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India and Pakistan's Nuclear Doctrines and Posture: A Comparative Analysis

September 9, 2016 / 0 Comments / in Vol 11 No 3 /

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Abstract

(Overt nuclearization by India and Pakistan in May 1998 threw up doctrinal challenges for the strategist communities of the two countries¹, which had until then been conveniently swept under the carpet. International pressures with regard to non-proliferation as well as safety and security of nuclear war-heads and other nuclear facilities, especially after 9/11, restricted the space for free thought process available to the strategists of both the countries. The doctrines that have so far emerged reflect

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more of the apologists' standpoints with respect to international concerns, rather than offering robust doctrinal statements focused at operational intent. Having preponderance in conventional arms, India subscribed to the 'No First Use' concept but, soon after, started diluting it by attaching conditionalities to it²; and having un-matching conventional capability, Pakistan retained the options of 'First Use'³. Ever since 1998, doctrines of both the countries are going through the pangs of evolution⁴. The doctrines of the two countries are mismatched. India intends to deter nuclear use by Pakistan while Pakistan's nuclear weapons are meant to compensate for conventional arms asymmetry. This paper examines the nuclear doctrines and postures of the two countries as perceived in Pakistan. – Author)

Doctrine—a conceptual overview

A typical doctrine incorporates a set of beliefs or principles perceived by a body of persons—decision making strategists or tacticians—as the best way to accomplish a strategic or battlefield mission.⁵ A doctrine is a guideline for the policy makers and decision makers. The primary objective of a doctrine is to construct a framework of deterrence to persuade an adversary that the costs to him of seeking a military solution to his political problems will far outweigh the benefits⁶; at the same time, it necessarily involves the need of reassurance to persuade one's own people, and allies, that the benefits of military action, or preparation for it, will outweigh the costs⁷.

At the same time, a doctrine provides for military action if the deterrence collapses.

A typical national nuclear doctrine represents the collective set of beliefs or principles held by the nation in regard to the utility of its nuclear weapons. A nuclear doctrine stands for the strategy of development, deployment, and employment of nuclear forces for posing threats in response of the crisis situation that a country's leadership envisages to face at the hand of perceived opponent/s. Nuclear weapons have changed the idea of war fighting with the concept of deterrence.

The basic purpose of a nuclear doctrine is the provision of conceptual, institutional and infrastructural mechanism for the development of nuclear weapons. The central doctrinal issue of nuclear weapon states is to pose threat and maintain deterrence.

The nuclear doctrines are mainly of two basic types: aggressive or offensive and non-aggressive or defensive⁸. A doctrine significantly differs from strategy. A strategy is the secret planning of the military operations. Strategy remains within the spheres of a planning body while a doctrine is quite different. A doctrine defines the pros and cons of a thing. It defines principles and policies about the development, deployment and

employment of nuclear forces. The definition of a nuclear doctrine actually elaborates the qualities of a perfect doctrine. A complete doctrine must be able to provide guidelines for policy makers and direction for the armed forces.

Each country evolves its own doctrine, keeping in view its unique and peculiar strategic environment. Beliefs and principles are not immutable. Nations and their leaderships change with the flux of time.

And circumstances require their national doctrines to be revisited, reviewed and recast, if deemed necessary⁹.

The strategic culture of South Asia is characterized by the psyche of animosity between India and Pakistan. Conventional arms build up, arms race, skirmishes, wars, nuclearization and a perpetual presence of insecurity is the consequence of this environment. Though both countries have some meaningful peace initiatives to their credit, the staying power of measures and effects emanating out of these initiatives, especially in the face of crises, has been rather limited. Thanks to nuclearization, there has since been a reasonable degree of crisis stability between the two countries. In order to understand the nuclear doctrine/posture of the two sides, it is essential to take a look at the nuclear doctrines of both sides and analyze the implication of these doctrines on their overall security calculus. Both countries articulate adherence to "Credible Minimum Deterrence", however their developmental strategies do not confirm a corresponding concurrence.

Emergence of Competing Doctrines

The incubating environment that led to the evolution of the two doctrines presents an interesting study. Though India presents China's nuclear explosion as the triggering cause for its nuclear programme, Indian nuclear pursuits were well on their way during the mid-1950s, prior to China's nuclearization in 1964¹⁰. On the heels of India's humiliating military defeat by China in the 1962 war, Chinese nuclear tests certainly added an element of urgency to India's nuclearization drive¹¹. India is at liberty to determine its national security threat perception; but while doing so it ought to remain objective.

India maintains that its major threat emanates from China, but the profile of Sino-India relations does not support this proposition.

Irritants apart, both countries have a fairly robust functional relationship with bilateral trade nearing US\$ 100 billion per-annum. China is also in the process of investing US\$ 20 billion in various projects in India. Summit level exchanges are frequent. Moreover, India is the largest stakeholder in the recently launched US\$ 100 billion Asia Infrastructure Investment Bank, underwritten by

China. The main stimulants of the Indian nuclear overdrive are: Indian ambition to get a permanent berth in the United Nations Security Council (UNSC), where all other permanent members are nuclear weapon states; and to establish its regional overlordship through exclusive nuclear capability.

Pakistan's necessity to nuclearize was triggered by India's so called Peaceful Nuclear Explosion(PNE) of 1974¹². The wound of dismemberment of Pakistan through Indian military intervention, in 1971, was still fresh, and the reality that defence against nuclear weapons is possible only by acquiring a compatible nuclear capability was well understood by Pakistan's national leadership. Despite this compulsion, Pakistan did not get a fair deal from the international community. Right from its inception Pakistan's nuclear weapon programme came under undue and unfair scrutiny, the trend continues. Many Indian strategist are adamant in their view that India should get past its focus on Pakistan and make a military policy with a view to China, as well as India's global influence. However, even this Indian approach doesn't solve the issue because the Indian military capability, nuclear and or conventional, put in place for China would any way be more than sufficient to cater to any threat from Pakistan. Hence, Pakistan's national security dilemma remains intact irrespective of India's threat perception—be it China focused or Pakistan oriented. In the ultimate threat perception calculus, it is the capability that matters, intent of a nation could change instantly.

Doctrinal Thought Processes

Historically, India's nuclear policy kept shifting over a wide continuum of possibilities ranging from a renunciation of the nuclear weapons option to maintaining a ready nuclear arsenal and operational nuclear force, leading to quick response-ability, punitive strikes and nuclear war fighting capability. After the so called PNE in 1974, India declared its policy of not developing weapons¹³. But actually, soon after, India was desperately looking for a suitable nuclear delivery capable air craft¹⁴. Then came Prime Minister Rajiv Gandhi's "Action Plan for a Nuclear-Weapon Free and Non violent World Order by 2010", which was presented to the international community, on 9 June 1988, on the eve of the third Special Session on Disarmament of UN General Assembly. Within a decade, India conducted multiple nuclear tests in May 1998.

Three major strands form the base of debates surrounding India's nuclear behaviour: national security, international regimes and nuclear energy. On one hand India pretends to support the cause of universal disarmament, and on the other it insists on maintaining a nuclear deterrent itself. India's relationship vis-à-vis international nuclear regimes have been full of paradoxes. Moreover, India's position on the need for nuclear energy is rather interesting.

Agreement 123 led to liberation of 8 reactors for military usage— all old Candu types. Such are the heavy water/natural uranium reactors one has to worry about as they permit online part removal of fuel rod bundles after short burn up. Moreover, India's master plan for nuclear energy involves a Fast Breeder Reactors programme, at an intermediary stage of nuclear power programme, which allows it to produce huge quantities of weapon grade fissile material. So far, India has not accepted any restrictions on its FBR programme.

Pakistan's necessity to nuclearize was triggered by India's so called PNE¹⁵. In addition, India's superiority in the conventional domain further necessitated the need for Pakistan to acquire nuclear weapon capability. Hence, the two countries had divergent reasons to go nuclear. India's programme was a luxury, it was status driven, whereas that of Pakistan was necessity driven, as a hedge against a nuclear adversary, which also enjoyed superiority in the conventional domain¹⁶. The doctrines of the two countries are mismatched. India intends to deter nuclear use by Pakistan while Pakistan's nuclear weapons are meant to compensate for conventional arms asymmetry. Pakistan's entire nuclear power programme is under the International Atomic Energy Agency (IAEA) safeguards, hence there is no possibility of diverting fissile material from nuclear power plants to weapon related projects.

Indian Nuclear Doctrine

On August 17th 1999, the then Indian National Security advisor, Mr Barjesh Mishra, announced what he termed as the Draft Nuclear Doctrine (DND)¹⁷. The draft could not gain parliamentary approval, yet it continued to be the main policy document under the nomenclature of DND. In January 2003, another policy document was issued. The salient aspects of the DND were:-

- India shall pursue a doctrine of Credible Minimum Nuclear Deterrence; actual size of the force was not quantified.
- India will have 'no first use' policy, but will respond with punitive retaliation should the deterrence fail.
- India will maintain sufficient, survivable and operationally prepared nuclear forces, capable of shifting from peacetime deployment to fully employable force in the shortest possible time.
- A robust command and control system with effective intelligence and early warning capabilities would be established, for which space based and other assets shall be created.

- Authority for the release of nuclear weapons will vest in the person of Prime Minister of India, or his designated successor(s).
- India will demonstrate the political will to employ nuclear forces.
- Highly effective conventional military capabilities will be maintained to raise the threshold of outbreak of both conventional as well as nuclear war.
- India will have effective, diverse, flexible and responsive nuclear forces based on a triad of land based missiles, aircraft and sea based assets.
- Survivability will be ensured through redundancy, mobility, dispersion and deception.
- India will not accept any restraints on its R&D capability and will continue to conduct sub-critical nuclear tests even if it decides to sign the CTBT at a future date.
- India will not use nuclear weapons against any non-nuclear weapon state, other than those which are aligned to any nuclear power.

Operationalization of Doctrine

On 04 January 2003, India announced the broad contours of its nuclear command and control structure and reiterated some key elements from its draft doctrine while modifying some others¹⁸. The salient features of this cabinet approved one page document are:

- Building and maintaining a credible minimum deterrence.
- Retaliatory attacks can only be authorized by civilian political leadership through the National Command Authority (NCA).
- No use of nuclear weapons against non-nuclear weapon states.
- In the event of major attack against India or Indian forces anywhere, by biological or chemical weapons, India will retain the option of retaliating with nuclear weapons.
- A continuance of controls on export of nuclear and missile related material and technologies.
- Participation in Fissile Material Cut Off Treaty Negotiations.
- Observance of the moratorium on nuclear tests.

The 2003 document retains the essence of DND while introducing some new dimensions, like¹⁹:-

- Declaration of the option to use nuclear weapons against use of Nuclear, Chemical or Biological weapons against Indian territory or Indian armed forces anywhere in the world not only extends the threshold of nuclear usage but also expands its geographical scope. These provisions have virtually nullified the 'no first use' commitment.
- Strict control over exports of sensitive technologies and commitment to participate in Fissile Material Cut off Treaty (FMCT) negotiations were aimed at clearing the obstacles in the way of Agreement 123.
- Continued observance of unilateral moratorium indicated that India is not willing to accept any binding obligation on the issue. When Pakistan proposed to convert their respective unilateral moratoriums into a bilateral commitment during initial rounds of the composite dialogue in 2004, India declined.
- A reaffirmation that India would not use nuclear weapons against non-nuclear weapons states has been retained and further refined by doing away with the exception 'other than those aligned with nuclear states.' The authors of the original document probably did not realise the implications, in terms of conflict proliferation arising out of that conditionality, hence the option was revoked.

New urge for Reviewing the Indian Nuclear Doctrine

In the beginning of April 2014, at a conference initiated by the Indian government, Dr Manmohan Singh casually urged the creation of a global convention to forswear the first use of nuclear weapons.

Following Singh's remarks, the then opposition Bharatiya Janata Party (BJP) instantly issued a rejoinder in its election manifesto, stating that the party "believes that the strategic gains acquired by India during the [earlier BJP-led] Atal Behari Vajpayee regime on the nuclear programme have been frittered away by [Singh's] Congress." Hence, the BJP pledged to "study in detail India's nuclear doctrine, and revise and update it, to make it relevant to [the] challenges of current times"²⁰.

The BJP spokespeople clarified that a review of India's no-first-use policy would be accorded priority if the party came to power²¹. This evoked great concern in some quarters that the BJP would abandon no first use, which has, at least theoretically, been a central anchor of India's nuclear doctrine since the country conducted a series of

nuclear tests in 1998 and established itself as a nuclear weapons state. BJP's Modi, campaigning for the 2014 election, subsequently declared that there would be "no compromise" on no first use, which reflected India's "cultural inheritance" (whatever that means).

Mumbai based respected Economic & Political Weekly commented editorially: "Given the BJP's naturally aggressive posture, such clarifications must be viewed with some scepticism and it is legitimate to explore what may be on the agenda." ²² In its election manifesto, the BJP had promised to "study in detail India's nuclear doctrine. Mr Seshadri Chari, a member of the group that formulated this section of the party's manifesto said: "why should we tie our hands into accepting a global no-first-use policy?" ²³ Even though BJP later retraced, the Indian mind-set is clear; and at an opportune time it would most likely revoke 'no first use'.

That moment would, in all probability, come soon after India gets its full membership of the Nuclear Suppliers Group (NSG). For now it is tied down by the commitments it had given to the NSG in context of its efforts towards international non-proliferation efforts, for getting a country specific waiver. India is periodically evaluated for its promises as a condition for renewal of its NSG waiver. Paragraph 3 of the NSG statement undeniably says the "basis" of the India specific waiver includes its July 2005 pledges and the September 5, 2008 statement by India's then External Affairs Minister Pranab Mukherjee. Once full (read permanent) membership is in place, India will no longer be subject to periodic scrutiny, and hence will be free to revoke, the already much diluted, 'no first use' option.

Pakistan's Perspective

The Indian doctrine is viewed in Pakistan with scepticism and concern because of its provocative nature. From the Pakistani perspective the Indian doctrine is perceived as having far reaching implications in determining the trajectory of India's nuclear development; consequently it also has a profound impact on Pakistan's decisions related to its nuclear force estimates and posture. In Pakistan, it is felt that:-

- India has effectively scuttled any possibility for the establishment of a Strategic Restraint Regime in South Asia.
- India's declaration of 'no first use' is a ploy to gain higher moral ground and has no credence.

- India's declared policy to upgrade its conventional forces on the pretext of raising its nuclear threshold would further accentuate the existing conventional imbalance and hence lower the Pakistani threshold.
- India is well on its way to upgrade its conventional forces. SIPRI 2011 report highlighted that "India was the world's largest importer of major conventional weapons from 2006–10." SIPRI 2013 and 2014 reports also indicated similar trends. Such estimates create a security-insecurity paradox in South Asia, because Pakistan's economy does not permit a weapon by weapon equation with India.
- By not specifying the source of nuclear threat to its security, India has kept the size of its 'minimum' deterrence open ended. India wants to drag Pakistan into a nuclear as well as conventional arms race to exploit Pakistan's economic vulnerability.

Strategic contradictions in India's nuclear stance were reinforced in 2005 when its defence minister George Fernandez reiterated that India considered China as its principal threat; but day to day diplomatic and strategic moves indicate that the main focus is on Pakistan. By declaring China as its main threat, India has effectively blocked the likelihood of any bilateral conventional or nuclear arms control or disarmament initiative. The arm control process has, ever since, moved from a Pak-India bilateral plane to a more complicated trilateral China-Pakistan-India plane.

An Indian analyst Kanti Bajpai holds India responsible for Pakistani nuclear weaponization and believes that Islamabad would not have gone all the way had New Delhi unambiguously closed the nuclear weapons option in the 1960s. He further states that the second opportunity was lost in the 1970s and 1980s when Pakistan was offering to sign any denuclearisation agreement that India was prepared to accept²⁴.

Another analyst, Bharat Karnad is, however, critical of any decision by India to sign either the CTBT or FMCT. For him the minimum acceptable terms should be provisions for India to conduct additional thermonuclear tests and accumulate sufficient fissile material for 1000 plus warheads²⁵. Karnad further suggests that India should have a ready arsenal of 330 nuclear weapons by 2030²⁶. However, Zia Mian and AH Nayyar believe that India is actually attempting to build about 400 nuclear warheads, at least four times what Pakistan currently possesses²⁷. Characterizing the 'no first use' as a hoax, Bharat Karnad comments that it is one of those restrictions that countries are willing to abide by except in war²⁸. Even K. Subramanyam had warned that 'massive' retaliation was an outmoded concept and difficult to enforce without periodic reinforcement²⁹. Yet India is continuing to arm itself with bombs and missiles.

New Trends in India's Developmental Strategy and Its Doctrinal

Implications

In a series of test launches, the Agni V missile is being continuously upgraded. Every time India test-launches an improved version of this ballistic missile, officials from the defense industry go giddy about the next missile, which they say will be bigger, more accurate, fly longer, and carry more nuclear warheads.³⁰ **Until now, all Indian ballistic missile types have carried only one warhead each, an important feature that is in line with India's minimum deterrence posture.** However, India's Defense Research and Development Organization (DRDO) has declared that the next Agni variant will be equipped to carry multiple warheads. While the single-warhead Agni V is a major defense weapon, the multiple-warhead Agni VI will be a "force multiplier," declared the former head of DRDO. Moreover, the DRDO chief said that all future missiles will be deployed in large canisters on road or rail mobile launchers to get "drastically" shorter response time with an ability to launch in "just a few minutes."³¹ In 2007, Avinash Chander, who was then appointed to head the DRDO, said the next Agni variant would have a range of over 5,000 kilometres [upping the category to ICBM status] and "be a multiple warhead missile with a capacity to carry four to 12 warheads."³²

Agni V& VI are not Pakistan specific, while Agni I to IV are Pakistan specific. And, if the Indian government has authorized quick-launch capability, it would be applicable to the entire series and may be to the Prithvi series as well. It is indeed bad news for South Asia. The combination of multiple warheads, increased accuracy, and drastically reduced launch time indicates that India is gradually moving from a minimum deterrence doctrine towards a more capable nuclear posture— nuclear war fighting³³.

The most important thing in a second- strike posture is not how fast India can react but simply that it can retaliate after absorbing the first strike. The ability to launch quickly is only relevant if India plans to conduct a first strike against its adversaries. Planning for first strike contradicts India's no-first-use policy. Nor is a quick-launch capability necessarily "more stable," it could significantly decrease stability both in peacetime – by stimulating Chinese and Pakistani planners to further increase the responsiveness of their nuclear missiles—and in a crisis by shortening decision time and increasing risk of overreaction and escalation. Statements made by Indian defense officials over the past few years about increasing the payload, responsiveness, and accuracy of nuclear ballistic missiles are worrisome signs that India is certainly moving towards acquiring nuclear war fighting capabilities.³⁴

In this context, soon after nuclearisation of India and Pakistan, Ashley J. Tellis had concluded in his monumental book "India's Emerging Nuclear Posture: Between Recessed Deterrent and Ready Arsenal" that out of various posturing options, India would most likely choose a 'Force-in- being-option' falling in between the recessed deterrence and ready arsenal³⁵. The implications of this posture would be that Indian nuclear capabilities will be 'Strategically active' but "operationally dormant." Practically this would mean retaining the ability to undertake retaliatory strike within hours to weeks. This kind of posture would be demonstrative of Indian restraint, while providing it deterrence capability vis-à-vis both China and Pakistan. The other advantage could be avoiding the cost of maintaining a ready arsenal.³⁶

Targeting Policy

Indian nuclear targeting policy indicates that despite Indian claims that it exercises centralized control over its nuclear weapons and the authority to release the nuclear weapons vests in the prime minister, however, there has to be pre-delegation of authority to field military commanders to use the nuclear weapons, it is also supported by the C² model adopted by India.³⁷ Pakistan's plugging of the gap in its deterrence, arising out of India's evolution of the Cold Start Doctrine, with the development of the short range Nasr missile has led to a bizarre hysteria from Western analysts and their Indian counterparts about Pakistan's contemplation to use battlefield nukes on its own territory³⁸. This is not true; however, Nasr has certainly poured icy water on the Cold Start Doctrine³⁹.

Pakistan's Nuclear Doctrine/Policy

While designing nuclear deterrence, Pakistan had two choices; one, war denying deterrence and, the other, nuclear war fighting deterrence. Both choices had a different pattern of implications including developmental strategies. War denying deterrence required a minimum number of weapons while war fighting deterrence needed a large number of nuclear arsenal, variety of delivery means and missile defence program. Pakistan's economy and strategic interests allow only the pursuit of war denying deterrence, and this is the course it continues to steer.

Pakistan principally decided to adopt the option of 'Credible Minimum Deterrence'. As a corollary, posture of Credible Minimum Deterrence has remained a principle option of Pakistan's nuclear policy. This principle underlines the notion that Pakistan's nuclear Policy is driven by threat to its security from India and is therefore India centric. Deterrence is the sole aim and a small arsenal is considered adequate. Hence, Pakistan

has followed a rational and realistic approach to deterrence, discarding any notions of a futile arms race with India.

Proponents of this approach have deliberately desisted from suggesting any figure to quantify the size of Pakistan's nuclear force. It is a considered opinion that minimum deterrence is not an abstract number or type, which remains static for all times. This is subject to change with changing circumstances like emergence of the concept of 'limited warfare under nuclear overhang'. Notions like "Cold start doctrine" or "Proactive Operations" did compel Pakistan to add battlefield nuclear weapon to its deterrence toolbox to fill in a gap created by the cold start doctrine. Efficacy of Pakistan's deterrence can only be maintained by keeping the size of the force flexible. Moreover, minimum cannot be quantified in the absence of any mutual restraint regime. The size of Pakistan's arsenal and deployment pattern has to be adjusted to ward off dangers of pre-emption and force attrition attributable to the Anti-Ballistic Missile (ABM) Shield being operationalized by India. Also there is much talk that Pakistan has moved from "Minimum Credible Deterrence" to "Full Spectrum Deterrence". Conceptually, MCD is flexible enough to absorb TNWs; hence no need to coin a new term— minimum implies the full spectrum.

Pakistan does not have an officially declared nuclear doctrine; it does not subscribe to the concept of "No First Use", however it offers conditional negative assurances. The salient features of Pakistan's nuclear policy can be summarized as follows:-

- Pakistan's Policy is based on Minimum Credible Deterrence
- It will abstain from a strategic arms race with India
- It will continue to support international arms control regimes which are non-discriminatory in nature
- It will participate in FMT negotiations
- Refrain from further nuclear testing
- Strengthen existing controls on the export of nuclear technology through administrative and legal mechanisms

Pakistan's nuclear policy is built around the twin pillars of restraint and responsibility and driven by security concerns in contrast to India's pretensions to a global power status. Pakistan has suggested a Strategic Restraint Regime with India on reciprocal

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basis involving measures for nuclear and missile regimes, as well as conventional balance. A number of meaningful bilateral agreements are already in place between the two countries, and in the past Pakistan has expressed readiness to enter into reciprocal arrangement with India on key issues like⁴⁰:-

- Declaration of a moratorium on the development, acquisition or deployment of ABM systems
- Non-deployment of ballistic missiles
- Non-operational weaponization of nuclear capable missiles

Nuclear Command and Control Systems

Both countries have in place their respective command and control systems. The National Command Authority of each side is headed by their respective Prime Ministers and represented by military and technical experts. Both sides have military strategic commands. Though India maintains that its command and control is assertive, a close scrutiny of Indian targeting policy suggests the inherent presence of a delegative aspect necessitating delegation of authority to military commanders at some intermediary stage. Three services chiefs are part of the Nuclear Executive Council headed by the Indian National Security Advisor (NSA)⁴¹. Pakistan's National Command articulation incorporates centralised control based on assertive command articulations. Fears about Pakistan's command and control over TNWs are misplaced.

Pakistan is not the first country to introduce TNWs. NATO has managed such weapons during the cold war era. Moreover, one may recall that out of India's⁴² five nuclear tests of 1998, two were of sub Kiloton yield. In a recent article "Not an Eye for an Eye", Pravin Sawhney says that: "it is difficult to believe that Pakistan's GHQ would have outsourced command and control of its TNWs to its field commanders⁴³.

Speculative concerns expressed by international commentators are mainly based on Western strategists' experience with such weapons' deployment in Europe by NATO during the cold war era. Pakistan's operational military culture is pegged around centralised control and decentralized execution coupled with complex permissibility access procedures. Field level execution is triggered only once command is received from the highest level—in this case from the National Command Authority—headed by the Prime Minister. Multiple verifications procedure is followed for passing such commands to subordinate tiers to avoid any ambiguity and or erratic execution; these operating procedures effectively block the field commander's discretionary authority.

While in case of NATO, such weapons became a permanent feature of deployed units/formations, in case of Pakistan no such weapon is planned to be issued to lower formations during periods of tension; Pakistan's TNWs are certainly not a unit/formation level item on the pattern of an artillery gun or a tank. The falling of TNWs in unauthorised hands is often blown out of proportion. There has been no such occurrence, or a semblance thereof to support this notion. Security and safety of Pakistan's nuclear programme has all along been widely acknowledged.

India's command and control of nuclear forces is an area of criticism, and rightly so. India is the only nuclear weapon country without a permanent Chief of Defence Staff to act as the interface between the Prime Minister, the National Command Authority and the military who 'own' the weapons — at least most of it. India's nuclear weapons are not only 'de-mated' and the core and ignition device separated from the warhead, but the separate components are under different departmental control. The actual reason for this bizarre arrangement is quite obvious. There is a petty turf war, and neither the Department of Atomic Energy nor the DRDO is willing to let go of the controlling part of the bomb, even if it means a cumbersome and unnecessary loss of control⁴⁴. Between the military, the DAE and the DRDO, none of them has any hierarchical control over the other two⁴⁵. The absence of the CDS results in even knowledgeable Indians conjecturing that the Strategic Forces Command (SFC) will completely bypass the military chain of command and operate directly under the PMO. This, of course, raises other more serious problems⁴⁶.

There are other serious operational issues as well. Having opted for road or rail mobile launching arrangements, India does not have the robust transport, road and rail infrastructure to move the missiles, warheads and cores from safe storage to launch hideouts and dispersal points with confidence and alacrity. These weaknesses have led to critics stating that India's nuclear capability is disaggregated and with weak institutional features⁴⁷.

Bilateral Relations since Nuclearization

Nuclear doctrines/policies of both countries have established a reliable deterrence in the region. During the first decade of nuclearization, both states experienced two major military confrontations: the Kargil crisis, 1999 and the Indian Military Standoff of 2002 — Operation Parakaram. Subsequently, in 2008 the Mumbai incident threw up a formidable challenge. Deterrence stood these tests and the crisis remained contained, stable and hence manageable. The Indian concept of limited war under the nuclear overhang more commonly known as the Cold Start Doctrine or Proactive Operations exposed a hole in Pakistan's nuclear deterrence. Thus Pakistani strategists came up with

a solution of a Tactical or Battle field Nuclear weapon AL Nasr. Paradoxically, this short range weapon has attracted more attention than India's 8000 km range near ICBM Agni V.

Shyam Saran's Articulations

Shyam Saran, head of the National Security Advisory Board articulated in April 2013 that India would retaliate with strategic weapons against Pakistan if a 26/11 like attack occurred on its land⁴⁹. He made several pronouncements about the evolution of India's nuclear policy and the current status of its nuclear deterrent. He cast these remarks as his personal views. However, many in India and outside saw his statements as articulating official policy on a sensitive issue, while maintaining deniability. The Times of India, for example, said Saran was "placing on record India's official nuclear posture with the full concurrence of the highest levels of nuclear policymakers in Delhi". He visualizes an escalatory ladder that triggers with a sub-conventional event or a terrorist attack. After which Pakistan tries to dissuade India from carrying out punitive conventional retaliation, by deploying its tactical nuclear weapons and India responds by using strategic weapons. Saran warns that any nuclear attack – whether by strategic or tactical weapons – would be met by "massive retaliation" from India. This will be "designed to inflict unacceptable damage on its adversary"...Any nuclear exchange once initiated, would swiftly and inexorably escalate to the strategic level". "Pakistan", he declares, should "be prudent not to assume otherwise as it sometimes appears to do, most recently by developing and perhaps deploying theatre nuclear weapons"⁵⁰.

Saran's presumption that Pakistan's decision to develop battlefield nuclear weapons represents a nuclear war-fighting option is unrealistic. Pakistan has repeatedly said that Pakistan regards the surface-to-surface solid fuel-based Hatf IX (Nasr), or any additional battlefield weapon that may subsequently be developed, as primarily weapons of deterrence. Their purpose is to reinforce deterrence and restore nuclear stability that has been disturbed by: growing conventional asymmetry in the region as India's military build-up continues; provocative Indian military doctrines that aim to bring conventional military offensives to a tactical level and India's development of ballistic missile defence (BMD) systems, whose purpose is to dampen down the effects of Pakistan's strategic capabilities⁵¹.

Most importantly Saran's escalatory scenario lays bare an underlying frustration that India's Cold Start Doctrine has been challenged if not blunted by Pakistan's TNW response. Factually, right from the beginning, India had never been committed to an unconditional no-first-use centred nuclear doctrine. Its current policy is ready-arsenal and deterrence by punishment. However, Pravin Sawhney has challenged Saran's

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recommendations of massive strikes on various counts including the lack of capability of the IAF to spare requisite air effort, and inadequacy of missile systems⁵². Even K. Subramanyam had warned that 'massive' retaliation was an outmoded concept and difficult to enforce without periodic reinforcement⁵³.

Pakistan's Position

Pakistan's NCA, met under the chairmanship of Prime Minister on 5th September 2013.

It reemphasised on the following cardinal points⁵⁴:-

- Centrality of Pakistan's nuclear programme for the defence of the country
- While maintaining its principled position on various arms control and non-proliferation issues, Pakistan would continue to oppose any arrangement that is detrimental to its security and strategic interest.
- As a responsible nuclear weapon state, Pakistan shall continue to adhere to the policy of Credible Minimum Deterrence, without entering into an arms race with any other country.
- Pakistan however would not remain oblivious to the evolving security dynamics in South Asia and would maintain a full spectrum deterrence capability, to deter all form of aggression.
- Pakistan's nuclear weapons programme is safe and secure.
- Development of tactical nuclear weapons was aimed at preserving "full spectrum deterrence" against any possible external aggression.
- Pakistan would continue to participate constructively in the Nuclear Security Summit process.
- With four decades long experience of safe and secure operation of nuclear power plants, Pakistan is ready to share its experience with other interested states by providing fuel cycle services under IAEA safeguards
- Pakistan's position on FM(C) T will be determined by its national security interests and the objective of strategic security of South Asia.
- Pakistan is also willing to provide training placements at its Centres of Excellence on Nuclear Security.
- Pakistan is committed to playing its due role as a mainstream partner in the global non-proliferation regime

- Pakistan is keen to join multi-lateral export control regimes on non-discriminatory basis

While addressing the UNGA, on September 30, 2015, Prime Minister Nawaz Sharif articulated that an easing of threat perceptions through peace efforts will make it possible for Pakistan and India to agree on a broad range of measures to address the peril posed by offensive and advanced weapons systems⁵⁵. Pakistan neither wants to, nor is it engaged in, an arms race in South Asia. We cannot however remain oblivious to the evolving security dynamics and arms build-up in our region, which obliges us to take essential steps to maintain our security⁵⁶. As a responsible nuclear weapon state, Pakistan continues to support the objectives of nuclear disarmament and non-proliferation while maintaining the highest standards of nuclear security and an effective regime to ensure the safety and security of our nuclear facilities and stocks⁵⁷. South Asia needs strategic stability and this requires serious dialogue to achieve nuclear restraint, conventional balance and conflict resolution.

The Prime Minister of Pakistan while addressing the 'United States Institute of Peace' on October 23, 2015 reiterated Pakistan's position:

"While refusing dialogue, India is engaged in a major arms build-up, regrettably with the active assistance of several powers. It has adopted dangerous military doctrines. This will compel Pakistan to take several counter measures to preserve credible deterrence. Clearly, there is a real and present threat to peace and security in South Asia. The international community can no longer pretend that it does not exist. It must play a role to stop the slide towards a dangerous Pakistan-India crisis by preventing India's belligerent actions rather than Pakistan's defensive responses⁵⁸.

While making a Statement at the UNGA side-lines Event on "Commemoration of International Day for the Total Elimination of Nuclear Weapons" on September 30, 2015, Foreign Secretary Aizaz Ahmad Chaudhary stated that Pakistan had been obliged to develop nuclear capability for self-defence and deterrence⁵⁹. He added that it was an existential choice that Pakistan made to preserve strategic stability in South Asia. He underscored that non-discriminatory, universal, comprehensive and general nuclear disarmament remained the highest priority on the international security agenda⁶⁰. Pakistan is fully committed to the objectives of non-proliferation and disarmament. Pakistan supports the goal of elimination of nuclear weapons through a global, verifiable and non-discriminatory legal instrument. Pakistan's nuclear policy continues to be guided by the principles of restraint and responsibility. Pursuit of peace and stability in South Asia through the resolution of all outstanding issues, including the core issue of

Kashmir, remains the cornerstone of Pakistan's policy. There is no alternative for the two countries, but to resume a comprehensive dialogue to resolve all outstanding issues, including the core issue of Jammu & Kashmir⁶¹.

Over the years, Pakistan has adopted a number of national measures to strengthen export controls and security, which are consistent with the best international standards⁶². Pakistan is also participating in global efforts to prevent and combat proliferation of Weapons of Mass Destruction, and has in this context contributed constructively to the Nuclear Security Summit process. To fulfil its vast energy needs, Pakistan is in the process of installing several civil nuclear power plants, under IAEA safeguards. As a responsible nuclear power, and one with the expertise, manpower and infrastructure to produce civil nuclear energy, it would be mutually beneficial for Pakistan to be accepted as a member of the Nuclear Suppliers Group and other export control regimes⁶³.

Conclusions

Doctrines of the two countries are mismatched. India intends to deter nuclear use by Pakistan while Pakistan's nuclear weapons are meant to compensate for conventional arms asymmetry.

India's existing nuclear doctrine can be broken down into three key elements: **deterrence, reassurance and nonproliferation**. This combination of factors is meant to simultaneously discourage adversary(ies) from attacking and soothe international concerns about India's nuclear arsenal. To accomplish this, successive Indian governments have committed themselves to building and maintaining a "credible minimum deterrent" and have promised massive retaliation in the event of a nuclear attack— both these points are contradictory.

Now, the threat of nuclear retaliation has been expanded to allow for use in response to a biological or chemical weapon attack. India is looking for excuses to revoke its "no first use" option, and holding back is due to its commitments given to NSG for grant of country specific waiver. India's performance is evaluated periodically against those assurances and adherence to 'no first use' is one of them. That's why India is desperate to get full membership of NSG, because after that it will not be liable to such periodic reviews.

Both India and Pakistan are seeking the group's membership. In the nuclear realm, both Pakistan and India share a number of common features, like: both are nuclear weapon states; are non-members of NPT and CTBT; since 1998, both are abiding by their unilateral moratorium on nuclear testing; are proponents of global disarmament; their

force goals are governed by minimum credible deterrence; both have a potent nuclear regulator and stringent export control regimes etc. Moreover, both countries have evolved a number of bilateral CBMs related to nuclear and missile activities, like advance warning of nuclear test and missile launch, and annual exchange of list of nuclear installations etc. The membership would greatly enhance the acceptance of these two countries as nuclear weapons states and give them a say in how countries should conduct trade in nuclear-related exports. Moreover, both will stand answerable to NSG for their conduct on nuclear trade.

Therefore, any criterion based expansion of the group would mean simultaneous entry of both the countries. Any country specific effort to have India in and Pakistan out will render the group dysfunctional and ineffective. That's why Pakistan is pursuing for a non-discriminatory criterion based approach for the expansion of NSG. Giving India membership and denying it to Pakistan would be discriminatory and would not serve global non-proliferation and other strategic objectives; moreover, it could throw-up a number of operational and functional lacunae which shall be difficult to reconcile. India already has a partnership arrangement with the NSG, and grant of membership to India alone would elevate its status disproportionately. Moreover, since the group operates on consensus, membership would give India a perpetual veto over any future decisions involving Pakistan.

Pakistan does not subscribe to country specific expansions and proposes that membership to all strategic regimes should be criteria based. Whenever such expansions are criteria based, Pakistan shall have no problem in qualifying for full membership of all strategic trade regimes due to the mentioned similarities in the nuclear profiles of India and Pakistan.

The way forward in the India-Pakistan setting is in engaging substantively to narrow the perceptual gaps and address the issues that lie at the root of both countries' security predicaments. Indeed both should look forward to graduate from a nuclear triad to a triad of peace, progress and prosperity.

Nuclear powers do not define their relations by threats or bluster. The only answer to the dilemmas created by the region's nuclearization is to engage, seriously and constructively, to build a better understanding of each other's conventional and nuclear policies, doctrines and postures through meaningful confidence building measures both in nuclear and conventional military spheres. Pakistan's proposal for a Strategic Restraint Regime has three interlocking elements designed to achieve strategic stability – measures for nuclear restraint, conventional military balance and resolution of

disputes. The proposal is still on the table and presents a way forward in a win-win manner.

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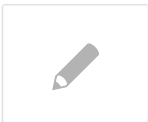
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