



# Nuclear *South Asia*

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## ISSUE BRIEF

INSTITUTE OF PEACE AND CONFLICT STUDIES

### NUCLEAR SECURITY PROGRAM

providing partnership and support to the global discourse on elimination of nuclear weapons

IPCS partners with the Nuclear Security Project of the Nuclear Threat Initiative (NTI) in its work towards global nuclear security.

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## Director's Note

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The **IPCS Nuclear Security Program (NSP)** at the IPCS seeks to respond to the twin challenges of nuclear disarmament and non-proliferation through the provision of independent, objective assessments, and by supplementing existing policy debates and strategic analyses. The NSP's work manifests in research projects, track-II dialogues, capacity-building for young scholars, and conferences, seminars and panel discussions to nurture the evolution of an informed strategic community.

During January-March 2011, the NSP focused on five new long-term research-intensive projects. One of these is aimed at achieving a common understanding of Indian and Pakistani nuclear concepts, doctrines and strategies; the results of this exercise will form a common nuclear lexicon. The NSP team also worked on the Sino-Pak nuclear deal, from Indian, American, Chinese and Pakistani perspectives.

Individually undertaken projects for the quarter include **Sino-Pak Nuclear Cooperation (Siddharth Ramana)**, which studies the relationship's impact on regional nuclear security, **Nuclear Installations in India (Ruhee Neog)**, a factual and analytical manual of existing and planned Indian nuclear power plants, **Credible Minimum Nuclear Deterrence (Tanvi Kulkarni)**, which attempts to understand the concept in its Indian context, the challenges to the doctrine and the geo-political realities in South Asia that affect it, and a Scenario-Building Project for a Nuclear Risk Reduction Regime in Southern Asia (**Lydia Walker**), which considers the elements of the envisaged regional regime and draws policy recommendations based on the shape and scope of the scenario. The initial findings are likely to be published as Special Reports or Issue Briefs in the next quarter (April-June 2011).

This quarter has been particularly eventful for the NSP. On the track-II front, the IPCS organized the Indo-Pak Track II Dialogue on Nuclear Issues and Nuclear Security in Southern Asia: An India-Pakistan-China Track II Dialogue, both of which were held in Bangkok in January 2011. The IIIrd Annual IPCS Young Scholars' Residential Workshop on Nuclear Disarmament and Nonproliferation was held at Surajkund, New Delhi in February 2011 over a period of five days. Participants for the workshop were drawn from India, Bangladesh, Japan, UK and the US. Excerpts are published in this quarterly. As part of the NSP's endeavour to engage with the Government of India, the NSP held a two-day conference on "India and Nuclear Disarmament" with support from the DISA, Ministry of External Affairs. Professor Muchkund Dubey, former foreign secretary of India delivered the key note address. This interaction was unprecedented in that it was the first of its kind.

**Nuclear South Asia** is the NSP's quarterly compilation, and this year's first issue provides a wide-ranging commentary on the season's most outstanding issues. Prof PR Chari, in **From CTBT to FMCT: The Nuclear Debate in India** advocates an urgent review of India's position on the two arms control agreements, citing their critical importance for measures towards Nuclear Zero as also strategic and energy security imperatives. In **New START Ratification: Future Possibilities**, Maj Gen (Retd) Dipankar Banerjee explores the potential impact of the treaty on the global strategic environment. Tanvi Kulkarni discusses the nuclear component of the five high profile visits to India in 2010 in her article, **The P-5 Visits and India's Nuclear Energy Programme**. **FMCT Negotiations: Games Pakistan Plays** is a commentary by Prof PR Chari on Pakistan's strategic maneuvering and its implications for the disarmament agenda. In **Sri Lanka and Iran: The 2030 Nuclear Power Plant and Iranian Support**, Lydia Walker considers the nuclear politics of the historic Iran-Sri Lanka relationship. **Towards an Indo-Pak Nuclear Lexicon - I: Credible Minimum Deterrence** (Tanvi Kulkarni), **Towards an Indo-Pak Nuclear Lexicon - II: Credible Minimum Deterrence** (Sadia Tasleem) and **Towards an Indo-Pak Nuclear Lexicon - III: Cold Start** (Ali Ahmed) are part of a larger project that attempts to achieve a common understanding of Indian and Pakistani nuclear concepts, doctrines and strategies.

**D Suba Chandran**

## ISSUE BRIEFS

## From CTBT to FMCT: The Nuclear Debate in India

PR Chari

*Visiting Professor, IPCS, New Delhi*

A humorous story, true incidentally, relates a conversation between two young BJP legislators in the mid-nineties when India's entry into the CTBT was being furiously debated. One says, "What is all this jazz about CTBT and FMCT. All I know is that the train starts moving when the siri (whistle) blows in VT," The other sagely answers, "That's all I know brother. But if you want to know more we are advised to talk to ...." Here he named a famous academic with saffron characteristics.

In truth, the debate in India died down thereafter on the CTBT. It never really started on the FMCT. But these arms control agreements are vital for pursuing a step-by-step approach to achieve the elusive goal of 'nuclear zero'. Moreover, 'all this jazz' critically impinges upon India's strategic and energy security. The obtaining lack of interest, therefore, is appalling. Stated simply, the Comprehensive Test Ban Treaty (CTBT) envisages the total prohibition of nuclear weapons' testing in all environments, including underground. Currently, the Limited or Partial Test Ban Treaty (1963), which is in force, disallows nuclear weapon tests in the atmosphere, outer space and under water; but permits underground tests to be conducted. This exception was made due to the difficulties that existed in the early sixties in detecting and distinguishing underground nuclear tests from earthquakes and similar natural seismic events. These difficulties reflected the then existing state of science, but considerable progress has since been made to enable detection of very low yield underground nuclear tests using a multiplicity of sensors.

After much ado the CTBT was negotiated and enacted in 1996. It requires 44 states with nuclear facilities relevant to manufacturing nuclear weapons to join and ratify the Treaty before it can enter into force. All have not signed. There are 9 holdouts, which includes China, Egypt, India, Indonesia, Iran, Israel, North Korea, Pakistan and the United States. The United States has signed, but not ratified the CTBT; in fact, President Clinton was hugely humiliated when its ratification was rejected by the US Senate in 1999 due to Republican obduracy, which still continues. There is no doubt that, should the United States ratify the CTBT now, a domino effect would result, and the other holdouts would quickly fall in line.

The Fissile Materials Cutoff Treaty (FMCT), again described simply, envisages the cessation of all manufacture of fissile materials for weapons purposes. The Treaty specifically

production of weapons-useable fissile materials, not past stocks that might have been accumulated over the years. Negotiations on the FMCT have remained frozen before the 65-member Conference on Disarmament in Geneva for more than a decade. The current impasse arises from Pakistan's reluctance to joining the FMCT negotiations, which has blocked any forward movement thereon since all decisions in the CD are mandated to be reached by consensus. Pakistan's rationale is that it cannot halt its weapons grade fissile materials production since it needs to rival India's superior capabilities, and derive a nuclear arsenal of adequate sufficiency.

So, what is the present urgency to review India's national positions on the CTBT and FMCT? What are these positions, anyway? Apropos, it should be noticed that India has traditionally supported the enactment of a CTBT, but this unequivocal posture has been followed a zigzag course. India was among the earliest advocates of a complete cessation of all nuclear arms testing in the fifties and was responsible for steering the Limited or Partial Test Ban Treaty towards fruition in 1963. Thereafter, it co-sponsored the resolution, along with the United States, introducing the CTBT in the United Nations (1993), but later withdrew its support in 1995 for domestic and strategic compulsions. Following its nuclear test series in 1998 India imposed a voluntary moratorium upon itself and pledged to desist from further nuclear testing. In an important statement made to Parliament on 15 December, 1998, Prime Minister Vajpayee had declared that "in the assessment of our scientists, this stand [voluntary moratorium on nuclear testing] does not come in the way of our taking such steps as may be found necessary in future to safeguard our national security." It was surmised that the Prime Minister was assured that computer simulation was sufficient to obviate the need for field testing, which greatly assuaged the hostility in the international community. A similar commitment was made by Prime Minister Manmohan Singh to continue India's voluntary moratorium on nuclear tests, which finds mention in the Indo-US Agreement of July 2005 which incorporated the historic Indo-US nuclear deal.

The conclusion worth stressing here is that both the BJP-led UPA and the Congress-led NDA governments have pledged to maintain the moratorium on nuclear testing, which is the essential purpose of the CTBT. By definition, however, a moratorium envisages the suspension of an activity, which is an impermanent condition and can be unilaterally abrogated at will. India is under no obligation or pressure at present to convert its moratorium into a permanent renunciation of underground nuclear testing. Will it succumb, however, to the domino effect and join the CTBT if the United States ratifies the Treaty?

President Obama promised to pursue CTBT ratification "aggressively" in his famous Spring 2009 Prague. After his recent success in achieving ratification of the New START agreement, there is fair optimism in Washington that the CTBT's ratification is do-able, despite the predictable opposition by the Republicans and the affected civilian and military bureaucracies. Significantly, Russia has also pressed all governments in the Conference on Disarmament in Geneva

to join the CTBT. Russian Foreign Minister Sergei Lavrov declared that: "The task of enacting the Comprehensive Nuclear Test Ban Treaty as soon as possible is particularly important. We once again call on all of the countries that have not yet signed and ratified the treaty to do so." He added that: "Unilateral moratoriums on nuclear tests are useful, but they cannot substitute this obligation [to enter the CTBT], which is key to global security." The reference to the Indian stance and its procrastination on ceasing nuclear tests in perpetuity is apparent and cannot be ignored.

The justification often heard in official quarters to explain this policy of figuratively 'keeping one's powder dry' is that India may need to respond if China or Pakistan tests in future, and must therefore retain its own right to test. But the counter-factual questions need to be asked: Why should China or Pakistan conduct nuclear tests in defiance of the international community, which strongly disapproves such nuclear exhibitionism? Do they need to test for political or strategic purposes? Or, for technical reasons like ensuring stockpile reliability or developing new warhead designs? Again, these questions have only arisen in the American context, given the influence of its weapons laboratories and manufacturing lobbies and their allied political interests. Do similar conditions obtain in China or Pakistan? There is some uncertainty in this regard, but that leads on to another counter-factual question: why should India feel impelled to respond in like fashion? Should it resume nuclear testing without any credible rationale that serves its national interest? Like reciprocating to Pakistan's missile tests with its own missile tests in a gladiatorial contest? In the absence of convincing logic, there is little reason for India to defy the international community if Pakistan or China should choose to test and infract the present taboo against nuclear testing.

What about the FMCT? India has expressed its support to a universal, non-discriminatory and verifiable Treaty, which is standard formulation for declaratory statements. But, it has not been called upon yet to take any stand on the divisive issues embedded in the FMCT draft provided by the Bush Administration some three years back, since the related negotiations have yet to commence. Hilary Clinton upped the ante by declaring recently that a ban on manufacturing new nuclear-weapons related material was in the world's interests, and that multinational talks on the FMCT should commence. Warning Pakistan she said, "Our patience is not infinite. There is no justification for a single nation to abuse the consensus principle and forever thwart the legitimate desire of the 64 other states to get negotiations under way on an agreement that would strengthen our common security." Strong words, but it remains to be seen whether strong words will translate into strong actions. All too often in the past US policy declarations have buckled under pressure, and yielded to the reality that supplies to the American forces and ISAF in Afghanistan have to traverse Pakistani territory to reach them. The security of the supply line can only be guaranteed by Pakistan, despite its being in league with non-state actors like

the al Qaeda, Lashkar-e-Toiba, and other sub-rosa groups that have an interest in procuring nuclear weapons. Hilary Clinton stated the obvious by reiterating that, since, "fissile material could fall into terrorists' hands, we must reduce the amount of such material that is available" which draws pointed attention to negotiating and finalizing the FMCT.

Unfortunately, the perspectives adopted by New Delhi and, for that matter, Islamabad in dealing with issues relating to the CTBT and FMCT are wholly unreal. Why? The short answer is that they ignore the intrinsic nature of nuclear weapons, which can inflict enormous death and destruction within seconds, while their after effects could last for generations. It was recognized at the very dawn of the nuclear era that nuclear weapons can only serve the ends of deterrence. And, nothing more, or anything else. Any use of these weapons by nuclear adversaries would result in mutual annihilation. Any use of nuclear weapons by a nuclear weapon power against a nuclear unarmed country would visit the greatest moral abhorrence on the culprit. These are not the fulminations of nuclear pacifists. The empirical evidence corroborates the ineluctable fact that nuclear weapons have not been used by nuclear weapon powers against their nuclear unarmed adversaries since Hiroshima and Nagasaki even when they were facing imminent defeat. The experience of Vietnam and Afghanistan reveals that the United States and the former Soviet Union accepted ignominious defeat while confronting far weaker adversaries rather than contemplate reaching the nuclear threshold.

*“Unfortunately, the perspectives adopted by New Delhi and, for that matter, Islamabad in dealing with issues relating to the CTBT and FMCT are wholly unreal.”*

The conclusion available here is that nuclear weapons are essentially unusable and that the tradition of non-use of nuclear weapons in crisis situations has embedded itself firmly in the international psyche. T V Paul notes in his seminal study on 'The Tradition of Non-Use of Nuclear Weapons' that: "The tradition of non-use serves several of the cherished goals of [the] international community, such as preventing nuclear war, avoiding inadvertent escalation, helping to reduce the proliferation of nuclear weapons, and depreciating the value of nuclear weapons as the currency of power in the international system."

In these circumstances, entering the CTBT now, and the FMCT, whenever its draft becomes available for consideration, should not present any problem. New Delhi and Islamabad currently possess an estimated 90 to 100 nuclear weapons each, which rivals the stockpile of the United Kingdom. These numbers are more than sufficient to deter an attack upon each other by each other, which includes China, in the case of India on rational considerations. Adding to the Indian nuclear stockpile and sophisticating its nuclear warheads to enable war-fighting makes absolutely no sense whatever. The reason is axiomatic. Nuclear weapons are not meant to fight wars, but to deter them. Why? It requires no great perspicacity to appreciate that an armed conflict between Nuclear-armed adversaries, with its inevitable action-reaction dynamics, is a prescription for mutual annihilation. Indeed,

the Cuban Missile Crisis in 1962 was the last serious direct confrontation that could have resulted in disastrous consequences.

The empirical evidence informs that nuclear weapons states are unable to use their nuclear weapons against nuclear unarmed states. A strong moral taboo exists against the use of nuclear weapons against civilian populations, which is quite unlike their being targeted by conventional weapons during major conflicts. For instance, the conventional bombing of Dresden and Tokyo during the Second World War resulted in casualties in the tens of thousands, rivaling those in Hiroshima and Nagasaki. But, the Dresden and Tokyo bombings, though widely condemned, have not led to any moral taboo against their repetition in future, unlike nuclear bombing.

How might we summarize these arguments and derive appropriate findings? The basic conclusion can be emphasized that nuclear weapons are essentially unusable. The tradition of their non-use has strengthened immeasurably over the nuclear era, which dawned tragically in 1945. The question, therefore, of what are the parameters of a credible and minimum deterrent must be sought within this prevailing ethic. The numbers of nuclear weapons that constitute this credible and minimum deterrent lies in the eyes of the interlocutor. But, in the Indian context, the need for nuclear holdings ranging from the tens to the hundreds has been passionately argued by these interlocutors. The usual methodology pursued is to determine -arbitrarily - how many population, military and industrial centers need to be eliminated in the adversary country or countries. That number is multiplied by two or three depending on the preferences of the interlocutor to cater for a primary attack and provide for adequate reserves. Without arguing against the fallacies in this dubious logic, it could be asked whether India, Pakistan or China would view with equanimity the loss of their capital city. Or, their major commercial centers viz. Mumbai, Karachi or Shanghai? Or, their large industrial complexes? Or, major developmental projects, atypically large dams? The answer to these uncomfortable questions is 'No'.

The inexorable logic then supervenes that the size and shape of the deterrent must be sought at the lowest possible levels of weaponry. What is the logic then in adding to numbers, or to improve these weapons interminably to enhance their war fighting capabilities? The inevitable conclusion has then to be reached that there is no need to keep increasing fissile material production for weapons purposes. And, to invest vast sums in the R & D efforts in sophisticating nuclear warheads. Should this logic be agreed upon there is little reason for India not to enter the FMCT and the CTBT; it would enable India to reclaim its lost élan of leading the world in the promotion of nuclear disarmament.

## ARTICLES

### New START Ratification: Future Possibilities

*Maj Gen (Retd) Dipankar Banerjee  
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**T**he US Senate approved the ratification of the New START Treaty at a lame duck session on 22 December 2010. The President signed it the following day. This successful ratification was the major foreign policy achievement of the Obama administration's first two years. Arguably, this may even be a small step in justification of the Nobel Peace committee's anticipatory decision in 2009 to award him this Prize. The US ratification has allowed the Russian Duma to commence its deliberations and hopefully ratify it by January 2011, paving the way for an early entry into force of an important arms control treaty.

*“An immediate potential impact will be that with this pending issue out of the way, both the US and Russia will be able to pursue other arms control initiatives, such as eliminating smaller tactical nuclear weapons, which continue to remain deployed in Europe.”*

The Treaty commits both sides, within seven years of ratification, to make significant reductions in their strategic nuclear arsenals. Each side will reduce nuclear warheads to a maximum of 1550 and the number of launchers to 700. Due to complex counting rules, the reduction, though significant, is not major. Yet, it has other advantages, the most notable is that both sides have shown their willingness to remain engaged in nuclear arms control and will be able to continue with verification inspections, which otherwise would have halted.

The US Senate deal came at a high cost. President Obama had to commit to spending \$185 billion over the next decade for "modernizing" the U.S. nuclear weapons production complex and nuclear weapons delivery vehicles. Also, a commitment that the missile defence project in Europe to which Russia has strong objections will continue to be pursued. Given these realities and the Republican majority in Congress from 2011, further disarmament measures, such as ratifying the Comprehensive Test Ban Treaty, seem remote.

It may be argued that the approximate 30 per cent reduction of strategic arms over seven years is not enough given the changed scenario so many years after the end of the Cold War

It is not sufficient for example to persuade the UK, France or China to seriously engage in negotiations for reducing their arsenals. This will require bringing US and Russian arsenals down to 1,000 warheads or less. Yet, there may be other possibilities.

An immediate potential impact will be that with this pending issue out of the way, both the US and Russia will be able to pursue other arms control initiatives, such as eliminating smaller tactical nuclear weapons, which continue to remain deployed in Europe. Tactical or short-range nuclear weapons have been defined as those that have a delivery range of below 500kms. This is a category where Russia has an advantage in numbers and it is said to have somewhere around 3,000 to 8,000 deployed and the US between 500-1200. There can be no conceivable requirement or justification for these weapons today.

Actually short range nuclear weapons are the most destabilizing in today's world for a number of reasons on which we need not dwell at much length here. Besides, due to the numbers available these are likely to be also the ones to fall into the hands of terrorists. Therefore, deterrence - the only conceivable reason for still maintaining nuclear arsenals - is best provided through a limited number of strategic weapons; the actual range of delivery systems depending on specific requirements.

This approach has worked earlier. Through a landmark arms control negotiation in the 1980s, the US and the Soviet Union had signed in December 1988 an Intermediate-Range Nuclear Forces (INF) Treaty. This eliminated at one stroke all nuclear weapons of an intermediate range, which are defined as between 500-5,500kms. The Treaty came in to force from 1 June 1989. This was, however, not a universal treaty. At that time China and probably Israel both had nuclear weapons and delivery means that came under this category and neither was affected by it. China today has a very large range and sophistication of missiles capable of nuclear weapons delivery in the intermediate-range. Later, when India and Pakistan developed their nuclear arsenals, they were meant for delivery by both short and intermediate-range delivery systems.

It is in this context that serious negotiation should begin to eliminate short and medium-range nuclear weapons. There will be several related questions that will arise as the history of arms control negotiations in the Cold War had shown. Should it first address weapons deployed on land or air? When should it address submarine launched missiles, considered so vital by strategists because of their comparative invulnerability? How about aircraft delivered weapons and what would be their counting procedures? In the past these issues were linked to weaponization of space and we have not made much progress there either.

These are not easy questions and there are no easy answers. The strategic environment in recent years has changed and not for the better. Nuclear weapons in North Korea, a possible weaponization of the Middle East, two ongoing wars and terrorism still the global challenge it is today. There have been some advances in 2010; such as the Nuclear Security

Summit in Washington DC and a NPT that had a final document. The New START at the end of the first decade of the twenty first century may provide some satisfaction.

## The P-5 Visits and India's Nuclear Energy Programme

Tanvi Kulkarni  
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**T**he race to enter India's nuclear power market is on. India has been gaining recognition as a responsible nuclear weapons power and, more significantly, expanding its nuclear commerce. Not all the deals that India wanted have fructified; but, a scramble for entering India's nuclear power industry was a notable feature of the visits made by the leaders of the major nuclear powers of the world to India in 2010.

Beginning in July 2010, India hosted high profile visits from the P-5 countries (Britain, the US, France, China and Russia, in that order).

***“India's nuclear energy requirements have opened up a \$150 billion market for nuclear power reactors and fuel, which provides immense scope for foreign firms to gain nuclear business in India.”***

Their leaders came with huge trade and business delegations and offers of multimillion dollar deals to 'create jobs back home' and 'make money'. India's nuclear energy requirements have opened up a \$150 billion market for nuclear power reactors and fuel, which provides immense scope for foreign firms to gain nuclear business in India. Apart from commercial logic, political factors and diplomatic leveraging have also dictated what each country has obtained from the giant Indian nuclear pie.

Ban on nuclear exports to India (a non-NPT state) and the unwillingness of previous Labour Party Governments has been responsible for the low level of UK-India nuclear commerce. In July 2010, UK's Conservative Party Prime Minister, David Cameron, assured that he would approve export licenses for civilian nuclear technologies being transferred to India and enable British firms like Rolls Royce and Serco to do nuclear business with India. No announcement however was made on advancing the India-UK joint declaration on nuclear cooperation. However, BARC signed a joint nuclear research programme with UK Engineering and Physical Sciences Research.

Having signed the Convention on Supplementary Compensation (CSC) ahead of US President Obama's four-day visit in November, India hoped to reassure US nuclear power

firms on the supplier liability aspects. Pending further negotiations, India's Nuclear Power Corporation (NPCIL) has not yet allotted specific nuclear projects to Westinghouse and General Electric. Obama was left to celebrate the deal and reiterate both countries' commitments to a nuclear weapons-free and weapons-free world. While supporting Indian membership of the four export control regimes (NSG, MTCR, Australia Group and Wassenaar), he demanded a firmer Indian stand against Iran's nuclear activities. Singh and Obama also floated the idea of a dialogue between nuclear weapons powers to reduce nuclear weapons.

French President Nicholas Sarkozy visited India in the first week of December. Four nuclear agreements were signed during his visit: Indian Atomic Energy Regulatory Board (AERB) and French Nuclear Safety Authority renewed their agreement on exchanging technical information and regulating nuclear safety; there were agreements on technical cooperation between AERB and French Institute of Radiation Protection and on Protection of Confidentiality, and, most significantly, a Framework Agreement between Areva SA and NPCIL for constructing two of six nuclear reactors at Jaitapur in Maharashtra along with supply of uranium fuel and a reprocessing facility. The French have shown keenness to deepen commercial nuclear relations with India despite the liability concerns.

The nuclear component was missing in the talks with Chinese Premier Wen Jiabao, when he visited India the week following Sarkozy's visit. Nuclear antagonism and China-Pakistan nuclear relations continue to mar any prospects for Sino-Indian civil nuclear cooperation. The Joint Communiqué did not go beyond reiterating commitments to global nuclear disarmament. Anxious not to heighten existing tensions with China, no clarifications were sought on the Sino-Pakistan nuclear deal. Indian Foreign Secretary, Nirupama Rao confirmed that India would be tackling the issue "through existing international mechanisms".

The Russian President's visit in December was an opportunity to accelerate Indo-Russian civil nuclear relations. India's nuclear liability clause was expected to affect the state-backed Russian companies the least. However, just prior to his visit, Medvedev made it clear that although India's signing the CSC would not assuage Russian concerns it would not affect their commitment to supply nuclear reactors and fuel to India. According to the agreement signed between Prime Ministers Putin and Singh in March 2010, Russia is slated to construct sixteen nuclear reactors in India. Agreements for Kudankulam 3 and 4 were not signed; an indication that the Russians do not want to be left behind in influencing India's nuclear policies to accommodate their own interests. The joint statement called on both countries to consider civil nuclear energy ventures in third countries.

Nuclear research is an area where cooperation with major powers is advancing. India is inviting support for establishing the Global Centre for Nuclear Energy Partnership. Negotiations with the US, French and the Russians highlight how each perceives its bilateral commercial nuclear relations with India, especially with regard to India's civilian nuclear

liability law. France moved ahead of the others with the Areva-NPCIL agreement. Indian nuclear diplomacy would have to do more on the American and Russian fronts. The Indo-US Nuclear Deal and the NSG waiver have allowed India to approach countries like Japan and South Korea for civilian nuclear deals. India should use the existing nuclear business relations and effective diplomacy to further expand its nuclear commerce.

### FMCT Negotiations: Games Pakistan Plays

PR Chari

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Pakistan is at it again. Whenever it is in trouble, Pakistan turns up the volume of its anti-India rhetoric. Suicide terrorism is taking a daily toll of lives in Pakistan. Its Afghanistan policy is going nowhere. The Pakistan army is obsessed with gaining 'strategic depth' in Afghanistan, and has drafted the Taliban to achieve this objective. But, elements of the Taliban have turned against Pakistan, and are indulging in sustained, uncontrolled violence within the country. The assassination of Salman Taseer - a voice of reason raised against Pakistan's medieval blasphemy laws - highlights the growing Islamization and chaos in Pakistan. Taseer's murder was condemnable, but the horrifying fact is that his assassin has become a national hero. Rose petals were showered on him when he was produced in court. Lawyers are flocking to defend him. Liberal opinion in Pakistan, on the other hand, has been marginalized.

***"Its Ambassador, Zamir Akram, has argued that by ceasing fissile materials production, Pakistan would concede a 'strategic advantage' to India."***

In true Nero-fashion Pakistan has now blocked negotiations on the Fissile Materials Cutoff Treaty (FMCT) in Geneva. Its Ambassador, Zamir Akram, has argued that by ceasing fissile materials production, Pakistan would concede a 'strategic advantage' to India. The WikiLeaks inform that Pakistan is currently manufacturing nuclear weapons faster than any other country, according to a cable sent by the US embassy in Islamabad to Washington. A recent study by the Bulletin of Atomic Scientists also informs that Pakistan possesses more nuclear weapons than India, but is feverishly manufacturing fissile materials to further enlarge its inventory. Nuclear weapons are not comparable to conventional weapons, and adding to their numbers beyond a point makes no sense. But, this logic is unlikely to impress Pakistan, whose defense and foreign policy is basically



driven by the obsessions of the Pakistan Army. Zamir Akram had another grouse. President Obama had pledged to assist India's admission into the Nuclear Suppliers Group, the Missile Technology Control Regime, the Australia Group and the Waasenaar Arrangement during his visit to New Delhi last November. Delivering on that promise the United States has very recently removed export controls on several Indian space and defense-related organizations, signaling a new era in US-India nonproliferation cooperation. Zamir argued that this represented a "paradigm shift in strategic terms."

Pakistan is actually hoping to somehow revive the debate on the Indo-US nuclear deal that was generated in 2008 when that deal was under process. The Bush administration had hammered that deal through the US Congress, the International Atomic Energy Agency (IAEA) and the Nuclear Suppliers Group (NSG), despite reservations voiced in some countries, collectively named the White Knights. Pakistan is seeking a similar dispensation, and China is working hard to provide Pakistan a comparable nuclear deal by supplying two more 300 MW atomic power reactors for its Chashma complex. Without going into the legal complexities involved, it should be noticed that China needs to place this matter before the Nuclear Suppliers Group for getting its prior approval. A similar approval had been obtained by the United States before finalizing the Indo-US nuclear deal. China is reluctant to pursue this route in the knowledge that the NSG may not endorse this deal between two blatant proliferators in the international system.

Reverting back to the collaterally damaged and stalled FMCT negotiations, Rose Gottemoeller, Assistant Secretary of State, has unequivocally declared: "Let me just place full emphasis and priority today on my main message, which is to launch the negotiations this year on a fissile material cutoff treaty in the Conference on Disarmament." She added: "That is a kind of general time frame," though 2011 was not a "specific deadline." In diplomatic language these words amount to expressing extreme displeasure with Pakistan, and with good reason. The 65-nation Conference on Disarmament transcended a ten-year deadlock in 2009 by agreeing to address four issues: nuclear disarmament, a fissile material cut-off pact, the prohibition of space-based weapons, and an agreement on non-use of nuclear weapons by nuclear-armed countries against non-nuclear weapon states. Pakistan has reneged now after endorsing this plan, which derails President Obama's hopes to operationalize his disarmament agenda; hence, Gottemoeller's subsequent threat: "If we cannot find a way to begin these negotiations in the Conference on Disarmament, then we will need to consider options."

And, what could be these options? Most effectively, by stopping financial assistance to keep a bankrupt Pakistan afloat. And, cutting off arms transfers, which includes spares and ancillaries, would heighten pressure on Pakistan's armed forces who are its real rulers. Can the United States afford to ignore Pakistan's logistics support to sustain the American and ISAF operations in Afghanistan? Will China bail out its distressed ally by defying the international community in this effort, and promoting a further closing of ranks by its

neighbours? The United States and China will, no doubt, weigh all their options carefully. Pakistan seems likely to witness interesting times.

## Sri Lanka and Iran: The 2030 Nuclear Power Plant and Iranian Support

*Lydia Walker*

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In September, Sri Lanka announced its plan to build its first nuclear power plant within the next 20 years. The Sri Lankan Secretary of the Ministry of Power and Energy said that they would get safety approval from the International Atomic Energy Authority. He did not mention what role Iran - a staunch, historic ally and the island nation's main energy supplier - would play in Sri Lanka's nuclear ambitions. A 2007 US Department of State cable leaked by WikiLeaks disclosed that the US had warned Sri Lanka to be cautious about its tight economic relationship with Iran and to stop its arms purchases from that nation. Are Sri Lankan nuclear energy ambitions a sign of it seeking a measure of independence from Iranian oil, or is it an expression of increased solidarity with an incipient nuclear Iran? In 2007, the US Ambassador to Sri Lanka urged Sri Lanka "to be very scrupulous" in entering into any new trade or investment deals with Iran. Might Sri Lankan-Iranian relations undergo a change if Iran goes nuclear?

Sri Lanka and Iran have an historic economic partnership. Iran sells crude oil cheaply to Sri Lanka and Sri Lanka buys its arms and armaments from Iran. Iran funds many Sri Lankan energy development projects, from hydroelectric power to oil refineries. Iran's investments in Sri Lanka were tallied in 2008 at approximately US\$450 million. Iran is also the largest lender and aid donor to Sri Lanka. It provided loans to Sri Lanka for the purchase of military equipment during the Sri Lankan Civil War and also trained Sri Lankan military personnel. Sri Lanka was the first Asian country which Iranian President Mahmoud Ahmadinejad visited when he assumed office.

Iranian support has been quite important to Sri Lanka. Sri Lankan Minister of Housing, Construction and Public Utilities, Wimal Weerawansa, invoked a history of Iranian support in response to the United Nations' 2010 decision to create a panel to examine possible human rights violations in the Sri Lankan government's counterinsurgency operations: "Iran has never let us down, even when many other countries in the world refused to back us. The county as a whole is very grateful for this brotherly treatment." At a June 2010 exchange, an Iranian minister responded to these kind words by agreeing that Iran also considers Sri Lanka a "brother" and that it would continue to support Sri Lanka in the future. The economic and political ties between Sri Lanka and Iran are both long-standing and current; they are also linked to Sri Lankan infrastructure and energy.

The prospect of an incipient nuclear Iran may well complicate the relationship between Iran and Sri Lanka. However, the recent past has been full of gestures of mutual support: In 2007, Sri Lanka's President Mahinda Rajapaksa publicly supported Iran's right to nuclear energy-production and use. In April 2008, Rajapaksa and Ahmadinejad issued a joint statement which called upon all nations with nuclear weapons to disarm. In August 2008, Iranian foreign minister, Manoucher Mottaki, announced that Iran was willing to share its uranium enrichment technology with Sri Lanka in order to facilitate a peaceful nuclear energy program for the nation.

The partnership is more complex than a senior-junior partnership based on mutual interests. Some Sri Lankans view the Iran-Sri

Lanka relationship as a byway for Sri Lanka to extract whatever it can get from Iran. Following the announcement of Iranian support for Sri Lanka nuclear power, there were rumours that the Sri Lankan government had 'timed' a

*“While the percentage of Iranian aid is most substantial, if Iran's incipient nuclear weapons program reaches the point where that nation becomes an international pariah, it is doubtful that Sri Lanka would stand with Iran against concerted pressure from the international community.”*

Colombo power outage to coincide with the Iranian Foreign Minister's visit in order to show just how much the country needs more electrical power. Also, not all Sri Lankans are in favour of a future with nuclear energy - Hemantha Withanage from the Sri Lankan Centre for Environmental Justice wondered “how a country which struggles to manage ordinary household refuse thinks that it will be able to safely dispose of nuclear waste.”

Iranian aid to Sri Lanka also needs to be placed in context. Sri Lanka also receives large sums from (among others) Denmark, India, the World Bank, and Japan. These countries and institutions are either strongly against proliferation themselves and/or would have little inclination to stand with Iran against possible, future global censure. While the percentage of Iranian aid is most substantial, if Iran's incipient nuclear weapons program reaches the point where that nation becomes an international pariah, it is doubtful that Sri Lanka would stand with Iran against concerted pressure from the international community.

While historic and mutually beneficial, the Iran-Sri Lanka relationship is one of convenience, not the guiding force behind either country's foreign policy. In addition, the advent of a Sri Lankan nuclear power plant is not viewed as an unalloyed good even within the country itself. Statements concerning its future appearance may have more to do with politicized modernization than actual energy policy.

## Towards an Indo-Pak Nuclear Lexicon - I: Credible Minimum Deterrence

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### Why Credible Minimum Deterrence?

India's nuclear weapons policy is identified with the posture of Credible Minimum Nuclear Deterrence (CMD). The principle entails quite a different interpretation than that understood in the western nuclear lexicon in that western theories and constructs, particularly from the Cold War, cannot be applied effectively to the Indian context. K Subrahmanyam has defended the CMD doctrine by stating that it has been adapted to suit India's requirements and thinking on nuclear weapons. Bharat Karnad defines it as a self-explanatory, moderate, limited, reasonable and legitimate posture that justified India's nuclear weapons and missile capabilities after the 1998 tests. The CMD doctrine highlights that India does not seek an open-ended nuclear arsenal and pillars other postures like the second-strike capability and no first use. Both terms, credible and minimum, are important individually and their equation makes for the credible minimum nuclear deterrence policy.

### What is the Indian understanding of credibility?

Odd as it seems, as a key feature of nuclear deterrence, 'credibility' is a dynamic, ambiguous and controversial concept. A theoretical understanding of credibility often embroils into a political and technical debate and its definition then depends on which decision-making community, school of thought and context one chooses to represent.

The Indian nuclear doctrine looks at credible deterrence as a political-psychological concept, and it serves as a prime means of communicating to potential adversaries that India maintains the will and capability to inflict unacceptable punishment through retaliation with nuclear weapons. An

*“The Indian nuclear doctrine looks at credible deterrence as a political-psychological concept, and it serves as a prime means of communicating to potential adversaries that India maintains the will and capability to inflict unacceptable punishment through retaliation with nuclear weapons.”*

effective second strike capability and survivability become important elements of credibility. Credibility must be maintained by robust command and control systems, safety and security of arsenal,

operational force preparedness, planning and training of forces, research and development and effective conventional military capabilities. The doctrine lends dynamism to the credible deterrent by making it responsive to India's strategic environment, national security and technological imperatives.

A state's approach and policy towards strategic weapons as well as the concepts and ideas that define them are affected by the internal politics of the state's decision-makers. In India, strictly speaking, the political leadership, military and scientific communities do not share the same approach to credible deterrence. The difference is however, to use the words of Professor Rajesh Basrur, a matter of 'political-technical perspective'.

In an interview to the Hindu newspaper on 29 November 1999, the then Minister of External Affairs, Jaswant Singh stated that "credibility lies in the possibility of retaliation and not its certainty." The political leadership in India maintains that deterrence credibility lies in its psychological impact on the adversary and on oneself. This neither suggests that the Indian political leaders are averse to sanction new technological developments, nor that the debate within the political class is monolithic. But from the political perspective, credibility has more to do with the effective communication of the threat of retaliation to the adversary - a sentiment echoed in the nuclear doctrine - than with the quality and quantity of weapons.

The psychological approach does not sit too comfortably with the Indian military. As a professional entity and the end-user of weapons systems, the military seeks credibility through technical parameters. The size, structure, level of technology, targeting philosophy, degree of acceptability of damage, time component and the temporal and physical reach of weapons systems are factors that decide how credible the deterrent is. The contentious Cold Start Doctrine, which enjoys little political support, is nevertheless reflective of the Indian Army's understanding of credibility in the operational sense. In a September 2009 television interview, General VP Malik suggested that India's inability to acquire requisite weapons and missile technology had eroded deterrence. In another USI Journal article in 2008, Gen Malik, who oversaw the Pokhran II tests as the Army Chief, wrote that a credible Indian deterrent would require allaying doubts about India's thermonuclear weapons capability, fissile weapons policy and the nuclear triad. A similar conception of 'credible' runs into a technical debate amongst the Indian nuclear scientific community. Debates on the partial success of the thermonuclear device and the need for further testing, which became even more pronounced against the backdrop of the Indo-US nuclear deal, have divided Indian nuclear scientists. Many scientists may not be as vocal as Dr. K Santhanam, but they would cast doubts on the credibility of India's nuclear deterrent based on a technical and technological yardstick.

Credible nuclear deterrence as a policy allows a range of diverse interpretations under the conceptual flexibility it provides. There is thus scope for a difference of interpretations among members of a country's strategic community. In the Indian nuclear strategic community,

experts like K Subrahmanyam - a nuclear pragmatist, according to Professor Kanti Bajpai - would strongly advocate the politico-psychological approach towards nuclear weapons as a credible deterrent. On the other, Bharat Karnad - often termed a nuclear maximalist by the pragmatists - argues for a capability credible enough to deter China as the principal adversary.

The context of nuclear deterrence presents us with yet another parameter to assess credibility. Does the level of credibility differ for deterrence against China and Pakistan? Opinions differ. To gauge it technically or politically would also depend on what kind of confrontation is to be deterred, what is to be communicated to the adversary and with what aspect of the adversary's nuclear identity does one associate the deterrent (a mutual no first use policy with China or the size of the Chinese nuclear arsenal?).

How we choose to define credibility further affects the size of the nuclear arsenal and therefore affects the 'minimum'. This commentary on the interpretations of 'credibility' is hoped to be followed by another which would look at how the minimum is debated within India. The number-game is perhaps the most complicated debate for nuclear weapons states.

## Towards an Indo-Pak Nuclear Lexicon - II: Credible Minimum Deterrence

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**C**redible Minimum Deterrence is a highly loaded term, often used to suggest a state's intentions with regard to its nuclear posture. Combined, the three words, 'Credible', 'Minimum' and 'Deterrence' present a complex paradox. Credibility, for instance, is an essential prerequisite for deterrence. Why then use the word 'credible' as a prefix to Deterrence or Minimum Deterrence?

Yet, another challenge arises from the apparently convoluted nature of messages that 'credible' and 'minimum' convey. While 'minimum' suggests "the least required to deter the adversary;" adding 'credible' to it blurs the whole idea. Since credibility largely depends upon the adversary's perception of our capabilities and intentions, there is always the possibility of incorrectly assessing our credibility in the adversary's calculations. Caution in such circumstances may necessitate preparation for the worst possible scenario, thus raising the 'minimum' bar. As a result what would appear credible might not be 'minimum'.

Why do then states opt to use terms that send across obscure signals? What shapes their particular choice of terms? And what do they actually mean by these terms? These are

important questions to be addressed while we strive to untangle the complexities of a common lexicon. This paper attempts to explain possible causes behind the idea of prefixing both 'minimum' and 'credible' to deterrence. (Identifying the right causes for a state might also help us clearly define what a state means by minimum and credible).

**Why 'minimum'?**

- i. To set a ceiling out of sheer sense of moral responsibility
- ii. A genuine commitment to keep the arsenal low (either because it is cost- effective or because a state cannot afford anything more than that)
- iii. Imitation/Emulation
- iv. Satisfying the international community and pacifying their concern regarding proliferation

**Why 'credible'?**

- i. Psychological comfort
- ii. Adds ambiguity
- iii. Provides leverage to move towards arms build-up
- iv. Imitation

**CMD as Pakistani nuclear policy: Tracing its history and identifying the causes**

While deterrence has been an integral part of Pakistan's nuclear policy since its inception, 'minimum' and 'credible' entered Pakistan's nuclear lexicon a little later. These two terms were endorsed in February 1999 in the then prepared (publicly unannounced) Nuclear Doctrine of Pakistan. (Interview with Brigadier (Retd.) Naeem Salik, 28 January 2011). The initial enthusiasm for minimum deterrence was essentially a consequence of Pakistan's economic condition with a well-pronounced conviction to keep the arsenal low in numbers.

The question remains, why was there a need to add an additional qualifier (i.e. credible) to 'Minimum Deterrence'? Brig (Retd.) Naeem Salik stated that this was done in order to have the psychological comfort of knowing that Pakistan was not dependent on a bare minimum that poses the challenge of having to lower the nuclear threshold.

Interestingly, one finds a number of occasions where 'minimum' or 'credible' were either replaced with some alternative 'qualifier' (e.g. defensive) or taken out altogether from public speeches made by the country's top leadership.

If anything, it illustrates that the issue of understanding Pakistan's nuclear lexicon is complex. It also suggests that quite often we might attribute too much to the rather less thought out choice of terms. It is less because these terms are used as disguises or are intentionally misleading, more because hardly any attention has been paid to the idea of developing nuclear jargon. There is no evidence that suggests open sessions of discussions and deliberations purely dealing with the question of a lexicon. Few would, for instance, have an answer to why we opted for the word 'credible' or why President Musharraf's idea of 'defensive' deterrence did not receive a huge following.

**Pakistani Perspective of CMD**

It has been reiterated time and again that Pakistan's nuclear weapons are meant to deter security threats posed by India. It is clear that threats to the very survival of the state would invoke the need to use nuclear weapons. Ambiguity nonetheless remains on what exactly would be the nature of 'other' threats that could compel Pakistan to use nuclear weapons. Red lines, defined by General Kidwai in one of his interviews, have been quoted and misquoted repeatedly. These lines leave many more confused than clear. It seems that there is a conscious effort to maintain existing ambiguity. Policy-makers in Pakistan feel convinced that this ambiguity serves deterrence well. Therefore, at this point in time, it is hard to move further on this question.

Next is the issue of prefixes. 'Minimum' Deterrence in Pakistan is largely seen as a dynamic concept. The then Foreign Minister Abdul Sattar, while speaking at a seminar in November 1999 at ISSI, Islamabad, elaborated, "Minimum cannot be quantified in static numbers. The Indian build up would necessitate review and reassessment...but we shall not engage in any nuclear competition or arms race." Some however find mere 'minimum' a little disturbing. They suggest that 'minimum' may not fully serve the purpose at times of an adversary's nuclear build-up. It might send the wrong signal and develop within the enemy over-confidence and a temptation to opt for aggression. Credible would in such circumstances help keep a psychological check on the adversary. Also, it would provide the protagonist an additional cushion of comfort. [Interview: Brig (Retd.) Salik]

*“Interestingly, one finds a number of occasions where 'minimum' or 'credible' were either replaced with some alternative 'qualifier' (e.g. defensive) or taken out altogether from public speeches made by the country's top leadership.”*

A natural question that follows is how then is the Pakistani idea of CMD different from India's CMD? Brig (Retd.) Salik asserted that the objective of Pakistan's CMD posture is very clear and specific, i.e. vis-à-vis India. Therefore it inherently has a limitation. On the contrary, India's CMD is an open-ended concept!

The point to note is that given these perceptions, would CMD, even in theory, remain a part of India-Pakistan nuclear policies over a long period of time or would it get washed away in the currents of mistrust, antagonism and sometimes over-emphasis on the technical details of deterrence?

Recently, a marked departure has been noted in a public pronouncement of Pakistani nuclear policy, from 'Credible Minimum Deterrence' to 'Credible Deterrence' (NCA Statement, 14 December 2010). The question was raised in two different forums and the speakers held contradictory positions. One speaker argued that it appears to reflect a shift in Pakistan's policy based on its current threat assessment. A senior government official, on the contrary, suggested that it was used in a given context and should be understood with reference to the complete statement issued by NCA. The emphasis on the word 'credible' was meant to reinforce the importance of credibility. It does not suggest a shift from

Minimum Deterrence.

## Towards an Indo-Pak Nuclear Lexicon - III: Cold Start

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The Army Chief wrote the epitaph on Cold Start, stating, “There is nothing called ‘Cold Start.’” But it must be acknowledged that in its short shelf life of seven years it had spawned a cottage industry of commentators on it. Like the proverbial ‘blind men of Hindoostan’, they inspected Cold Start and found it viable or otherwise, depending on their avian nature as hawks or doves.

Cold Start is no more to be mourned since it did enliven strategic commentary, helped create a strategic culture and brought the Indian political and security establishment to see the military, finally, as a potentially usable instrument. Yet, that the doctrine remained untested owes to India’s grand strategy, characterized lately as ‘strategic restraint’. Strategic restraint is a coming to terms with limitations of force, brought on by things such as the economy and the nuclear backdrop.

The term ‘Cold Start’ for India’s conventional doctrine was conjured up in a media briefing by a ‘source’ on the sidelines of the Army Commander’s conference in the summer of 2004. The doctrine had been discussed in that conference but was adopted in the next conference in autumn that year. It was a culmination of the changes in the Army brought on by the lessons of the two preceding crises, the Limited War in Kargil and the subsequent exercise in coercive diplomacy, Operation Parakram.

Incidentally, even as military analysts made their careers dissecting it, the government in the form of the Ministry of Defence, took care never to refer to it. This suggests that it was a legacy of the previous government, with an image of being more defence-friendly. The NDA dispensation had taken care to bring out the nuclear doctrine while in power, tying India down to its expansive formulation of ‘massive’ nuclear retaliation against India or its forces ‘anywhere’. The threat was to create the space necessary to operationalize a proactive conventional war doctrine.

‘Cold Start’ was a limiting description of the doctrine. Cold Start refers only to the kind of capability the Army gave itself, of going into conventional operations from a standing start. This owed to its embarrassment in having taken three weeks

to mobilize after the parliament attack, thereby seemingly losing an opportunity to administer punishment and thereby instill caution in Pakistan.

The doctrine envisaged a series of limited thrusts across a wide front into Pakistan by divisional sized forces. These served to capture territory, seize the initiative and provide a launch pad for strike corps to deepen the penetration. Enemy reserves would thus be forced to react and expend themselves. Attrition from the air would enable whittling down the wide front into Pakistan by divisional sized forces. These served to capture territory, seize the initiative and provide a launch pad for strike corps to deepen the penetration. Enemy Pakistani Army, seen as the center of gravity. The Army, suitably degraded, would be displaced from power post-conflict in Pakistan, enabling a democratic peace to ensue unlike the last time round post 1971.

The doctrine had much to recommend it. It brought India’s military advantage back into the reckoning despite nuclearization. It enabled taking the first tier of defences when they were unheld or relatively underdeveloped. This would have saved India from casualties, particularly in the mountains. This would have helped prevent the development

*“Cold Start is no more to be mourned since it did enliven strategic commentary, helped create a strategic culture and brought the Indian political and security establishment to see the military, finally, as a potentially usable instrument.”*

of an attrition match as had occurred in the earlier wars. It would be a war fought on Pakistani territory, thus sparing India of the effects of the increasing lethality of war. Making early gains, India could call for early war termination on its terms. Since the nuclear threshold was to be respected, there would be no call for Pakistan to resort to nuclear weapons.

Nevertheless, the doctrine had its criticism. It was seen as narrowing the opportunity for crisis management and conflict avoidance through diplomacy. It would set South Asia a short fuse vulnerable to any passing bunch of self-interested jihadis. A default military reaction in real time would place the two states at odds with each other, playing into the hands of non-state actors who would expect to gain from the resulting instability in Pakistan.

It was deemed to be too deterministic about the location of the Pakistani nuclear threshold. It was taken as high, enabling operations to a limited depth. This was to be unmindful of the influence of a conflict environment on decision-making. It was politically naïve in its belief that knocking down the Pakistani Army would result in democratic forces prevailing. The jihadis could instead have come to the fore. This could be due to Pakistan using them in an Iraqi style asymmetric war against Indian conventional forces in Pakistani territory. Lastly, it was seen as part of the inter-Service rivalry, with the Army trying to set the agenda as the lead service, in reply to the Air Force’s intent of an ‘air alone’ strategy in an indigenous version of ‘shock and awe’.

The Cold Start period was India’s third doctrinal tumult. The first was a defensive one subsequent to the 1962 and the 1965

Wars in which the lessons of Ichogil canal were replicated across the front. The second was one of mechanized warfare, led by Sundarji. Cold Start therefore was long over due, since the Sundarji doctrine had been overtaken by overt nuclearization.

Thinking beyond the limitations of Cold Start is the direction of India's fourth and forthcoming doctrinal trust. Cold Start can be expected to be reckoned in history as a necessary bridge between India's war-waging and war-deterring military.

## SEMINAR REPORTS

### Revisiting and Looking Beyond the Rajiv Gandhi Action Plan

*12 January 2011  
IPCS, New Delhi*

**T**oday, almost two decades after the RGAP has been proposed, there have been rapid developments at the regional and international levels. Both India and Pakistan have overtly gone nuclear, with China being directly involved in the regional nuclear equation. There has been an increased debate on the NPT, CTBT and the FMCT in the last two decades.

Amb. Arundhati Ghose (Former Indian Ambassador to the UN Conference on Disarmament), Rear Admiral Raja Menon (Chairman of the task force on Net Assessment and Simulation, National Security Council) and Professor Mattoo (CIPOD, JNU) discussed these issues in a panel discussion held at the IPCS on 12 January 2011.

As much as the RGAP comes as an Indian strategy for global nuclear disarmament, it is tied to India's national security imperatives in the present context. The Panel and participants discussed the RGAP, as an Indian disarmament initiative, in terms of its relevance, practicability and shortcomings. Some of the issues raised included the need to strengthen Indian credibility on global disarmament initiatives, to take into account other international initiatives like the Global NFU and to calculate whether the international system is ready for any such efforts. The RGAP calls for further debate and deliberations.

## Indo-Japan Relations

*17 February 2011  
IPCS, New Delhi*

**I**ndo-Japanese relations are moving forward with a strong momentum and in the last six years many steps have been

taken to strengthen the process of bilateral engagement. However, this process needs to be continued further and hence it is the responsibility of think-tanks to show the way forward, and set the agenda for the Indo-Japanese relationship.

The direction of India's foreign policy has changed substantially over the years and India has tried to build core relationships with several strategic powers in the world, especially the US. While India is dependent on the US for ancillary equipments and other spare parts, it has however not abandoned Russia and at least 70-80 per cent of Russia's military equipments have their origins in India. Drivers for strategic relationships with other powers exist due to the need for expanding security and defence cooperation especially in maritime security; including counter-piracy, humanitarian assistance and disaster relief.

It is significant to note that future bilateral and multilateral exercises in maritime spheres would take place in the Pacific. In this sense, India and Japan share congruent structures which generate affinity between the two and make them natural allies. There are two principal areas where cooperation can be envisaged between India and Japan: first, in the field of military operations-training and second, economic collaborations. The Indo-Japanese relationship is yet to achieve its full political potential. Cooperation in Research and Development on their industrial substitutes is highly necessary. Moreover, people to people and academic exchanges need to be emphasized to improve goodwill amongst the two countries. The procedure for Japanese visa acquisition also needs to be simplified for facilitating human and trade movement.

Though India has a well-crafted Look East Policy, it is psychologically limited to Southeast Asia. Given the geopolitical reality of the current times, nothing much is likely to happen in the Western part of the globe. Despite Japan's negative image given its atrocities during the Second World War, the people of India and Japan have never harboured any enmity towards each other. Though China has overtaken Japan in terms of Gross GDP figures, Japan still holds a better record in terms of per capita income. Japan continues to lead the world in Official Development Assistance (ODA) and India has benefited most from it, a case in point being Delhi-Mumbai Industrial Corridor which will have a transformational effect on Indian infrastructure.

The foundation of this relationship is not based on shared values and interests such as democracy as is so often declared publicly. Rather it is largely shaped by the China factor and geopolitical imperatives. This cannot be the basis of a sustainable relationship and will lead to missed opportunities in other fields. Moreover, Japanese investment in India and the number of Indians working in Japan as well Japanese working in India are low as compared to South Korea, for example.

It would be highly beneficial for the two countries to strengthen people-to-people contact particularly student exchanges. Indian students going abroad contribute most to the local economies; this phenomenon could be replicated in

the case of Japan as well. The Indian diaspora has always been an asset to their host communities which enables cultural relations to grow without any hindrances.

The current Asian security architecture has been set up over the past few decades and unfortunately it will be very difficult to alter it according to preferences of the emerging powers. Though several initiatives have been made through tentative recommendations in the form of ASEAN and other organizations, powerful countries like China are able to manoeuvre their existence for their own purposes. India and Japan should be able to devise strategies to function within the ambit of the existing security architectures.

The Japan factor is largely missing in any Indian nuclear discourse even though it is an important actor in the region. It is highly ironical that Japan constructed its first nuclear reactor meant for a foreign nation, for Pakistan. The fact that the number of nuclear scientists, engineers and students who engage in the nuclear subject are declining is quite interesting and suggests an area of complementarity for both India and Japan in terms of students exchange and technical cooperation. Also given the rate of economic growth in India, retiring Japanese engineers could possibly have second careers in India in the future.

The other interesting fact mentioned in the presentation is that 50 per cent of Japanese are now willing to discuss the change in the Japanese nuclear posture. This is a totally new development in the Japanese public attitude towards nuclear issues and shows how concerned the Japanese are about their neighbourhood.

If India and Japan have to ramp up their nuclear cooperation, Japan needs to cross the hurdles created by public opinion and India is very curious to know what the Japanese government is doing on this front. Japan has to do something to mitigate the public anti-nuclear sentiment that could hinder the progress of the current nuclear cooperation. Otherwise, other countries will be able to overtake Japan in nuclear trade with India. For example, South Korea is more than willing to cooperate on nuclear technology and reactors and even China has declared its willingness for civilian nuclear cooperation with India. Japanese concerns over India conducting another nuclear test are overblown. India has much to lose in the process. Similarly, even if India continues to oppose the NPT as being discriminatory, it is only a matter of time before India goes along on the CTBT and FMCT.

Towards this end, a day-long seminar on Indo-Japanese relations between delegations from both countries was held at the IPCS on the 17 February 2011. A variety of issues were discussed by the participants:

Japan's nuclear policy and the prospect of Japan-India nuclear agreement

- The Indo-US nuclear deal and its implications for Japan
- The Japan-India relationship in an emerging Asian perspective
- Japan's nuclear policy and the prospect of Japan-India nuclear agreement

- The Indo-US nuclear deal and its implications for Japan
- The Japan-India relationship in an emerging Asian perspective

## Trilateral Nuclear Dialogue

*Bangkok, Thailand*

Under the aegis of the Institute of Peace and Conflict Studies (IPCS) and with the support of the Nuclear Threat Initiative (NTI), an inaugural trilateral dialogue on nuclear issues between India, Pakistan and China was initiated in December 2008.

This successful programme, which is internationally unmatched, has engaged senior participation from the three countries including scholars, diplomats and military officials, at a track II level dialogue. The aim is to understand, inform and elucidate upon mutual concerns of nuclear developments between the three countries, and also provide a platform for the articulation of an Asian view towards achieving Global Nuclear Zero.

The themes discussed in the conference were:

- Global Nuclear Trends and Threat Perception
- Asian Nuclear Stability and Security
- Examination of Nuclear Capabilities, Doctrines and Policies
- Fissile Material Stockpiles and Production Ban
- An Asian View towards Global Nuclear Weapons Elimination

During the two-day workshop, the dialogue encouraged a critical exchange of military doctrines, policies and strategies, and helped enhance strategic perception. Among the many topics discussed, a number of important positions were provided to provide for greater confidence-building among the participating countries.

For example, during one such dialogue, the Pakistani delegation elaborated on extensive security measures which were taken by the Strategic Plans Division in addressing global concerns of non-state actors gaining access to nuclear US nuclear agreement and the Fissile Material Cut off Treaty (FMCT) among others as a means of addressing concerns raised by the Chinese and Pakistani delegations. The Chinese delegation addressed concerns of tensions on the China-India border materials. The Indian delegation reiterated their position on global disarmament and responsible nuclear weapons power status by emphasizing their No First Use Doctrine. Encouragement was also given to evolving an Asian nuclear lexicon which would better address the strategic paradigm of the region.

The dialogue has also furthered understanding of the regional implications of global nuclear trends, including the Nuclear

Nonproliferation Treaty Review Conference in 2010, and the ratification of the New START agreement between the United States and Russia in 2011. While it was generally agreed at the workshop that the two nuclear giants must lead the way in disarmament efforts, the Asian nuclear weapons states should also take initiatives in furthering the disarmament discourse.



incorporation of major strategic debates within the parlance of younger scholars, the IPCS actively engages with the academic and strategic community through the medium of the Institute's annual workshop. This year twenty four students and practitioners from India, the United States, Japan and Germany attended the Third Annual

The Dialogue also reviewed regional security developments in the nuclear field, including developments in Iran's nuclear program, and the crisis in the Korean peninsula, and their regional security implications. It was agreed upon by the three countries that the provocations in the Korean peninsula and in West Asia need to be condemned, and support for a diplomatic resolution to the crisis be extended.

Some of the participants in these workshops were Maj Gen Dipankar Banerjee (India), Professor Shen Dingli (China), Amb Najmuddin Shaikh (Pakistan), Maj Gen Pan Zhenqian (China) Amb Lalit Mansingh (India) Brig Feroz Khan (Pakistan), Amb KC Singh (India), AVM Shahzad Chaudhary (Pakistan), Dr (Col) Teng Jianqun (China), among others.

The dialogues were held in Colombo (2008), Shanghai (2009), Singapore (2010) and Bangkok (2011). The next dialogue is scheduled to be held in July 2011, to further build upon platforms of discussions held.

Young Scholars' Workshop on Nuclear Disarmament and Nonproliferation, Surajkund, Haryana from 23 - 27 February 2011. Applicants for the workshop came from diverse academic and professional backgrounds, including the sciences and journalism.

This combination fostered a valuable opportunity among young scholars for the exchange of views and provided a foundation for future networking among the participants. For a significant number of participants, the workshop represented their first orientation to the IPCS and its work on nuclear issues.

**IIIrd Annual Young Scholars' Residential Workshop on Nuclear Disarmament and Nonproliferation 2011**  
*Surajkund, Haryana*



As a new debate on the relevance of nuclear weapons and the future of nuclear power for peaceful purposes enters the post Cold War era, a number of myths, facts and queries are inadvertently raised and questioned. India's role in opposing nuclear weapons, while at the same time grudgingly having to accept it owing to geo-strategic compulsions and its quest to explore the nuclear renaissance, reflect a South Asian perspective on the debate. For capacity-building and the

The primary purpose of the workshop was to help refine the ability to analyze objectively, and to assess the qualitative output from the workshop, a questionnaire soliciting comments and feedback was provided to the participants.