agreed upon sites should be explored. Given that both countries have similar nuclear doctrines premised on no-first use and deterrence by punishment, BMD should logically be used for retaliatory capabilities—including command and control structures. Such an agreement would not only stabilize deterrence but also help alleviate arms race instability. If BMD can be mutually deployed to improve the survivability of retaliatory assets and nuclear command authorities, an agreement could increase deterrence stability by ruling out the possibility of a disarming first strike. At the same time, all sides would evade the defense-offense spiral. With Pakistan, NAC in an environment where BMD exists could occur through the fostering of better understanding and clarity on nuclear doctrine. For instance, it is important for India to explain that an NFU doctrine with BMD in no way increases the chance of pre-emption. Also, an India-China agreement on the subject could go a fair distance in psychologically alleviating Pakistani concerns on the matter.

Controls on MIRVed Missiles

China is believed to have MIRV technology but it is unclear whether Beijing has deployed it. Meanwhile, India is certainly moving toward MIRVs and it is only a matter of time until Pakistan also develops or acquires MIRV missiles. Once China, India, and Pakistan deploy MIRVs, strategic stability will suffer because this capability produces a temptation for pre-emption. With their greater accuracy, multiple warheads become essentially first strike weapons. For the attacking state, a MIRV provides the promise of being able to carry out a disarming counter-force strike. Meanwhile, missiles with many warheads also become attractive targets for the adversary too, creating an urge to strike MIRV missiles before they are launched. Therefore, the use or lose dilemma is heightened. Moreover, in a crisis, the states with MIRV technology might be tempted to strike first in hopes of gaining a war-winning advantage.
An agreement whereby all sides agree not to develop MIRV missiles would contribute to fostering crisis stability. Single warhead missiles present much less tempting targets: a pre-emption strategy would require more warheads be expended than could be destroyed. It would be far more worthwhile for India, China, and Pakistan to arrive at a mutual understanding on this technology rather than follow the dangerous path taken by Washington and Moscow. The three South Asian powers would only arrive at the realization that the United States echoed in its latest Nuclear Posture Review, which mandates the de-MIRVing of its missiles as a step towards strategic stability.

The case for mutual agreement on MIRV missiles may appear unfeasible because countries with ‘minimum deterrence’ doctrines might find it more useful to have smaller numbers of MIRV missiles. But some strategic stability must be established. In this case, it may be worthwhile to link MIRV capabilities with NFU. Doing so will rule out pre-emption since it reduces risks generated by the existence of MIRV arsenals and functions as effective NAC.

**Conclusion**

NCA and CBMs cannot eliminate political conflicts. Nor are they a solution to outstanding security issues. However, they can work to avoid the exacerbation of political conflicts by enhancing predictability, transparency, and constraint. Nuclear learning in South Asia will improve if both sides develop an understanding or mutually agreed upon proscription or limitation on acquisition, deployment, or use of some weapon systems. For successful NAC, the basis of certain principles and constraining some capabilities will not only reduce the chance of accident but also limit the damage and assure stability. The most important of these is the equity of benefits so that neither side is left nursing a sense of loss. During negotiations, there has to be a flexible approach that allows reciprocal concessions to be made and accepted. Rigid positions that allow no room for maneuverability are bound to fail. Domestic acceptability of the agreements also must be ensured through the construction of political legitimacy. This requires engaging with different stakeholders such as political parties, the armed forces, defense industries, etc. Above all, any such attempts will require vast amounts of patience and perseverance. The entire process is likely to come up against attitudinal and political hurdles and will require deft, determined navigation. NAC must be premised on the absolute belief that arriving at an agreement is in the best interest of the nations—individually and collectively.