INDIA-PAKISTAN NUCLEAR COMPETITION: IMPLICATIONS FOR REGIONAL STABILITY

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INTRODUCTION

On 19th April 2011, Pakistan conducted the maiden test, of its newly developed short range ballistic missile Hatf-IX (NASR). This missile, with a range of 60 kilometres, can be fired from a multi-tube launcher mounted on a mobile carrier. A press statement issued by the Inter Services Public Relations Directorate on the occasion, described the missile as a quick reaction weapon, capable of carrying nuclear warheads of appropriate yields. The Director General of Strategic Plans Division (the permanent Secretariat of Pakistan’s National Nuclear Command Authority), who was also present to witness the test remarked that, ‘this test has consolidated Pakistan’s nuclear deterrence at all levels of threat spectrum’ (ISPR No. 94/2011). This statement, apparently indicated, that the new weapon system was intended to have a possible battle field role. The test generated a vigorous media debate as to the rationale behind this development. The debate was, however, overshadowed by the news of American raid that killed Osama Bin Laden. Analysts, supportive of the development of NASR, have argued that it was Pakistan’s logical response to India’s highly provocative and threatening ‘Cold Start War Doctrine.’ Others view it as a destabilising development that would make a nuclear war more probable in South Asia.

In the wake of the helicopter borne raid, by US special-forces, deep inside Pakistani territory, on 2nd of May 2011, a new war of words began between India and Pakistan. India’s Army and Air Force Chiefs of Staff were quick to claim, that India has the capability to emulate the American action, (Indian Express May 03, 2011, Amir Mir: The News May 06, 2011) and conduct similar operations, ostensibly against alleged terror training camps inside Pakistan. These statements evoked very strong reaction from the Pakistani Government and military establishment, already seething with anger over the US covert operation and facing severe criticism from domestic public and media. Foreign Secretary Salman Bashir, addressing a press conference in Islamabad, gave a strongly worded rebuke, saying that the US raid should be taken as an exception and not as a rule, cautioning anyone harbouring any hostile intent to desist from the temptation (Mariana Baabar: The News, May, 06, 2011). This was followed by a statement emanating from the Corps Commanders’ Conference (the highest military decision making forum), warning the Indians against any adventurism. Finally, the Chief of Pakistan’s Inter-Services Intelligence Directorate, while giving his testimony about the US operation before the joint parliamentary session, declared that Pakistan will give a befitting response to any Indian action inside Pakistan. He went on to ominously add, that for this purpose targets have been selected inside India and plans duly rehearsed. (Indian Express May, 16 2011) The reverberations of his statement were felt in India, prompting the convening of a meeting of India’s Nuclear Command Authority, chaired by the Indian Prime Minister and attended by the National Security Advisor and the three services chiefs, to review the state of
preparedness of India’s nuclear arsenal and delivery systems. (The Times of India May 17, 2011) Meanwhile, Air Marshal K.J. Mathews, commander of India’s tri-service strategic forces command in a statement at Bangalore on 18th of June 2011, has claimed that, ‘there is a huge amount of work going on’ and that ‘we are way up and ahead of what we need to do’ (domain-b.com). A clear indication that India’s nuclear build up is going full steam ahead.

These developments, after the passage of over a decade since India and Pakistan conducted tit-for-tat nuclear tests in May 1998, are disturbing to say the least. It was hoped, that the two South Asian rivals will learn to live in a nuclearized security environment, curb their tendencies for sabre rattling and brinkmanship and develop institutionalised mechanisms for crisis management and implement appropriate confidence building measures (CBMs), to stabilise their security relationship. Unfortunately, such hopes have not yet been realised, tensions run high, and the regional stability remains fragile. The composite dialogue initiated in 2004, with a lot of promise, has not yielded much, except some useful CBMs. The dialogue was unfortunately disrupted, after the Mumbai terrorist attacks in November 2008, and tentative steps are being taken to breathe fresh life into it.

In this backdrop, it is imperative to study the recent developments in the South Asian subcontinent, to enable us to discern, the trends and directions in which the two countries are moving, in terms of doctrinal and technological developments with serious ramifications for peace and stability in the region. This paper will examine, in some detail, the strategic implications of Pakistan’s fielding of a short range battlefield nuclear missile, and what does it signify in terms of its doctrinal thinking and evolving technological capabilities. It will also study, the contours of India’s Cold Start War Doctrine, and its implications, including its influence on Pakistan’s decision to develop the NASR missile system. India is going ahead with the development of its ICBM range AGNI-IV, with a range of 5000 kilometres, its nuclear powered submarine Arihant, and has tested a new short range missile ‘Parahar’, all with potentially serious implications for regional security.

However, before a critical appraisal of these developments, in order to develop a clear insight into the issues impinging on regional stability, it would be imperative to put these developments in the right perspective. Towards this end, it would be useful to understand, the notions of strategic stability and arms racing at the very outset, to be able to relate these to the situation in South Asia. This will, hopefully, provide a useful theoretical foundation for subsequent analysis.

**STRATEGIC STABILITY**

‘Strategic Stability’ has been defined as a ‘situation between adversaries, in which they are unlikely to fight a strategic war, involving attacks against industry, population or strategic military forces’ (Stockton 1986: 3). This definition is however, too broad and leaves many ambiguities in the mind of the reader, as it appears to have been designed to describe the antagonistic relationship between the two super powers during the Cold War. It also seems to imply, that it is more pertinent to explain the relationship between two nuclear armed adversaries, and leaves out the situations where none of the adversaries is armed with nuclear weapons, or only one of the adversaries may be in possession of nuclear weapons. Nevertheless, this particular
concept of strategic stability can be usefully applied to the South Asian region, where both the antagonists are nuclear armed states. Other writers have also defined the term according to their own respective perceptions, while some have employed a philosophical approach others have attempted to explain the concept, with the help of Game Theoretical models. One analyst has categorised strategic stability in terms of its technical (related to configuration of forces), and political dimensions. He believes, that though less attention is paid to the political dimension, it is more important since ‘it governs incentives to change the status-quo’ (Betts 1982: 109).

The concept of strategic stability is firmly rooted in the deterrence theory, and according to another expert, ‘it consists of a set of practices and assumptions, by which, the terrifying weapons of mass destruction created by twentieth century science have been absorbed into the age old game of international politics’...(Mandelbaum 1977:15). The nuclear regime, has affected the international security landscape, in many ways. For instance, there was no war between the two superpowers, or even between their close allies, despite the occurrence of some very serious crises such as the Berlin and Cuban missile crises. The most revealing example is that of Europe, which had been the most turbulent place for centuries. However, in the post-World War-II era, Europe has remained largely peaceful, mainly because of the perceived connection, between political conflicts and nuclear weapons.

The situation in South Asia can be compared, with that of Europe in 19th and earlier half of the twentieth century. India and Pakistan fought three major wars (1947-48, 1965 & 1971) and a serious border conflict (Rann of Katch-1965), within the first 25 years of their independent existence. However, there has been no major war since 1971, despite the occurrence of some very serious crises (Brasstacks 1986-87, Kashmir 1990, Kargil 1999, 2001-02 Military Stand-off and the 2008 crisis over Mumbai terrorist attacks). On all these occasions, barring Kargil, where active hostilities took place, hostilities were prevented through the successful management of these crises, either through bilateral efforts or external nudging or both, mainly due to the fear of escalation of the conflict into a catastrophic nuclear exchange. Some security experts even contend, that had there been nuclear weapons in South Asia, the earlier wars could also have been averted (former Indian Army Chief General Sundarji and former Vice Chief of Army Staff of Pakistan Army General K.M. Arif, among others, subscribed to this view).

Stockton has identified three main threats to strategic stability (Stockton 1986: 8), which can be usefully employed as a framework, to explain the South Asian strategic environment. These are:-

- **Crisis Instabilities**

  ‘Crisis instabilities’ occur, when both the antagonists believe that the outcome of the conflict can be improved in large measure by resorting to a first strike, rather than riding out an enemy strike and then responding in a retaliatory mode. In such a situation, they are more likely to launch a strike, in the event of a serious crisis. However, their actions will be determined, by the degree of advantage they could gain through a first strike, and the imminence of war. Thomas Schelling also supports this view, and points out that, ‘even modest advantages of striking first, could fuel reciprocal fears of attack, and
dangerously heighten the apparent probability of a war during a crisis.’ In the South Asian context, this is not relevant as a destabilising factor, at least for now, since neither India nor Pakistan have nuclear forces on hair trigger alert. They also lack real time target acquisition and surveillance capabilities, which limit their ability to carry out an effective first strike.

- **Arms Race Instabilities**

Arms race instabilities arise, when states perceive the need to compete with their rivals, in making quantitative and qualitative force improvements. However, all force improvements are not driven primarily by such perceived requirements. There are other factors, such as, domestic political pressures, bureaucratic rivalries and technological imperatives, which also play a part. Though, each of the adversaries, attempts to undertake development programmes, in response to its own perceptions, about what is happening on the other side of the fence, these perceptions often prove erroneous, as was the case in US response in the 1950s and early 1960s, to the perceived bomber and missile gaps vis-à-vis the Soviet Union. This factor is clearly applicable to the prevailing situation in South Asia, since both Indian and Pakistani strategic programmes are still growing.

- **Escalatory Dangers**

In a conflict between two nuclear armed adversaries, even if initially fought with conventional weapons, there is always a possibility of escalation to the strategic level conflict, involving the use of nuclear weapons. This escalation, may not be advertent or pre-mediated, but there is always a danger of inadvertent escalation, which can be caused, by any of the following possibilities. Firstly, it could be caused by misreading and misperception of the intentions of the adversary. Secondly, the possibility of an accidental escalation would always be there. This could result from damage to or destruction of, a component of the adversary’s nuclear forces, such as, a ballistic missile submarine, a nuclear capable aircraft, or a land based missile during the conduct of conventional tactical operations. Thirdly, is the possibility, though very remote, that a third party may launch a submarine launched ballistic missile (SLBM) against the territory of one of the belligerents, exploiting the fog of war, with a view to cause escalation of the conflict. India has been propounding a limited war doctrine since early 2000, arguing that, there is a space for a limited conventional war, even under the nuclear overhang. This line of thinking is fraught with dangers, because the possibility of inadvertently damaging or destroying a Pakistani nuclear weapon or delivery system, cannot be ruled out, especially during the conduct of attacks against air bases.

**ARMS RACING**

‘Arms racing’ is one of the most frequently used terms in strategic literature, yet it is one of the least understood, and is frequently misused. Barry Buzan has defined arms racing as, ‘a self-stimulating military rivalry between states, in which, their efforts to defend themselves militarily, cause them to enhance the threats they pose to each other’. This phenomenon is also sometimes described as ‘mirror imaging’. According
to Huntington, it is ‘a progressive, competitive, peacetime increase in armaments by
two states or coalition of states, resulting from conflicting purpose or mutual fears.’
Colin Gray, on the other hand, has explained it as, ‘two or more parties perceiving
themselves to be in an adversary relationship, who are increasing or improving their
armaments at a rapid rate and structuring their respective military postures with a
general attention to the past, current and anticipated military and political behaviour of
other parties’ (Buzan 1987: 69). Albert Wohlstetter, however, does not subscribe to
the notion of an arms race. He argues, that there was surely a military competition
between the two super powers, but it is not appropriate to characterise it as an arms
race (Wohlstetter 1974). His argument, is based on, a widely accepted conception of a
race, wherein, two or more competitors move in the same direction and towards the
same objective. However, a military competition does not necessarily imply, that both
sides are trying to develop similar kinds of weapon systems, or are trying to achieve
similar objectives. The term ‘race’ also creates the perception, that all the competitors
are moving at full speed, whereas an on-going military competition may just be
moving at a leisurely pace.

Whether we call it an arms race or merely a military competition, it follows three
models (Buzan 1987: 74) which are as under:-

- **Action-Reaction Model**

  This model implies that, states increase their armaments quantitatively as well
  as qualitatively, because of the perceived threats from other states. This would
  mean that, the factors affecting the arms dynamic, are mainly external. There
  are many examples of this kind of competition in history, such as the naval
  arms race between Britain and Imperial Germany, before the onset of the First
  World War. In post WW-II era, the atomic and hydrogen bomb programmes of
  the Soviet Union, were a direct reaction to the US atomic monopoly. In South
  Asia, the India-Pakistan relationship has historically been dominated by action-
  reaction syndrome, manifesting itself most visibly in the nuclear and missile
  competition. Pakistan embarked on a nuclear weapons programme, in response
to India’s nuclear programme, and initiated its missile programme in response
to India’s testing of Prithvi and Agni ballistic missiles in the late 1980s. In
May 1998, Pakistan conducted tit-for-tat nuclear tests, after India had carried
out a series of tests early in the same month (Salik 2009: 68-150).

- **Domestic Structure Model**

  In this model, the underlying idea is that, the impetus for an arms competition
  is generated by the internal factors as opposed to the external factors. It is also
  described as the bureaucratic model. This model has a more profound effect, in
democratic systems of government, as compared to the autocratic systems.
Various players, who influence the decision makers in this model, are
corporate interests of the research and development organisations, inter-
services rivalry and domestic politics. Since there was no tradition of public
debates, on the security issues in South Asia and especially in Pakistan,
traditionally, this factor has exercised insignificant influence. However,
over time an across the board public consensus has developed in Pakistan, in
support of the national nuclear programme. The full impact of this factor
became obvious, after the Indian nuclear tests in May 1998, when the incumbent Prime Minister, faced an irresistible public pressure, to respond in kind. The extent of this pressure, can be gauged from the fact, that the Prime Minister told the American interlocutors, who had come to persuade him to refrain from testing on behalf of President Clinton, that if he did not order the tests, his government would be overthrown by the people. Similarly, there was a vigorous public debate in 1998 and early 1999 in Pakistan, over the decision to sign the Comprehensive Test Ban Treaty (CTBT), both inside and outside the parliament. Consequently, the government had to yield to the public disapproval of the decision. This was in stark contrast, to the decision in late 1960s not to sign the NPT, which was driven by the foreign-service bureaucracy, without any involvement of the public. Same was true, of the decisions, to accede to the Biological Weapons Convention and later the Chemical Weapons Convention. With a free and vibrant media in both countries, this factor is going to assume much greater significance in the future (Salik 2009: 151-191).

As for the inter-services rivalry, its intensity is much greater in India, as compared to Pakistan, manifesting itself in the inability of the Indian government to appoint a Chief of Defence Staff, having announced the decision to establish this office many years ago. With the operationalization of the naval leg of the nuclear triad in India in the next few years, this competition between services, over the control of strategic assets, is likely to further intensify. In Pakistan, because of a large disparity in the respective sizes of the three services, the army being the predominant service, has never faced a serious challenge from the smaller services. However, in Pakistan, the intense rivalry between the two most important nuclear organisations, namely, Pakistan Atomic Energy Commission (PAEC) and the Khan Research Laboratories (KRL), is well documented. Fortunately, this rivalry worked to Pakistan’s advantage, since in order to outdo each other, the two organisations produced much quicker results than their Indian counterparts. There was, of course, the downside of the rivalry, wherein, on many occasions they indulged in negative propaganda to malign each other in public, through print and electronic media and in case of KRL, led to certain indiscretions and irresponsible acts, which brought a bad name to the country.

**Technological Imperative Model**

There is a widely held view, that technological imperative has been the single most important factor in driving the arms race, and especially the nuclear arms race. For instance, Gwyn Prins argues that, “since 1945 the growing sophistication of weaponry and research technology, has given rise to a view of the arms race, which attributes its course and pace to the ‘pull’ of technological advance rather than ‘push’ of political initiative” (Prins 1983: 157). There are many other influential individuals such as first director of Lawrence Livermore laboratory, Herbert York, President Kennedy’s science advisor, Jerome Wiesner and Lord Zuckerman, scientific advisor to the British government in the 1960s, who concur with this view. Due to the growing sophistication of technology, the governments increasingly rely on the advice of their scientific advisors, and as such, they exercise a lot of influence in the
policy making process. Marek Thee has similarly argued that, “there is no way to halt armaments and reverse the arms race, unless we seriously address the problem of military technology and military research and development…. and that a self-sustaining technological momentum has overtaken whatever may have been achieved in the number counting arms control exercise” (Thee 1986: 437).

Since research and development in nuclear and missile technology, in India and Pakistan, is restricted to the state run entities, there is no classic military industrial complex lobbying, for the development and induction of their products and technologies as is the case in the United States. However, in recent years, scientific community and strategic research and development organisations have grown in stature and influence. As the research and development produces new weapon systems, there is an inexorable momentum to test and induct them. This is going to be a critical factor, in fuelling the nuclear missile arms race in South Asia, as the technological capabilities of the scientific communities in the two countries grow overtime.

DOCTRINAL DEVELOPMENTS IN INDIA AND PAKISTAN

In the pre-1998 tests era, the public postures adopted by both India and Pakistan were ambiguous and while their efforts to acquire military nuclear capabilities were widely known, the two countries were officially in denial, of the existence of any such programmes. This approach was basically designed to deflect external pressure, and to avoid economic sanctions and international opprobrium. However, the downside of the policy was that, there could be no debate on issues such as doctrines, command and control, safety and security and other operational aspects related to their prospective nuclear arsenals. While in India, there were a number of academic writings and some discussion of these issues in think tanks and certain military institutions, in Pakistan, there was no such precedence. However, after overt nuclearisation in May 1998, the two countries have come to grips with these challenges (Salik 2009: 219-239 & 282-291, Cheema 2010: 148-196, 176-188, 315-373 & 436-497).

Doctrinal and Technological Developments in India

The Indian government set up a 32 member National Security Advisory Board (NSAB), which included security analysts, former diplomats, bureaucrats, retired military officers and academics to develop a nuclear doctrine. The NSAB formulated its recommendations, which were announced by the National Security Advisor, Brajesh Mishra, at a press conference on 17th of August 1999. The document was however, termed as a ‘Draft Nuclear Doctrine,’ pending the formal approval by the Indian government. Amongst the salient features of the doctrine were: a minimum credible deterrence, no first use, punitive retaliation against a nuclear strike against India, the intent to develop a nuclear triad: comprising land based missiles, air delivered weapons and submarine based weapons, and political control of nuclear decision making. However, the minimum deterrence was neither quantified, nor was it clarified against whom this deterrence was directed, which essentially meant that, the size of the credible minimum deterrence was left open ended. The command and control arrangements were not announced. Later on, on 4th of January 2003, the Cabinet Committee on Security issued a one page document, which besides reiterating
some important points of the draft nuclear doctrine, modified the language of others, and also explained the broad contours of India’s nuclear command and control. While the ‘No first use’ was retained, it was greatly watered down by the qualification, that India will retaliate with nuclear weapons, against any chemical or biological attack, against its territory or its forces anywhere in the world. The formulation ‘punitive retaliation’ in the draft doctrine was also changed to ‘massive retaliation’ (Salik 2009: 219-239, Cheema 2010: 315-373). These subtle changes in language have made the doctrine far more aggressive, than its earlier version. In October last year, India’s National Security Advisor Shiv Shankar Menon, in a speech at India’s National Defence College, stated that India has a policy of no nuclear first use against non-nuclear weapon states, which means that India’s original ‘No first use’ declaration has become totally redundant now. An Indian security analyst has tried to explain away the statement, by reasoning that it does not signify a change in policy, but it was a typographical error (Vipin Narang: IDSA Comments March 1, 2011). The fact, that the text of the speech has been posted, on the website of Indian Ministry of External Affairs, without any modification since then, clearly shows that it was more than a typographical error (MEA India: October 21, 2010). Otherwise it would have been amended by now. Moreover, Mr. Menon, in his capacity as National Security Advisor, also heads the Executive Committee of India’s Nuclear Command Authority and therefore, his utterances are bound to be deliberate and well considered and have to be taken seriously.

In the aftermath of the military conflict with Pakistan, over high mountain ranges along the line of control in the Kargil area of the disputed state of Jammu and Kashmir, India’s security managers started proclaiming, that in the spectrum between low intensity conflict and nuclear war, there is a space for a limited conventional war, ostensibly, to deter Pakistan from a repeat of a Kargil like operation. However, during the year-long military stand-off between India and Pakistan in 2001-02, the Indians could not employ their limited war doctrine. Later, it was explained, that since the Indian military took a long time to mobilise, it gave enough time to Pakistan to counter mobilise its forces and the element of surprise, a key factor for success was lost (Davis 2011: 7-8 & 230). India, therefore, developed a new doctrine, called the ‘Cold Start’ doctrine and has been war gaming it since 2004. This doctrine, envisages initial attacks by the defensive forces, already located close to the borders, to be followed up by fast moving independent battle groups (IBGs), to deny Pakistan any warning time. The purpose is to carry out shallow strikes (to avoid crossing Pakistan’s nuclear red lines) inside Pakistani territory, as reprisals to any suspected terrorist attack in India, by Pakistan based militant groups. (Ladwig 2007: 158-192) This doctrine, is highly provocative and destabilising, with a perpetual threat of a surprise attack. Of late, some Indian analysts have been insisting, that the current Indian Army Chief has denied the existence of a Cold Start Doctrine. However, the fact, that India has been carrying out large scale war games since 2004 to test the concept, cannot be ignored. It is, however, possible that they now use a new term ‘proactive operations’, instead of Cold Start, with the same destabilising and dangerous connotations.

During the course of negotiations, to finalise a civilian nuclear cooperation agreement between the United States and India, the Indian side agreed to place eight of its sixteen unsafeguarded nuclear power reactors under IAEA safeguards. However, it insisted and was able to keep its fast breeder reactors out of the purview of the safeguards regime. Once these reactors become operational, India’s capacity to produce fissile
materials would be increased exponentially, tilting the nuclear balance in its favour in addition to the already favourable conventional military balance. India, is also in the process of operationalizing, its first nuclear powered submarine Arihant. The last stumbling block, was the designing of a compact nuclear power plant, for installation in the submarine, which has been overcome with the Russian assistance (Shivanand Kanvi 2008) India has been working, on the development of a submarine launched ballistic missile (SLBM) ‘Sagarika’, for many years. It has already tested a 3500 kilometre range ballistic missile AGNI-III. In a recent meeting the Indian Nuclear Command Authority reviewed the progress of work on a 5000 kilometres range missile AGNI-IV, also called Suriya, and Arihant submarine (The Times of India: May 2011). Once these systems are operationalized, they would have security implications, far beyond the South Asian region. These systems, will give India the capability, to strike at targets deep inside China, which is likely to invoke counter moves by China, thereby, vitiating the security environment in the whole of the Asia-Pacific region. The nuclear powered submarine, once fitted with an SLBM, will provide India with an assured second strike capability. However, on the downside, once this submarine is deployed at sea, it will have implications for India’s nuclear posture, as well as its command and control system. At the moment, both India and Pakistan are in a state of recessed operational posture, with nuclear warheads kept separate from the delivery systems, but in a submarine there is no geographical distance between the weapons and the delivery systems. Currently, both countries are maintaining, assertive centralised command and control systems, but in case of a submarine, the command and control would be automatically pre-delegated, merely because of technological compulsions, and due to difficulties in communicating with a submerged submarine. The additional problem, likely to emerge with the deployment of nuclear powered submarines, is the likelihood of incidents at sea, wherein a Pakistani conventional submarine may come into contact with the Indian nuclear submarine, during a crisis or a limited conventional conflict, leading to inadvertent escalation.

Doctrinal and Technological Developments in Pakistan

Immediately after the nuclear tests in May 1998, work was in initiated, at the Army’s General Headquarters, to formulate Pakistan’s nuclear doctrine and to set up the nuclear command and control system. The work was completed, within the next few months. However, while the details of the command and control structure were made public in February 2000, Pakistan has never formally announced its nuclear doctrine. The logic behind holding back a formal pronouncement is that ambiguity reinforces deterrence by keeping the other side guessing. This line of argument is clearly in conflict, with one of the cardinal principles of deterrence, which is, clear and unambiguous communication of the deterrent threat. However, the broad contours of the doctrine have been alluded to from time to time, by senior government officials and national leaders. Being a conventionally weaker power, compared to its main adversary, Pakistan views nuclear weapons as a means to deter aggression at both conventional and nuclear levels. It was also decided at the very outset, that Pakistan’s nuclear doctrine would be based on Credible Minimum Deterrence. This was a realistic policy, keeping in mind the resource constraints and the desire to avoid getting embroiled into a debilitating nuclear arms race with India. Pakistan, however, unlike India, did not embrace the idea of a ‘no first use’ of nuclear weapons and decided to keep its options open. The reasoning behind this decision was, that
subscribing to a no first use nuclear policy, would amount to inviting aggression at the conventional level. Some of the other salient features of Pakistani doctrine are; non-use of nuclear weapons against non-nuclear weapon states, a determination not to share nuclear weapons or technology with any country or entity whatsoever and a centralised command and control. Pakistan has, while emphasising the defensive nature of its deterrence, also made it clear, that the size of its minimum deterrence is dynamic in nature and subject to change with changes in the security environment. It was, however, clear that nuclear weapons were seen only as weapons of last resort that would be used, when Pakistan’s very survival is at stake and it has run out of all conventional options. The implication was, that the so called ‘tactical nuclear weapons’ will not be developed for possible battlefield use (Salik: 219-239, Cheema: 148-196).

Pakistan’s recently tested short range ballistic missile ‘NASR’, once operationally deployed, will have repercussions far greater than its small size and short range. Given its short range of only 60 kilometres, this missile is clearly intended for a battlefield use, with all its attendant risks. It will also mean that it will have to be deployed, very close to or within the battle zone. This will pose challenges, related to ensuring physical security of the weapon system, against enemy actions from both ground and air. Maintaining an effective command and control over the forward deployed system, and preventing any unauthorised use particularly in the fog of battle, would be other challenges to contend with. Deployment of this weapon system within the battle zone, its short range and low yield warhead, would make it easier to contemplate its battlefield use, thus making escalation of even a limited conventional conflict to the nuclear level more probable in South Asia. Rodney Jones views this development, as Pakistan’s answer to India’s aggressive Cold Start Doctrine. He considers Cold Start/Proactive Defence Strategies, envisaging quick Indian thrusts into Pakistani territory under a nuclear overhang, as extremely dangerous ideas and considers these as challenges to Pakistan’s deterrent posture. However, he also believes that Tactical Nuclear Weapons (TNWs) are too dangerous a response to India’s doctrine, which in his view is still inoperative and argues that Pakistan should consider other options first, to deal with the Indian challenge. A respected Indian analyst has cautioned that induction of TNWs will lower the nuclear threshold in India-Pakistan conflict and has warned that if India responds in a similar manner, it would aggravate India’s security environment rather than improving it. (Basrur: RSIS Commentaries April 2011). While a Pakistani analyst also views the NASR testing as a dangerous development, arguing that Pakistan should have learnt from the experience of the super powers, rather than trying to reinvent the wheel. He thinks, these weapon systems can possibly be used only against Indian forces that are already on Pakistani soil, which would mean that deterrence has already broken down, and questions the utility of these weapons in restoring the deterrence (Haider: Express Tribune April 2011).

The testing and possible employment of this weapon system has other connotations as well. From the technological point of view, development of this missile is not an extraordinary achievement as such. However, the claim that it can carry nuclear warheads of appropriate yield is a clear indication, that Pakistan has acquired the capability to miniaturise nuclear warheads, which certainly is a consequential development. The ability to design and produce compact and light weight weapons would mean that, Pakistan would be able to equip its sub-surface naval platforms with nuclear weapons, thereby attaining an assured second strike capability. The diameter
of NASR weapon system is also small enough, to be adapted to fit into the torpedo tubes of the existing diesel powered submarines. The compact light weight warheads can also be used to tip the different varieties of cruise missiles, which Pakistan has already developed. This will assume much greater significance, especially in the event of materialisation of India’s intended deployment of ballistic missile defence (BMD) systems. Does this development also indicate a change in Pakistan’s nuclear doctrine from minimum credible deterrence to nuclear war fighting? Such a transition would mean requirement of a much greater variety and relatively larger size of the nuclear arsenal, leading inexorably to a nuclear arms competition or an arms race with arch rival India.

ANALYSIS/CONCLUSIONS

All the ingredients that can cause instability exist in South. There have also been at least three major crises since 1998, but the redeeming feature so far has been the recessed deterrence postures of the two countries, which are helpful during crises and provide a safety valve against accidental or unauthorised use. Potential for arms race instabilities is always there, since both India and Pakistan are busy in building up their respective fissile material stocks and are developing and flight testing ever more capable and sophisticated missiles. India is also actively working on the development and/or acquisition of BMD systems, which would force Pakistan to introduce both quantitative as well as qualitative improvements in its arsenal. The India-US nuclear deal coupled with the rapidly advancing fast breeder programme has opened up a vast new potential for India to substantially increase its fissile material stockpiles. Following the dictates of the action-reaction syndrome, which has historically determined the nature and direction of India-Pakistan relations, Pakistan has taken steps to enhance its plutonium production capacity, by embarking on the construction of new plutonium production reactors at its Khushab nuclear complex (Albright, Brannan 2011). This factor has also been instrumental, in hardening of Pakistani position, in the Fissile Material Cut-off Treaty negotiations at the Conference on Disarmament at Geneva. It is yet to be seen, as to how India reacts to Pakistan’s development and testing of the short range missile NASR, capable of carrying small nuclear payloads. Should India also decide to develop and field a comparable weapon system, the nuclear competition in South Asia will enter a new and dangerous dimension, with serious repercussions for strategic stability in the region.

The unrestrained R&D effort, by India and Pakistan, will provide an impetus for an arms competition. Growing influence of the scientific community and public support for the expanding nuclear and missile capabilities, will also generate pressures, for a sustained competition. India and Pakistan have agreed upon some useful nuclear / missiles related CBMs, however, institutional mechanisms for crisis management such as Nuclear Risk Reduction Centres (NRRCs) have not been established. There is also no overarching Strategic Restraint Regime (SRR). Pakistan’s proposed SRR has been turned down by India. Introduction of TNWs would be an unfortunate development due to their escalation potential and greater probability of use as compared to the strategic systems (Basrur: RSIS Commentaries April 2011). While shunning the TNWs, both sides need to refrain from propounding threatening operational doctrines, such as Cold Start or Proactive Operations, which generate unnecessary pressures on the other side to respond. Though, both sides had agreed in the Lahore Memorandum
of Understanding of February 1999, to discuss their security doctrines and concepts they have failed to do so, to the detriment of regional stability.

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Both India and Pakistan have ballistic missiles capable of delivering nuclear weapons. According to the Washington-based Center for Strategic and International Studies (CSIS), India possesses nine types of operational missiles, including the Agni-3 that can reach targets up to 5,000 kilometers. Pakistan's missiles, built with Chinese support, can also reach any part of India, CSIS said. Both countries also have smaller nuclear warheads that can be attached to short-range missiles (50-100 kilometers). According to the Stockholm International Peace Research Institute (SIPRI), Pakistan is estimated to have a nuclear arsenal. Although both India and Pakistan have been de facto nuclear weapons states since the 1980s, it was only Pakistan's operationalization of an aggressive first-use nuclear posture in 1998 that created significant instability at both lower and higher levels of conflict. To maintain the credibility of this posture, Pakistan devolves nuclear assets to the envisioned end users in the Pakistan military.

Perhaps the scariest implication of these arrangements is that extremist elements in Pakistan have a clear incentive to precipitate a crisis between India and Pakistan, so that Pakistan's nuclear assets become more exposed and vulnerable to theft. “Posturing for Peace? Pakistan’s Nuclear Postures and South Asian Stability.” Pakistan likely will not keep building its nuclear arsenal for an indefinite period, given its economic constraints and comparatively modest nuclear force requirements. Its deterrence is focused on India and is not meant to seek regional or global power status. The availability of delivery systems might also be a limiting factor for the size of Pakistan’s nuclear arsenal.