



## India's Credible Minimum Deterrence A Decade Later

**Tanvi Kulkarni and Alankrita Sinha**  
*Research Officers, IPCS.*

Deterrence in the most conventional sense implies the making of military threats in order to prevent an adversary from taking aggressive actions (Buzan 1987). According to Barry Buzan (1987: 136), deterrence as a concept purports to stop an unwanted action by the adversary before they occur and encompasses both denial and the possibility of retaliation.

The introduction of nuclear weapons into this complex dynamic of deterrence does not stabilise the crisis situation, as conventional wisdom suggests, but makes it even more threatening. The core of nuclear deterrence involves convincing the adversary that the cost of an undesirable action is more than the rewards. This requires a comprehensive understanding of not only the adversary's motives, decision-making processes and objectives, but also one's own capability to influence the calculus of costs and benefits that an adversary attaches to his own belligerence. Therefore, nuclear deterrence also takes into account the credibility of one's own nuclear threat that is aimed at convincing the adversary that his belligerence will be 'punished' by unacceptable damage through nuclear means. It is in the wake of this that India evolved its own nuclear doctrine which seeks to uphold the notion of credible minimum deterrence.

### I UNDERSTANDING NUCLEAR DETERRENCE: THE INDIAN CONTEXT

The National Security Advisory Board's Draft Report on Indian Nuclear Doctrine of 17 August 1999 was officially adopted (read operationalized) as India's Nuclear Doctrine on 4 January 2003, upon review by the Cabinet Committee on Security. Unlike other nuclear weapons states, India's nuclear

programme went from being peaceful, to also include components of a weapons programme at a later stage. This partially explains the absence of a well-defined framework to guide the process of civil-military diversification, till then. Therefore, after Pokhran II, the doctrine was intended at justifying India's declared weapons status internationally and guiding India's nuclear policy thereafter. However, neither was the doctrine of a permanent unchangeable character, nor were its principles; while this left loose ends, it provided scope for incorporating unforeseen developments.

### Indian thinking on nuclear deterrence: Three major strands

In the Indian strategic community, three major strands of thinking on nuclear weapons are important to consider – those of the nuclear rejectionists, pragmatists and the maximalists (Bajpai 2000: 267-301). There is substantial debate over the nature of the Indian nuclear deterrent between the three schools of thought; while the rejectionists want to ultimately do away with nuclear weapons based deterrence, the maximalists call for a primarily thermonuclear deterrent. In opposition to this, the pragmatists feel that nuclear weapons successfully serve India's national interests and aid visibility in global politics, but a spiralling arms race should be avoided.

In the post Pokhran II period, the Indian approach and policy towards strategic weapons, including the concepts and ideas that define them, have been influenced by the pragmatists (like K Subrahmanyam and Gen K Sundarji- hailed as the gurus of India's nuclear policy). Their chief concern has been to balance India's nuclear capability, with smaller number of nuclear weapons.

## Nuclear Security Programme (NSP)

Institute of Peace and Conflict Studies



B-7/3, Safdarjung Enclave,  
New Delhi, 110029  
91-11-4100 1900  
[www.ipcs.org](http://www.ipcs.org)

Credible Minimum Deterrence (CMD) is one of the central pillars of India's nuclear policy. Nuclear policy makers often argue that India's nuclear weapons programme, has always been guided by the understanding of minimum deterrence – avoiding largess in terms of cost, pace or posture. Credibility came upon demonstration of weapons capability. The credible minimum posture was considered apt to justify India's nuclear weapons and missile capabilities after the 1998 tests. K Subrahmanyam called it a doctrine adopted to suit India's requirements and thinking on nuclear weapons (Subrahmanyam 1999). Bharat Karnad (2008) defines it as a self-explanatory, moderate, limited, reasonable and legitimate posture. The CMD doctrine highlights that India does not seek an open-ended nuclear arsenal and pillars other postures like the second-strike capability and no first use. CMD has now become the over-arching feature of the Indian Nuclear Doctrine, advertising three aspects of a nuclear weapons-empowered India: security with a thrust on deterrence, a responsible nuclear weapons state and commitment to global nuclear disarmament.

### Understanding Credibility and Minimalism

The CMD posture has two elements – credibility and minimalism. Both terms can be elucidated separately, but it is their equation that makes for the nuclear deterrence policy. Credibility is a combination of political will, capability, effective and assured retaliation, intelligence and survivability. The minimum can be interpreted in terms of size, cost, posture and eventuality of use.

The Indian nuclear doctrine echoes a strictly political interpretation of credible deterrence – one not shared in spirit by the military and scientific constituencies within the country – as a politico-psychological concept that serves to communicate to potential adversaries that India maintains the will and capability to inflict unacceptable punishment through 'massive retaliation' with nuclear weapons. Credibility is composed an effective second strike capability and survivability (assured by a nuclear triad)

*India is the only nuclear weapons state that officially pronounces its doctrine based on 'credible minimum deterrence' and can therefore claim an interpretation different from those in Western theories, particularly those applicable to the Cold War*

ensured through a robust command and control system, safety and security of arsenal, operational force planning, training and preparedness, and research and development. This is to be backed by effective conventional military capabilities. The doctrine lends dynamism to the credible deterrent by making it responsive to India's strategic environment, national security and technological imperatives.

The understanding of credibility builds up a flexible, multi-dimensional and even a somewhat 'moral' definition of minimum deterrence. A minimum deterrent is to be maintained through not only the smallest possible size of nuclear arsenal but a defensive posture defined by no first use and non-use against non-nuclear weapons states, a de-alerted and de-mated warhead status and absolute civilian control over the nuclear force (minimum eventuality of use and thereby minimizing financial, human and social costs of a nuclear exchange). It also has a self-restraint imperative. Simultaneously, a minimum deterrent is meant to give sense of conduciveness to disarmament efforts and therefore reinforce the Indian morality argument.

It is important to note here that India's nuclear doctrine talks of Credible Minimum Deterrence and not minimum credible deterrence - a deterrent of the smallest possible value (minimum) and yet 'credible'. Minimum deterrent is to be consistent with maximum credibility. Quantification is inevitable yet unimportant; the number of nuclear weapons is not the real determinant of successful deterrence. The idea is to project the Indian nuclear deterrent as a minimum sufficient and dynamic concept. Moreover, CMD is a relational and relative concept. The deterrent is relative in the sense that its measurement is relative to the quality, quantity and value of the arms possessed by each participant in the adversarial relationship. Defending the nuclear doctrine, K Subrahmanyam (1999) wrote that no first use, credible minimum deterrence and civilian control being the three pillars of India's nuclear doctrine "all other components ...are strict mathematical derivatives from the three...".

Declarations like politico-psychological conception of nuclear weapons, ultimate commitment to global nuclear disarmament and unilateral moratorium on nuclear testing are self-restraining; they delimit the purpose and growth in size (qualitative and quantitative) of arsenal. Hence they lend to 'minimum' nuclear deterrence. At the heart of nuclear deterrence lies its targeting philosophy (Nair 1996: 98). Counter-value targeting ensures credibility and minimalism in the nuclear deterrent – bleeding the adversary through massive civilian damage with a small

arsenal. Therefore calculations for the minimum deterrent are furnished also on the basis on the number of weapons/ warheads required to take out adversary's non-military/ civilian centres.

The Nuclear No First Use (NFU) posture not only subscribes to the idea of non-usage/ minimum eventuality of the use of nuclear forces, but in fact is meant to reinforce the credibility of deterrent. The underlying idea that it projects is: a state can afford to avoid a pre-emptive attack only when it can successfully absorb the adversary's attack and retaliate punitively. Another element that is of constant focus, but has not yet been separately acknowledged in the doctrine, is the time factor. To be credible nuclear arsenals are to be kept in a position that allows minimum deployable time. India's nuclear doctrine qualifies CMD with effectiveness, endurance, timeliness, diversification, flexibility and responsiveness; and a nuclear triad of delivery systems are to ensure these.

## II CMD: A CRITIQUE

The relational and relative in India's credible minimum deterrence is concerned mainly with India's neighbours and nuclear weapons states – Pakistan and China. It results from an understanding that no threat from China or Pakistan, except a nuclear attack, is big enough for India to require an expansive use of nuclear forces. It is clear that India's nuclear weapons are deterrents only against nuclear threats. Is that enough?

### **CMD vis-à-vis Pakistan and China**

The challenge to India's posture comes from the Pakistani policy and psyche – nuclear weapons are war-fighting tools, mainly aimed to be used against India and reserving a first use option for Pakistan. The nuclear asymmetry between India and Pakistan, which India could claim as working to its advantage, is now narrowing. Pakistan now bellows intentions of battlefield usability of nuclear weapons through its nuclear-capable Nasr (Hatf-9) tactical missiles. Besides these, Pakistan exhibits both, better control over managing nuclear ambiguity and stronger resolve concerning the usability of nuclear weapons. The Pakistani nuclear redlines remain ambiguously defined (although some experts in India may argue to the contrary) and military control over nuclear forces is tightening further. Increasingly, Pakistan emerges as the nuclear-threatener in the Indo-Pak equation.

With China, the mutual no-first-use policy rationalizes credible deterrence. Besides, China keeps India engaged with Pakistan, to pursue a nuclear trajectory to close gaps with the US. The

*With China, the mutual no-first-use policy rationalizes credible deterrence. Besides, China keeps India engaged with Pakistan, to pursue a nuclear trajectory to close gaps with the US. .*

Indian nuclear deterrent remains largely ineffective towards the burgeoning Chinese nuclear assistance to Pakistan. It is hard to believe what the Chinese claim to be their nuclear capabilities. Therefore, a correct calculation of the required credible minimum deterrence against China is very difficult to calculate. Any significant change in the US nuclear policies and strategies is bound to change the Chinese nuclear position. Consequently, it affects India's security preparations.

Is it enough to deter only nuclear attacks from China and Pakistan? If yes then India would definitely not be sharing the same perception as its adversaries on nuclear deterrence. Pakistan's nuclear philosophy of deterring conventional military threats and attacks by India has gone to the extent of considering detonation of tactical weapons on their own soil to ward off Indian forces. This may warrant fashioning the nuclear deterrent in ways that lends it greater credibility.

Nuclear deterrence, as a Cold War strategy, is premised on the rationality of the actors in the conflict. It assumes that states as the primary actors in a conflict are unitary rational actors and they base their choice of action in the context of an uncertain environment; one which is mitigated by their rationality. At the core of nuclear deterrence is the assumption that rational actors believe that the costs of their nuclear action would be far greater than the gains from bargained inaction. However, nuclear deterrence theories and policies premised on the Cold War realities are inapplicable to the changed realities of present day. (Cain 2010: 298). The primacy of states as primary actors in the international system is currently being challenged by the rise of non-state actors (terrorist groups). As far as nuclear deterrence is concerned, rationality of the two Cold War rivals has now given way to the irrationality of non-state actors.

In the Indian context, the idea of CMD which threatens a credible retaliatory nuclear strike with assured destruction, falls short in face of sub-conventional threats for three major reasons. First, non-state actors are free of obligations attached to legitimately recognized players in the

international system (Schwartz 2009: 57). This makes them less prone to bargaining strategies hinged on nuclear weapons. Second, they cannot be identified territorially, thus the idea of retaliatory attack gives way. The ambiguities under which non-state actors hide make them invulnerable to the credibility of retaliatory measures, thus purging the very ardour of deterrence as a strategy (Stone 2010: 274). Third, these non-state actors do not necessarily share the same value- systems (Lowther 2010: 4) and world-views as the Indian state, thereby affecting the whole process of rational calculations which is imperative to influence and deter adversaries.

The operational doctrine of 2003 changed the nature of India's second strike from 'sufficient' to 'massive'. Massive retaliation and minimum deterrence are contradiction in terms. Combined with the NFU, they indicate that the response will be none or total. A minimum-sized arsenal may not be credible enough to warrant massive retaliation. Far from convincing adversaries, India's credible minimum deterrent has failed to convince even the domestic constituencies. The contentious Cold Start Doctrine, which enjoyed little political support, was nevertheless reflective of the Indian Army's understanding of credibility in the operational sense. The military's conventional war strategy is hindered by the 'all or nothing' attitude in the nuclear doctrine (Kampani 2011). Most of the technical debate concerned India's thermonuclear weapons capability, fissile weapons policy and the nuclear triad. A section of India's nuclear scientific community has been most vocal about the incredibility of India's nuclear deterrent. Apart from these, the civilian-military institutional divide in India adds to incongruence on nuclear policy (Kampani 2011).

Transparency and ambiguity clash rather seriously in India's doctrine of CMD. Intended ambiguity plays to deterrence advantage. But much of the ambiguity seems to be forced from lack of clarity about our own deterrent. Many questions await debate: Does the level of credibility differ for deterrence against China and Pakistan? What kind of confrontation is to be deterred? What is to be communicated to the adversary? With what aspect of the adversary's nuclear identity does one associate the deterrent (a mutual no first use policy with China or the size of the Chinese nuclear arsenal)? Politically, credibility requires effective communication of the threat of retaliation to the adversary than with quality and quantity of weapons. It is therefore built over time and depends heavily on rhetorical threats. Is

Indian rhetoric credible? Greater official clarity on what constitutes our 'credible minimum' deterrent is therefore needed.

Finally, the way terminologies are constructed affects posturing and communication. 'Minimum' deterrence seals the lower limits of the arsenal, indicating that any number below this limit would endanger deterrence. Herman Kahn's term 'finite deterrence' (Kahn 1960: 4) appropriately conveys the sense of a fixed upper limit. It is naïve to believe that India's nuclear force would always remain at a fixed minimum level of the deterrence. The term 'minimal', widely used by many Western experts, better conveys the relation between the deterrent and the consequent numerical flexibility. There might therefore be a need to rephrase the term in our lexicon.

## REFERENCES

- Bajpai, Kanti (2000), "India's Nuclear Posture After Pokhran II" in *International Studies*, 37(4): 267-301.
- Buzan, Barry (1987), *Introduction to Strategic Studies: Military Technology and International Relations*, London: The Macmillan Press Ltd.
- Cain, Anthony C. (2010), "Deterrence in the Twenty-first Century", in Anthony C. Cain (ed.) *Deterrence in the Twenty-first Century: Proceedings*, 18-19 May, 2009, London.
- Kampani, Gaurav. (2011), "Institutional "Software": The Hidden Dimension of Nuclear Instability in South Asia", CASI Papers, University of Pennsylvania.
- Karnad, Bharat (2008), *India's Nuclear Policy*, Westport, Connecticut: Praeger Security International Series.
- Lowther, Adam (2010), "Framing Deterrence in the Twenty-first Century: Conference Summary", in Anthony C. Cain (ed.) *Deterrence in the Twenty-first Century: Proceedings*, 18-19 May, 2009, London.
- Nair, Vinai K. (1999), "The Structure of an Indian nuclear deterrent", in Amitabh Mattoo (ed.) *India's Nuclear deterrent: Pokhran II and Beyond*, New Delhi: Har-Anand Publication Pvt. Ltd.
- Schwartz, Norton A. and Timothy R. Kirk (2009), "Policy and Purpose in Anthony C. Cain (ed.) *Deterrence in the Twenty-first Century: Proceedings*, 18-19 May, 2009, London.
- Stone, John (2010), "Deterring Non-State Actors: The Challenge of al-Qaeda", in in Anthony C. Cain (ed.) *Deterrence in the Twenty-first Century: Proceedings*, 18-19 May, 2009, London.
- Subrahmanyam, K. (1999), "A Credible Deterrent - Logic of the Nuclear Doctrine", *The Times of India*, New Delhi.