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# Indian Nuclear Doctrine: A Critical Assessment of the Proposal for a Minimum Nuclear Deterrent

Peter Gizewski

International Security Research and Outreach Programme  
Non-Proliferation, Arms Control and Disarmament Division

March 2000



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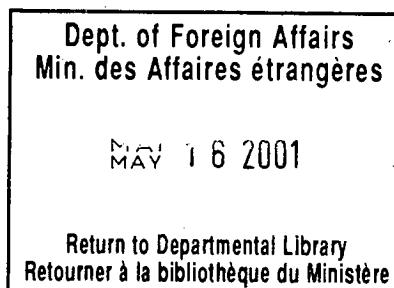
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## **PREFACE**

The International Security Research and Outreach Programme commissioned a study to identify and explore issues pertaining to the nature of the National Security Advisory Board's *Indian Nuclear Doctrine*. This report stemmed from that study.

The views expressed in this paper are those of the author, and do not necessarily reflect the views or positions of the Department of Foreign Affairs and International Trade or of the Government of Canada.

Department of Foreign Affairs and International Trade  
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March 2000

## **ACKNOWLEDGMENTS**

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## EXECUTIVE SUMMARY

The recent proposal by India's National Security Advisory Board (NSAB) calling for adoption of a policy of minimum nuclear deterrence has generated considerable concern and controversy. This report critically assesses 1) the doctrine's justification, 2) the economic and technical feasibility of attaining it, and 3) its potential impacts on both regional security and ongoing international disarmament initiatives.

While the draft report offers a relatively clear blueprint of the basic prerequisites essential to the creation of a secure and effective minimum nuclear deterrent, the rationale underlying the development of such a force, along with the capacity to build and maintain it are questionable. While some observers have noted that there is an emerging pattern of restraint between India and Pakistan (with each exhibiting a progressive unwillingness to breach thresholds and risk escalation), past crises have also featured intelligence failures and tendencies toward misperception on both sides which dangerously increase the chances for escalation. A future crisis could generate reputational stakes and concerns regarding the "sunk costs" of conflict, which could make concessions harder to achieve. The proposed doctrine could also invite a Pakistani response which could, for reasons of a lack of strategic depth, be inherently destabilizing. Beyond this, Indian reassurances concerning likely reactions to an "ideal" minimum deterrent tend to ignore the fact that at present, such a force is nowhere near implementation and would take years to develop. They avoid any discussion of the likelihood that such an ideal could ever be achieved, and ignore the manner in which other states could react during the period under which such a force is being constructed. Continued movement toward a weaponized deterrent also complicates the viability of arms control, disarmament and confidence-building both within the region and beyond it.

## RÉSUMÉ

La récente proposition du Conseil consultatif de sécurité nationale de l'Inde (NSAB) appelant à l'adoption d'une politique de dissuasion nucléaire minimale a suscité de profondes inquiétudes ainsi qu'une vive controverse. Le présent rapport comporte une évaluation critique : 1) du bien-fondé de la doctrine, 2) de la faisabilité technique et économique du projet, et 3) de ses répercussions éventuelles sur la sécurité régionale et sur les initiatives internationales en cours en matière de désarmement.

Le rapport préliminaire présente un plan détaillé relativement clair des conditions de base préalables à la création d'une dissuasion nucléaire minimale, sécuritaire et efficace; toutefois, le bien-fondé de la création d'une telle force, ainsi que la capacité de son édification et de son entretien, sont sujets à caution. Certains observateurs ont noté l'émergence, de la part de l'Inde et du Pakistan, d'une attitude empreinte de modération (chacun des deux pays se montrant de plus en plus réticent à franchir certains seuils et à risquer l'escalade); néanmoins, les crises du passé ont fait ressortir l'insuffisance des renseignements et les tendances à une perception erronée de part et d'autre, qui accroissent dangereusement les risques d'escalade. Une future crise pourrait comporter des enjeux liés à la réputation et des préoccupations en ce qui a trait au « coûts irrécupérables » d'un conflit, qui pourraient rendre plus difficiles les concessions. La doctrine proposée pourrait aussi entraîner une réaction du Pakistan qui, par manque de profondeur stratégique, pourrait être intrinsèquement déstabilisante. De plus, les assurances données par l'Inde concernant les réactions probables à une dissuasion minimale « idéale » tendent à méconnaître le fait que, pour l'instant, la mise en oeuvre d'une telle force n'est nullement réalisable à court terme et que son déploiement nécessiterait plusieurs années. Ceux qui proposent la création d'une force de dissuasion nucléaire indienne évitent tout débat sur la possibilité qu'un tel idéal se réalise un jour, et ignorent la façon dont d'autres États pourraient réagir au cours de la période de sa mise en place. Le mouvement continu vers la dissuasion armée complique aussi la viabilité du contrôle des armements, du désarmement et du renforcement de la confiance au niveau de la région et ailleurs.

# INDIAN NUCLEAR DOCTRINE: A CRITICAL ASSESSMENT OF THE PROPOSAL FOR A MINIMUM NUCLEAR DETERRENT

## INTRODUCTION

The recent proposal by India's National Security Advisory Board (NSAB) calling for adoption of a policy of minimum nuclear deterrence (MND) has generated considerable concern and controversy. At present, the document represents a draft proposal and not the official policy of the government of India. Nevertheless, such a position, if pursued, threatens to raise serious issues for security and stability in and around the region, and would have significant implications for a range of ongoing arms control and disarmament initiatives.

Already, the document threatens to further complicate progress on the Comprehensive Test Ban Treaty (CTBT). Not only could New Delhi's active pursuit of a nuclear deterrent work to scuttle Conference efforts to expedite the Treaty's entry into force, but could well generate concerns about the future integrity and value of the regime itself.

This report offers an early examination of the proposed doctrine. More precisely, it outlines and critically assesses: 1) the doctrine's justification, 2) the economic and technical feasibility of attaining it, and 3) its potential impacts on both regional security and ongoing international disarmament initiatives (i.e. the CTBT Article XIV Conference). The report concludes with some suggestions on how the doctrine might be addressed by the international community, including Canada.

## PROPOSED DOCTRINE: RATIONALE AND CHARACTER

The NSAB's proposal is premised on the belief that the threat posed by existing nuclear arsenals and "first use" doctrines represents a grave and still inadequately addressed threat to international peace, security and national sovereignty. In fact, the continued existence of such threats reflects a "virtual abandonment of nuclear disarmament" on the part of the declared Nuclear Weapon States (NWS). Such circumstances – along with the nation's inalienable right to self-defence – demands the acquisition of effective, credible, nuclear deterrence.<sup>1</sup>

The possession of an adequate retaliatory capability represents the foundation of the doctrine. Yet in the case of India, the circumstances triggering nuclear retaliation would be strictly limited. Nuclear arms would exist exclusively for deterring nuclear attack, and would thus be employed solely for the purpose of retaliation-in-kind. The first use of nuclear options would be explicitly rejected.<sup>2</sup>

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<sup>1</sup> National Security Advisory Board, *Indian Nuclear Doctrine* (Government of India, 1999), pp. 1-2.

<sup>2</sup> *Ibid.*, pp. 2-3.

The deterrent would feature:

- sufficient, survivable and operationally “ready” nuclear forces;
- robust Command, Control, Communication and Intelligence systems (C3I);
- effective early warning capabilities;
- comprehensive planning and training for nuclear operations consistent with the strategy, and;
- the “political will” to employ such forces if and when required.<sup>3</sup>

A “triad”, consisting of sea, air and mobile-land based systems would characterize the force – providing both the redundancy, mobility and dispersion essential to its survivability and effectiveness. The force would also possess the ability to shift quickly from peacetime deployment to fully employable forces, and would retain a capacity to shift alert status even in the face of significant degradation through repetitive hostile strikes.<sup>4</sup>

C3I would be developed with survivability in mind. And warning and intelligence would be maximized through the creation of space-based systems. Beyond this, nuclear forces would be tightly controlled – with the authority for release residing in the Prime Minister and designated successors.<sup>5</sup> Throughout, deterrent effectiveness would be bolstered by an ongoing and unrestrained research and development capability.

A range of safety procedures would guard all nuclear systems against theft, loss, or damage, and the government would ensure against additional nuclear incidents through the creation of an appropriate disaster control system.<sup>6</sup>

A number of initiatives aimed at increasing stability and eliminating nuclear arms would be pursued in tandem with the development of the deterrent force. Specifically, New Delhi would press for the creation of an international treaty banning the first use of nuclear weapons, internationally-binding and unqualified negative security assurances to non-nuclear weapon states (NNWS), the pursuit of further nuclear arms control and an array of appropriate regional risk-reduction and confidence-building measures.<sup>7</sup>

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<sup>3</sup> *Ibid.*, p. 3.

<sup>4</sup> *Ibid.*, p. 3-4.

<sup>5</sup> *Ibid.*, p. 4.

<sup>6</sup> *Ibid.*, p. 5.

<sup>7</sup> *Ibid.*, p. 6.

## **ASSESSMENT**

The Advisory Board's draft offers a relatively clear blueprint of the basic prerequisites essential to the creation of a secure and effective minimum nuclear deterrent. Yet the rationale underlying development of such a force, along with the capacity to build and maintain it are more questionable.

### **Rationale**

The doctrine is justified in broad terms. Beyond assertions that nuclear arsenals and NWS create a threat which necessitates a nuclear counter, detailed identification of specific nuclear dangers is avoided.

Such contentions avoid the acrimony which would likely attend a more precise discussion of threats. Nonetheless, as justification for the development of a nuclear deterrent, they are tenuous. In fact, a more detailed assessment of the existing strategic environment suggests that the document tends to exaggerate both the nature of the threat itself and the lack of available alternatives for addressing it.

### **Threats**

For the foreseeable future the majority of NWS pose few appreciable threats (either nuclear or otherwise) to India. In fact, those possessing the largest, most sophisticated arsenals appear relatively uninterested in nuclear diplomacy of any kind.

In the case of the United States, possession of overwhelming conventional military superiority and a strong interest in preventing further proliferation of nuclear arms, eliminates the likelihood of nuclear use in all but the most extreme conflicts and circumstances. In fact, the employment of nuclear weapons under less compelling conditions would not only subject the U.S. to near-universal moral condemnation, but would likely spur further nuclear spread – an outcome which could erode the conventional advantage the U.S. would seek to exploit in subsequent conflicts.

The threat of a premeditated Russian attack is similarly remote. While Russia's nuclear arsenal is now predicated on first use options, lingering economic and political turmoil internally insures that Moscow's concerns with security and stability are primarily confined to the domestic sphere and developments in its near abroad (e.g., Chechnya). A long and continuing tradition of cordial relations with India, and recent military cooperation between Moscow and New Delhi make any foreseeable Russian threat all the more remote.

As for Britain and France, existing arsenals and doctrines are strongly premised on homeland defence, and are configured largely around native concepts of "minimum deterrence." Recent years

have witnessed decisions in both capitals to pare down their nuclear forces. And both states now exhibit greater transparency on nuclear matters. Barring a major war involving at least one of the nuclear superpowers, British and French nuclear systems would not likely be used to support what in both cases amount to relatively limited interests abroad.

Threats closer to home are more plausible. Yet they are also problematic. And it is not clear that a nuclear deterrent offers the most effective means for addressing them. In the case of China, war with India in 1962, past skirmishes along the Sino-Indian border, and tensions over Tibet all work to insure its status as a long-standing source of concern. More recently, Beijing's nuclear cooperation with Pakistan has only served to intensify New Delhi's worries.<sup>8</sup>

Still, near-term dangers are difficult to identify. No major conflict has occurred between the parties in over a decade, and recent years have seen a slow but steady demilitarization of shared borders under existing Sino-Indian agreements. Current sources of dispute remain well below a level which would warrant armed conflict. And inhospitable terrain along with a well-trained Indian army insures that successful conduct of a large-scale conventional assault could not be guaranteed.

Beijing's present nuclear policy appears similarly benign. China retains a doctrine premised on no-first-use, and while its nuclear systems can reach India, US intelligence estimates indicate that deployment patterns emphasize coverage of targets in Russia and the United States.<sup>9</sup> Retirement of the DF-3A – the most appropriate missile for use against Indian targets, and the PLA's rejection of a replacement in the mid-1980s (i.e. the DF-25) are reassuring. Furthermore, while speculation about the existence of a Chinese missile base in Tibet continues – more reliable US sources conclude that such claims are unfounded.<sup>10</sup>

The case of Pakistan is more worrisome. Three wars between the two parties since independence, long-standing and continuing skirmishes over Kashmir, a number of intense crises – some of which occurred against a backdrop of mutual suspicion concerning the possession of nuclear capabilities, and Islamabad's recent move toward a more "overt" nuclear posture all attest to the likelihood and potential seriousness of any future conflict. Beyond this, Sino-Pakistan cooperation fuels concerns in some quarters over the future prospect of a two-front war.

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<sup>8</sup> Viewed in this context, comments by former Indian Defence Minister George Fernandes justifying last year's nuclear tests primarily on the ground of a "China threat" are not entirely surprising.

<sup>9</sup> See Arnett, "Facts and Fiction: Current Nuclear Weapon Capabilities in South Asia", <http://www.sipri.se/projects/technology/Facts.html>. While recent de-targeting arrangements between the U.S. and China signal some shift in their strategic relationship, this should not obscure the fact that a portion of China's nuclear capability remains reserved for use against the U.S.

<sup>10</sup> *Ibid.*

Yet even here, the value of a nuclear deterrent is far from clear. While the sheer destructiveness of nuclear weapons and a clearly enunciated doctrine governing their employment may serve to impose a certain degree of caution and restraint on the military actions of both sides, the capacity of a minimum deterrent to prevent limited conflict from occurring is unlikely – particularly given a declaratory doctrine of NFU.<sup>11</sup>

Furthermore, even a well-constructed deterrent may ultimately fail to instill the caution necessary to avoid escalation. What may be considered rational conduct in an atmosphere of calm may be less so during an intense crisis or in the “fog of war.” In fact, under such circumstances, the need to delegate authority to commanders in the field, rapidly shifting tactical situations, and organizational biases could all combine to instill a different calculus in decision makers – one which may heighten the prospects for further conventional escalation and even nuclear employment.

Nor do the potential nuclear dangers raised by sub-state actors and terrorist groups offer a particularly convincing rationale for a nuclear deterrent. While such threats cannot be entirely dismissed<sup>12</sup> – it is difficult to envisage precisely which groups would seek to undertake nuclear action against India much less be in a position to do so. Beyond this, it is even more difficult to see how a nuclear arsenal could effectively deal with such an event were it to occur. Retaliation against sub-state or sub-national groups can be difficult. And consideration of a nuclear response would doubtless raise a myriad of serious political and moral problems – most notably vis-a-vis the state or states on whose territory such groups were suspected of residing.

### *Alternatives*

The fact that most of the threats which a nuclear arsenal is intended to address are either “non-deterrable” or highly problematic from the standpoint of deterrence tends to weaken the NSAB rationale for a minimum deterrent.

Yet such an indictment would not prove fatal were viable alternatives to a nuclear arsenal absent. In fact, NSAB contentions that the NWS have “virtually abandoned” the disarmament cause strongly suggest that effective alternatives for meeting nuclear threats are unavailable.

Once again however, the Advisory Board’s assertions appear overly simplistic. While recent years have indeed witnessed slower progress on the disarmament front and a general unwillingness on the part of some NWS to forsake preferred nuclear options – commitment to the process itself remains high. International pressure for a fundamental reevaluation of offensive nuclear doctrines

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<sup>11</sup> For instance, it is difficult to foresee how a nuclear capability would deter a conflict such as what has occurred in Kashmir or Kargil.

<sup>12</sup> Ongoing concern over the safety and integrity of the Russian nuclear arsenal has insured that such threats continue to command considerable attention.

has generally increased, and efforts to justify such positions have become ever-more strained.<sup>13</sup> Beyond this lies an established record of past progress in stabilizing existing nuclear relationships at progressively lower levels of armament which cannot be denied. To ignore past progress and the prospect of more based upon debatable judgements concerning the future integrity of the disarmament process appears premature and ultimately counterproductive.

Curiously, the document's call for the pursuit of a number of discrete arms control, stability and confidence-building measures tends to undercut its earlier suggestions that pursuit of a minimum deterrent represents India's only viable option. In fact, given probable threats, a number of the initiatives advanced could prove more valuable to the cause of security, stability and ultimately disarmament than the deterrent itself.

## **Feasibility**

### ***Economic and Technical Constraints***

Creation of a nuclear deterrent along the lines proposed represents a technically demanding and economically costly enterprise. As outlined, such a deterrent requires high force survivability, robust C3I, reliable weapon systems, and a range of systems explicitly devoted to security and safety of the arsenal and all that sustains it.

Certainly given India's economic and technological capabilities, the creation of a viable nuclear force is conceivable. India has long possessed a relatively modern industrial sector with expertise in nuclear energy, missile development and arms production. It also boasts solid capabilities in space satellite communication and software design. More broadly, while government debt represents a lingering problem, recent IMF projections report current economic expansion at 5.7% of real gross domestic product, and suggest continued economic growth in the near future (i.e. real GDP estimated at 5.5% for year 2000).<sup>14</sup>

The stated objectives of the force envisaged (i.e. deterrence of nuclear attack via the threat of retaliation-in-kind) would also tend to reduce the economic and technical investment required to achieve the deterrent outlined.

In this regard, P. K. Subrahmanyam – an articulate advocate of a minimum deterrent – contends that costs associated with such an arsenal can be kept down by virtue of the strategy's limited character and goals. A strict no-first-use pledge (i.e. nuclear retaliation only after absorbing

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<sup>13</sup> In this regard, recent years have witnessed a gradual narrowing of US first-use options to retaliation for CBW attacks – an implicit recognition that justification for its retention is becoming more difficult.

<sup>14</sup> "Pakistan, India Urged to Boost Incomes", *Dawn* (Internet Edition) (23 September 1999), p. 1.

a nuclear attack) would eliminate the need for forward deployment of nuclear systems, and reduce the likelihood of accidental or unauthorized use.<sup>15</sup> It could even allow forces to be de-targeted and de-alerted. Accordingly, the C3I systems required need not be “too sophisticated, elaborate or costly,”<sup>16</sup> and the technical and economic investment required in the areas of surveillance and early warning would be similarly “reduced.”<sup>17</sup>

Yet while a minimum deterrent may be conceivable in some form, the version which the Advisory Board proposes is likely to pose obstacles which would make its attainment unlikely either in the short or the medium-term.

Technically, the creation of the sea-based leg of the proposed triad would be particularly daunting – an observation which past Chinese experience amply supports. Current naval reactors are too large for submarines, and the Indian Navy continues to show little interest in the capital investment required to develop necessary alternatives. In fact, even if India begins research and development in this area in earnest, most analysts estimate that actual realization of a sea-based deterrent would take at least 10-12 years. The creation of an effective mobile-missile system could also prove technically challenging.

Economic costs would impose additional burdens. The expense associated with earlier, less sophisticated deterrents have proven prohibitive. In 1985, a balanced nuclear force consisting of missile systems, aircraft and warheads “in the low three-digit figures” was estimated at 70 billion rupees (which in current terms would amount to 180 billion rupees or \$5 billion), and rejected by then-Prime Minister Rajiv Gandhi largely on the basis of expense.<sup>18</sup> The financial resources associated with the NSAB proposal would be far greater. According to Bharat Karnad – one member of the Board – a triad of 350-400 weapons, built over the next decade, would cost “...an estimated \$178 billion at current prices.”<sup>19</sup>

In fact, notwithstanding assertions that the arsenal's limited purpose would reduce its technical sophistication and expense, much could depend on the reactions of nuclear neighbours to

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<sup>15</sup> See P.K. Subrahmanyam, “A Reasoned Policy: Nuclear Deterrence in South Asia”, *Harvard Asia-Pacific Review* (Internet Edition), [www.hcs.harvard.edu/~hapr/winter98/subra.html](http://www.hcs.harvard.edu/~hapr/winter98/subra.html)

<sup>16</sup> *Ibid.*

<sup>17</sup> *Ibid.* In fact, the key area of investment would be force survivability. Such efforts would be essential to insure that potential enemies could never be certain that a strike would completely eliminate Indian capability.

<sup>18</sup> A More recent estimate by Indian analysts reported that New Delhi would have to spend about \$1 billion a year over the next 10 years to field a dyad in the low three figure levels.

<sup>19</sup> Reported in Sadanand Dhume, “Choosing the Target: Hardliners Say India's Nuclear Weapons Should be Able to Strike the U.S., Moderates Want a Regional Deterrent,” *Far Eastern Economic Review* (16 September 1999), p. 30.

its creation. Theoretically, while a properly configured minimum deterrent should be impervious to the size and sophistication of opposing arsenals, an arms race in the region could well work to drive costs upward. In that event, India could be forced not only to invest ever-greater resources in maintaining the survivability and integrity of its nuclear systems, but in the conventional capabilities needed to insure that the nuclear threshold remains high.

A range of "opportunity costs," would also attend the arsenal's pursuit. Resources devoted to a nuclear arsenal inevitably represent dollars taken away from a range of other economic and social programs (e.g. eradicating poverty, unemployment, low living standards, improving the domestic energy sector etc). The expenditure required to develop India's minimum deterrent could reportedly meet 25% of the yearly costs of sending every Indian child to school.<sup>20</sup> Add to this the losses in assistance which would flow from the continuation of international sanctions, and the economic implications of such a force are even more profound.<sup>21</sup> In fact, the domestic political fallout associated with such penalties could ultimately prove prohibitive.

### *Toward A Nuclear Dyad?*

Such considerations suggest that for the near-to-medium term, any Indian deterrent would inevitably involve a scaled down version of the arsenal proposed – most likely a "dyad" featuring a combination of manned bombers and missiles.

Given past service preferences and the need to control the costs associated with maintaining high survivability of forces and effective C3I, primary emphasis would be placed on the former.<sup>22</sup>

Doctrine governing the force could be identical to that advanced in the advisory (i.e. NFU), and would similarly be premised on the survivability of nuclear striking power – i.e. insuring that any adversary could not discount the possibility of some nuclear retaliation even after an initial strike. Yet shortfalls in current nuclear capabilities would require force augmentation to insure a credible second-strike.<sup>23</sup> Indeed, while India already possesses such a capacity vis-a-vis Pakistan,

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<sup>20</sup> See Peter Lavoy, "Costs of Nuclear Weapons in South Asia", *Electronic Journal* 2:4 (September 1999), p. 3.

<sup>21</sup> According to the World Bank, it is likely that the imposition of sanctions on India and Pakistan have been harmful to both countries – preventing trade and halting the majority of foreign capital inflows. See "Nuclear Tests Affect the Region's Growth Rate: World Bank", *Dawn* (Internet Edition) (23 September 1999), p. 1.

<sup>22</sup> According to Arnett, heavy investment in bombers suggest that the Indian Air Force (IAF) would prefer this platform over missiles. Furthermore, they would likely rely upon the Anglo-French Jaguar for nuclear delivery. See Arnett, "Facts and Fiction".

<sup>23</sup> Criteria for judging a credible second-strike capability are inevitably vague. In general, such a capacity requires possession of a force capable of inflicting "unacceptable damage" on an adversary following absorption of an initial strike. Yet judgements concerning what an adversary regards as "unacceptable" cannot be known with certainty

its ability to hit "high-value" targets in China is far more circumscribed.

Furthermore, and in contrast to the NSAB model, a deterrent composed exclusively of manned bombers and missiles is likely to necessitate greater concern with measures associated with force survivability. Indeed, a wholly land-based deterrent would be more vulnerable to both conventional and nuclear attack. And while the prospect of an enemy launching a fully disarming pre-emptive strike would be improbable, planners would undoubtedly wish to insure a level of force survivability sufficient to eliminate any illusions to the contrary. In fact, in this area, many of the economic costs associated with the NSAB version of deterrence would attend (and perhaps even exceed) a scaled-down variant.

Overall, military allegiance to the strategy chosen should pose few major difficulties. Traditionally the purview of the Indian scientific community and select politicians, inter-service interests and stakes in nuclear operations have generally been low. With few bureaucratic axes to grind, the military is likely to comply with any and all lines of responsibility set down by India's civilian leadership.

In fact, past military practice appears quite conducive to the dictates of no-first-use doctrine. The IAF has long planned for the conduct of a protracted conventional war in which nuclear arms would serve as a shield against first use by an aggressor.

Worrisome however, is a tradition of near-total exclusion of the military from nuclear planning. Indeed, failure to institutionalize effective service participation in all aspects of the nuclear doctrine could ultimately place the deterrent credibility of the arsenal at serious risk.<sup>24</sup> As such, major efforts would be needed to insure military competence in areas such as strategic and tactical warning, and in developing inter-service coordination for nuclear operations. Service involvement would be equally essential for insuring the safety and security of the weapons themselves.

Beyond this, careful thought would be required for insuring clear lines of authority in the event of political succession. Given India's long tradition of weak coalition governments, developing such provisions could be difficult.

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in the absence of a careful analysis of its values and interests. Clearly however, the ability to inflict "assured destruction", ie. one-third of a nation's population and two-thirds of its industrial capacity need not represent the sole benchmark and is increasingly viewed in many quarters as excessive.

<sup>24</sup> For elaboration, see Neil Joeck, *Maintaining Nuclear Stability in South Asia* (Adelphi Paper No. 312) (London: International Institute for Strategic Studies, 1997), pp. 60-63.

## IMPLICATIONS

### Regional Security and Stability

Deployment of a nuclear force would doubtless have a range of implications for political and military relationships in and around the region.

Yet some argue that the creation of further instability is not self-evident. Subrahmanyam contends that properly structured, MND offers the safest and most stable nuclear doctrine possible. Given secure, survivable second-strike forces and a NFU doctrine, force size can be relatively finite, the need for forward deployments, tactical nuclear systems and war-fighting doctrines would be eliminated, and incentives to adopt "hair-trigger" alert postures would be reduced.<sup>25</sup>

Furthermore, little evidence suggests that the introduction of such a deterrent would lead regional actors to behave irresponsibly. Past Indo-Pakistan conflict in fact indicates an emerging pattern of restraint between the contestants – with each exhibiting a progressive unwillingness to breach thresholds and risk escalation for the stakes at issue. Objectives on both sides have been strictly limited and non-ideological in character. And even in the case of Kashmir, escalatory pressures are mitigated by the fact that Kashmiris are ultimately a distinct people with a separate ethnic identity.<sup>26</sup>

Most reassuring is the fact that regional actors would be keenly aware of the dangers which the introduction of nuclear weapons would impose. In fact, the close proximity of potential adversaries would underline the fact that any nuclear exchange could not only occur with the utmost speed but would take place on home soil – a prospect which would reinforce incentives to exercise caution and restraint.<sup>27</sup>

Yet while such observations may remove grounds for excessive pessimism, they fall short of providing comfortable reassurance. True, past crises reveal some tendencies toward growing restraint, yet they have also featured intelligence failures and tendencies toward misperception on both sides which dangerously increased the chances for escalation. While the intrinsic value of Kashmir may well be limited, a future crisis could work to generate reputational stakes which could be harder to concede. And if such a crisis were to involve armed conflict and significant losses – concern over "sunk costs" could work to harden the positions of the disputants even more. Indeed, under such circumstances worries over escalation would hardly be far-fetched.

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<sup>25</sup> P.K. Subrahmanyam, "A Reasoned Policy in South Asia".

<sup>26</sup> *Ibid.*

<sup>27</sup> *Ibid.*

Beyond this, Indian reassurances concerning likely reactions to an “ideal” minimum deterrent tend to ignore the fact that at present, such a force is nowhere near implementation and would take years to develop. They avoid any discussion of the likelihood that such an ideal could ever be achieved. And they ignore the manner in which other states could react during the period under which such a force is being constructed.

Consideration of such issues suggests that in the near-to-medium term, the implications of a nuclear deterrent are far from reassuring. The requirements associated with such a force are numerous and many have yet to be tackled in a sustained and serious manner. Questions of system deployment, command responsibility, integration of the armed forces with nuclear planning, lines of delegation and succession, and a myriad of other issues require resolution. And the past offers little assurance concerning the capacity of Indian officials to resolve such questions effectively. To the extent that such issues remain unresolved, concerns about deterrent credibility, nuclear accidents, and inadvertent escalation during crises can only linger and generate instabilities in and around the region itself.

In fact, given the numerous issues that still require resolution, it is difficult to see how even a no-first-use pledge could automatically be assumed to have the stabilizing effect which Subrahmanyam and other Indian analysts claim for it. In fact, it is not clear that pledges of no-first-use would be trusted. Here, New Delhi's early justification of its arsenal on the basis of a “China threat” is suggestive. The fact that a similar pledge from a state with an established arsenal is regarded as insufficiently convincing to India strongly suggests that the credibility of its own pledge would be suspect – particularly given its current lack of experience in matters of nuclear doctrine.<sup>28</sup>

Perhaps not surprisingly, the majority of observers suggest that further moves toward a nuclear deterrent will generate a range of arms race and crisis instabilities. India's pursuit of a nuclear arsenal has already led to a slight deterioration in its relationship with Beijing. And lingering requirements for a credible second-strike capability against China will require deployments which are likely to be vulnerable and potentially destabilizing in the short term. Such moves could well create pressures on Beijing to counter Indian deployments with its own nuclear missile build-up. The end result could be growing tension between states, and ultimately, less security on both sides.

The impact of New Delhi's nuclear ambitions on the Indo-Pakistan relationship are equally if not more troubling. Beyond its obvious role in exacerbating political tensions with Islamabad and triggering moves toward overt Pakistani nuclearization, an Indian arsenal could generate nuclear doctrines, war plans and deployments in its Islamic neighbour which are particularly destabilizing.

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<sup>28</sup> Against this backdrop, the NSAB suggestion that the arsenal feature a capacity for a “swift movement to a nuclear-ready capability” when under attack is somewhat unsettling. It is difficult to imagine any nation – much less a “new nuclear” state – absorbing continuous strikes before launching if it possesses sufficient intelligence that such an attack will occur.

When combined with Pakistan's lack of strategic depth, New Delhi's nuclear and conventional superiority could encourage Islamabad to adopt a doctrine of nuclear first use as a feasible counter. This could well involve placing nuclear weapons on hair-trigger-alert, a launch-on-warning posture, the development of tactical nuclear weapons and forward deployment of nuclear systems.

In fact, evidence suggests that both Pakistani political and military leaders are well aware of the possibilities which threats to behave recklessly or at least precipitously hold for enhancing deterrence. In 1990, Pakistani President Ghulam Ishaq Khan claimed that "(i)n the event of war with India, Pakistan would use nuclear weapons at an early stage."<sup>29</sup> Moreover, following last years nuclear tests, Pakistani officials stated that nuclear weapons would be "...meant to deter India from launching a conventional war and that tactical nuclear weapons would have a role in that strategy."<sup>30</sup> When combined with a protracted crisis, such views could work to substantially raise the prospects of nuclear employment.<sup>31</sup>

Resources expended on mitigating such instabilities would undoubtedly add to the already considerable economic costs which development of a minimum nuclear deterrent will require. The end result may well be that the gains in security yielded by pursuit of the arsenal may ultimately be eclipsed by the losses in domestic prosperity and even stability which the effort could generate.

### **Confidence-Building, Arms Control and Disarmament**

Continued movement toward a weaponized deterrent also complicates the viability of arms control, disarmament and confidence-building both within the region and beyond it.

In fact, release of the proposed doctrine has generated near-universal criticism. Opposition in both Beijing and Islamabad is especially intense – with the latter suggesting that the doctrine threatens to mark the “death blow to non-weaponized deterrence within the region.” Statements by some Indian officials have tended make matters worse. In this regard, announcements of New Delhi's capacity to build a neutron bomb along with assertions that India plans to develop 300-400 nuclear warheads over the next three years only serve intensify Islamabad's interest in developing a strong counter.

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<sup>29</sup> According to Arnett, likely forms of Pakistani “first use” would involve missile strikes against Indian tank divisions deployed in the Rajasthan desert or against IAF bases. Such attacks might be perceived as aiding the war effort and not raising the risk of retaliation, since relatively few civilians might be killed. See Arnett, “First Strike Could be Key to Islamabad Strategy”, *The Times* (29 May 1998).

<sup>30</sup> See Arnett, “Facts and Fiction: Current Nuclear Weapons Capabilities in South Asia.”

<sup>31</sup> Interestingly, some Indian commentary views the NSAB proposal as “seriously flawed” on grounds that it surrenders the initiative to Pakistan – an enemy which some believe will not be deterred by Western notions of minimum deterrence or “unacceptable” damage. See Sat Pal, “A Flawed Doctrine”, *The Pioneer* (16 September 1999), p. 9.

Given the current Indo-Pakistan military balance, along with continual expressions of India's commitment to a pro-deterrent course, it is difficult to foresee how Islamabad would readily agree to any reciprocal no-first use pledge. Nor is it likely to enter into any ban on the production of fissile material (unless existing stockpiles are taken into account). And any arrangements limiting the size and quality of its conventional capabilities would be similarly rejected.

The prospects for regional confidence and security-building measures (CSBMS) may be somewhat more positive. Past practice suggests that CSBMs have generally been developed following periods of intense crisis. And the prospect of further weaponization of the Indian arsenal along with a lack of movement on the arms control and disarmament front may well generate the "crisis atmosphere" required for a renewal of interest in the confidence-building enterprise. In fact, such conditions could well create opportunities for the elaboration and more effective implementation of a number of measures, including: hot-line agreements between parties, "no-attack" agreements governing nuclear installations, agreements calling for advance notifications on military exercises, manoeuvre and troop movements, and agreements aimed at military data exchange. Recent calls for the creation of regional nuclear risk reduction centres would likely generate similar interest.

Insuring sustained and consistent application of such measures would be more challenging. Commitment to CSBMs has tended to wane over time.<sup>32</sup> And while a more nuclearized environment could create a sense of purpose previously absent, this could not be taken for granted. As such, continual monitoring would be required to insure against a renewal of past practice.

The implications of Indian nuclear plans for the Comprehensive Test Ban Treaty (CTBT) are more troubling. Certainly, New Delhi's claims that it requires no further testing to move forward with its nuclear deterrent removes an obstacle to its willingness to endorse the regime. And recent press commentary indicates that New Delhi may be anxious to cultivate a more positive image in the international community.

Nevertheless, New Delhi's pro-nuclear stance threatens to reduce the chances of acquiring other endorsements needed to eventually bring the Treaty into force. It raises concerns about the value (and permanence) of some of the endorsements given. And ultimately, it works to raise profound questions regarding the treaty's true value and significance – particularly as an effective disarmament measure.

Already, concerns over India's nuclear programme have fed opposition as to the value of the regime. Concerns over Pakistani reaction are especially high – in fact generating interest in allowing Islamabad to undertake "conditional" endorsement – whereby future Pakistani testing would be

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<sup>32</sup> For elaboration, see Peter Gizewski, *Confidence-Building and Risk Reduction in the India-Pakistan Relationship: past Problems and Current Prospects*, (Ottawa: DFAIT, 20 July 1998).

allowed in response to a resumption of nuclear testing by India.<sup>33</sup>

Yet whether endorsement can be secured may be less important than the fact that further movement toward a realization of Indian nuclear ambitions increases the chances that the "non-testing norm" is widely perceived as weak and ineffectual. In the face of an evolving Indian deterrent, even unconditional endorsement might not remove the prospect of Islamabad eventually withdrawing from the regime and resuming its nuclear testing based on considerations of "supreme national interest." And recognition of this fact can only threaten to undermine confidence in the meaning and integrity of the regime, as well as the very purpose and significance CTBT endorsement itself.

## CONCLUSION

Official interest in the doctrine proposed by the NSAB is presently tentative. According to Indian Prime Minister Atal Bihari Vajpayee, the document represents "a draft," and has been released as "...a basis of negotiation with the U.S., the Group of 8 and Pakistan." More recently, external Affairs Minister Jaswant Singh noted that while the NSAB proposal represented one of a number of papers requested by the National Security Council, – "(i)t is not a policy document of the Government of India".<sup>34</sup>

Beyond this there has also been a growing recognition in international circles that the document allows room for manoeuvre.<sup>35</sup> And it is clear that many Indians are not insensitive to the cost considerations associated with such a venture.<sup>36</sup>

Yet while India may ultimately reject the minimum deterrent advanced by the Advisory Board, there is presently little indication that it does not remain strongly committed to the development of a minimum deterrent of some variety.

Given the analysis offered above, it is clear that efforts should be made to convince India of the potential costs and dangers which such a course presents.

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<sup>33</sup> See Shaheen Sehbai, "Washington's Concession for CTBT Signing: Pakistan to Resume Tests if India Does", *Dawn* (Internet Edition) (21 September 1999), p. 1.

<sup>34</sup> As quoted in C. Raja Mohan, "India Not to Engage in a N-Arms Race: Jaswant", *The Hindu* (29 November 1999), p. 6. In fact, in his interview with Mohan, Singh refers to the NSAB as a group of non-official strategic experts and analysts tasked by the National Security Council to prepare a number of papers on various topics.

<sup>35</sup> C. Raja Mohan, "Hostility to N-Doctrine Subsiding," *The Hindu* (28 August 1999), p. 1.

<sup>36</sup> In this regard, C. Raja Mohan recently observed that "there is a Finance Ministry (in India) as well. It isn't as though the nuclear robots are running the show." See Sadand Dhume, "Choosing the Target," p. 30.

Such efforts would primarily involve making a case along the lines discussed above. Specifically, it would involve demonstrating that further movement toward a nuclear deterrent:

- would do little to effectively address perceived nuclear threats;
- would involve technical and economic costs likely to be wholly incommensurate with the potential gains it offers; and,
- would risk generating a range of negative effects for security, stability and disarmament both within the region and beyond.

Such an approach would also include a number of concrete suggestions aimed at addressing the security concerns which Indian nuclear capabilities are intended to meet. Possible initiatives could include: renewed commitments to the active pursuit of global nuclear disarmament (e.g. ratification of START II and pursuit of START III, moves toward the de-alerting of nuclear arsenals), offers of economic and technical assistance for the effective implementation and extension of regional confidence and security-building measures (especially those aimed at enhancing nuclear transparency e.g. joint seminars on nuclear doctrine and strategy, agreements for sharing research aimed at preventing and containing the consequences of nuclear accidents, development of procedures for and the implementation of reciprocal inspections of nuclear facilities), and a proposal for the creation of a functional risk-reduction centre within the region.<sup>37</sup>

Convincing India to reconsider its pro-nuclear course may well prove impossible. Notwithstanding the fact that strong arguments can be advanced against a nuclear deterrent on military, economic and technical grounds, considerations of domestic politics and visions of the international status and respect which nuclear arms promise to generate may inevitably hold sway.

Yet even if a nuclear doctrine is adopted, advancing such arguments now would help to raise issues which will ultimately need addressing. Voiced frequently and forcefully enough, such a case could at the very least serve to insure that if a more “nuclearized” sub-continent proves inevitable, it is predicated on the most responsible nuclear policies and practices humanly possible.

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<sup>37</sup> Such measures would be entirely consistent with the “Memorandum of Understanding” issued by New Delhi and Islamabad as part of the Lahore Declaration.

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