

INDIA'S NUCLEAR DOCTRINE: THE BASIS FOR CREDIBLE DETERRENCE

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It is said, "One swallow does not a summer make." Along similar lines, the mere acquisition or demonstration of a nuclear weapons capability does not make for credible deterrence either. For the weapons to be gainfully employed for national security based on nuclear deterrence, a number of other steps are necessary. These include conceiving a clear role for the weapon, making it deliverable, instituting adequate command and control systems, and formulating a targeting philosophy to inflict unacceptable damage on the enemy. These parameters can best be defined by a national nuclear doctrine.

A nuclear doctrine is a basic statement of principles that lays down the purpose of the nuclear weapon, the manner of its development and deployment, and the concept of its employment. It, therefore, provides the conceptual underpinning for the role that the weapon would play in the overall security strategy – whether it would be considered a militarily usable tool of war, or a political instrument for enforcing deterrence. India's nuclear doctrine is premised on this second understanding and, hence, has certain distinctive characteristics.

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This paper seeks to identify and describe

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the salient features of the country's nuclear doctrine. It begins by explaining the critical *importance of having a nuclear doctrine as the basis for credible deterrence*, since in its absence a nation's nuclear strategy would meander aimlessly and an adversary could construe actions wrongly. Irrespective of whether a nuclear doctrine professes an aggressive nuclear posture or is defensive in nature, its enunciation enables some sort of threshold identification and provides some stability to a nuclearised environment. The second section of the paper takes an in-depth view of the *principles on which India's nuclear doctrine*, as put forth by the National Security Advisory Board (NSAB) in 1999¹ and subsequently in the statement issued by the Cabinet Committee on Security on January 4, 2003², is based. It also *assesses the appropriateness* of these principles for India. The last segment describes some of the *supporting structures that flow out of these tenets and that need to be in place* for the sake of the credibility of India's deterrence.

THE NEED FOR A NUCLEAR DOCTRINE

Stated simply, the purpose of a nuclear doctrine is to provide the *raison d'être* of the nuclear weapon for a nation, as also to make available the philosophy behind fundamental questions of when, how, and where the weapon would be used for national defence. These objectives may be met through the formal enunciation of a doctrine or through hints dropped in more amorphous statements. In fact, nuclear doctrines of not all countries exist in the form of structured, publicly shared documents, as in India. In some cases, such as Pakistan, the doctrine can only be gleaned from official statements or articles written by retired military officers or political leaders or members of the strategic community.

In either case, though, the nuclear doctrine is expected to serve a critical, but only limited purpose. Limited, because there are several things that a doctrine is not. It is not a statement of account that calculates the cost of the nuclear weapons. Neither is it a fact sheet that identifies all the threats and challenges faced by a country. Nor is it an operational strategy or a set of tactical rules that

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1. National Security Advisory Board, Draft Indian Nuclear Doctrine, August 17, 1999. Available at <http://www.meadev.nic.in>
 2. Cabinet Committee on Security, Government of India, "India's Statement on 'Operationalisation' of Nuclear Doctrine," January 4, 2003. Available at <http://www.meadev.nic.in>

describes force postures or deployment patterns. Instead, the doctrine is a system of beliefs that:

- (a) describes the utility of nuclear weapons to the state. It, thereby, reflects the worldview as seen by the state and what purposes are served by the acquisition of nuclear weapons;
- (b) identifies the manner in which the weapons would be employed to meet the purpose they have been acquired for. In performing this function, the doctrine addresses important subsidiary issues pertaining to force posture, concept of operations and weapon deployment.

Hence, the doctrine encapsulates the philosophy that is expected to guide national nuclear strategy. Based on these tenets, it should become possible for the national leadership, civilian and military, to determine the nature and size of the nuclear arsenal, including delivery vehicles, the kind of command and control systems, the type of retaliation and the identification of targets, deployment status, etc. Similarly, it should provide some inkling to the adversary as to how a nation intends to use its nuclear capability, at what stage of conflict nuclear weapons could come into play, and how they may be deployed.

While a doctrine must be rooted in the practical realities confronting a nation, such as its strategic culture, its threat perceptions, its economic strengths and the state of its existing scientific-technological capabilities, yet it can also afford to take little flights of fancy in aspiring for an ideal situation. For instance, India's nuclear doctrine, despite seeking to provide the basis for nuclear deterrence, still contends, "India shall continue its efforts to achieve the goal of a nuclear weapon-free world at an early date." It identifies "global, verifiable and non-discriminatory nuclear disarmament" as a "national security objective."³ Similarly, the doctrine also establishes the need for India's nuclear forces to be "based on a triad of aircraft, mobile land-based missiles and sea-based assets."⁴ While neither of these situations is immediately available, the doctrine encourages movement towards them in the interest of national security. Therefore, unlike a nuclear strategy that must be solely dictated by

3. As stated in Para 8.1 of the *Draft Indian Nuclear Doctrine*, n.1.

4. As stated in Para 3.1 of the *Draft Indian Nuclear Doctrine*, n.1.

existing realities and capabilities, the doctrine can display a greater sense of freedom and flexibility.

A coherent document on India's nuclear doctrine was formulated just fifteen months after the conduct of nuclear tests in May 1998. In one of its earliest tasks, the first NSAB⁵, constituted soon after India declared itself a state with nuclear weapons, produced a draft that encapsulated recommendations on what the country's nuclear doctrine should be. On August 17, 1999, the draft nuclear doctrine was made available for public scrutiny and debate. The national and international community were likewise taken by surprise not only by the speed with which the task was undertaken, but also by the transparency that the then caretaker Indian government offered on a subject that is normally considered elitist and kept out of public purview. Not surprisingly, therefore, the Indian doctrine was subjected to a fair amount of criticism from within the country and outside, not all of which was either justified or constructive.

Amongst the responses from the international community, the US, in its capacity as the self-appointed spokesperson of global non-proliferation promptly articulated its disapproval of the draft doctrine. The White House did not find the draft an "encouraging document" and the Pentagon too pointed out to the dangers inherent in such an act and called for the denuclearisation of South Asia. Russia and China also expressed concern at the Indian move and urged restraint.

While the P-5 were shocked at the audacity of a newly nuclear country to be able to articulate a nuclear doctrine in such a short time after nuclearisation, there seemed to be some amount of confusion in Pakistan on how much importance it should attach to the Indian action. While, on the one hand, Pakistan criticised India's move in bringing out the document, as also the substance contained therein for being "dangerous and ominous," on the other hand, in a typical "me too" response, it quickly announced that Islamabad too was engaged in giving "final touches" to its own doctrine!⁶ While no doctrine has since been officially announced by Islamabad, a statement attributed to the then Pakistani foreign minister revealed

5. The NSAB exists as an official body that is part of the National Security Council. It acts as a forum through which the government decision-making apparatus can draw on the advice and experience of appointed academics and retired civil servants and military officers. Members of the NSAB serve a term of one year.

6. "Pakistan Reacts Strongly to India's Assertion," *The Times of India*, August 19, 1999.

what Pakistan actually thought about the Indian nuclear doctrine. He was quoted in *Dawn* as saying, "By announcing its nuclear doctrine before Pakistan, India was trying to score points and present itself as a more responsible nuclear power in the region."⁷

As derived from here, one would assume that the release of a nuclear doctrine actually amounts to a display of responsible behaviour. This, in fact, is the truth. The declaration of a nuclear doctrine by a country that has unambiguously demonstrated its nuclear capability actually clears the air and injects transparency into an issue otherwise shrouded in secrecy. By clearly defining a political role for its nuclear weapon and the philosophy behind its use, New Delhi provided a rare clarity. While this was wrongly, though not unexpectedly, construed as India getting ready to "embark on a further and even more dangerous escalation in the nuclear and conventional arms build-up," the doctrine actually only formalised what India had declared as its nuclear position all along after the nuclear tests in May 1998. The draft doctrine reflected the same precepts that had been articulated by then Prime Minister Vajpayee in Parliament within days of the tests.⁸ It emphasised the acquisition of a credible "minimum" deterrent and advocated a no first use (NFU) posture premised on a counter-strike capability to inflict unacceptable damage. With each one of these parameters, India had chosen to impose restraints and checks upon its own self.

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In fact, it is this restraint that was criticised by several quarters of the Indian strategic community. While a few decried the doctrine for being too ambitious since it spoke of a triad⁹, there were others that objected to the concept of

7. M Ziauddin, "Pakistan's Nuclear Doctrine Being Finalised: FM," *Dawn*, August 19, 1999. (Emphasis added.)

8. Suo Motu Statement by Prime Minister Vajpayee in Parliament on May 27, 1998. As reproduced in *Strategic Digest*, July 1998

9. Praful Bidwai, "New Delhi's Nuclear Doctrine Could Ignite Arms Race," *Dawn*, August 23, 1999.

minimum deterrence¹⁰, and yet others who dismissed minimum deterrence as “making a virtue out of necessity.”¹¹

Perhaps, it should be conceded that India’s choice of minimum deterrence is to some extent dictated by the resource (not just monetary, but also available fissile material) and technological (missile range, accuracy and payload carrying capability) constraints that the country faces, but, as is argued in the body of this paper, minimum deterrence more than adequately addresses India’s security concerns required to be met with nuclear weapons.

Its criticism notwithstanding, to its credit, the draft doctrine provided the essential starting point for a coherent nuclear strategy. On January 4, 2003, the

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government issued a statement on the basis of a decision taken by the Cabinet Committee on Security which further amplified the nuclear doctrine and operational arrangements governing India’s nuclear assets. While this ‘official’ nuclear doctrine largely retained the

recommendations of the NSAB draft document, it did, however, make a few changes, not all of which have been particularly helpful in explaining the nuances of deterrence. Some, in fact, such as the expansion of the role of nuclear weapons to deter chemical and biological weapons, as also the use of “massive retaliation” in place of “punitive retaliation” have created some confusion. These are discussed in greater detail in the following sections.

INDIA’S NUCLEAR DOCTRINE – THE UNDERLYING PRINCIPLES

Use of Nuclear Weapons for Deterrence

From the time of the first demonstration of the destructive power of the nuclear

10. Bharat Karnad, for example, advocated a “maximally strategic” deterrence posture built around multiple kinds of high yield nuclear weapons and many delivery systems. For more on his views, see Bharat Karnad, “A Thermonuclear Deterrent,” in Amitabh Mattoo, ed., *India’s Nuclear Deterrent: Pokhran and Beyond* (New Delhi: Har-Anand Publication Pvt. Ltd., 1999), p. 108.

11. Brahma Chellaney wrote, “India does not have the plutonium or financial resources to exercise more than the barest of minimum deterrence, and is far from having the capacity to carry out a disabling first strike against an opponent...” “India’s Nuclear Planning, Force Structure, Doctrine and Arms Control Posture,” Paper presented at the UNESCO International School of Science for Peace, Forum on Nuclear Disarmament, Safe Disposal of Nuclear Materials, or New Weapons Developments: Where are the National Laboratories Going?, Landau Network-Centro Volta, , Italy, July 2-4, 1998.

weapon in 1945, there has never been a consensus on the actual role of nuclear weapons in national security. In 1950, George Kennan pithily articulated this crucial question before the then US secretary of state:

Are we to rely upon weapons of mass destruction as an integral and vitally important component of our military strength, which we would expect to employ deliberately, immediately, and unhesitatingly in the event that we become involved in a military conflict with the Soviet Union? Or are we to retain such weapons in our national arsenal only as a deterrent to the use of similar weapons against ourselves and as a possible means of retaliation in case they are used?¹²

This dilemma – whether the nuclear weapon is just another type of weapon that is militarily usable or whether the absolutely horrific consequences of its use place it in the realm of the unusable except as a political instrument of deterrence – has preoccupied every country that possesses it. India has resolved the issue for itself by accepting the latter use of the nuclear weapon. Accordingly, the Indian nuclear doctrine is firmly rooted in the belief that nuclear weapons are a political instrument for deterrence and not a military tool for war-fighting. This assertion, for India, emanates from two facts: one, from the comprehension of, and abhorrence for, the high destruction potential of the nuclear weapon that makes its use unthinkable for any rational political end. There can be no cause precious enough to justify the actual use of nuclear weapon; secondly, from the realisation that there is no credible defence against nuclear weapons. Way back in the mid-1950s, a British scientist, Patrick Blackett, had conceded, “There is no effective defence at present, nor is there one in sight, against a *large-scale and determined atomic attack on cities and centres of population.*”¹³ Over the decades, defence has fought back with technological advancements. The erection of ballistic missile defence (BMD) does today offer some form of protection against a nuclear attack. But even this is several years from offering a foolproof guarantee against a large scale, determined and multi-directional atomic attack. Washington justifies its

12. As cited in Lawrence Freedman, *The Evolution of Nuclear Strategy*, Third Edition (New York: Palgrave Macmillan, 2003), p. 63.

13. P.M.S Blackett, *Atomic Weapons and East-West Relations* (Cambridge: Cambridge University Press, 1956), p. 3

BMD as providing protection against a few errant missiles from countries such as North Korea or Iran that would have no more than a few nuclear weapons, and not against the Russian or even the Chinese arsenal. Besides, the BMD provides protection only against one form of delivery, the ballistic missile. In case nuclear bombs are air delivered or through some other more mundane means, there can be no defence against the horrendous destruction they would cause.

Hence, the Indian doctrine, with its emphasis on deterrence, actually seeks to obviate the possibility of the use of this weapon of mass destruction (WMD) in the first place. It aims to persuade the adversary that any nuclear use by him would result in such retaliation as to make the cost of the action unacceptable. It compels a reconsideration of the decision to use nuclear weapons at all.

The second important characteristic of India's nuclear doctrine, at least as put forth in the NSAB draft, was to restrict the possible use of nuclear weapons only against the adversary's use of nuclear weapons. In other words, India perceived a role for its nuclear deterrence only against the use or threat of use of other nuclear weapons and not against conventional [as the North Atlantic Treaty Organisation's (NATO's) and Pakistan's nuclear doctrines profess] or other WMD such as chemical or biological weapons (as US doctrine contends). Of course, there were analysts that thought this view to be too restrictive. For instance, Brahma Chellaney argued,

It should not be simplistically assumed that nuclear weapons are only for deterring a nuclear threat, as if it is okay for others to employ conventional force against vital Indian interests. Given the decades-old technology sanctions it has suffered and the way its foreign policy has been seriously constricted, India has had to pay an extraordinarily heavy political price for its nuclear weapons. It should seek to derive the full security value from them, the way the wealthy nuclear powers do.¹⁴

Perhaps, this rationale ultimately did hold sway over nuclear decision-makers since, in the January 2003 official statement, the scope of nuclear deterrence was expanded to include chemical and biological weapons too. It may

14. Chellaney, n.11.

be recalled that the US too had done the same in its *Nuclear Posture Review* of 2001. The move, however, made little sense for the US and hardly makes the Indian nuclear deterrent more credible. This is for two reasons: first, the international community has already outlawed the use of these two classes of WMD by way of the Chemical Weapons Convention and the Biological and Toxic Weapons Convention respectively. Countries signatory to the two conventions are supposed to have declared their stockpiles and undertaken their destruction. Therefore, India's potential adversaries should not normally be assumed to possess these weapons. In case India still fears such an eventuality, it can seek redressal by invoking its right to inspections. Despite these, if there are still apprehensions about any clandestine stocks of the adversary being used in a conflict, even then, should India retaliate with its nuclear weapons? Would this then not escalate the situation into a sure nuclear exchange? What then should India's response be? While it is beyond the scope of this paper to discuss this scenario at length, it may be said that conventional capabilities should be able to, or made able to, handle such a situation. Contemporary threat perceptions, in fact, accrue greater probability to these WMD being used by non-state actors for whom treaties are irrelevant. But against them, classical nuclear deterrence can anyway not hold good. Non-state actors do not provide a fixed target that can be deterred with unacceptable damage through use of nuclear weapons against them. A different cache of military and foreign policy tools needs to be employed against them. Therefore, except for some symbolic value, the expansion in scope of the nuclear doctrine holds little relevance for nuclear deterrence as required by India against its potential adversaries.

Instead, India's narrow articulation of nuclear weapons as a means of deterrence only against nuclear weapons actually accurately reflected India's traditional abhorrence for nuclear weapons and the reluctant steps it took down this path. It underscored that India had consistently argued that nuclear disarmament, and not nuclear deterrence, can, and must, constitute the basis for lasting world peace and security. But the absence of any substantive progress on this front, coupled with a deteriorating regional security environment, compelled India to acquire the nuclear deterrent. Yet, it continues to view its nuclear weapon as a pure deterrent. As Prime

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Credible Minimum Deterrence

The rejection of the concept of nuclear war-fighting frees India from the need to match the nuclear arsenal of its adversary/(ies), weapon for weapon. It was stated by Kenneth Waltz several decades back, “Forces designed for war-fighting have to be compared with each other. Forces designed for war-deterring need not be compared. The question is not whether one country has less than another....”¹⁶ With the principal role of India’s nuclear force being to protect the nation from nuclear blackmail and coercion, instead of any desire to enforce compellence, or mount aggression, the country’s policy-makers perceive the need for only “minimum deterrence” or a small nuclear force. Official pronouncements, however, have refused to be drawn into quantifying the minimum deterrent. Rather, the draft doctrine leaves the decision on the actual size and composition of the nuclear arsenal to threat perceptions from the strategic environment, technological imperatives and the needs of national security. As Jaswant Singh, India’s foreign minister in 1998, said,

The minimum is not a fixed physical quantification. It is a policy approach dictated by, and determined in, the context of our security environment. There is no fixity. Therefore, as our security environment changes and alters and as new demands begin to be placed on it, our requirements too are bound to be evaluated.¹⁷

15. Suo Motu Statement, n.8.

16. Kenneth Waltz as quoted by Gen. Sundarji, *The Blind Men of Hindoostan: Indo-Pak Nuclear War* (Delhi: UBSPD, 1993), p. 68.

17. India’s foreign minister’s speech in Parliament on December 16, 1998. Downloaded from <http://www.meadev.gov.in>.

While the determination of minimum deterrence would change with transformation of threat perceptions and technological developments, it definitely need not seek superiority or even parity with an adversary's nuclear forces in the number of weapons, or yields or types of weapons. However, this freedom is qualified by the need to acquire an assured capability of a second strike that can inflict unacceptable damage on the enemy. Credible deterrence based on such a principle, therefore, imposes its own prerequisites, as defined below:

- Sufficient, survivable and operationally "ready" nuclear forces. This implies that while mere numbers and balance of force might not be relevant because the scale of destruction caused by even a few nuclear weapons could constitute unacceptable damage, what is critical is to ensure that sufficient warheads and delivery vehicles survive a first strike,¹⁸ and be ready for retaliation. This calls for the creation of a secure second strike potential in the form of hardened silos, mobile launchers, deployment beyond the reach of hostile delivery systems, dispersion of the arsenal on a triad, and structured weapon release authority in order to guarantee an assured appropriate response. Reliability of the delivery system is critical for deterrence credibility and this includes dependability of communication (that the correct message is delivered at the right time for launch); of launch (that the missile actually lifts off); of the booster (that it ignites in time); of separation (of the booster from the missile after burn-out); of penetration (despite enemy air defence systems); and of detonation (at the designated target).¹⁹
- Robust command, control, communication and intelligence systems (C3I). This is critical to ensure that the nuclear assets remain secure in peace-time but can make the shift to fully employable forces when necessary in the shortest possible time for effective retaliation. Such a system comprises personnel, procedures that acquire, collate, analyse and interpret information to assist decision-making, and equipment that enables acquisition and transmission of decisions to different constituents of the force in real-time.

18. Technically, first strike is an attack so powerful so as to leave one's opponents with forces which are insufficient to inflict substantial damage on the attacker.

19. For more on this, see Sundarji, n. 16., p. 76.

- Effective surveillance and early warning capabilities to acquire intelligence on alert status of the adversary. These are necessary to minimise risks of a miscalculated or inadvertent strike based on faulty intelligence or false alarms.
- Comprehensive planning and training for nuclear operations consistent with strategy. Well-trained and motivated human resources are the key to effective operations, especially when dealing with nuclear weapons. The soldier must be thoroughly prepared, technically and psychologically, to handle the responsibility.
- The “political will” to employ such forces if and when required. The actual use of the nuclear weapon is ultimately a political decision. Therefore, for deterrence to be credible, visibility of political will through an organisational set-up reflecting institutional decision-making is crucial. There is dire need of conducting periodic scenario-building exercises and regular threat assessments to educate the political leadership.

No First Use Against Nuclear Weapon States and Non-Use Against Non-Nuclear Weapon States

The central principle that logically flows out of the perception of nuclear weapons as political instruments of deterrence is their no first use in a conflict. Doctrines that ascribe a war-fighting role to nuclear weapons need to adopt aggressive postures that envisage their first use. During the Cold War, the USA and USSR believed that a nuclear war could be fought and won and, hence, went on adding numbers and newer delivery capabilities in order to maintain an edge over the other. For the Americans, crafted as their war strategy was on the Pearl Harbour experience, acting first and maintaining surprise were critical. Not surprisingly, therefore, Washington subscribed to a launch on warning (LOW) and launch under attack (LUA) postures. This was done in the belief that unless the US was able to undertake a preemptive/surprise strike, it stood little chance of being able to destroy all Soviet targets as required in its war plan. And minimising, if not completely eliminating, the enemy’s second strike capability was the primary task of the first strike, and, hence, the need for ever increasing

numbers of warheads. NATO too adopted a first use doctrine to deter Soviet conventional might, a logic that Pakistan now uses in support of its nuclear doctrine of first use against India. The Soviet Union, similarly, relied on its capacity to mount preemptive attacks. And, to undertake preemption, both sides built up large, ready counter-force capabilities, supported by a huge infrastructure in the form of C3I, early warning systems, etc.

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India's nuclear doctrine, in contrast, has freed itself of many of these requirements by basing its nuclear strategy on a *retaliation only* policy. It implies that India will not be the first to introduce nuclear weapons in any conflict with a nuclear weapon state (NWS) and will not use nuclear weapons in a conflict with a non-nuclear weapon state, unless it is aligned with an NWS. Until now the only other nation to have publicly adopted an NFU has been China, but its NFU does not apply in conflicts over territories claimed by China. Therefore, India's unconditional NFU has no precedent and understandably, it has been greeted with criticism and scepticism.

At the domestic level, there are enough who argue against NFU on the ground that it would jeopardise national security. Some contend that it would lead to a need for building a larger nuclear arsenal than would be required with a first use policy. Others dismiss the NFU doctrine as nothing more than public posturing, not capable of offering any guarantee against first use if the need so arose. While this is true of any declaratory policy, the fact remains that an NFU doctrine makes sense once it gets translated into force postures and in that sense, provides a measure of indication of a country's intentions. While a first use posture requires missiles to be on alert for LOW/LUA and the nuclear warheads to be mated or ready to be instantly mated with the delivery system, NFU offers greater time and a more relaxed posture. In fact, several points of criticism of NFU do not stand up to scrutiny. If analysed dispassionately, as has been attempted in the following paragraphs, NFU offers the best possible choice for India in the present circumstances.

First of all, it must be understood that the adoption of NFU does not in any way adversely impact India's ability to defend itself against nuclear weapons. Given that the country does not foresee any plausible, rational scenario for the actual use of nuclear weapons, and least of all where it might be compelled to use nuclear weapons first, not for coercion and nor for any territorial or political expansionist ambitions, NFU appears most logical. By placing the onus of escalation on the adversary, while retaining the initiative of punitive nuclear retaliation, India has sought to steer away from nuclear brinkmanship in any and every conflict. Meanwhile, by establishing the nuclear weapon as an instrument

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of punishment, India seeks to prevent deterrence from breaking down, and, thus, aims to minimise, if not prevent, the very use of the nuclear weapon. NFU actually encourages the possibility of 'no use' instead of 'sure use'. This is clearly demonstrated in Table 1.

There are some who argue that by binding itself to an NFU pledge, India has left the initiative with the adversary. But as is evident from the table, through NFU, coupled with assured retaliation, India has reined in the initiative more in favour of no use of nuclear weapons. Unless the adversary's leadership is completely irrational, has suicidal tendencies or is utterly unmindful of national and international public opinion, the possibility of a nuclear war should not arise and the surety that India would not use nuclear weapons first would ensure that.

Table 1

Nuclear Posture Country 1	Nuclear Posture Country 2	Nuclear Threshold	Chance of Nuclear War
First Use	First Use	Low	Very High
No First Use	No First Use	High	Very Low/Nil
First Use	No First Use	Relatively High	Low

Secondly, it is also questioned whether India should retain NFU even if it gets to know that the adversary is preparing for a nuclear strike? Should not preemption then be the right step? The answer to this lies in understanding that even preparation is no guarantee of a nuclear strike. Rather, it may well be part of a strategy of “coercive diplomacy.” It is not a coincidence that all the 51 incidents of threat of use of nuclear weapons actually were intended to conduct coercive diplomacy. Therefore, despite the apparent show of readiness, there will, more likely than not, still be a chance that nuclear weapons would not actually come into use. But by striking first, India would end up inviting certain and massive retaliation. In fact, even if the adversary’s first use of nuclear weapon was to be a small demonstration strike, with India’s preemptive nuclear strike, it would surely retaliate with all that is available. In such a scenario, therefore, it would be better to indicate own level of nuclear preparedness in order to reinforce deterrence, seek international diplomacy to mount pressure, and, at the same time, maintain ready credible conventional forces.

In fact, NFU is the best answer to those international strategic analysts who believe that nuclear weapons in India and Pakistan lead to a condition of instability.²⁰ They argue that since both sides have small nuclear forces, they would be tempted to launch a disarming first strike in case of a crisis. But India’s no first use posture removes this temptation not just for itself, but also for the adversary. Secondly, NFU necessitates measures for increased survivability in order to reduce vulnerability of the nuclear arsenal and these too mitigate the ‘use or lose’ syndrome. In fact, NFU goes to alleviate Pakistani insecurity which, in turn, is beneficial to India by relieving pressure on its leaders for launching a preemptive strike. If Pakistan was constantly under the fear that an Indian nuclear strike was imminent, its own temptation to use its nuclear force would be higher. Therefore, for the sake of crisis stability, it is actually in the best interest of India to make its adversary feel more secure, rather than on the defensive and mistrustful of Indian nuclear intentions. This situation was best described by Robert McNamara in the context of the Soviets’ hardening their missile sites. He wrote,

20. This has been forcefully argued by Sumit Ganguly and Kent L. Bringer, “Nuclear Crisis Stability in South Asia,” in Lowell Dittmer, ed., *South Asia’s Nuclear Security Dilemma : India, Pakistan and China* (New Delhi: Pentagon Press, 2005).

In a period of tension, I wanted the Soviet leaders to have confidence that those forces would survive an American attack and would be capable of retaliating effectively. Then they would not feel a pressure to use them preemptively... I had no desire to face, in a period of tension, an adversary who felt cornered, panicky and desperate and who might be tempted to move irrationally.²¹

Thirdly, by declining a first use stance, India has also removed the need for retaining nuclear forces on hair-trigger alert, a situation not at all conducive to strategic stability, given the geographical realities of the neighbourhood. Having nuclear forces on alert not only raises the possibility of an accidental nuclear war based on a gross miscalculation, but also lowers the threshold of nuclear war in a crisis situation.

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In the case of India and Pakistan, this would be akin to inviting trouble, given their proximity, low warning time and frequent crises. Therefore, India's NFU actually brings stability to the nuclear equation. It allows for a policy of recessed deterrence that allows nuclear weapons and delivery vehicles to be developed and built, but to be stored separately, ready to be assembled in the event of a crisis.

It may be recalled that in the early years of the Cold War, superpower warheads were not routinely mated, nor necessarily co-located, with delivery systems. It was the subsequent development of safety features designed into modern warheads and the advent of sophisticated administrative controls on nuclear weapons that made higher alert levels possible. Ironically, however, after keeping their nuclear missiles on hair-trigger alert for years, the two superpowers found the best nuclear risk reduction measures in de-alerting these and separating warheads from delivery systems! De-mating, de-alerting and de-targeting, the three steps taken by the superpowers for nuclear risk reduction and confidence-building, form a natural part of the NFU posture.

21. Robert McNamara, *Blundering into Disaster: Surviving the First Century of the Nuclear Age* (London: Bloomsbury, 1987).

Without having to go through this cycle, India's nuclear doctrine accepts the adoption of NFU as more stabilising since nuclear forces need not be maintained on high alert status. In fact, for deterrence to be credible with a no first use doctrine, it would only be necessary to have available all the relevant nuclear assets, though dispersed, as unassembled nuclear warheads under civilian control, and dedicated delivery systems kept either in storage or in readiness away from their operational areas – as long as they can be brought together as rapidly as required during a supreme emergency.

Fourthly, the NFU also answers another argument made against nuclear weapons causing regional instability. It has been alleged that since the arsenals of India and Pakistan are small and technically primitive, they lack fail-safe devices such as double keys, permissive action links (PAL) or other elaborate procedures insuring against an unintended or accidental attack. The NFU eases this situation since it precludes the need for delegation of authority for launch and, thus, minimises risks of miscalculation and accidental attack. In fact, given that the existent non-proliferation constraints limit the possibility of such devices becoming available to India, NFU makes the task easier.

One situation, however, that could test India's NFU is a scenario where a Taliban type military man or some non-state actors take control of nuclear weapons in Pakistan after a period of political instability.²² Two responses could arise in this case. Firstly, if the new player has assumed state power and become a political actor, then he would also develop a stake in the political system and powerdom and, hence, would be expected to display some sense of rationality in the use of nuclear weapons. Classical deterrence based on a retaliation policy (or mutually assured destruction – MAD) can be expected to apply in such a scenario. But in case the non-state actor (NSA) has got hold of the nuclear weapon in a situation of political chaos, and threatens to use it against India in a suicide bomber mentality – in order to wreak nuclear havoc without worrying about the consequences of the same for its own state – then nuclear deterrence

22. The prospect of a nuclear capable state losing control of some of its weapons to terrorists has been put forth as a real and immediate danger in the US Quadrennial Defense Review 2006. American options in case of such an eventuality have been well brought out in Thomas Donnelly, "Choosing Among Bad Options: The Pakistani 'Loose Nukes' Conundrum," *National Security Outlook*, American Enterprise Institute for Public Policy Research, May 2006.

becomes more difficult to apply. In fact, this is the problem being faced by nuclear doctrines worldwide.²³ To deal with cases such as this, India needs a multi-pronged strategy: first, it must maintain high conventional capability that can be used preemptively in order to stop a nuclear attack on itself; second, it must declare that WMD terrorism would invoke retaliation against the state known to be sponsoring such activities; third, participate in global/multinational endeavours aiming at controlling proliferation of dual-use materials through strengthened export controls, and enhanced security and safety of nuclear arsenals; and fourth, focus on better intelligence and preparedness levels to mitigate a national disaster.

Evidently then, no first use can hold in a range of situations, and, in fact, the posture that it translates into, offers several advantages for India:

- (a) It eliminates the need for forward deployment of nuclear systems, and thus, reduces the likelihood of accidental or unauthorised use. LOW/LUA force postures, by their very nature, require pre-delegation of authority to launch nuclear weapons down a clearly defined chain of command. It may be mentioned in this context that the US and USSR, which for many years relied on tactical nuclear weapons (TNW), were never unaware of the dangers inherent in these postures. It was found that in such a situation, the "fog of war" was abnormally dense. Battles where use of TNW was envisaged were described as "battles of great confusion; [where] casualties would be high; troops would be left isolated and leaderless; and morale would be hard to maintain."²⁴ Therefore, TNW were amongst the early ones to figure in arms control initiatives once the two superpowers had realised that "the use of nuclear weapons could never be a purely 'tactical' decision, taken by the local commander according to the state of battle. It would be a strategic decision to be taken at the highest level and with reference to the prevailing, overall political and military situation."²⁵ India has adopted this wisdom without the experimentation.

23. For a comprehensive examination of this, see Manpreet Sethi, "Current Trends in Nuclear Weapons Thinking and Strategies," forthcoming paper in *Asian Defence Review 2007* (New Delhi: Knowledge World, 2007).

24. An assessment of William Kaufmann as cited by Freedman, n.12, p. 104.

25. *Ibid.*, p. 105.

- (b) It forecloses the chance of an irrational preemptive strike, as also minimises the risks of an inadvertent or unauthorised nuclear use. In times of crisis, lack of information, misinformation and misjudgments can often be the cause of confrontation without either side having the intention to precipitate one. As McNamara said, "It is correct to say that no well informed, coolly rational political or military leader is likely to initiate the use of nuclear weapons. But political and military leaders, in moments of severe crisis, are likely to be neither well informed nor coolly rational."²⁶
- (c) It reduces the expectations from the C3I systems. Obviously, first use of nuclear weapons based on LUA/LOW places a greater strain on communications. But recessed deterrence can make do with a less sophisticated, less elaborate and, hence, less costly system.
- (d) It takes the pressure off for an immediate response to nuclear attack. As C. Raja Mohan has argued, "India believes its deterrence requirements can be met without time-urgent responses to a nuclear attack."²⁷ A similar point was made by Gen. K. Sundarji, in the late 1980s:

The response can be a good few hours or even perhaps a day after the receipt of the first strike. A very highly sophisticated, highly responsive command, control and communication system that functions in real time is not necessary.... Even a very successful decapitating attack by the adversary cannot give him any assurance of the non-launch of the surviving second strike by the recipient of the first strike.

- (f) Last but not the least, the presence of the nuclear arsenal in separate places also enhances the survival of the arsenal from a preemptive strike. This is extremely important for upholding the credibility of deterrence with an NFU posture.

Besides the above-mentioned benefits, there can be no disputing the fact that a no first use policy is morally the most correct one. That is, if there can be

26. McNamara, n. 21, pp. 13-14.

27. C. Raja Mohan, "No First Use and India's Nuclear Transition," Pugwash Papers, Pugwash Meeting 279, London, November 15-17, 2002.

anything morally correct about nuclear weapons at all. Nuclear weapons are not just any weapons that could or should be used indiscriminately. They are special in the sense of their immense destructive capability. And therein lies their value as deterrents.

More than anything else, the merit of India's NFU policy lies in challenging the long held nuclear theology of first use as professed by Western nuclear powers. Until now, this has been touted as the only possible approach to use nuclear weapons for safeguarding national security. The Indian adoption of NFU has opened up another focal point at the other end of the spectrum. It offers a counterview to the traditional aggressive and arms race generating doctrines. If this were to be accepted by all NWS, then the world might find itself on its way to a diminishing salience of nuclear weapons, perhaps their delegitimation, and eventually their abolition.

Assured Retaliation

India's nuclear doctrine frees itself of the compulsion of immediate retaliation and bases deterrence instead on the *certainty* of retaliation that would be *punitive* in nature. Therefore, while the counter-attack may not be prompt, it

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would be assured and would cause unacceptable damage to the adversary. As has been said, "The ability to retaliate with certainty is more important than the ability to retaliate with speed."²⁸ In fact, the time taken to retaliate would have to be dependent on technical realities such as the time required to bring together the nuclear weapon and delivery vehicle, the nature of precise

command and control and custody arrangements, the state of the country after having absorbed the first strike, as also other domestic and international political factors.

28. Ashley Tellis, *India's Emerging Nuclear Posture: Between Recessed Deterrent and Ready Arsenal* (Santa Monica, CA: RAND, 2001), p. 326.

Accordingly, therefore, India's doctrine does not specify any time for retaliation. In fact, the NSAB draft did not even define the nature or magnitude of punishment, except for describing it as "punitive". Beyond this, it did not address questions about the character, extent or weight of retaliation. Instead, it followed the French logic that "the adversary must not be able to calculate what would be the reaction to this or that initiative he might take."²⁹ It only conveyed that retaliation would be certain and it would be devastating irrespective of when or how it was inflicted.

However, while the draft nuclear doctrine mentioned "punitive retaliation", the 2003 official version changed it to "massive retaliation." The reasons for doing so have been conjectured upon by many.³⁰ But this has not necessarily enhanced the credibility of deterrence because it actually restricts the available response to an adversary's first strike to only an all out nuclear attack. This may appear too drastic for use except in extreme circumstances. While it may be argued that India's nuclear philosophy does not conceive nuclear use except in extreme circumstances, however, a case can be made for greater flexibility in response options. In fact, "punitive retaliation" is credible enough since it provides alternatives relative to the nature of strike and level of provocation. The US too in the 1960s had reached the conclusion that it should have a variety of response options other than massive retaliation against cities. This wisdom was obtained after several US officials, including Robert McNamara as secretary of defence, expressed their dissatisfaction with the inflexibility of a single integrated operation plan (SIOP) that envisaged a preemptive first strike involving 3,423 weapons totalling 7,847 megatons against the Russians and Chinese in case of any conflict, irrespective of the provocation!!³¹ A more flexible response was, therefore, proposed that envisaged a substantial raising of the nuclear threshold for the critical initial responses to be made by conventional forces alone, keeping the use of nuclear weapons late and limited.

29. This is the logic of the French nuclear doctrine, as explained by Tellis, *Ibid.*, p. 321.

30. See Rajesh Rajagopalan, *Second Strike: Arguments About Nuclear War in South Asia* (London: Penguin Books, 2005) and Tellis, *Ibid.*

31. For more on this, see Gerard J. DeGroot, *The Bomb: A History of Hell on Earth* (London: Pimlico, 2005), pp. 268-269.

In the Indian context too, especially vis-a-vis Pakistan, as Ashley Tellis argues, by basing deterrence on massive retaliation that forecloses the option of a graduated response, India might end up encouraging its adversary to massively employ its own arsenal in the fear that India's "massive retaliation" to any nuclear use would anyway hold the possibility of disarming it.³² Thus, India might invite a greater nuclear use upon itself than the enemy might actually have factored into its calculations. This would then rob India of the opportunity to exercise escalation dominance. Meanwhile, in relation with China, given its existing nuclear superiority and higher survivability quotient, Indian threats of massive retaliation after having suffered a first Chinese strike hardly seem credible.

Civilian Control Over Nuclear Weapons

India's nuclear doctrine establishes strict civilian control over any decision to use nuclear weapons in a conflict, as also over the custody of the nuclear warheads

India's nuclear doctrine establishes strict civilian control over any decision to use nuclear weapons in a conflict, as also over the custody of the nuclear warheads in peace-time.

in peace-time. This is a clear reflection of the constitutional system of governance where the ultimate decision-making is the responsibility of the prime minister. While the nuclear force is expected to be maintained in the form of separated components, with the responsibilities for the command, custody, integration, and use of the weapons clearly demarcated between the civilians and the military, the command over their use would lie solely with the civilian leadership. In the

remote contingency that deterrence does break down and nuclear release orders are issued by the prime minister (or his designated successors), the nuclear components would be integrated into a usable weapon system, with custody to be transferred to the military, which would retain sole responsibility for executing nuclear use options.

32. Tellis, n. 28, p. 340.

Pursuit of Universal Nuclear Disarmament

Ordinarily, one should not expect to find a mention of nuclear disarmament in the nuclear doctrine in the first place since it actually seeks to operationalise a nuclear weapons policy. However, India's nuclear doctrine clearly designates universal nuclear disarmament as a "national security objective." It identified a nuclear weapons free world (NWFW) as the ideal state of affairs but since the world did not seem to be getting any closer to it, the Indian nuclear doctrine was compelled to bring the Indian nuclear strategy more in alignment with the world of *realpolitik*. It may be recalled that while explaining the rationale behind India's overt acquisition of the nuclear capability to the Parliament on August 4 1998, the then Indian prime minister had, in the same breath, also exhorted India's nuclear diplomacy not to lose sight of the objective of an NWFW.

India's nuclear doctrine clearly designates universal nuclear disarmament as a "national security objective."

SUPPORTING STRUCTURES FOR CREDIBLE DETERRENCE

In order to translate the principles of India's nuclear doctrine into workable concepts, certain supporting structures or prerequisites are necessary. The doctrine itself prescribes them as being critical for enhancing the credibility of the kind of nuclear deterrence that India aspires for. These are briefly explained in the following paragraphs.

Survivability

The credibility of nuclear deterrence is wholly dependent on the survivability of a sufficient nuclear force that can assuredly mount a second/retaliatory strike. This necessitates the survival of not only the nuclear warhead, but also the delivery vehicle; the command and control set-up, including not just the primary decision-maker and his entire pre-determined chain of succession, but also the line of command up to the man in the field who is to execute the decision; secure communication systems; targeting coordinates; and, above all, the survival of the

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political will to stomach the horrendous damage that any nuclear strike would cause.³³ The last element, however, can never be empirically assessed. In fact, President Nixon had once said that international relations are like “stud poker with a hole card,” the only covered card being “the will, nerve and unpredictability of the President – his ability to make the enemy think twice about raising the ante.”³⁴ The survivability of this will can be heightened through educating the political

leadership about not only how deterrence works and the need to show adequate resolve, but also by ensuring the availability of other well informed advisers to help in times of crisis. Meanwhile, survivability of the other prerequisites can be enhanced through intelligent planning and adequate redundancy measures.

Traditionally, survivability has been assured through dispersion of nuclear forces, use of deception and by maintaining some sort of a relationship, not necessarily of parity, with the enemy’s intelligence, surveillance, warheads and more importantly delivery capabilities. Dispersion is a function of mobility and the more mobile the components of the nuclear arsenal are, the greater is the chance of their survivability. But, managing mobility is not an easy task. The challenges include not just organising the frequent movement of actual nuclear warheads and delivery vehicles but also that of dummies so as to weave in adequate deception and camouflage into the survivability strategy.

The determination of survivability is also dependent on the adversary’s nuclear doctrine, force posture and strategy. A known counter-force or a counter-value targeting philosophy, or even both, provides some indication of the likely targets to be prioritised and, hence, helps address some of the

33. Several Indian and foreign writers have doubted that the Indian leadership has a “killer instinct.” For instance, Aditya Chibber writes, “The *vairagya* syndrome of renunciation has always robbed us of the killer instinct.” See Aditya Chibber, *National Security Doctrine: An Indian Imperative* (New Delhi: Lancer, 1990), p. 85 ff. A fiction writer, Humphrey Hawksely, in his book *The Third Global War* too depicts a nuclear stricken Indian leadership unable to bring itself to retaliate with nuclear weapons.

34. Matin Zuberi, unpublished manuscript, chapter entitled, “Nuclear Battlefield.”

survivability issues. But these are complex issues that require serious thinking and analysis in peace-time in order to enhance the credibility of deterrence. This is imperative, because survivability is absolutely critical with a no first use posture wherein nuclear deterrence rests squarely on the ability to mount an assured retaliation within a reasonable time period.

Strategic Triad

One effective way of enhancing survivability of the nuclear arsenal is to distribute the nuclear weapons on a triad of land-, air- and sea-based assets. The existence of the triad provides redundancy, mobility and dispersion essential for force survivability and effectiveness. This has been a time-tested formula and from the time the submarine launched ballistic missiles (SLBM) first became available after 1955, it has been considered the most survivable delivery system. A US nuclear submarine captain described the American Polaris submarine as

...an extremely survivable assured capability that the Soviets knew they could not destroy and knew if they conducted a first strike, that system would some day be available to retaliate. It might take some time to get the message to them from a destroyed national headquarters, but at some day the missile warheads would come raining in and they would pay the price.³⁵

The Indian nuclear doctrine has tapped into the same wisdom by advocating the eventual build-up of a strategic triad as the foundation of its credible deterrence. In fact, the proposal for the triad is a logical consequence of the no first use policy that assures retaliation but is not time-critical. The ability to strike after sustaining a first attack can be best assured with sea-based assets, as the other two, land-based missiles and aircraft and their bases, are more vulnerable to a preemptive strike, especially with the advances that have taken place in space-based surveillance technologies. Of course, sea-based deterrence poses its own challenges, two of which being the acquisition/development of the vessel

35. DeGRoot, n.31, p. 267.

itself and the development of the necessary communication systems for the submarine. For India, the construction of the submarine has not proved easy given that the country has had to undertake a completely indigenous development of the vessel, having been denied import of nuclear and even dual-use materials and technology. Also, since the country's nuclear energy programme has been based on the development of pressurised heavy water reactors instead of pressurised water reactors, the technology best suited for nuclear submarines, the country has had to develop a parallel track of technology. The second challenge arises in the form of establishing secure, constant and reliable channels of communication with nuclear submarines. Normally, underwater communications are possible through extremely low frequency (VLF) bands of the electromagnetic spectrum. These communication channels, however, have a restricted traffic bearing capacity and so are slow. Also their transmitting stations are large, fixed and difficult to harden, making them vulnerable to a first strike. The US resolved this problem by having an airborne VLF system coupled with satellite communications. India too will have to find its own answers to this problem, as also to questions such as how to obviate the possibility of an accidental or unauthorised use once SLBMs are deployed and activation codes made available to captains?

However, till such time as the sea-based deterrent becomes available, India would have to base its nuclear deterrence and manage its survivability challenges with land-based ballistic missiles (by making them more solid fuelled and more rail and road mobile) and air delivered nuclear warheads (by hardening air bases and equipping them with effective air defences). Of these two, too, in the immediate future, the responsibility of India's nuclear deterrence will have to be borne mainly by the air force, since ballistic missiles with required ranges and accuracy are yet not operationally available. In order to ensure flexibility of selection of missile launch sites for enhancing survivability, it would be necessary for India to develop missiles of the ranges of not less than 5,000 km, a capability that will take some time to develop. Even then, air delivered nuclear capability will play a critical role in deterrence since manned nuclear capable aircraft provide an effective means to show strength

and resolve and yet give the political leadership the flexibility of recalling a mission even after it has been launched.

Counter-Value Targeting

With a no first use posture, if in the remote contingency that India is to respond to a nuclear attack, it would be most logical to use the weapons on cities instead of on purely military targets. While this sounds barbaric, it is actually the threat over large chunks of population and the productive assets of the country that can constitute unacceptable damage to make deterrence work best. Also, given that the accuracy measure of Indian missiles might be less than optimum in some ranges, Indian nuclear weapons would be most effective in attacks against economic and industrial assets, infrastructure nodes, and population centres. According to Ashley Tellis, "India's relatively small number of low-yield weapons is not optimised for effective direct attacks on opposing nuclear forces (counter-force targets)..."³⁶ On the other hand, they would be best suited against cities that denote softer targets (easy to pulverise even with a low yield weapon), larger targets (less sensitive to accuracy of delivery systems) and easier to locate targets (even without the help of very sophisticated navigation and targeting systems). The damage inflicted upon life and property would certainly constitute punishment of a magnitude that any country would find unacceptable.

Robust Command and Control

While the exact details of the command and control organisation and operation is not the objective of this paper,³⁷ it only seeks to highlight its centrality to credible deterrence. In fact, punitive retaliation is possible only if India has a robust

Till such time as the sea-based deterrent becomes available, India would have to base its nuclear deterrence and manage its survivability challenges with land-based ballistic missiles and air delivered nuclear warheads.

36. Tellis, n. 28, p. 352.

37. For a detailed analysis on this subject, see Gurmeet Kanwal, *Nuclear Defence: Shaping the Arsenal* (New Delhi: Knowledge World, 2001), pp. 143-169.

command and control system that enables efficient and responsive decision-making and has enough redundancies built into it to survive even a worst case disarming strike. While the survivability of C3I2 is critical in case of breakdown of deterrence, the knowledge of its existence and smooth functioning are critical during peace-time for enhancing the credibility of deterrence.

Pre-determination of Unacceptable Damage

Nuclear deterrence as practised by India is based on the retributive utility of nuclear weapons. It clearly establishes that any incidence of nuclear use against the country would bring back assured damage on the user itself and of a kind that would be found unacceptable by the aggressor. It is the fear of this retaliation that is supposed to hold back or deter the adversary from launching a first nuclear strike.

Obviously, this logic calls for India to be clear about the level of damage that its retaliatory strike must cause for it to be unacceptable to the adversary. This assessment can only be made on the basis of an extensive and intensive study of the cultural, socio-political, and strategic factors affecting the likely response of the adversary to nuclear use. The ability of a country to absorb damage is a complex function of its strategic culture, political system, economic state of growth and level of freedom enjoyed by the populace. During the 1950s, China's leader Mao Tse Tung described his country's damage acceptability threshold to be very high. But a more developed and economically advanced China cannot be expected to ascribe to the same philosophy. There is a case to be made that as countries develop, they also

India's assessment of the level of punitive retaliation that an adversary will find unacceptable enough to hold deterrence in place is critical.

become more vulnerable and less open to accepting damage. Economically backward or politically isolated nations, on the other hand, have little to lose and may be able to absorb more damage.

India's assessment of the level of punitive retaliation that an adversary will find unacceptable enough to hold deterrence in

place is critical. This is also required in order to be able to correctly calculate the number of nuclear weapons India must stockpile and those that must absolutely be made survivable for effective retaliation.

Security and Safety of the Arsenal

The doctrine places a lot of emphasis on ensuring the security and safety of the nuclear arsenal, not just in peace-time but also in war-time. Given that India's nuclear arsenal exists in a de-mated state and in different locations, the risk of unauthorised use or the chance of inadvertent use due to miscalculation is less but it also means having to provide for the physical security of the assets to guard against theft, sabotage or unauthorised access. It also calls for the need to match ease of storage for ensuring safety with ease of availability at the launch site or airfield when required.

CONCLUSION

"Doctrines control the minds of men only in periods of non-emergency. They don't necessarily control the minds of men during periods of emergency. In the moment of truth, when the possibility of major devastation occurs, one is likely to discover sudden changes in doctrine." James Schlesinger stated this in a hearing before the US Senate Committee on Foreign Relations, 93rd Congress, 1974.³⁸ This statement could be even more true in the case of nuclear doctrines, but, fortunately, since the world has somehow averted the use of nuclear weapons, there are no empirical instances to either prove or disprove this assumption. At the same time, it must also be said that doctrines are not cast in stone. They reflect the realities – political, economic and technological – of the times and could change as these parameters undergo a transformation.

But, for the time that it exists, a nuclear doctrine performs the crucial task of providing a window to how a country perceives its nuclear weapons. It explains why it needs these WMD and how it plans to use them in the achievement of those objectives. India has premised its need for nuclear weapons on its desire to resist nuclear coercion or blackmail and, hence, espies its use only for self-

38. As quoted by Tellis, n. 28, p. 362.

defence. Accordingly, New Delhi has enunciated a nuclear doctrine that perceives a purely political role of deterrence for its nuclear weapons. Flowing

New Delhi has enunciated a nuclear doctrine that perceives a purely political role of deterrence for its nuclear weapons.

therefrom, India's nuclear doctrine ascribes to a no first use posture since it holds that the nuclear weapon has no role in enforcing compellence or staging aggression and, hence, is only considered usable in a situation where an adversary has first used a nuclear weapon against the country. In such a situation, the doctrine prescribes assured retaliation to inflict

unacceptable damage. In order to carry out this exercise, the doctrine aspires for a minimum nuclear deterrence whose credibility resides in its survivability.

The operational nuclear strategy as flows from India's nuclear doctrine provides the least risk option in a situation where nuclear weapons are present. It premises nuclear deterrence on a small arsenal that is not on hair-trigger alert, and, hence, less open to the possibilities of miscalculation or accidental use. At the same time, given its own orientation towards no first use and punitive retaliation in case of use, the doctrine seeks to minimise the chances of nuclear use in the first place.

Lastly, it must be reiterated that India's nuclear doctrine accords due importance to the attainment of an NFWF as the best insurance of Indian security. In an NFWF, India can be regionally more secure and globally better placed to pursue its objective of assuring strategic autonomy for its pursuit of economic and security objectives. But until such a world may be obtained, India's own brand of nuclear deterrence, as defined by its nuclear doctrine, will have to do the needful.