Responding to Pakistan's Tactical Nuclear Weapons

Dr Priyanjali Malik@

Pakistan officially confirmed that it possesses tactical nuclear weapons in October 2015, on the eve of Prime Minister Nawaz Sharif's official visit to the United States.[1] The news was not a surprise: discussions about Pakistan's interest in battlefield nuclear weapons have surfaced periodically over the past half-decade.[2] Yet, despite a small but steady stream of calls for India to broaden its nuclear options for greater flexibility, the Government has largely resisted moves to overtly acquire tactical nuclear weapons (TNWs). That said, India's short-range *Prahaar* missile, which could hypothetically carry a small nuclear payload, might appear to leave the door ajar for such a development.[3] However, as this paper will argue, a study of TNWs on the subcontinent underscores the difficulties of inducting, storing, authorising use of and actually using such weapons. India, therefore, is correct in rejecting this category of weapons; indeed, New Delhi should go further and remove any possible ambiguity regarding its position with respect to non-strategic nuclear weapons.

TNWs have proved notoriously slippery to define.[4] Most definitions have pivoted on range or target to distinguish a tactical or theatre nuclear weapon, but in understanding that, given the flexibility exhibited by modern delivery systems and devices, such a distinction is often subjective. In view of the shared borders and short distances on the Indian subcontinent, this study relies on an understanding of TNWs as relatively small weapons systems whose use is expected to affect the outcome of a battlefield engagement. The term 'relative' is of course left open to interpretation, which poses its own problems, as does defining a battlefield operation. Nonetheless, this narrow definition allows this paper to address the concerns raised by Pakistani Foreign Secretary Aizaz Ahmed Chaudhry's October 2015 announcement

@Dr Priyanjali Malik is an independent researcher based in London who focuses on politics and nuclear security in South Asia. Her book 'India's Nuclear Debate: Exceptionalism and the Bomb' is based on her thesis, which was awarded the BISA Michael Nicholson Thesis Prize for 2008.

Journal of the United Service Institution of India, Vol. CXLVI, No. 604, April-June 2016.

on Pakistan's acquisition of 'low-yield nuclear weapons to counter Indian aggression'.[5]

Before going into the implications of this official confirmation, it might be useful to reflect on Chaudhry's choice of timing and place for his announcement. The Pakistani Foreign Secretary was briefing the press in Washington DC prior to Prime Minister Sharif's arrival in the United States. The White House had already made it clear that the meeting with President Obama would not yield a nuclear deal for Pakistan along the lines of the 2008 US-India deal, as had earlier been rumoured.[6] There was, therefore, an audience and expectations to be managed at home in Pakistan. There was also the need to maintain gentle nuclear pressure on Washington to keep it engaged with Islamabad. If, in the process, a strong message was sent to India at a time when relations between the two countries could be improved but were not in any danger of being thrown into a massive downward spiral, then that was a bonus. Indians would do well to remember that they are not always the primary targets of all of Pakistan's nuclear messaging.[7]

The message, however, has been noted in India and outside. New Delhi's official silence on this topic has probably not gone unnoticed either. In any case, India's position on battlefield nuclear weapons was articulated in April 2013, when rumours about Pakistan's interest in these weapons started gaining traction. Shyam Saran, then the Convenor of the National Security Advisory Board, had stated that India will respond to a nuclear first strike with 'nuclear retaliation which will be massive and designed to inflict unacceptable damage on its adversary. The label on a nuclear weapon used for attacking India, strategic or tactical, is irrelevant from the Indian perspective.'[8] Saran's argument rested on the understanding of nuclear weapons that holds any use as ultimately strategic, privileging the *political* understanding of the destructive atom. It was also responding to calls for India to adopt a posture of flexible response, for, as Saran reminded his audience, once you step on the ladder of escalation, there is only one direction of movement.

From India's point of view, Pakistan's apparent induction of TNWs into its military doctrine with plans for early use lowers the nuclear threshold dangerously. There are also the associated dangers of theft, nuclear terrorism, unauthorised use and

miscalculation at times of crises. Any one of these scenarios coming to pass could lead to terrible consequences, no matter how much damage-control is attempted after the event.[9]

However, looking at the region from the outside – and this is a view that Pakistan has assiduously promoted with some success – the threshold was already lowered once rumours of the Indian Army's Cold Start doctrine began to circulate.[10] Pakistanis have long justified their need for supposedly more 'usable' nuclear weapons by citing Cold Start. The implication is that TNWs would be used on Indian forces that have crossed over into Pakistani territory in some kind of limited operation, as is said to be envisaged under Cold Start, or more recently, the Pro-active Strategy.[11] As Pakistanis have argued, since they cannot match India conventionally they need a cost-effective option to put an end to ideas of Indian troops breaching the International Border, however limited or otherwise that operation might be.[12]

The irony here is that although Cold Start may not even exist, the fears of a nuclear flashpoint have been successfully raised within and outside the region.[13] While the Indian Army is absolutely correct in planning for future conflicts – that is, doing its job – the rumours about Cold Start have allowed Pakistan to claim a valid reason for lowering the nuclear threshold. And whether or not India does anything to trigger a nuclear response across the border, Pakistan has already notched up a minor victory for itself in making bilateral relations between Islamabad and New Delhi a matter of concern for capitals across the globe. The threat of radioactive fallout, however small, is not just directed at New Delhi. As the retired head of Pakistan's Strategic Plans Division said in a speech in Washington last year, '[w]ell-meaning nudges from well-meaning friends will be most helpful in the larger interest of international peace, and security in a region dubbed as a nuclear flashpoint' [sic].[14]

Pakistan's position on battlefield nuclear weapons is not without problems, of course. The decision to adopt TNWs as part of its posture of full-spectrum deterrence raises fears about command and control, unauthorised use and nuclear security. The numbers game when choosing to rely on tactical nuclear weapons, where the weapons have to be calibrated against different hypothetical targets to theoretically achieve the desired result,

exercises a logic of its own. At the height of the Cold War, the US and the Soviet Union possessed several thousand non-strategic nuclear warheads; even today, the US has approximately 760 TNWs while Russia is believed to have between 1000 and 6000 non-strategic warheads.[15] The problems of securing scores of small warheads cannot be overstated; indeed, the security of Pakistan's warheads is a topic that recurs whenever senior Pakistani military and political figures interact with their counterparts outside the country.[16]

Then there are the myriad problems arising from incorporating TNWs into doctrine and actually using them. Jeffrey McCausland has an excellent comparison of what is known of Pakistan's doctrine with NATO and Soviet deployment of tactical nuclear weapons during the Cold War, which highlights the operational difficulties of planning for nuclear war-fighting.[17] Questions of when, where and how to use tactical nuclear weapons bedevilled NATO planners and there is no reason to believe that the answers to these questions should get any easier when contemplating using them on one's own soil.

NATO strategists struggled with 'weapons employment', which covered choosing the correct weapon for a particular target, while containing collateral damage so that theoretically, the war-fighting could be kept limited, all the while keeping these plans updated in a fluid situation where the ground realities are changing during an engagement. Thereafter, the yield of the weapon needs to be weighed up. Considering that these nuclear devices are to be exploded on Pakistani soil to halt an Indian offensive, how much would achieve the desired result while curtailing the radiation on home soil? Very low-yield nuclear weapons might prove ineffective in halting an armoured offensive. And yet, how much radiation would the planners in Rawalpindi wish to contemplate in Punjab, the most likely theatre of engagement, which is also the heartland of their support? What about the contamination of agricultural lands and water, which moreover, given the geography of the rivers, would flow down to most of the rest of the country?

Then, as McCausland enumerates, there are the operational difficulties that arise from use. Any nuclear device, however small, will also affect the troops of the country firing the weapon – apart from radiation, the dazzle effects of the explosion will incapacitate

one's own forces as well. The fireball that results from the explosion may well cause more damage than had been anticipated. There will also be the need to counter the effects of the electromagnetic pulse, which will in all probability disable communication links with the field commanders. So, choosing when to use the nuclear device is complicated by a whole sequence of events that will affect that unit's ability to conduct further conventional operations. The next rung on the ladder of escalation may well have moved a lot closer.

And finally, there is the political fallout. Would the international outrage that would result from Pakistan breaking the nuclear taboo be worth the halting of a limited Indian offensive?[18] So far, Pakistan has relied on its tactical nuclear weapons to get other countries to nudge India towards a less belligerent stand. But the effectiveness of this bargaining chip lies in not using it.

The point of enumerating these doctrinal and operational problems is not to engender complacency in India. Quite the opposite. New Delhi has its work cut out in responding to these nuclear developments across the border. The first point appears to be addressed: India should not consider TNWs for itself. The doctrine of flexible response did not work for the Cold Warriors and there is little to indicate that South Asia, with the complications of proximity, population and politics will find it any easier. It would therefore be prudent for New Delhi to manage very carefully the messages sent out with regard to *Prahaar,* often touted as India's response to Pakistan's short-range *Nasr* missile.[19] Though India has been cautious not to explicitly posit a nuclear payload for *Prahaar,* it has tested sub-kiloton nuclear devices, which could presumably be employed for TNWs.[20] It would be tempting, therefore, for those frustrated by Pakistan's ability to apparently play the nuclear card at a lower level to present *Prahaar* as India's answer to Pakistan's TNWs. Apart from posturing, however, there would be very little to gain from such a move and much to lose. It would also be prudent for New Delhi to ensure that scientific endeavour does not push India down the tactical nuclear route, as arguably occurred with India's drift towards the ballistic missile shield, which has caused its own doctrinal headaches.[21]

There are other diplomatic considerations that make TNWs an unviable proposition for India. New Delhi is currently engaged in making the case for India's entry into the Nuclear Suppliers

Group and the Missile Technology Control Regime, based on India's history of responsible nuclear stewardship, non-proliferation advocacy and its record on nuclear safety and security. New Delhi will most certainly not want to be lectured on the dangers of 'loose nukes' that might arise from delegating control of small battlefield nuclear weapons down the chain of command, as frequently occurs when senior Pakistani civilian and military leaders interact with their foreign counterparts. Further, any move to acquire 'more usable' nuclear weapons that, moreover, appear to undermine India's No First Use pledge will only lead to India being more tightly bound to Pakistan in the eyes of its international interlocutors when New Delhi is doing all it can to break that link.

In the end, doctrinally, diplomatically and economically, New Delhi would be putting itself at a disadvantage in allowing nuclear weapons developments in Pakistan to dictate the nuclear agenda in India. India has of course to take cognisance of advertised changes in Pakistan – but not necessarily react to them. And the response does not necessarily have to be nuclear. There are other avenues that can be mined much more productively.

To begin with, New Delhi should consider reviewing the communications on Cold Start or the Pro-active Strategy. The official silence on the matter has allowed Pakistan to gain diplomatic advantage from an exercise in contemplating options to secure India. However difficult this might be to accept, there is a view outside the region that India is partly to blame for Pakistan lowering the nuclear threshold. There is a distinction to be made between reducing mobilisation timings to the border and actually planning to send military formations across the international border. If, as indications are, that Cold Start is not a serious part of joint military planning, then perhaps it is time to consider some way of disassociating India from Cold Start.

New Delhi will also need to keep open the channels of communication with Islamabad. Whether India likes it or not, one of the aims of Pakistan's TNWs is to force New Delhi to resume dialogue with Islamabad. As former Pakistani High Commissioner to the UK and Ambassador to the US, Maleeha Lodhi has argued – and her thesis is fairly representative of this strand of thinking across the border – Pakistan needs to counter Cold Start with Full

Spectrum Deterrence; however, given 'the subcontinent's volatile environment where a crisis can emerge quite quickly from a terrorist attack or another Kashmiri "spark" there is urgent need for a new understanding between Pakistan and India', which, she goes on to argue, can only be addressed by 'dialogue and mutual understanding.'[22] She ends her opinion piece, for good measure, by wondering why the international community has 'done little, if anything, to insist on and promote such an understanding.'[23]

This argument is not subtle but it is effective. Whatever current domestic opinion on engaging Pakistan, constant communication is the only way forward. In the end, it will also reduce Pakistan's room for manoeuvre, for discussion will leave little space for claims of misinterpreting India's intentions. In any case, as India's responses to Mumbai in 2008 and events in Gurdaspur and Pathankot in 2015 and 2016 have shown, New Delhi is choosing to focus attention away from a military response to a terrorist provocation. This is not because India is deterred by Pakistan's TNWs so much as because New Delhi is all too aware of its own strategic arsenal.

As Lawrence Freedman has argued, when nuclear weapons are involved the distinction between a 'tactical war' and 'strategic war' becomes specious.[24] Any use of nuclear weapons, whatever their size, is, in the end, strategic. To allow nuclear weapons to assume any other capabilities is to play into the hands of those who would use nuclear weapons to alter the status quo. Internally and abroad, India needs to steer the conversation away from TNWs. Now is the opportunity for New Delhi to take a proactive stance in proving that South Asia need not be the nuclear flashpoint that others fear.

Endnotes

[1] Anwar Iqbal, "'Pakistan has built low-yield nuclear weapons to counter Indian aggression'", *Dawn,* 20 October 2015, http://www.dawn.com/news/1214157. For a much fuller explanation of Pakistan's thinking on tactical nuclear weapons, see Lt Gen Khalid Kidwai's remarks to the Carnegie International Nuclear Policy Conference on 23 March 2015, the full transcript of which is available at 'A Conversation with Gen Khalid Kidwai', Washington DC, Carnegie Endowment for International Peace, http://carnegieendowment.org/files/03-230315carnegieKIDWAI.pdf.

General Kidwai lead Pakistan's Strategic Plans Division for fifteen years, until he retired – after 12 extensions – in December 2013.

[2] See, for example, Manoj Joshi, 'Ballistic Missile Nasr: A bigger threat from Pakistan', *India Today,* 2 June 2011, http://indiatoday.intoday.in/story/pakistans-short-range-ballistic-missile-nasr-is-a-matter-of-concern-for-india./1/140087.html; Bharat Karnad, 'India's nuclear amateurism', *The New Indian Express,* 28 June 2013

[3] Y Mallikarjun, 'India all set to test new short-range tactical missile', *Hindu,* 3 July 2011. DRDO appears to be focused on trying to export conventional versions of the missile; the 'Pragati' variant was exhibited in South Korea in October 2013. 'Hemant Kumar Rout, 'Tactical Missile Pragati Readied for Export', *New Indian Express,* 5 November 2014

[4] See William C Potter, Nikolai Sokov, Harald Muller and Annette Schaper, *Tactical Nuclear Weapons: Options for Control,* Geneva: ¨United Nations Institute for Disarmament Research, UNIDIR/2000/20

[5] 'Pakistan has built low-yield nuclear weapons…'

[6] David Ignatius, 'The U.S. cannot afford to forget Afghanistan and Pakistan' *The Washington Post,* 6 October 2015

[7] For an interesting take on this see Vipin Narang, 'Posturing for Peace? Pakistan's Nuclear Postures and South Asian Stability', *International Security,* Vol 34, no 3, pp 38 – 78

[8] Indrani Bagchi, 'Even a midget nuke strike will lead to massive retaliation, India warns Pak', *The Economic Times,* 30 April 2013. Saran was speaking in his personal capacity, but his speech was widely interpreted as having received official sanction. See Maleeha Lodhi, '"Shyam Saran's Nuclear Bluster is Dangerous', *Sunday Guardian,* 1 June 2013. Even with the change in government, this is still India's official position.

[9] This is not a purely South Asian problem. The BBC recently televised a simulated session of a Britain and NATO war-gaming exercise which took as its starting-point rising tensions in Eastern Europe. Despite the experience and efforts of those in the room, the simulation ended with Russia arming its ICBMs. See, BBC,

'Inside the War Room', *BBC Two,* first aired on 3 February 2016, 9.00 PM. A report of this programme is available at 'Could you stop World War III?', BBC Magazine, http://www.bbc.co.uk/guides/zpm8xsg#zc3hbk7. Incidentally, this programme seriously upset Russian sensitivities; nobody appreciates being seen as the initiator of a nuclear war, even if one's nuclear doctrine threatens just that *in extremis.*

[10] Walter C Ladwig III, 'A Cold Start to Hot Wars?; The Indian Army's New Limited War Doctrine', *International Security,* 32, 3 (Winter 2007/08): 158 – 190. Ladwig's article has been cited numerous times in support of arguments that Cold Start will trigger a nuclear war on the subcontinent.

[11] While India has never officially confirmed Cold Start and the Army has recently appeared to distance itself from it, mention of a 'pro-active strategy' is now gaining currency. However, 'Cold Start' remains the focus of Pakistani ire.

[12] Jayant Sriram, 'The threat of 'tactical nuclear weapons', conversation with Professor Pervez Hoodbhoy, *Hindu,* 14 January 2016

[13] Rajat Pandit, 'Cold Start in focus, but does it exist?', *Times of India,* 2 December 2010; Jaganath Sakaran, 'The Enduring Power of Bad Ideas: "Cold Start" and Battlefield Nuclear Weapons in South Asia', *Arms Control Today,* 4 November 2014

[14] 'A conversation with Gen Khalid Kidwai'

[15] Amy E Woolf, 'Nonstrategic Nuclear Weapons', *Congressional Research Service,* 23 February 2015, RL 32572, p2

[16] David E Sanger, 'US Exploring Deal to Limit Pakistan's Nuclear Arsenal', *New York Times,* 15 October 2015, http://nyti.ms/1jCdPT3

[17] Jeffrey D McCausland, 'Pakistan's Tactical Nuclear Weapons: Operational Myths and Realities', *Deterrence Instability* (2015): 149. The following paragraphs draw heavily from this essay.

[18] Though nuclear weapons have spread and become exponentially more sophisticated since the bombs that were dropped on Hiroshima and Nagasaki, they have never been fired again. The strengthening taboo against the use of nuclear weapons that has coalesced in the decades since August 1945 has arguably done

as much to keep the peace as the threat of destruction from splitting the atom. See Nina Tannenwald, *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons Since 1945* (Cambridge: CUP, 2007)

[19] Mallikarjun, 'India all set to test new short-range tactical missile'. Though beyond the scope of this paper, a similar argument can be made about India's cruise missiles. The room for miscalculation with regard to dual-capable missiles could make them a liability at times of crisis as once fired, there is no way of knowing the nature of the payload on these missiles until they reach their target.

[20] India tested a 0.2 kiloton device in the first series of nuclear tests conducted on 11 May 1998 and two further sub-kiloton devices on 13 May 1998.

[21] For India's drift into BMD, see Mahesh Shankar and T V Paul, 'Nuclear doctrines and stable strategic relationships: the case of south Asia', *International Affairs,* 92:1, (2016), p 10ff; Vipin Narang, 'Five Myths about India's Nuclear Posture', *The Washington Quarterly,* Summer 2013, 143 – 157

[22] Maleeha Lodhi, 'India-Pak relations are at an all-time low', *The Sunday Guardian,* 3 January 2015

[23] *Ibid.*

[24] Lawrence Freedman, *The Evolution of Nuclear Strategy,* 3rd edition, (London: Palgrave 2003), 64 *ff*