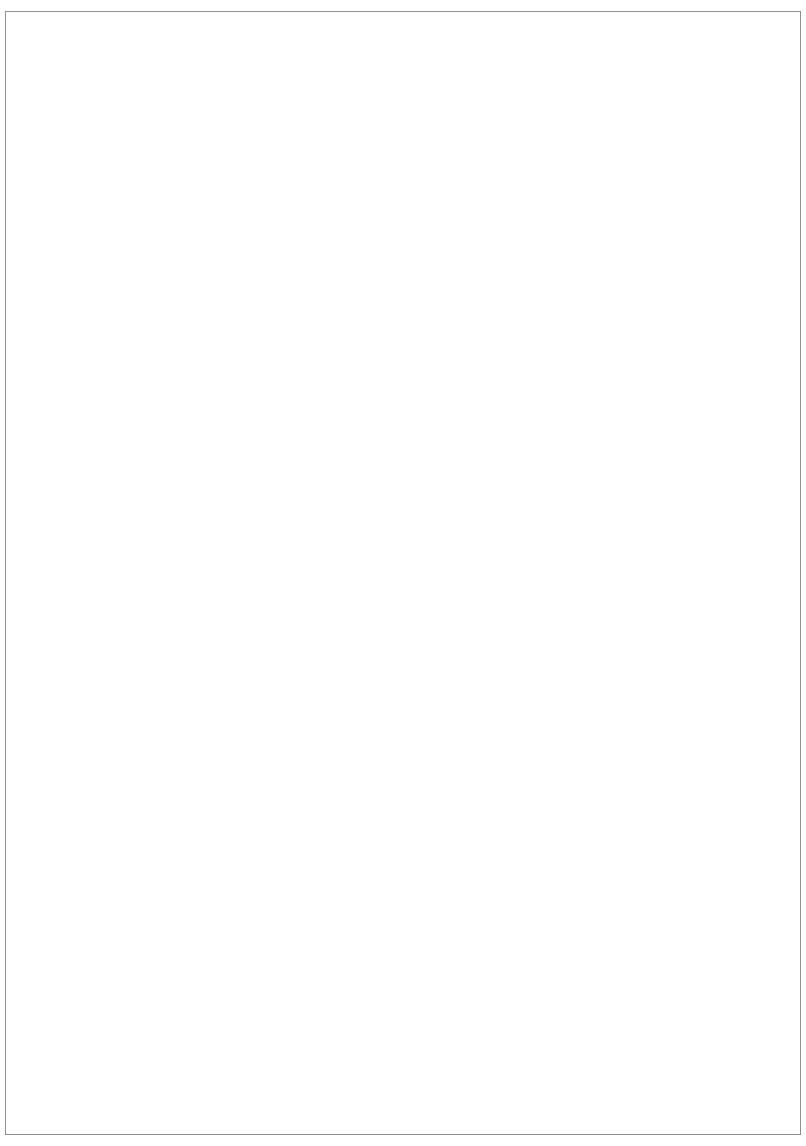
NUCLEAR DISARMAMENT A WAY FORWARD



IDSA Task Force Report



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Cover Illustration :

The illustration on the cover is a rendering of the 'Doomsday Clock' which was first depicted in 1947 by the *Bulletin of Atomic Scientists* to indicate the imminence of global disaster due to a nuclear exchange. The closer the symbolic clock face is to midnight, the closer the world is estimated to be to global disaster. The Clock initially showed seven minutes to midnight, was placed at 17 minutes to midnight in 1991 at the end of the Cold War, and is currently placed at 6 minutes to midnight. Apart from a nuclear exchange, issues like climate change and negative implications of nanotechnology have also been factored in while depicting the current time.

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Foreword

As long as nuclear weapons remain with some states, others will seek to develop them. Their continued existence poses the risk that someday they will be used. The growing demand for nuclear energy will result in increased availability of knowledge and materials to produce nuclear weapons. Highly motivated transnational terrorist organizations have already shown their resolve to procure Weapons of Mass Destruction and the possibility of their someday procuring nuclear materials and using them as weapons can no longer be dismissed.

These real and growing dangers call for a range of coordinated actions. But at the same time the momentum for nuclear disarmament needs to be revived. Even though arch realists of the cold war era have begun to see the logic of abolishing nuclear weapons, their initial enthusiasm seems to be dissipating. A global consensus on disarmament remains a distant dream.

Part of the scepticism arises from the many seemingly insurmountable impediments which beset the path to disarmament. Unless these impediments are carefully analysed and measures to deal with them developed, disarmament would indeed remain an unrealistic vision.

The US-Russia Strategic Arms Reduction Treaty signed on April 8, 2010 and the recent Nuclear Security Summit are important steps towards reducing the risks posed by nuclear weapons. However, these initiatives will prove inadequate in convincing nations aspiring to acquire nuclear weapons that their salience in the emerging global order will diminish. Such nations continue to view the current nuclear non-proliferation regime as a device to privilege the nuclear haves and deprive the have-nots. The threat to global security will therefore continue to persist till nuclear weapons are delegitimized and a credible and concrete plan for their abolition is developed.

It is in this backdrop that IDSA set up a Task Force to examine the issues concerning disarmament with Shri Satish Chandra, formerly India's Ambassador to Conference on Disarmament and Deputy National Security Advisor (NSA) as Chair. This report is the outcome of its deliberations. It seeks to examine the obstacles to nuclear disarmament and the manner in which they can be removed. It reiterates the dangers of the nuclear weapon states persisting with their current policies of privileging nuclear weapons in their security postures and neglecting their obligations under article VI of the nuclear non-proliferation treaty (NPT). While noting the difficulties in realizing the vision of a world free of nuclear weapons in incremental steps, this report calls for renewed efforts to bring about a Nuclear Weapons Convention (NWC) as the best way of achieving the objective in a time-bound, verifiable and equitable manner.

Given India's own history of championing the cause of disarmament, we need to once again seize the initiative. It is hoped that this report will promote an informed debate among the broader strategic community and the citizens in general on a possible way forward towards a nuclear weapons free world.

The Institute owes a debt of deep gratitude to Ambassador Satish Chandra who chaired the Task Force and brought to bear on the subject his own rich insights. He welcomed the many voices of dissent in the Task Force and skillfully synthesized them in this report. Thanks are due to all the Task Force members for their well-researched inputs and views. The staff members of Indian Pugwash Society— Prof. K. D. Kapur, P.K. Sundaram, and Salvin Paul— also provided valuable assistance in the work of this report. Finally, I would like to acknowledge the exemplary assistance provided by Samuel Rajiv at various stages of developing this report.

April 2010

N.S. Sisodia

he international community has not, till recently, sought to achieve the objective of a nuclear weapon free world in a concerted fashion. There have of course been innumerable calls for the elimination of nuclear weapons. The United Nations General Assembly (UNGA), for instance, from its very first session in 1946, has periodically called for the elimination of nuclear weapons, and since 1996 has annually recommended negotiations for the conclusion of a Nuclear Weapons Convention (NWC) aimed at achieving this objective. Similarly, as early as 1954, the Board of Governors of the International Commission of the Red Cross (ICRC) pleaded for the prohibition of the use of nuclear weapons and the ICRC at its 21st International Conference held in Istanbul in 1969 passed a resolution calling upon the United Nations (UN) for a special agreement on the prohibition of weapons of mass destruction. Similar sentiments against nuclear weapons were also voiced by the International Court of Justice (ICJ) in 1996, by the Nuclear Non Proliferation Treaty (NPT) Review Conferences in 1995 and 2000, by leaders like Rajiv Gandhi in 1988, and by groups of middling powers in 1984¹ and 1998.² Progress has, however, been limited as the five nuclear weapon states, recognized as such by the NPT, have, historically, shown little interest in a nuclear weapon free world.

The USA and the Soviet Union (later the Russian Federation) have concluded a number of bilateral nuclear arms reduction agreements, like the two Strategic Arms Limitation Treaties, the Intermediate Range Nuclear Forces Treaty, the Strategic Arms Reduction Treaty, etc. which have brought down their nuclear weapon holdings. As a result of these agreements the global nuclear warhead stockpile, over 95 per cent of which is held by the USA and Russia, has come down to the present-day level of around 23,000. While this represents a significant drop from the 1985 peak of about 70,000 warheads,³ present holdings of nuclear warheads are sufficient to destroy the world several times over. This exercise, which many see as "an elimination of redundancies",⁴ was driven by the logic of relations between these two states and not by any desire for the elimination of nuclear weapons. Accordingly, these agreements neither led to, nor even envisaged, the subsequent involvement of the other nuclear weapon states in discussions to further the cause of nuclear disarmament aimed at the elimination of nuclear weapons.

Far from working for a nuclear weapon free world the nuclear weapon states have constantly been upgrading their nuclear arsenals and have integrated them into their war-fighting doctrines and mechanisms.

¹ 6 nation continent initiative involving Argentina, Greece, India, Mexico, Sweden and Tanzania.

² New Agenda Coalition involving Brazil, Egypt, Ireland, Mexico, New Zealand, Slovenia, South Africa and Sweden.

³ See Gareth Evans and Yoriko Kawaguchi (Co-Chairs), *Eliminating Nuclear Threats: A Practical Agenda for Policy Makers,* at http://www.icnnd.org/reference/reports/ent/pdf/ICNND_Report EliminatingNuclearThreats.pdf, p. 13.

⁴ Foreword by Hans Blix to Morten Bremer Maerli and Sverre Lodgaard (eds.), *Nuclear Proliferation and International Security* (New York: Routledge, 2007), pp. xiv–xviii.

All of them, with the exception of China, have spurned the no-first-use doctrine and clearly envisage the use of nuclear weapons even in conventional conflict situations. The USA has gone so far as to project their use in pre-emptive and preventive modes. The nuclear weapon states are, therefore, guilty of having legitimized nuclear weapons and enhanced their importance as a currency of power. This, in turn, has encouraged proliferation. Many a state that would never have contemplated going nuclear, had the nuclear weapon states moved towards nuclear disarmament, has done so, with a few actually crossing the forbidden threshold.

The focus of the nuclear weapon states all these years has been not on addressing vertical proliferation but on curbing horizontal proliferation while at the same time maintaining their monopoly on nuclear weapons. Their instrument of choice for this purpose was the NPT, which was essentially based on a bargain, whereby the nuclear weapon states on the one hand committed themselves to "pursue negotiations in good faith" for nuclear disarmament and the non-nuclear weapon states on the other hand undertook to forswear nuclear weapons for all time. In addition, the non-nuclear weapon states were guaranteed an inalienable right to civil nuclear technology.

The NPT was buttressed by the International Atomic Energy Agency (IAEA) as well as a host of informal multilateral regimes incorporated by bodies such as the Zangger Committee, the Nuclear Suppliers Group (NSG), the Australia Group, and the Wassenaar Arrangement, and initiatives such as the

Proliferation Security Initiative (PSI) and UN Security Council Resolution 1540, among others designed to prevent horizontal proliferation. While the IAEA functioned as the policing agency administering a safeguards system to ensure that the non-nuclear weapon states party to the NPT did not divert source and special fissionable materials for weapon purposes the multilateral regimes and initiatives detailed the materials, equipment and technologies normally to be denied to such states except under stringent conditionalities, as well as measures to be taken in order to prevent such materials, equipment and technologies from falling into unauthorized hands. Over time, IAEA policing has been steadily tightened through mechanisms like full-scope safeguards, the Additional Protocol, etc., and the guidelines laid down by the multilateral bodies have become more restrictive both in respect of what can be provided to non-nuclear weapon states and of the conditionalities on which such supplies may be made. These measures have been supplemented by several initiatives - unilateral, regional and international - designed primarily to prevent nuclear weapons, materials, equipment and technologies from coming in possession of unauthorised parties.

Regrettably, the efforts to prevent horizontal proliferation under the NPT regime have not been matched by similar moves to prevent vertical proliferation. The original sin lies in the NPT itself as it was geared mainly to addressing horizontal proliferation and its treatment of vertical proliferation was much less focused. For instance, while non-nuclear weapon states were required to upfront renounce the acquisition of nuclear weapons the obligation on the nuclear weapon states was more nebulous, entailing only "good faith" negotiations towards "effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament". Moreover, while the treaty had specific provisions to curb horizontal proliferation, by way of the requirement of IAEA safeguards on non-nuclear weapon states and restraints on supply of source, special fissionable materials and equipment to them, there were no similar stringent obligations on nuclear weapon states in achieving the stated goal of nuclear disarmament by way of a timeframe or even rough benchmarks.

In these circumstances, it is no surprise that while the NPT regime has not been able to reverse vertical proliferation it has had some success in curbing horizontal proliferation. This is borne out by the fact that, with Israel having gone nuclear before the NPT came into force, only three additional states, namely, Pakistan, India and North Korea have acquired nuclear weapons, over and above the five NPTrecognized nuclear weapon states. Four states have given up nuclear weapons, namely Belarus, Ukraine, Kazakhstan and South Africa, and several like Libya have abandoned their quest for nuclear weapons. Nevertheless, the world remains perilously close to the use of nuclear weapons, as reflected in the fact that the Bulletin of the Atomic Scientists in January 2010 moved the hands of its Doomsday Clock backward by a minute to six minutes to midnight, after having advanced it by two minutes to five minutes to midnight in 2007.⁵ In a sense the situation is more precarious today than for much of the cold war period, partly on account of the increased likelihood of nonstate actors getting access to nuclear materials or weapons, and partly on account of the increase in the number of nuclear armed states, some of which do not have the benefit of the experience of years of safeguards put in effect by the nuclear weapon states to prevent nuclear accidents, misjudgements and unauthorized launches. Moreover, whilst during the cold war a nuclear exchange was essentially a binary function and thus much more controllable, today with the number of nuclear armed states having increased the possibility of use of nuclear weapons has increased exponentially. Finally, the legitimization of nuclear weapons resulting from the policies adopted by the nuclear weapon states can result in another thirty to forty states going nuclear at relatively short notice as they have the capacity to do so. It is in this context that in 2005 Robert McNamara argued:

⁵ See " 'Doomsday Clock' moves one minute away from midnight", 14 January 2010, *The Bulletin of the Atomic Scientists*, at <http://thebulletin.org/content/media-center/announcements/2010/01/14/doomsday-clock-moves-one-minute-away-midnight>. The closer the clock is to midnight, the closer the world is estimated to be to global disaster. Originally, only a global nuclear war was under consideration but now climate change and "new developments in the life sciences and nanotechnology that could inflict irrevocable harm" are also factored in by some scientists. The gravity of the situation is borne out by the fact that the Doomsday Clock has steadily moved down from 17 minutes to midnight in 1991 to 6 minutes to midnight today. Indeed, even for many years during the cold war, the hands of the clock were further from midnight than they are today.

If the United States continues its current stance, over time, substantial proliferation of nuclear weapons will almost surely follow. Some, or all, of such nations as Egypt, Japan, Saudi Arabia, Syria, and Taiwan will very likely initiate nuclear weapon programs, increasing both the risk of use of the weapons and the diversion of weapons and fissile materials into the hands of rogue states or terrorists. ⁶

Indeed, it could be argued that the NPT regime has reached the limits of its success and, henceforth, will produce diminishing returns unless accompanied by sincere and concerted moves aimed at the elimination of nuclear weapons. This is because progress on non-proliferation can ultimately be ensured only by progress on nuclear disarmament. One without the other is simply not sustainable.

Conscious of the ever-increasing risk of the actual use of nuclear weapons and of progressive horizontal proliferation, the nuclear weapon states are hoping to push for further tightening of the NPT regime, entailing even more onerous restrictions on non-nuclear weapon states, at the upcoming NPT Review Conference in 2010. Aware that these demands will be rejected out of hand unless they are accompanied by some concrete moves which are seen as an indicator of sincerity, on their part to address vertical proliferation the nuclear weapon states, and in particular the USA, are now beginning to suggest the importance of moving towards a nuclear weapon free world. Thus, in his speech on 5 April 2009 in Prague, President Barack Obama made a ringing endorsement of the need to work for a nuclear weapon free world. In spelling out the "trajectory" of US policy towards this end he argued inter alia for reduction in the salience of nuclear weapons, cuts in the nuclear arsenals of the nuclear weapon states, strengthening the NPT regime, operationalizing the Comprehensive Test Ban Treaty (CTBT), and finalizing the Fissile Material Cut-Off Treaty (FMCT). President Obama's Prague speech was preceded by the Obama-Medvedev joint statement in London on 1 April 2009 wherein the two leaders, while committing their respective states to work towards the goal of achieving a nuclear weapon free world, also agreed to work together to fulfil their obligations under Article VI of the NPT and "demonstrate leadership in reducing the number of nuclear weapons in the world". It must be noted, however, that no timeframe has been set for achieving the objective of a nuclear weapon free world which, in fact, is only seen as a "long-term goal". Nevertheless, the position taken by the USA and Russia constitutes a quantum change from the past as they have recognized, albeit belatedly, that movement on nuclear disarmament is a sine qua non for sustained progress on horizontal proliferation and that they must be much more serious in respect of their obligations under Article VI of the NPT.

Accordingly, we may witness a series of moves on the part of the nuclear weapon states aimed at curbing both horizontal and vertical proliferation. It remains to be seen whether these moves represent a sincere effort at eliminating nuclear weapons and are meaningfully sustained beyond the

⁶ Securing our Survival: the Case for a Nuclear Weapons Convention, at <http://www.icanw.org/files/SoS/SoS_section4.pdf>, p. 17.

2010 NPT Review Conference. It is imperative, therefore, that India is ready with an appropriate response, not only in terms of an overarching approach to the process of nuclear disarmament but also in terms of the fine details of the highly complex technical issues involved in negotiating an agreement, or convention, on the elimination of nuclear weapons.

An effort has been made in this manuscript to suggest an Indian approach to the unfolding non-proliferation agenda of the nuclear weapon states in the coming months. The positions taken on nuclear disarmament in the past by the nuclear and non-nuclear weapon states are outlined first. The current NPT regime, the threats and challenges posed by the continued existence of nuclear weapons, the evolution of thinking about a nuclear weapon free world, and a possible approach to the elimination of nuclear weapons are then analysed. In the process, some of the complexities involved in arriving at this desired end state are also discussed.

APPROACH TO NUCLEAR DISARMAMENT

h is chapter discusses, in two separate sections, the several approaches of nuclear weapon states and non-nuclear weapon states to nuclear disarmament.

A. NUCLEAR WEAPON STATES

The key to nuclear disarmament, obviously, rests with the nuclear weapon states. Their reluctance to renounce nuclear weapons accounts for the glacial pace of nuclear disarmament. This is particularly reprehensible because while the nonnuclear weapon states signatories to the NPT have lived up to their commitment under the treaty to forgo nuclear weapons, the nuclear weapon states have failed to fulfil their part of the bargain requiring them to take effective measures towards nuclear disarmament. On the contrary, they have been steadily modernizing their nuclear arsenals and their nuclear doctrines indicate that they are unlikely to give up their nuclear weapons any time soon.

It is true that a few non-nuclear weapon states such as Egypt, South Korea, Iran and Libya undertook some prohibited nuclearrelated activities in technical violation of the IAEA safeguards applicable to them. Condemnable as these activities were, they can in no way be cited as a reason for the nuclear weapon states to have flouted the nuclear disarmament obligations applicable to them under the NPT. This is all the more so as, barring North Korea, no non-nuclear weapon state signatory to the NPT has so far actually gone nuclear. Even North Korea did so after walking out of the NPT.

As succinctly put by Steve E. Miller,

At no time during the life of the NPT, from 1968 onwards, have nuclear weapons been regarded as anything other than central and integral to the defence postures of the nuclearweapon states ... At no time during the life of the NPT has nuclear disarmament been compatible with the military doctrines of the nuclear-armed states.

Accordingly, despite lip-service by the nuclear weapon states to the notion of nuclear disarmament it has at no time been "an operational policy objective of any of these states."⁷

USA and Russia. The end of the cold war should have eliminated the rationale for nuclear weapons particularly for the two superpowers. The USA would have benefited the most from the abolition of nuclear weapons as by the early 1990s it enjoyed an overwhelming margin of qualitative superiority in conventional weapons over any other military power. This holds true even today.

Instead of moving in this direction, the USA and Russia did not take any concerted action to promote the emergence of a nuclear weapon free world and reduce the salience of nuclear weapons. They currently hold over 95 per cent of the world's stockpile of 23,335 nuclear warheads and account for 7540 of the 8190 operational

^{7.} Steven E. Miller, "Proliferation, Disarmament, and the Future of the Non-Proliferation Treaty", in Maerli and Lodgaard (eds.), *Nuclear Proliferation and International Security*, pp. 50–69.

warheads (see Annexure I: Status of World Nuclear Forces 2009).

It may be mentioned moreover that US deployments of nuclear warheads in Europe peaked at 7300 in 1971. They have since been gradually drawn down. It is estimated that currently there are around 150–240 US non-strategic nuclear warheads at six nuclear weapon facilities in five states belonging to the North Atlantic Treaty Organization (NATO): Belgium (10–20), Germany (10–20), Italy (70–90), Netherlands (10–20), and Turkey (50–90).⁸

The USA was also deploying nuclear weapons in South Korea (until 1991), Greece (2001) and the UK until a couple of years ago. Such overseas deployments are arguably in violation of Article I of the NPT, which requires the nuclear weapon states not to

> transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any nonnuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

The contention that there is no such violation as Article I merely refers to "transfer" and not deployment is untenable because many of the warheads deployed overseas are earmarked for delivery by host-country aircraft and aircrew which would require transfer of control at some point in time prior to actual use. It is for this reason that in the process of Congressional ratification of the NPT the US Administration made a declaration of interpretation to the effect that the treaty would cease to be valid in time of war. Jozef Goldblat asserts in this context:

> From the start of hostilities, transfer to any recipient of nuclear weapons, which in peacetime remain under the control of US forces, as well as their acquisition by NNWS [non-nuclear weapon states] by other means, would cease to be prohibited. This interpretation, called "war reservation", contradicts the essential provisions of the NPT.⁹

In any case, such deployments greatly enhance the risk of use of nuclear weapons.

While the nuclear arsenals of the USA and Russia are down substantially from the peak levels in the 1980s, both states continue to modernize their weapon systems. Like the USA and Russia the other nuclear weapon states, namely France, UK, and China, as well as those who have crashed into the nuclear club, namely Israel, India, Pakistan and North Korea have constantly been upgrading their nuclear weapons.

An original signatory of the NPT along with the UK and the Soviet Union, the USA has been concerned mainly with preventing horizontal proliferation. It has shown no indication of fulfilling its part of the bargain under Article VI of the treaty requiring it to undertake "effective measures" towards nuclear disarmament. Admittedly, the USA concluded a number of important

⁸ <http://www.nti.org/db/disarmament/country_nato.html>.

⁹ Jozef Goldblat, "Ban on Nuclear Weapon Proliferation in Light of International Law," in Maerli and Logaard (eds.), Nuclear Proliferation and International Security, pp. 9–29.

such as the Intermediate Range Nuclear Forces (INF) Treaty, thus eliminating an entire class of weapon systems in the possession of the two states, the Strategic Arms Limitation Talks (SALT) Interim Agreement, the Anti Ballistic Missile (ABM) Treaty, the SALT II Agreement, the Strategic Arms Reduction Treaty (START) I, START II, and the Treaty on Strategic Offensive Reductions (SORT) which placed limits on missile launchers and warheads. However, these agreements have still left the USA with an inventory of nearly 10,000 warheads, enough to destroy the world several times over. It is clear that these agreements were not conceived as an exercise to work towards a nuclear weapon free world, progressively drawing down the weapon holdings of the two nuclear giants and involving the other nuclear weapon states into a proportionate attenuation of their nuclear capabilities. Moreover, even this process of bilateral arms reductions was stymied due to the US withdrawal from the ABM Treaty in 2002, which provoked Russia into reneging on START II. The USA's dismissive approach to nuclear disarmament was mirrored in its failure to ratify the CTBT – even though it had co-sponsored the UN resolution urging commencement of negotiations thereon -

agreements with the Soviet Union/Russia

and in its change of tack midstream through negotiations on the FMCT by proposing that there was no need for international verification.

US strategies since the mid-1990s have been to advocate new rationales for the retention of nuclear weapons and developing new types of nuclear weapons. The US doctrine of 1996 for Joint Theatre Nuclear Operations postulated the use of nuclear weapons against non-state actors in possession of weapons of mass destruction as well as against conventional forces. The US Nuclear Posture Review (NPR) of 2002 went further, advocating the possible use of nuclear weapons (a) against hardened targets which can withstand a conventional attack, (b) in retaliation against a weapon of mass destruction attack, and (c) in the event of surprising military developments. The NPR advocated the retention of the nuclear hedge over and above the already existing hedge of 2500 nuclear warheads. It envisaged a new triad comprising nuclear forces, non-nuclear defence systems and a responsive infrastructure (the hedge). It also advocated the building of new types of nuclear weapons, notably bunker busters and low-yield weapons. Clearly, the NPR viewed nuclear weapons as being more usable than ever before. The US annulment of the ABM Treaty and efforts at refurbishing US ballistic missile defence were pointers in this direction and marked a paradigm shift in US thinking. Under the Bush Administration pre-emption came to be considered as synonymous with counter-proliferation. Even the Obama Administration, though currently not envisaging "construction of new ballistic missiles, submarines or heavy bombers", is "developing a new generation air-launched cruise missile". There is also domestic pressure for development of a "Reliable Replacement Warhead". In addition, "The service life of existing equipment has been extended till 2030 and higher yield warheads from dismantled missiles installed on them."10 President Obama's

¹⁰ See Evans and Kawaguchi (Co-Chairs), *Eliminating Nuclear Threats*, p. 20.

calls for a nuclear weapon free world, discussed in greater detail in Chapter V, constitute a welcome change from past US policy, but it remains to be seen how effectively he is able to achieve forward movement in this regard.

Russia, an original signatory of the NPT, signed and ratified the CTBT in 1996, and has maintained a moratorium on testing since 1990. It originally espoused the nofirst-use doctrine in 1982, but apprehensive of NATO expansion and grappling with the degradation of its conventional weapon systems, abandoned it in 1993. Thus, Russia's Security Concept of 1997 envisaged the use of all its forces, including nuclear weapons, in case of armed aggression that posed an existential threat. The Security Concept of 2000 went further and permitted the use of nuclear weapons as deterrence to even smaller-scale wars that did not necessarily pose an existential threat to Russia. The important role of nuclear weapons in Russia's security posture is reflected in the threat of nuclear attack held out to Poland by the Russian Deputy Chief of Staff, General Anatoly Nogovitsin, for its willingness to host a US ballistic missile defence system.¹¹ Continuing to modernize its nuclear forces, Russia has developed the RS-24, an intercontinental ballistic missile (ICBM) with multiple independently retargetable vehicles (MIRV), which is an improved version of the TOPOL-M; it was scheduled for deployment in December 2009.¹².

France. France, though a late entrant to the NPT in 1992, has signed and ratified the CTBT, has signed several Nuclear Weapon Free Zone Treaties, and is supportive of the FMCT. While abandoning its land-based missile systems and reducing its airlaunched nuclear warheads by a third, it has continued apace with the modernization of its nuclear arsenal which is estimated to have about 300 nuclear warheads. France is set to replace its nuclear submarinelaunched M-45 missiles with the more modern and 9000 km range M-51 three-2010.13 stage missiles in These developments have been made possible as laboratory-based expansions of French nuclear weapon design, development and production capacities have been underway for years.

The centrality of nuclear weapons to France is highlighted by the following excerpt from its White Paper on Defence and National Security, published in June 2008:

> Nuclear deterrence remains an essential concept of national security. It is the ultimate guarantee of the security and independence of France. The sole purpose of the nuclear deterrent is to prevent any State-originating aggression against the vital interests of the nation wherever it may come from and in whatever shape or form. Given the diversity of situations to which France might be confronted in an age of globalisation, the credibility of the deterrent is based on the ability to provide the President with an autonomous and sufficiently wide and

¹¹ Cited in Robert S. Norris and Hans M. Kristensen, "Nuclear Notebook: Russian Nuclear Forces 2009," Bulletin of the Atomic Scientists, May/June 2009, p. 55.

¹² Norris and Kristensen, p. 56.

¹³ The M-51 (with more than double the range of M-45) was test-fired for the fourth time in January 2010. See Pierre Tran, "French Sub-Launched M51 Missile Test-Fired", 27 January 2010, at http://www.defensenews.com/story.php?i=4473080>.

diversified range of assets and options. This requires the modernisation of two components: the sea-based ballistic missile submarine force and the airborne missiles carried by nuclearcapable combat aircraft. Even though there may not be any direct threat of aggression today against France, it is imperative to retain the capability to preserve the freedom of action of our nation if our vital interests are threatened with blackmail. France will have the means to develop its capability as long as nuclear weapons are necessary for its security.

Indeed, in January 2006 President Jacques Chirac warned that France was prepared to launch a nuclear strike against any country that sponsored a terrorist attack against French interests. In this context, he indicated that the French nuclear arsenal had been reconfigured to make a tactical strike in retaliation against terrorism.¹⁴

UK. The UK's rationale for possession of nuclear weapons rests on the premise of deterrence in conformity by and large with that of USA, Russia and France. It looks to its nuclear weapon capability not only as a means to deter nuclear threats but also "other threats, such as from biological or chemical weapons, and has declined to give promises of no first use."¹⁵ However, amongst the recognized nuclear weapon states the UK has, perhaps, taken the lead in embracing the objective of a nuclear weapon

free world. For instance, in February 2008, Defence Secretary Des Browne called for a sustainable and credible plan for multilateral nuclear disarmament indicating that "The UK has a vision of a world free of nuclear weapons ... we intend to make further progress towards this vision in the coming years."¹⁶ Prime Minister Gordon Brown at the UN General Assembly in September 2009 proposed a "global grand bargain" between nuclear weapon states and non-nuclear weapon states whereby the nuclear weapon states would reduce their nuclear weapons in return for non-nuclear weapon states not acquiring them. As part of the effort, he informed that his government was reviewing a possible reduction in the UK nuclear submarine fleet from 4 to 3. Brown insisted, however, that maintaining the UK's nuclear missiles was "non-negotiable".¹⁷ The UK House of Commons in March 2007 had also voted in favour of the government's plan to renew its nuclear weapon collaboration agreement with the United States for another ten years. New facilities for nuclear warhead design and testing were also approved.¹⁸

It may be underlined that the USA, Russia, France and the UK have not only distanced themselves from the no-first-use doctrine, but also refrained from providing meaningful and unconditional negative security assurances to non-nuclear weapon

¹⁴ Cited in Securing our Survival: The Case for a Nuclear Weapons Convention, p. 16.

¹⁵ George Perkovich and James M. Acton, "Abolishing Nuclear Weapons", *Adelphi Paper 396* (London: IISS,, 2008), p. 21.

¹⁶ See Des Browne, "Laying the Foundation for Multi-Lateral Disarmament", Conference on Disarmament, 5 February 2008, at http://www.acronym.org.uk/docs/0802/doc04.htm.

¹⁷ "Brown move to cut UK nuclear subs", BBC, 23 September 2009, at <http://news.bbc.co.uk/2/hi/uk_news/politics/ 8270092.stm>.

¹⁸ See "Opposition to Trident continues to grow", *Disarmament Diplomacy*, Issue 85, Summer 2007, at http://www.acronym.org.uk/dd/dd85/85news02.htm>.

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states. As regards the assurances of non-use of nuclear weapons provided by them in national statements in 1995, which are virtually identical, these extend only to nonnuclear weapon states parties to the NPT. Secondly, non-use of nuclear weapons against such states is not applicable if they are involved in an attack in alliance or association with a nuclear weapon state against the nuclear weapon state concerned and its allies or states towards which it has a security commitment.

China. Alone among the nuclear weapon states China has not only embraced an unqualified no-first-use concept but has also provided negative security assurances which are clearly unconditional. Accordingly, in its national statement on security assurances on 5 April 1995 China stated, inter alia:

China undertakes not to be the first to use nuclear weapons at any time or under any circumstances. China undertakes not to use or threaten to use nuclear weapons against non-nuclear-weapon States or nuclearweapon-free zones at any time or under any circumstances. This commitment naturally applies to non-nuclear-weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons or non-nuclear-weapon States that have entered into any comparable internationally binding commitments not to manufacture or acquire nuclear explosive devices.¹⁹

This apparently benign approach must, however, be taken together with the fact that while it has signed the CTBT China has not so far ratified it. Similarly, China for years prevented the negotiation of the FMCT in the Conference on Disarmament (CD) ostensibly on the ground that equal attention needed to be paid to discussions on a ban on the weaponization of outer space. It is probable that this was a ploy to gain time to build up adequate stocks of fissile material for weaponization. China has, moreover, been relentlessly modernizing its nuclear weapon systems and has sufficient fissile material to support a much larger nuclear arsenal than the around 240 warheads attributed to it. Analysing President Jiang Zemin's address in July 2000 to China's Central Military Commission on the "Five Musts" on nuclear weapons, the Nuclear Threat Initiative suggests that

> Jiang's statement as well as recent research has suggested that Chinese strategists have begun to shift their doctrine from minimum to limited deterrence in which China would possess a more sophisticated nuclear force structure capable of controlling nuclear escalation during a conflict and bringing about intra-war deterrence. This new doctrine may also provide for nuclear war fighting in specific circumstances.²⁰

Israel. Israel is the sixth nation in the world, and the first in the Middle East, to have developed and acquired a nuclear weapon capability. It went nuclear in 1967 and since 1970 its nuclear weapon capability has been commonly acknowledged. Israel has advanced nuclear weapon capabilities both in terms of the quantity and quality of its

¹⁹ See "China's National Statement on Security Assurances", 5 April 1995, at <http://www.nti.org/db/ china/engdocs/npt0495a.htm>.

²⁰ See "China's Nuclear Doctrine," at <http://www.nti.org/db/China/doctrine.htm>.

arsenal. Indeed, some analysts maintain that Israel has as many as 150–200 nuclear warheads as against the 80 attributed to it in Annex I. It has a functional triad to launch its nuclear weapons. In 2008 Israel tested a Jericho III missile with 4800–6500 km range; earlier in 2006 it ordered two diesel electric submarines to add to its inventory of three, to accommodate its sealaunched nuclear-capable cruise missiles. In addition, Israel has 205 nuclear-capable fighter aircraft acquired from the USA.²¹

While the five official members of the nuclear club that have signed the NPT and India and Pakistan which have not done so have publicly declared their nuclear status, Israel has not done so. There have, however, been occasions when senior Israeli officials and leaders have indirectly acknowledged Israel's nuclear capability. Israel remains outside the NPT. It has signed but not ratified the CTBT. Since Israel has never tested, it has no difficulty in advocating an open-ended verifiable moratorium on testing pending the entry into force of the CTBT. Israel has indicated that it will join a WMD (weapons of mass destruction) free zone in the Middle East, as advocated by Egypt, only if all the regional states, including Iran, establish a durable peace with it and implement a regionally controlled verification regime. It has been argued that even if all the nuclear armed states agreed to eliminate their nuclear arsenals Israel would not join them unless "political, security, verification and transparency conditions specific to the Middle East were to its satisfaction."²²

Pakistan. Pakistan's nuclear weapon programme dates to the 1970s. Though it tested in 1998, it was nuclear weapon capable in 1984.23 Pakistan's nuclear weapon capability was built up clandestinely though the USA was aware of this development. China provided Pakistan considerable help in the development of its warheads as well as missile systems.²⁴ Pakistan has since 1998 been steadily upgrading its nuclear weapon capability. Its nuclear warheads can be delivered by missiles and US-, French- and Chinese-manufactured aircraft. Pakistan has two types of short-range ballistic missiles (400-450 km), and a 2000 km medium-range ballistic missile. Another medium-range ballistic missile is undergoing testing and a third is under development. A ground-based cruise missile, similar to a Chinese model, is being tested, and will be developed in sea- and air-based versions.²⁵ Pakistan has not signed the NPT or the CTBT. It insists that the FMCT to be negotiated must include not only future production of fissile material as originally mandated but past production as well. It has recently broken the consensus arrived at after years of debate for commencement of negotiations in the CD on the FMCT. It is probable that Pakistan has taken this step in order to build up its stocks of fissile material for weapon purposes.

²¹ See Evans and Kawaguchi (Co-Chairs), *Eliminating Nuclear Threats*, p. 23.

²² Perkovich and Acton, "Abolishing Nuclear Weapons," p. 24.

 ²³ "Pakistan's Nuclear Weapons Programme", at http://nuclearweaponarchive.org/Pakistan/PakArsenal.html.
²⁴ R. Jeffrey Smith and Joby Warrick, "A nuclear power's act of proliferation", *Washington Post*, 13 November 2009, at http://www.washingtonpost.com/wp-dyn/content/article/2009/11/12/AR2009111211060.html; see also "China's Nuclear Exports and Assistance to Pakistan", at http://www.nti.org/db/china/npakpos.htm.

 ²⁵ Evans and Kawaguchi (Co-Chairs), *Eliminating Nuclear Threats*.

Pakistan has not publicly enunciated its official nuclear doctrine. It has been projected, however, that the guiding principle of its nuclear doctrine is minimum credible deterrence. It is, apparent nevertheless that Pakistan's nuclear weapon progamme is India-specific. Indeed, Lt Gen Khalid Ahmed Kidwai, the then head of Pakistan's Strategic Force Command is on record asserting that Pakistan's nuclear weapons are aimed solely at India. He is further reported to have indicated that these weapons would be used if:

- 1. India attacks Pakistan and conquers a large part of its territory (space threshold)
- 2. India destroys a large part either of its land or air forces (military threshold)
- 3. India proceeds to the economic strangling of Pakistan (engaging in a naval blockade or stoppage of the Indus waters)
- India pushes Pakistan into political destabilization or creates large-scale internal subversion (domestic destabilization).²⁶

India. India conducted a peaceful nuclear explosion in 1974. In 1998 it went nuclear (Pokhran II) in the light of the fact that the region was awash with nuclear weapons and all its calls for a nuclear weapon free world remained unheeded. India has been involved in the negotiations leading up to the NPT and the CTBT but has not signed these treaties. India's nuclear doctrine embraces the concepts of no-first-use and non-use of nuclear weapons against nonnuclear weapon states, a clear indication that India would build and maintain a credible minimum deterrent, would continue to observe a moratorium on nuclear testing and maintain strict control on export of nuclear-related technologies. India also reiterates its continued commitment to a nuclear weapon free world through global, verifiable and nondiscriminatory nuclear disarmament measures. "The doctrine is reflective of India's resolve not to engage in an arms race, and not emulate the nuclear war fighting doctrines expounded by some other nuclear weapon states, but rather to envisage the role of nuclear weapons purely as a deterrent."27 It is true that India's nofirst-use stance is not open-ended as it leaves open the possibility of retaliation in the event of an attack on it or its forces by nuclear, biological or chemical weapons. Nevertheless, there can be no mistaking the purely defensive role accorded by India to nuclear weapons.

North Korea. North Korea is the latest entrant into the nuclear armed club. It withdrew from the NPT in January 2003 and tested in October 2006 and May 2009. North Korea is presumed to have six to eight nuclear weapons along with a missile delivery system. North Korea's weaponization has demonstrated the fragility of the NPT regime and the fact that if any state is determined to go nuclear it can do so. It has further shown up the inability of the international community to

²⁶ "Nuclear Safety, Nuclear Stability, and Nuclear Strategy in Pakistan", A concise report of a visit by Landau Network Centre, Centro Volta to Pakistan, January 2002.

²⁷ Keynote address by Satish Chandra at the Delhi Policy Group Seminar on "Nuclear Weapons and Security", 30–31 August 2004, New Delhi.

prevent such a development. North Korea's going nuclear could also have a domino effect of inducing other states in the region to do likewise.

None of the nine nuclear armed states, with the possible exception of India, shows any inclination to renounce nuclear weapons. They are all modernizing and upgrading their nuclear weapon systems.

B. NON-NUCLEAR ARMED STATES

The non-nuclear armed states favour nuclear disarmament in varying degrees and are by no means a monolithic group. They may be grouped into three categories, namely, (a) those closely allied to nuclear weapon states or enjoying the benefit of extended deterrence, (b) the threshold or virtual nuclear weapon states, and (c) the rest, who are in the main NPT signatories and members of the Non-Aligned Movement (NAM).

States Enjoying the Benefit of Extended Deterrence. States benefiting from extended deterrence are members of NATO, Australia, Japan and South Korea. At its Nuclear Planning Group meeting on 15 June 2007, NATO reaffirmed the importance of deploying US nuclear weapons in Europe.

Accordingly, NATO's current Strategic Concept envisages heavy reliance on nuclear weapons as they provide "supreme guarantee of our security".²⁸ Amongst the NATO states Germany, Belgium, Turkey, Italy and the Netherlands host about 150– 240 US tactical nuclear weapons and the UK has a nuclear weapon cooperation agreement with the US. While some of these tactical missiles are earmarked for delivery by US aircraft, some are allocated for delivery by German, Belgian, Turkish, Dutch and Italian aircraft.²⁹ This is not only in violation of Article I of the NPT which, as pointed out earlier, prohibits such nuclear sharing arrangements on the part of nuclear weapon states, but also of Article II which prohibits such actions on the part of non-nuclear weapon states. States hosting nuclear weapons have a finger on the nuclear trigger; they are therefore virtual nuclear weapon states and hence their commitment to the cause of nuclear disarmament is less than total.

Similarly, US ballistic missile nuclear submarines regularly patrol the Pacific Ocean, providing a nuclear umbrella to states in South East Asia in security alliance with the United States; they also benefit from US land-based missiles. While they broadly favour a move towards nuclear disarmament, the elimination of nuclear weapons would entail the withdrawal of the nuclear umbrella that they currently enjoy. This poses a security dilemma for them. Hence it is questionable as to how strongly even steadfast champions of nuclear disarmament like Japan and Australia would support the elimination of nuclear weapons in a time-bound framework.

As perceptively pointed out by the Lowy Institute in its policy brief of October 2009, the Australian reliance on its alliance with the US is "at odds with its disarmament

²⁸ "NATO: The Alliance's Strategic Concept", at <http://www.nato.int/cps/en/natolive/official_texts_27433.htm>.

²⁹ <http://www.nti.org/db/disarmament/country_nato.html>.

rhetoric". The policy brief underlines that Australia's alliance with the US is a "vital part of its defence policy" and includes "extended deterrence" and suggests that President Obama's initiative for a nuclear weapon free world "raises important questions for Australia and other allies under the US nuclear umbrella." It is one thing for US allies to support the gingerly moves so far taken towards nuclear disarmament; it is quite another thing for them to sincerely strive for a nuclear weapon free world. These states advocate a process of nuclear disarmament stretching over several decades rather than one envisaging the elimination of nuclear weapons in a much shorter and finite timeframe.

Japan committed itself in 1967 to not possessing, not producing and not permitting introduction of nuclear weapons into its territory. Christopher W. Hughes suggests, however, that "The nuclear option is gaining greater credence in Japan" due to Japan's anxieties over North Korea, China's modernization of its nuclear forces. doubts over the credibility of US extended deterrence and USA's general nonproliferation stance. While the increasing nuclearization of its neighbourhood at one level gives a further fillip to Japan's traditional calls for a nuclear weapon free world, at another level it impels Japan to cling even more closely to the US nuclear umbrella. Japan is already concerned about the ongoing US-China rapprochement and these concerns would be magnified if they led to the reduction of US "dependence on nuclear weapons to provide extended deterrence".³⁰ In these circumstances, much like all other countries which are beneficiaries of extended deterrence, Japan cannot but view a nuclear weapon free world with mixed feelings.

Threshold and Virtual Nuclear Weapon States. The threshold and virtual nuclear weapon states include states like Japan, South Korea and Germany, which benefit from extended deterrence. They also include states like Brazil, Argentina, South Africa, Egypt and Iran, which are regional powers with considerable technical capabilities in the nuclear power production field and the nuclear fuel cycle. Many of the latter can, if they so choose, cross the nuclear threshold relatively easily. Indeed, some of them had, at one time or another, ambitions of going nuclear; only a few years ago, Egypt and South Korea were found to have undertaken certain prohibited activities in violation of their IAEA safeguard obligations. South Africa had become a nuclear armed state and has voluntarily dismantled its weapon system. Libya was proceeding down the path of weaponization but was compelled to abandon all such activities. Iran is suspected of harbouring such ambitions. The urge of these countries towards nuclearization has in the past been triggered by the legitimization of nuclear weapons and the perceived benefits conferred by their possession. Their preference would be for a world free of nuclear weapons.

These countries may not, however, necessarily subscribe to every piecemeal disarmament proposal. Brazil, for instance, has not agreed to sign an Additional

³⁰ Christopher W. Hughes, Japan's Remilitarisation (London: International Institute of Strategic Studies, April 2009); cited in Reshmi Kazi, "Japan's Nuclear Future", *Strategic Analysis*, 33(6) (November 2009): 809–13.

Protocol with the IAEA which would expand inspections to sites not directly related to nuclear materials. Its new Defense Strategy Plan states that Brazil will not sign any additions to the NPT until the nuclear weapon states have made progress towards nuclear disarmament. Brazil is a member of the NSG and with its neighbour Argentina has firmly opposed a new text of the guidelines which would make adherence to the Additional Protocol a requirement for supply.³¹

Egypt ratified the NPT in 1981 and is fully supportive of it, but has had a twofold approach to non-proliferation:

> While consistently leading efforts to establish a Middle East Nuclear Weapon-Free Zone (and since 1990 a WMD-Free Zone), Egypt has also protested about key components of the nonproliferation regime for their lack of universality (i.e. because Israel remains outside the NPT and other treaties restricting

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weapons of mass destruction). Egypt has therefore refused to adhere to the IAEA Additional Protocol and the Chemical Weapons Convention, and to ratify the CTBT, the African Nuclear Weapon-Free Zone (the Pelindaba Treaty), and the Biological and Toxin Weapons Convention.³²

In contrast to Brazil and Egypt, South Africa, while being a staunch advocate of the early elimination of nuclear weapons as the only guarantee that they will never be used, has been in favour of virtually all the disarmament, arms control, and confidence-building measures on the table including the CTBT, a verifiable FMCT, the strengthening of the NPT regime and the IAEA, stronger negative security measures, etc.

Other NPT signatories. The remaining states parties to the NPT constituting the vast majority are all unequivocally in favour of a nuclear weapon free world.

³¹ <www.nti.org/e_research/profiles/brazil/index.html>.

³² <www.nti.org/e_research/profiles/egypt/index.html>.

CURRENT NUCLEAR NON-PROLIFERATION REGIME

The current nuclear non-proliferation regime is anchored firmly in the NPT (Annexure II) buttressed by the IAEA safeguards system and multilateral export control and technology denial arrangements, reinforced further by several arms control agreements and a variety of bilateral, multilateral and international initiatives. In addition, there are bilateral agreements between the USA and Russia addressing vertical proliferation. Matin Zuberi in August 2004 described the nuclear non-proliferation regime with its focus on the NPT as

an interlocking network of international treaties, domestic legislations, bilateral regional and multilateral verification systems called nuclear safeguards, positive and negative security assurances to non-nuclear weapons states, economic sanctions, technology controls, nuclear weapon free zones and informal groupings of states for specific purposes ...³³

The Non-Proliferation Treaty (NPT)

The NPT is a treaty under which the rights and obligations of the nuclear and nonnuclear weapon states are unequal. Nuclear weapon states, enjoying a privileged position, were defined as those that had tested before January 1967. Membership of the nuclear weapon club was thus frozen for all time to five states. The treaty permitted the nuclear weapon states to retain nuclear weapons but required the non-nuclear weapon states to renounce

them in perpetuity. Furthermore, it obliged the later under Article III to accept IAEA safeguards in order to verify the fulfilment of the obligations assumed by them under the treaty, to prevent "diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices". For this purpose the article further stipulated that the safeguards would be "followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility". In addition, the article prohibited the states parties to the treaty from providing the non-nuclear weapon states not only source or special fissionable material but also "equipment or material especially designed or prepared for the processing, use or production of special fissionable material", unless the source or fissionable special material was safeguarded.

Non-nuclear weapon states agreed to accept the unequal status conferred upon them by the treaty as Article IV guaranteed them "unfettered access to civil nuclear technology"³⁴ and Article VI contained a nuclear disarmament commitment albeit over the long term. Implicit in this was that the second-class status of the non-nuclear weapon states was temporary and that the nuclear weapon states would eventually abandon their nuclear weapons. Thus the issues of horizontal proliferation and nuclear disarmament are intertwined and

³³ Matin Zuberi, "PSI: Pros and Cons", Centre for Security Analysis, Chennai, August 2004, pp. 10-17

³⁴ Miller, "Proliferation, Disarmament, and the Future of the Non-Proliferation Treaty," p. 50.

it is being acknowledged that absence of meaningful progress on the former will adversely affect progress on the latter.

Confrontation on Article VI of the NPT between the haves and have-nots has been "a central strand in the history of the NPT system, and generally an unhappy chapter in that history. There has been persistent and bitter disagreement ... about what disarmament obligation exists and how well it has been fulfilled." ³⁵

At the root of this disagreement is the "elusive"³⁵ character of Article VI, which does not categorically make it incumbent on the nuclear weapon states to renounce their nuclear weapons in a specified timeframe. The shortcomings of Article VI, as reproduced below, in this regard are self-evident:

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and a treaty on general and complete disarmament under strict and effective international control.

The text of this article merely commits the states parties to "good faith" negotiations "relating to" nuclear disarmament and not to the elimination of nuclear weapons. Moreover, it blurs the exclusive responsibility of the nuclear weapon states to the pursuit of negotiations on nuclear disarmament by requiring all states parties to the treaty to engage in such negotiations as well as those on general and complete disarmament. Above all, there is an absence of any timeline, or even benchmarks, for the achievement of nuclear disarmament.

Over the years there has been increasing criticism of the nuclear weapon states, particularly USA and Russia, for failing to live up to their disarmament obligations under the NPT. They have used the imprecise language of Article VI to always make out the case that they are complying with NPT requirements "no matter what the state of their nuclear postures, no matter what the state of the nuclear balance and no matter what the fortunes or misfortunes of arms control might be."37 They have habitually cited the unilateral or negotiated steps taken, cuts implemented, forces retired and agreements reached as evidence of fulfilment of their obligations under Article VI. While all such steps have generally been welcomed, critics remain more focused on the unwavering plans of the nuclear weapon states to retain nuclear weapons, the centrality of these weapons in their defence strategies, their persistent embrace of the first use option and the retention of thousands of weapons in the US and Russian arsenals.

The disarmament commitment under Article VI was made "more explicit, more binding and more tangible"³⁸ as a result of the 1995 NPT Review and Extension Conference, the July 1996 Advisory Opinion of the International Court of Justice (ICJ) and the 2000 NPT Review Conference.

³⁵ Ibid., p. 51.

³⁶ Ibid., p. 52.

³⁷ Ibid., p. 54.

³⁸ Ibid.

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As a result of the pressure exerted by the non-nuclear weapon states and as a price for obtaining the indefinite extension of the NPT, the nuclear weapon states made the following concessions on nuclear disarmament at the 1995 NPT Review Conference, which find mention in the consensus document on "Principles and Objectives for Nuclear Proliferation and Disarmament":

- Recognition in the preamble of the goal of elimination of nuclear weapons;
- Reaffirmation of the commitment of the nuclear weapon states to pursue nuclear disarmament; and
- Adoption of an action plan for "effective implementation" of Article VI, which inter alia included completion of the CTBT by 1996, immediate commencement and early completion of talks for finalization of the FMCT and "determined pursuit" of reductions in nuclear weapons.

The ICJ in its Advisory Opinion in July 1996, elaborating on the meaning and content of Article VI, unanimously took the view that "There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control." This removes all ambiguities in the meaning of Article VI by specifically pointing out that it requires the achievement of nuclear disarmament which be must comprehensive and should not merely be limited to some steps towards it.

At the 2000 NPT Review Conference the Final Document identified thirteen practical steps (Annexure III) for the fulfilment of

Article VI. These steps ranged from the broad and expansive to the narrow and precise. Most fundamentally it called for "An unequivocal undertaking by the nuclear weapon states to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament to which all States parties are committed under Article VI". It also called for the immediate establishment in the CD of a body mandated to work on nuclear disarmament, and established the principle of irreversibility in nuclear disarmament and arms control efforts. Additionally, it called for a continued testing moratorium, early entry into force of the CTBT, immediate negotiations for the conclusion of the FMCT, full implementation of START II, early completion of START III, preservation and strengthening of the ABM Treaty, etc. It also had an omnibus provision calling for further unilateral reductions in nuclear arsenals, further reductions in non-strategic nuclear weapons, diminished role of nuclear weapons in security policies and "the engagement as soon as appropriate of all the nuclear weapons states in the process leading to the total elimination of their nuclear weapons".

Regrettably, despite these developments the nuclear weapon states did not reshape their positions and strive to fulfil their nuclear disarmament obligations under the NPT. Most of them did not accept the ICJ's interpretation and argued that its Advisory Opinion did not have legal force and was not legally binding. Accordingly, they turned down a UNGA resolution in 1997 endorsing the ICJ Advisory Opinion and calling for talks on a convention prohibiting

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nuclear weapons. The Bush Administration went on to infringe virtually all the thirteen steps agreed to at the 2000 NPT Review Conference and, in fact, did the opposite of what was required. While other nuclear weapon states are also at fault, the fact is that the USA "serves as the lightning rod on these issues".³⁹

As a result, the vast majority of states not only believe that the nuclear weapon states are not in compliance with Article VI, but that they also do not intend to comply with it. The longstanding discord on noncompliance of the nuclear weapon states with their nuclear disarmament obligations cannot but adversely affect the nuclear nonproliferation regime. The cavalier attitude of the nuclear weapon states to nuclear disarmament is not a good advertisement for the NPT and is detrimental to nonproliferation.

Though the NPT was extended for all time at the 1995 Review Conference, it permits, under Article X, withdrawal with three months notice in "the supreme interests" of the country. Though only the Democratic Peoples Republic of Korea has so far exercised this right, the possibility of other countries doing so cannot be ruled out, particularly if the recalcitrance of the nuclear weapon states on Article VI continues much longer.

The International Atomic Energy Agency (IAEA)

The NPT is policed by the IAEA, which has become the world's nuclear inspectorate. The IAEA predates the NPT, having been set up in 1957. Its three main functions as per its statute are to "verify that safeguarded nuclear material and activities are not used for military purposes", help "countries to upgrade nuclear safety and security, and to prepare for and respond to emergencies" and help "countries mobilize peaceful applications of nuclear science and technology."⁴⁰ It is no surprise that the IAEA's safeguards system and verification role today vastly overshadows its other two functions, with the NPT having made it mandatory for all non-nuclear weapon states signatories to the treaty to conclude IAEA safeguards agreements.

The IAEA safeguard system currently comprises three types of safeguard arrangements: for states not party to the NPT, for the nuclear weapon states and for non-nuclear weapon states signatory to the NPT.

The first type of safeguard arrangements are currently applicable only to India, Pakistan and Israel, which are not NPT signatories. They are applicable under

agreements that cover only the nuclear material, facilities, equipment and/or materials specified in the agreement. These item-specific safeguards agreements are often the result of conditions agreed upon with a State supplying the item(s) in question to another State and are based on the provisions in document INFCIRC/66/Rev.2. These agreements have provided for the application of safeguards to nuclear material, non-nuclear material (e.g. heavy water, zirconium tubes), facilities, a heavy water production plant and nuclear-related equipment. Under such

³⁹ Ibid., p.60.

⁴⁰ <www.iaea.org/OurWork/index.html>.

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agreements, the Agency is required to ensure that the nuclear material and other specified items are not used for nuclear weapons or other nuclear explosive devices or in such a way as to further any military purpose.⁴¹

The second type of safeguard arrangements are those applied to nuclear weapon states. They are termed voluntary safeguards because the latter are not bound by the NPT to accept them.

> However, all five have concluded safeguards agreements under which they have voluntarily offered nuclear material and/or facilities from which the Agency may select to apply safeguards. These so-called voluntary offer safeguards agreements (VOAs) generally follow the format of agreements based on INFCIRC/153 (Corr.), but vary in the scope of materials and facilities covered, e.g. excluding those with national security significance. VOAs also foresee the possibility of withdrawing such material and facilities from safeguards. The Agency implements safeguards in such States: (i) to test innovative safeguards methods, or to give the Agency experience that it might not otherwise gain in safeguarding advanced nuclear fuel cycle facilities; and (ii) to fulfil expectations of non-nuclear-weapon States that some facilities in nuclear-weapon States are subject to safeguards. The Agency also applies safeguards in nuclear-weapon States as a result of legal obligations arising from other safeguards agreements and for efficiency reasons (e.g. to verify transfers of nuclear material when it is more cost effective to verify such transfers in the exporting, nuclear-weapon State than in the receiving, non-nuclear-weapon State).42

The third type of safeguards arrangements entered into by the IAEA are the comprehensive safeguards as stipulated under Article III of the NPT for the nonnuclear weapon states. These constitute the bulk of the safeguards agreements entered into by the IAEA and cover all nuclear material in the state. These agreements follow the structure and content set out in Agency document INFCIRC/153 (Corr.).2. Such agreements require the state to accept Agency safeguards on all source or special fissionable material in all peaceful nuclear activities within it or carried out under its control anywhere. The Agency, on its part, has the right and obligation to ensure that safeguards are so applied on all such material, for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices.

Consequent upon the failure to detect Iraq's nuclear weapon programme despite it being a signatory to a comprehensive safeguards agreement, it was decided to further strengthen the IAEA safeguards system. Accordingly, in February 1992 the IAEA Board of Governors affirmed that the scope of comprehensive safeguards agreements was not limited to nuclear material actually declared by a state, but included any material that is required to be declared. Expressed differently, the Board confirmed that the Agency has the right and obligation, under such agreements, not only to verify that state declarations of nuclear material subject to safeguards are "correct" (i.e. they accurately describe the type(s) and quantity (ies) of the state's declared nuclear

⁴¹ <www.iaea.org/Our Work/SV/Safeguards/safeg_system.pdf>.

⁴² Ibid.

material holdings), but that they are also "complete" (i.e. that they include everything that should have been declared). Soundly based safeguards conclusions regarding "completeness" in states with comprehensive safeguards agreements in force depend on the extent to which the Agency is equipped to detect undeclared nuclear material and activities in such states.

> Although the Agency has the authority, under comprehensive safeguards agreements, to verify the absence of undeclared nuclear material and activities, the tools available to it to do so, under such agreements, are limited. This realisation set the stage for safeguards strengthening efforts culminating in the approval, by the Board of Governors, of a model protocol additional to safeguards agreements which provides the Agency with such tools: the Protocol Additional to Agreement(s) between State(s) and the IAEA for the Application of Safeguards (INFCIRC/ 540 (Corr.)), referred to as the Model Additional Protocol. It is only for States with both a comprehensive safeguards agreement and an additional protocol in force that the Agency has the verification tools it needs to provide credible assurance of the absence of undeclared nuclear material and activities.43

If the IAEA's policing authority under comprehensive safeguards is considerable, entailing inter alia environmental sampling and unannounced or surprise inspections, that coupled with the rights accorded to it by the Additional Protocol makes it far more extensive and intrusive. The latter, inter alia, enables the Agency to review a state's entire nuclear fuel cycle activities as

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well as its manufacture and export of sensitive nuclear-related technologies. In order to do so the Agency is authorized to use satellite imageries, wide area environmental sampling, access to all parts of the nuclear fuel cycle, short-notice access to all buildings at the inspection site, access even to nuclear fuel cycle activities not involving nuclear material, etc.

The IAEA has approved Additional Protocol agreements with 124 countries, 92 of which, including all the nuclear weapon states, have ratified them. The Additional Protocols with the nuclear weapon states are, however, specially tailored to specifications dictated by the latter. Moreover, to be effective the Additional Protocols need to be backed by comprehensive safeguards, which the nuclear weapon states have not concluded.

Bilateral and Multilateral Arrangements

While the aforesaid comprehensive safeguards agreements have in the main been concluded by non-nuclear weapon states pursuant to their obligations under the NPT, they are also required under some other bilateral or multilateral arrangements. These include: the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Tlatelolco Treaty); the South Pacific Nuclear Free Zone Treaty (Rarotonga Treaty); the Argentine-Brazilian Declaration on Common Nuclear Policy; the Treaty on the South-East Asia Nuclear Weapon-Free Zone (Bangkok Treaty); the African Nuclear-Weapon-Free Zone Treaty (Pelindaba Treaty); and the Central Asian Nuclear-Weapon-Free Zone Treaty.

⁴³ Ibid.

Multilateral Export Control Groupings

While the IAEA is the designated organization for ensuring that the nonnuclear weapon states adhere to the NPT, several multilateral export groupings have emerged over the years and formulated guidelines designed to restrict, except under stringent conditionalities, the transfer of sensitive materials, equipment and technologies, which could be used for weaponization, to such states. These groupings drew inspiration from the Coordinating Committee on Multilateral Export Controls (COCOM), set up after World War II by the US and its allies, for technology denial to the opposing communist bloc.

The Zangger Committee. The first of these informal multilateral export control groupings was the Zangger Committee, which sought to define what constituted "source or special fissionable material" and "equipment or material especially designed or prepared for the processing, use or production of special fissionable material" which NPT signatories under Article III.2 of the treaty were prohibited from providing to non-nuclear weapon states except under safeguards. The Zangger Committee reached consensus on these items, termed as a "trigger" list, in 1972, and also stipulated the conditions of supply, which essentially reiterated the NPT requirement of IAEA comprehensive safeguards on such supplies, adding that source and special fissionable materials should not be used for military purposes and all re-exports of such items should be conditional on acceptance of safeguards on them by the recipient state. Over the years the Zangger Committee's trigger lists have become more detailed and extensive.

Following India's peaceful nuclear explosion at Pokhran in 1974 (Pokhran I), several other multilateral export control regimes came into being in order to more strictly control the export of sensitive technologies and equipment, notably the London Suppliers Club in 1975 (later known as the Nuclear Suppliers Group), the Australia Group in 1985, the Missile Technology Control Regime in 1987, and the Wassenaar Arrangement in 1995.

The Nuclear Suppliers Group (NSG). The NSG is a 45-member organization. Its main objective is to ensure that civilian nuclear trade does not lead to nuclear weapon development. For this purpose it has developed and constantly fine-tunes and upgrades two sets of guidelines: one governs the export of items that are specially designed or prepared for nuclear use; the other relates to items, often termed as dual-use items, that can make a major contribution to an unsafeguarded nuclear fuel cycle or nuclear explosives but which also have applications in non-nuclear activities. Significantly, the scope of the NSG's trigger list differs from that of the Zangger Committee which, moreover, does not address the issue of dual-use items. Restrictions on export of dual-use items are also exercised by the 39-member Wassenaar Arrangement.

Specific mention may be made of the fact that NSG guidelines encourage a move away from transfer of new national enrichment and reprocessing facilities, stating that

if enrichment or reprocessing facilities, equipment or technology are to be transferred,

suppliers should encourage recipients to accept as an alternative to national plants, supplier involvement and/or other appropriate multinational participation in resulting facilities. Suppliers should also promote international (including IAEA) activities concerned with multinational regional fuel cycle centres. (INFCIRC/254, 2007)

The logic of this approach is based on a warning sounded by IAEA Director General Mohamed El-Baradei in October 2003 that "should a state with a fully developed [nuclear] fuel cycle capability decide, for whatever reason, to break away from its proliferation commitments, most experts believe it could produce a nuclear weapon within a matter of months."44 Consequently, it is becoming increasingly difficult for non-nuclear weapon states to get enrichment and reprocessing technology and materials. In order to meet the requirements of nuclear fuel of such countries for peaceful purposes and, at the same time, minimize the risk of a nuclear break-out by them, it is proposed that they should seek supplies from either the Nuclear Threat Initiative/IAEA fuel bank, or from a multinational entity like the **Russian International Uranium Enrichment** Centre, or the Multilateral Enrichment Sanctuary Project in Germany. It may be noted that these entities, barring the Russian International Uranium enrichment Centre, have not so far taken off.

The Australia Group. The Australia Group is a 39-member organization addressing export controls relating to biological and chemical weapons.

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Missile Technology Control Regime (MTCR). The 34-member MTCR seeks to prevent the proliferation of unmanned delivery vehicles which may be used to deliver weapons of mass destruction. It controls export of systems and sub-systems capable of carrying a payload of 500 kg and above over a range of at least 300 km and specially designed production facilities for such systems. In addition it controls exports of missile-related components including propellants, avionics equipment and other materials used in the manufacture of such missile systems and subsystems.

It needs to be underlined that the abovementioned multilateral export control groups are informal and ad hoc entities functioning through consensus with varying membership not fully representative of the international community. All but the Wassenaar Arrangement lack even a secretariat. Since regimes are "agreements the or arrangements whereby member states implement regulations and license sensitive items on the basis of 'national discretion', licensing decisions are frequently inconsistent, or may provoke criticism from other members."45 Each member state in the final analysis effectuates exports of sensitive items as per its own laws and regulations, which are influenced by the collective decisions of the particular export control regime of which it is a member.

These export control groups have acted as technology denial regimes hampering the legitimate developmental activities of many non-nuclear weapon states, in violation of

⁴⁴ Mohammed El-Baradei, "Towards a Safer World", *The Economist*, 16 October 2003.

⁴⁵ Tariq Rauf, "Export Controls and Multilateral Nuclear Arrangements," in Maerli and Lodgaard (eds.), *Nuclear Proliferation and International Security*, pp. 267–90.

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the right guaranteed to them under Article IV of the NPT. Such denials have, in many a case, been undertaken on mere suspicion, thereby causing unnecessary hardship and provoking ill will.

The Current Non-proliferation Regime

Apart from the NPT, the IAEA, the multitude of export control regimes and the various nuclear weapon free zones, the existing non-proliferation regime is also coloured by a number of initiatives and measures – unilateral, bilateral, or multilateral – of varying value, aimed at providing assurances against nuclear attack to non-nuclear weapon states, arms control or at establishing mechanisms or arrangements designed to attenuate, in some way, the threat posed by nuclear weapons.

The requirement of security assurances for the non-nuclear weapon states arose from the fact that the NPT, though obliging the latter to forswear nuclear weapons, did not provide for their security against the use, or threat of use, of nuclear weapons. "Positive security" assurances were provided in 1968 under UN Security Council Resolution 255 (Annexure IV) whereby the Soviet Union, the USA and UK pledged immediate assistance under the UN Charter to any non-nuclear weapon state party to the NPT that was a "victim of an act or an object of a threat of aggression" in which nuclear weapons were used.⁴⁶ This was, however, found wanting as it was merely a reiteration of the duty of UN members vis-à-vis victims of aggression. Moreover, China and France were not bound by this resolution.

UN Security Council Resolution 984 (Annexure V), passed in 1995, just before the NPT Review and Extension Conference, seeking to rectify the situation, contained more substantive and meaningful "positive security" assurances. Specifically, the resolution provided that, in response to request from a state victim of nuclear aggression, the Security Council members would help settle the dispute, restore international peace and security and take "appropriate" measures for technical, medical, scientific and humanitarian assistance. In addition, the UN Security Council could consider recommending procedures for grant of compensation under international law from the aggressor. Though an improvement on Resolution 255, the resolution stopped well short of according extended deterrence by the nuclear weapon states, which alone would provide foolproof security to the nonnuclear weapon states.

The resolution also failed to effectively respond to the longstanding demand of the non-nuclear weapon states for negative security assurances through a commitment of non-use of nuclear weapons against them by nuclear weapon states. All it did was to take note of the conditional non-use statements of the nuclear weapon states, and declare the obvious that aggression with nuclear weapons would endanger international peace and security. In these statements all the nuclear weapon states excluding China indicated that they would not use nuclear weapons against non-

⁴⁶ Question relating to measures to safeguard non-nuclear weapon states parties to the treaty on the nonproliferation of nuclear weapons," 19 June 1968, at http://daccess-dds-ny.un.org/doc/RESOLUTION/GEN/ NR0/248/36/IMG/NR024836.pdf?OpenElement

nuclear states parties to the NPT, except in the case of invasion or other attack on them, their territory, their forces and their allies, carried out or sustained by such a nonnuclear weapon state in association or alliance with a nuclear weapon state. China alone undertook to maintain a non-use posture vis-à-vis the non-nuclear weapon states parties to the NPT, or non-nuclear weapon states that have undertaken comparable internationally binding commitments not to manufacture or acquire nuclear explosive devices.

Clearly, the negative and positive security assurances provided to the non-nuclear weapon states have been anaemic and have not adequately addressed their apprehensions about the use of nuclear weapons against them.

Some of the arms control measures implemented to date include the following: the Partial Test Ban Treaty (PTBT) of 1963, prohibiting testing in the atmosphere, outer space, and under water; the 1971 Sea Bed Treaty, prohibiting the implanting of nuclear weapons or any other weapon of mass destruction in the ocean floor or subsoil thereof; the 1974 US-Soviet Threshold Test Ban Treaty (TTBT), limiting the yield of underground nuclear weapon tests to 150 KT; and the 1976 US-Soviet Peaceful Nuclear Explosions Treaty (PNET) governing underground nuclear explosions for peaceful purposes. While these have some value, the more meaningful arms control measures like the CTBT, designed to put a stop to all testing, and the FMCT, aimed at prohibiting the production of all fissile material for weapons purposes, continue to elude the international community despite the fact that UN

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General Assembly resolutions to start negotiations for concluding them were adopted as far back as December 1993. It is unfortunate that the USA, which cosponsored the resolutions for finalizing the CTBT and FMCT, subsequently became inimical to their conclusion.

The current non-proliferation regime is also dotted with a host of initiatives aimed at one or another threat related to nuclear weapons and their spread. For instance, one set of initiatives comprising the USsponsored Container Security Initiative (CSI), Proliferation Security Initiative (PSI), UN Security Council Resolution (UNSCR) 1540 (Annexure VI), and the Global Initiative to Combat Nuclear Terrorism is directed at interdicting trafficking of nuclear-related supplies and addressing the dangers of nuclear terrorism.

Launched in 2002, the CSI entails the prescreening of container traffic bound for the US, at foreign ports, as an additional means of preventing entry into the USA of containers that pose a terrorist risk, and promote smoother flow of traffic at US ports. Pre-screening is undertaken on the basis of advanced technologies for purposes of non-intrusive examination of suspect containers and data bases developed in regard to the reliability of suppliers. Currently, over fifty foreign ports are participants in the CSI.

The PSI, announced by President Bush in May 2003, is a multilateral coordination mechanism designed to prevent the flow of weapons of mass destruction and related materials to, and from, states and non-state actors of proliferation concern by interdiction which can involve the boarding of ships or denying transit facilities to

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aircraft. Participation in it has increased from 11 countries initially to over 95 countries currently.

UNSCR 1540 outlaws non-state actors as holders of weapons of mass destruction and provides an international legal basis for interdiction of the latter.

The Global Initiative to Combat Nuclear Terrorism is an international agreement which came into being in October 2006. It was a move spearheaded by the US and Russia with the following objectives:

- Bring together experience and expertise from the non-proliferation, counter-proliferation, and counterterrorism disciplines
- Integrate collective capabilities and resources to strengthen the overall global architecture to combat nuclear terrorism
- Provide the opportunity for nations to share information and expertise in a legally non-binding environment.

Another set of initiatives, under the Cooperative Threat Reduction Programme, is to secure and dismantle weapons of mass destruction and their associated infrastructure in the states that formed part of the former Soviet Union, so that the problem posed by the possibility of leakage of know-how and of nuclear materials consequent upon the disintegration of the Soviet Union is minimized. Under this programme, many of the 60,000 scientists and engineers employed in the Soviet nuclear weapons programmes have been absorbed in internationally funded civilian programmes at centres established in Moscow, Armenia, Georgia, etc. Russia was also given assistance under the programme for establishing safe storage sites for nuclear weapons, for dismantling nuclear weapons, missiles, etc. in accordance with START I requirements. Furthermore, a dismantlement programme was initiated under which 500 tons of highly enriched uranium extracted from Russian weapons is being down-blended in Russia and then transported to the USA for use as fuel in nuclear power plants.

Yet another set of initiatives is directed at discouraging countries from acquiring mastery over the nuclear fuel cycle because once they do so they can go nuclear relatively quickly. This is the rationale for the restraint exercised by export control groups like the NSG in effectuating nuclear fuel cycle-related transfers and the call on all states in the recently passed UN Security Council Resolution 1887 "for stricter national controls for the export of sensitive goods and technologies of the nuclear fuel cycle". It is in this backdrop that the USA in 2006 advanced the Global Nuclear Energy Partnership (GNEP) aimed at restricting nuclear fuel manufacture to a relatively small number of producer countries which would lease it to consumer states and take back the spent fuel and reprocess it. It is too early to assess whether this initiative will take off.

The most striking failure of the current nuclear non-proliferation regime is the absence of any agreement or understanding amongst all the nuclear weapon states aimed at progressively reducing their holdings in fulfilment of their obligations under Article VI of the NPT.

There have been, since the 1970s, several bilateral agreements between the US and the Soviet Union/Russian Federation

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which, apart from SALT I, have resulted in a substantial draw down of their nuclear weapons from earlier peak levels. The most notable of these agreements have been listed as follows:

- The Strategic Arms Limitation Talks (SALT I) of 1969–1972 led to an interim agreement freezing the number of ICBM launchers for the two countries and setting ceilings on the numbers of submarine-launched ballistic missile (SLBM) launchers and ballistic missile submarines. Significantly, these ceilings permitted an increase of SLBM launchers from existing levels.
- The SALT I talks also led to the Anti Ballistic Missile Treaty in 1972 permitting deployment of only two limited area defence systems with up to 100 interceptor launchers each. In 1974 a protocol was signed limiting such deployment to only one site. In June 2002 the US withdrew from this treaty.
- In 1979 the SALT II treaty limited the total number of delivery vehicles (launchers and bombers) to 2400 for each side to be further reduced by end-1981 to 2250. In 1986 the US indicated that it would no longer be bound by these limits on the grounds that the USSR was violating it.
- The Intermediate-Range Nuclear Forces (INF) Treaty of 1988 required both countries to eliminate all groundbased ballistic and cruise missiles with a range of 500 to 5500 km.
- The Strategic Arms Reduction Treaty I (START I) of 1991 set a ceiling of 1600 strategic nuclear delivery vehicles and

6000 accountable warheads for each country. The treaty expired by 5 December 2009 and the US and Russia were committed to a new agreement by that date.

- START II, of 1993, imposed further reductions on the number of strategic delivery vehicles and warheads deployed on them. But the treaty did not enter into force because on US withdrawal from the ABM Treaty Russia indicated that it would not abide by it.
- The Strategic Offensive Reductions Treaty (SORT) of 2002, in force till 31 December 2012, envisages reduction in operationally deployed strategic warheads by each side to between 1700 and 2200 within ten years. It lacks a verification mechanism and does not prescribe the destruction of delivery mechanisms or specify what is to be done with the warheads.

As stated earlier, the foregoing cuts in the nuclear arsenals of USA and Russia may seem impressive, but with their current holdings, amounting to several thousand warheads, they still have the ability of destroying the world many times over. Moreover, the history of the aforesaid arms agreements does not inspire much confidence. It has been noted that the USA walked out of the ABM Treaty with no compunction and Russia walked out of START II in retaliation. Furthermore, the absence of a verification system in SORT lends an air of casualness to the entire bilateral disarmament process between the two nuclear giants. This tardy approach to nuclear disarmament explains Mohamed El-Baradei's assertion in the second part of

his interview published on 7 October 2009 in *The Hindu* that the nuclear environment that dawned with President Obama's advent to power "is coming after two wasted decades when the nuclear weapon states made no significant effort to move towards nuclear disarmament in fulfilment of their [commitment] under the NPT."⁴⁷

The fatal flaw in the current nuclear nonproliferation regime has been the failure of the nuclear weapon states to fulfil their part of the commitment to move towards nuclear disarmament, even as the nonnuclear weapon states, by and large, stood by their obligations of renouncing such weapons and putting up with safeguards and all manner of technology control and denial regimes. This misplaced emphasis on horizontal proliferation and lack of focus on the pressing need for disarmament accounts for most of the nuclear-related concerns that afflict the international community today. As early as August 1965, V.C. Trivedi, India's representative to the Eighteen Nation Disarmament Committee, had, in the NPT negotiations, highlighted the need for emphasis on vertical proliferation, in the following terms:

> When we are talking, therefore, of nonproliferation, the fundamental problem we have to consider is that of proliferation that has already taken place.... A non-proliferation agreement is, therefore, basically an agreement to be entered into by the nuclear powers not to proliferate their weapons ... A prohibition to proliferate applies firstly to

those who are in a position to proliferate or reproduce themselves and only secondarily to those who may subsequently be in such a position.⁴⁸

The failure of the nuclear weapon states to give up nuclear weapons accounts in large measure for the unravelling of the nuclear non-proliferation regime. This is evident in the nuclear break-out by three states and the reluctance of the non-nuclear weapon states to assume any further obligations sought to be imposed on them in the cause of non-proliferation. Had the nuclear weapon states eliminated their nuclear arsenals the nuclear break-outs that have been witnessed would not have occurred, all states would have readily taken on all the obligations required to keep the world free of nuclear weapons and there would have been no possibility of terrorists acquiring nuclear weapons.

Some of the other shortcomings in the current nuclear non-proliferation regime can be summarised as follows:

The nuclear weapon states disregarded their obligations under Article VI of the NPT to move effectively towards nuclear disarmament. Moreover, some of them have themselves been proliferators in violation of Article I. It is common knowledge that China, a signatory to the NPT, aided and abetted Pakistan's emergence as a nuclear weapon state and continues to do so.49

⁴⁷ Siddharth Varadarajan, "The reality is that India will remain outside the NPT", *The Hindu*, 7 October 2009, at http://www.hindu.com/2009/10/07/stories/2009100751800900.htm.

⁴⁸ Cited in S.K. Sharma and Gopal Singh (eds.), *Documents on India's Nuclear Disarmament Policy, Vol. II* (New Delhi: Anamika, 1999), p. 590.

⁴⁹ See Thomas C. Reed and Danny B. Stillman, *The Nuclear Express: A Political History of the Bomb and Its Proliferation* (Minneapolis: Zenith Press, 2009); Also Smith and Warrick, "A nuclear power's act of proliferation"

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The USA, as pointed out earlier, continues to violate Article I by basing nuclear weapons abroad. The international community has done nothing to penalize the offending states.

The emergence of several multilateral export control regimes designed to prevent horizontal proliferation has resulted in denial of technology to the non-nuclear weapon states, quite contrary to what was promised under Article IV of the NPT. In this context, as pointed out by the late Matin Zuberi, when the NPT was concluded, it was understood that

> whatever was not prohibited was allowed. The American chief negotiator of the NPT, William Foster, listed activities that were not prohibited and he said "neither uranium enrichment nor stockpiling of fissile material for peaceful purposes under safeguards would violate Article 2 of the Treaty." He also said "clearly permitted would be the development, under safeguards, of plutonium fuelled power reactors including research on the properties of metallic plutonium, nor would Article 2 interfere with the development or use of fast breeder reactors ..." It should be noted that all these are the most proliferation-prone activities and the regime has moved to ban these activities because of their dangerous potential.⁵⁰

> In other words, extra-legal restraints have been introduced over the years against the non-nuclear weapon states. Moreover, the imposition of such controls has been selective and by no means transparent and uniform.

- Similarly, the treatment of different states for IAEA safeguards violations has been selective and not uniform. Some have been let off lightly and others heavily penalized.
 - States like Pakistan which have been proliferators and which developed their nuclear weapon arsenal clandestinely and through illegitimate means were never stopped in their tracks or punished because they enjoyed US support.
 - States hosting US tactical nuclear weapons in violation of Article II of the NPT, like South Korea and some of the United States' NATO allies, were never punished.
- The withdrawal clause in the NPT constitutes a serious shortcoming. Though only North Korea has so far exercised it the possibility of other states doing so could seriously compromise its longevity.
- The extended deterrence provided by the USA has tended to co-opt its beneficiaries to the retention of nuclear weapons by the United States and thus muted their support for the near universal movement for the elimination of nuclear weapons.

Notwithstanding its various shortcomings many, led by the USA, are seeking to strengthen the NPT regime. Indeed, Secretary of State Hillary Clinton is reported to have declared, while delivering the Second Dean Acheson Memorial Lecture in Washington DC in November 2009, that the Obama Administration was

⁵⁰ Zuberi, "PSI: Pros and Cons"

looking forward to working with India to come up with a twenty-first-century version of the NPT. In an interview to Fareed Zakaria on CNN on 22 November 2009, when queried whether the US should help bring India into the system as a nuclear weapon state, Prime Minister Manmohan Singh reiterated that India "is a nuclear weapons state ... a responsible nuclear power. We have an impeccable record of not having contributed to unauthorized proliferation of these weapons of mass destruction" and added that "I hope it will happen."⁵¹ It would be ill advised for India to be associated with the exercise to strengthen the NPT because

it is out of tune with world realities and has failed its own charter, and any attempt to resuscitate it will only further erode the objectives of nuclear disarmament and non-proliferation. It is time to think of a new non-proliferation and disarmament architecture and it is critical that India takes a lead in this venture.⁵²

⁵¹ Cited in "The Haves and the Haves", Blog of the Centre for Strategic and International Studies (CSIS), Washington, 3 December 2009, at <http://csis.org/blog/haves-and-haves>; see also "Dr. Manmohan Singh on CNN's Fareed Zakaria GPS", 23 November 2009, at <http://www.indiainfoline.com/Research/LeaderSpeak/Dr.-Manmohan-Singh-on-CNNs-Fareed-Zakaria-GPS/6112722>; David P. Fidler and Sumit Ganguly, "Singh's Shrewd Move", *Newsweek*, 4 December 2009, at <http://www.newsweek.com/id/225533>.

⁵² Amitabh Mattoo, "A Treaty to Nowhere", *The Telegraph* (Kolkata), 2 December 2009, at <http://www.telegraphindia.com/1091202/jsp/opinion/story_11803227.jsp>.

THREATS AND CHALLENGES IN A NUCLEARIZED WORLD

t is commonly acknowledged that one of the most serious threats facing the world today emanates from nuclear proliferation. This stems from the fact that nuclear weapons are far deadlier, in terms of the devastation that they can cause, than other weapons of mass destruction, notably biological and chemical weapons, and they are constantly proliferating.

Though nuclear weapons are down to a third of their peak levels of the 1970s, and though the two main repositories of these weapons no longer pose an existential threat to each other, the possibility of their use is perhaps greater than ever before. As argued by Sidney Drell and James Goodby in an essay entitled "Issues for Debate", written for a conference on nuclear disarmament held on 24–25 October 2007 at Stanford University's Hoover Institution,

> new threats have appeared that cause us to believe that a nuclear blast in one of the world's great cities is more likely than during the Cold War. With the spread of technology on a global scale, the world now faces the prospect that its most terrible weapons will fall into dangerous hands, whether in rogue states or in terrorist organizations, resulting in a world less predictable, more accidentprone, and more susceptible to worst-case thinking. The danger is magnified by regional conflicts and by an extensive nuclear black market that flourished undetected for years.⁵³

While during the cold war the threat of a nuclear holocaust was omnipresent due to

the enormous tensions between the two superpowers, the new elements at play today make the world a much more dangerous place.

First, each additional country acquiring nuclear weapons multiplies manifold the risk of use of nuclear weapons. This arises not merely from a nuclear armed state's intentional or accidental use of nuclear weapons, but also from the leakage of its nuclear weapon-related know-how and materials to both state and non-state actors either by design or due to a security failure. China, for instance, has as a matter of policy consistently provided Pakistan with technological and material support in its nuclear weapon development programme. Similarly, Pakistan has been providing nuclear weapon-related materials and know-how to a number of countries and some of its nuclear scientists were in touch with al Qaeda.

Secondly, even though there were originally five nuclear armed states, and with the addition of Israel in the late 1960s six, decision-making on the actual use of these weapons during the cold war was, essentially, a binary function involving only the US and Soviet leaderships. This led to a greater measure of control on the use of nuclear weapons, particularly as, over time, these two states had put in place a system of safeguards to prevent nuclear accidents, misjudgements and accidental launches. The increased number of nuclear armed

⁵³ See George P. Schultz, Sidney D. Drell and James E. Goodby, "Rekjavik Revisited: Step toward a world free of nuclear weapons", at < http://www.nuclearsecurityproject.org/atf/cf/%7B1FCE2821-C31C-4560-BEC1-BB4BB58B54D9%7D/DRELL_GOODBY_REYKJAVIK2_REV0D.PDF>.

states coupled with the fact that binary polarity induced by the cold war no longer operates, has increased the risk of use of nuclear weapons both because decisionmaking on this issue is now in the hands of several players, and not just basically two, and because the new nuclear armed states have not had the "luxury of time to develop rules, tacit and otherwise, to tilt the scale against the use of nuclear weapons".54 One reason why deterrence worked between the USA and the Soviet Union was that, as argued by Schultz et al., they had no territorial claims against each other and were "insulated by thousands of miles from the daily frictions that arise when adversaries live side by side." The circumstances have changed in respect of the new nuclear armed states, which makes the world a much more dangerous place.

Thirdly, the spread of technology coupled with the renaissance of the nuclear power industry, fuelled by the pressing requirement of clean energy in the context of the need to address the menace of global warming, greatly increases the possibility of horizontal proliferation in the absence of the elimination of nuclear weapons and the absence of an international regime that makes their acquisition an impossibility. Some idea about the extent to which the world is beginning to turn to nuclear energy may be gauged from the fact that the World Nuclear Association estimates that the global nuclear generating capacity is set to increase to at least 1130 GWe by 2060 from the current level of 373 GWe. It also indicates that nuclear power is under

serious consideration in about thirty countries which do not currently have it. In addition to the 436 nuclear power reactors currently operating over 40 are currently under construction, 130 are planned for 2030 and over 200 are further back in the pipeline.⁵⁵

Fourthly, some newly nuclear armed states may become more adventurist under the assumption that retaliation would be muted in view of their nuclear capability. Pakistan, for instance, has engaged itself in terrorist activities directed against India with much greater abandon after having weaponized from the 1990s onwards. It has also attempted to use nuclear blackmail against India on more than one occasion.

Fifthly, leaderships of nuclear-armed rogue states are unlikely to be as responsible as those of normal states and more prone to the rash use of nuclear weapons. Furthermore, they are more likely to be proliferators and not averse to the diversion of nuclear know-how and materials to both state and non-state actors.

Finally, with each passing day there is an increasing possibility of terrorist groups acquiring some kind of nuclear weapons, weapon-usable fissile materials or radioactive materials for making a dirty bomb. Al Qaeda has for long been on the lookout in this regard. It has been hunting for fissile material or suitcase bombs from Russia as well as technological know-how from Pakistani scientists.

While it is unlikely that terrorist groups could in the near future build a nuclear

⁵⁴ Ibid., pp. 3–19.

⁵⁵ See "The risks associated with peaceful uses of nuclear energy," in Evans and Kawaguchi (Co-Chairs), *Eliminating Nuclear Threats*, pp. 48–56.

device from scratch they could, however, much more easily steal nuclear weapons or fissile material from storage or during transportation. In this context, it may be noted that, as per the Illicit Trafficking Database (ITDB) maintained by the IAEA there were, between January 1993 and December 2008, 421 incidents involving theft or loss of nuclear and other radioactive materials, and 336 incidents involving unauthorized possession of such materials and criminal activities relating to them.

It is more or less axiomatic that as long as there are nuclear weapons, nuclear power reactors, radioactive materials, etc., such endeavours on the part of terrorist outfits will continue and it is only a matter of time before they succeed. Once such outfits secure nuclear weapons, their use is inevitable, as terrorists cannot be deterred and have a low responsibility threshold. Elimination of nuclear weapons would greatly diminish, though not completely close, the possibility of terrorist groups acquiring nuclear materials.

The task of preventing the use of nuclear weapons in a nuclearized world is enormously difficult. Like the proverbial apple in the Garden of Eden, the very existence of the nuclear weapon makes its use inevitable.

The NPT regime has not helped in advancing the cause of a nuclear weapon free world. On the contrary, it has

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legitimized nuclear weapons and failed to prevent proliferation. Indeed, as long as there are nuclear weapons there will be proliferation not merely to states but also to non-state actors. As the 1996 Canberra Commission on Complete Elimination of Nuclear Weapons starkly put it:

> So long as any such weapons remain, it defies credibility that they will not be used, by accident, miscalculation or design. And any such use would be catastrophic. It is sheer luck that the world has escaped such a catastrophe till now.⁵⁶

Since the science of making nuclear weapons cannot be unlearnt the only effective way of preventing such weapons from ever being used is to make their use an international crime and to eliminate them on the pattern of biological and chemical weapons. For this purpose all nuclear armed states would have to give their nuclear weapons under up international supervision and multilaterally negotiated agreement would have to be arrived at for their elimination within a time-bound framework. Such an agreement would have to be internationally and effectively verifiable. It would also need to have inbuilt safeguards, to ensure that no state or non-state actors would ever acquire nuclear weapons, and should they do so they would face the severest possible international sanctions.

⁵⁶ http://www.ccnr.org/canberra.html, accessed on 15 January 2010.

EVOLUTION OF THINKING ABOUT NUCLEAR DISARMAMENT

The evolution of thinking about the need for nuclear disarmament is as old as nuclear weapons themselves. While "Global Zero" has usually been marginalized in the international strategic and political discourse, it has remained a cherished goal in the agenda for global peace and security.

It has often been argued that nuclear disarmament is not achievable because nuclear technology cannot be unlearnt or un-invented and the genie once out of the bottle cannot be put back into it. International law, however, provides instances where states have agreed on certain principles of war-fighting, including the eschewing of certain classes of weapons of mass destruction.

The Law of Hague (1899), addressing the conduct of war, established the principle of the need to maintain the delicate balance between military necessity and humanitarian consideration in war, which included drawing a distinction between non-combatants and the military, with a view to confining the use of weapons and tactics to only military objectives. The inability of nuclear weapons, like all weapons of mass destruction, to restrict themselves to only military objectives and their proclivity to impose enormous suffering on the civilian population violates the most basic principle of international law. It is this factor which influenced the International Court of Justice (ICJ) to rule in its 1996 Advisory Opinion that the threat or use of nuclear weapons would

"generally be contrary to the rules of international law".

In accordance with the abovementioned principles, the following four instruments have been concluded banning the use of certain classes of weapons:

- 1. The 1925 Geneva Protocol prohibiting the use of asphyxiating, poisonous and other gases and all bacteriological modes of warfare;
- 2. The 1972 Biological Weapons Convention banning the development, production and stockpiling of bacteriological toxins for hostile purposes and providing for their destruction;
- 3. The 1993 Chemical Weapons Convention banning the development, production and stockpiling of chemical weapons and providing for their destruction;
- 4. The 1997 Anti Personnel Mines Convention banning the development, production, stockpiling and retention or transfer of anti-personnel mines and providing for their destruction.

Regrettably, nuclear weapons still remain exempt from any such ban, or even opprobrium, regarding their use or threat of use. On the contrary, as stated earlier, they have been allowed to become a currency of power and most of the nuclear armed states have no compunction in postulating their use in conventional conflict situations in a first use mode. This is all the more reprehensible as the legitimization of nuclear weapons flies in the face of international law and opinion. In this context, it is germane to note that the very first resolution adopted by the UN General Assembly (UNGA) in January 1946 called for the "elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction"57 (Annexure VII). This was followed up by a UNGA resolution in 1961 stating that the use of nuclear weapons went against the "spirit, letter and aims" of the United Nations and as such were in violation of the UN Charter (Annexure VIII). The resolution further proclaimed that the use of nuclear weapons was a "crime against mankind and civilization".58

This widespread aversion to nuclear weapons has persisted over the decades accompanied by repeated calls for their elimination. Unfortunately, all these calls have been unheeded and no effort has been made to evolve a multilaterally negotiated, universal and internationally verifiable agreement designed to achieve the elimination of nuclear weapons within a time-bound framework. The focus in the 1960s and 1970s essentially lay on arms control.

The major multilateral arms control agreements of the time were the Partial Test Ban Treaty (PTBT, 1963), the Outer Space Treaty (1967), the Treaty of Tlatelolco (1967), the NPT (1967), and the Seabed Treaty (1971). The NPT, strictly speaking,

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is both a nuclear arms control and a nuclear disarmament treaty, but since the nuclear disarmament obligations undertaken by the nuclear weapon states were disregarded, it has essentially functioned only as an arms control agreement aimed mainly at curbing horizontal proliferation.

In the bilateral US-Soviet Union construct this period saw arms control agreements like the Threshold Test Ban Treaty (TTBT, 1974), the Peaceful Nuclear Explosion Treaty (PNET, 1976), the SALT I Interim Agreement (1972) and the Anti-Ballistic Missile (ABM) Treaty. The only nuclear disarmament treaty concluded between the two in this period was the Strategic Arms Limitation Talks II (SALT II) agreement of 1979. These agreements were undertaken to stabilize the nuclear arms race between them and to address the growing prospect of war between them. Arms control had the larger goal of stabilization rather than to simply get to lower numbers of weapons, much less address the wider issue of the elimination of nuclear weapons.

It was from the 1980s onwards that one witnessed major bilateral US-Soviet/ Russian agreements on nuclear disarmament which brought about substantial reductions in their weapon holdings. It may be recalled that the beginning of the 1980s, after the 1978 UN Special Session on Disarmament (SSOD I), witnessed an upsurge in popular sentiment towards nuclear disarmament. This may be traced to the apprehensions aroused by the

⁵⁷ "Establishment of a Commission to Deal with the problems raised by Atomic Energy", UNGA Resolution 1(I), 24 January 1946, at http://daccess-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/032/52/IMG/NR003252.pdf?

⁵⁸ "Declaration on the Prohibition of the Use of Nuclear and Thermonuclear Weapons," UN General Assembly Resolution 1653, 24 November 1961, at http://daccess-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/167/06/IMG/NR016706.pdf?OpenElement>..

US-Soviet nuclear confrontation of the time and to NATO's decision in 1979 to deploy cruise and Pershing II missiles in Europe. The Reagan Administration's commitment to a nuclear build-up triggered much public anxiety and an outburst of popular protest. The Nuclear Weapon Freeze Campaign drew public support in the US and won the backing of the Democratic Party. Similar anti-nuclear sentiment was evident in much of West Europe. In nearly every West European country, anti-nuclear groups were revived and grew into mass movements.

President Reagan did not remain unaffected by this outburst of popular sentiment and, turning a new leaf, sought to advance nuclear disarmament in the US-Soviet context. President Gorbachev, too, for different reasons, had similar ideas. It is in this context that Reagan and Gorbachev at their first summit in Geneva in 1985, breaking out of the prevailing mindset of their respective establishments, declared that "a nuclear war cannot be won and must never be fought". Though success in agreeing upon the elimination of all ballistic missiles by 1996, as proposed by the US, eluded the two leaders at the subsequent Reykjavik Summit in 1986, the meeting laid the groundwork for the subsequent INF Treaty of 1988 and for the START I treaty of 1991.

Unfortunately, despite the end of the cold war, the renunciation of nuclear weapons by Belarus, Ukraine, Kazakhstan and South Africa, the indefinite extension of the NPT, and the ICJ's ruling that the NPT clearly

required the nuclear weapon states to eliminate nuclear weapons, there was little further progress on bilateral nuclear disarmament apart from the SORT Treaty of 2002. On the contrary, nuclear weapons acquired greater salience in Russian and US nuclear doctrines, the USA walked out of the ABM Treaty and Russia out of START II, and the commitments made towards the elimination of nuclear weapons at the 2000 NPT Review Conference received a major setback at the next NPT Review Conference due to inflexible approach of the US. These negative developments were accompanied by the Indian and Pakistani nuclear tests, North Korea's withdrawal from the NPT and its nuclear tests, fears that Iran may go nuclear, exposure of the A.Q. Khan proliferation network and apprehensions that sooner or later non-state actors like al Qaeda might obtain nuclear devices.

It is in the backdrop of the foregoing, which presages the breakdown of the nonproliferation regime and the increased possibility of the use of nuclear weapons, that the world is witnessing a groundswell of opinion in favour of the elimination of nuclear weapons. The first salvo in this regard was fired by four former prominent US officials comprising George Schulz, William Perry, Henry Kissinger and Sam Nunn in a set of two articles in the Wall Street Journal of 4 January 2007 and 15 January 2008.⁵⁹ Their call for a nuclear weapon free world is based on the argument that the end of the cold war has rendered the doctrine of US-Russian deterrence "obsolete", that with a

⁵⁹ "A world free of nuclear weapons", 4 January 2007, A15, at http://www.fcnl.org/issues/ item.php?item_id=2252&issue_id=54>; "Toward a nuclear free world", 15 January 2008, at <online.wsj.com/public/ article_print/SB120036422673589947.html>.

multiplicity of nuclear armed states, reliance on nuclear weapons for deterrence is "becoming increasingly hazardous and decreasingly effective", and that terrorist outfits, "outside the bounds of a deterrent strategy" are also increasingly more likely to get nuclear weaponry. They readily acknowledge that the non-nuclear weapon states have "grown increasingly skeptical of the sincerity of the nuclear powers" in fulfilling their disarmament commitment, that the non-proliferation efforts currently underway are inadequate, and that it is essential to have a vision of a nuclear weapon free world along with a series of steps towards that goal to pull the world back from the "nuclear precipice".

Despite some contrarian voices like that of James Schlesinger, former US Secretary of Defence, who continue to attach great value to nuclear deterrence and are sceptical about a verifiable elimination of nuclear weapons, the call for a nuclear weapon free world has found resonance amongst many leaders, particularly in the West, most notably in the US and UK. Several thinktanks the world over have been energized to provide an intellectual underpinning to the cause of a nuclear weapon free world. In addition, in support of this cause the Australian and the Japanese governments 2008 launched in September an International Commission on Nuclear Non Proliferation and Disarmament and the Nuclear Threat Initiative. Stanford University's Hoover Institution launched the National Security Initiative. In December 2008, one hundred leaders from around the world launched a Global Zero

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campaign. The latter has proposed a plan for the phased, verified elimination of nuclear weapons, starting with deep reductions in the US and Russian arsenals, to be followed by multilateral negotiations among all nuclear powers for an agreement to eliminate all nuclear weapons by 2030. In a public opinion poll commissioned by Global Zero in 2008, substantial popular support was found for the elimination of nuclear weapons through an agreement in a time-bound framework. In twenty of the twenty-one countries surveyed large majorities ranging from 62 to 93 per cent favoured such an agreement. The exception was Pakistan, where 46 per cent favoured the plan while 41 per cent opposed it. All nations known to have nuclear weapons were included in the poll, except North Korea where public polling is not available.

In a refreshing change from the past, President Obama, after assuming office in January 2009, also called for a world free of nuclear weapons. In this context, he undertook to take deep cuts in US nuclear weapon holdings, reduce the salience of nuclear weapons in US doctrines, ratify the CTBT, and urge all concerned to commence negotiations on the FMCT in January 2010. He has succeeded in getting President Medvedev on board for agreeing to conclude a follow-on agreement to START I in April 2010. Both sides have pledged to reduce their deployed strategic nuclear warheads to 1,550 and strategic delivery systems to 800 (both deployed and non-deployed, with a limit of 700 for deployed systems).⁶⁰

⁶⁰ "US-Russian Nuclear Arms Control at a Glance", *Arms Control Today*, March 2010, at http://www.armscontrol.org/factsheets/US Russia Nuclear Agreements March 2010

While President Obama's assertions and actions are certainly a welcome advance over the positions taken by his predecessors who, barring Reagan, were not even prepared to contemplate a world without nuclear weapons, it is significant that Obama has neither put any timeline for the elimination of nuclear weapons nor presented any concrete programme of action as to how one would arrive at that goal, apart from suggesting that after the US and Russia take deep cuts in their arsenals, other nuclear weapon states should also join in the process of nuclear disarmament. He has also admitted that the goal of a nuclear weapon free world may not be achieved in his lifetime. Furthermore, he was categorical that the US nuclear arsenal will continue to be used for providing extended deterrence to US allies for as long as nuclear weapons exist and that the NPT regime will be strengthened. Indeed, UN Security Council Resolution 1887 (Annexure IX), personally sponsored by President Obama, calling for the universalization of the NPT, was essentially focused on curbing horizontal proliferation by a further tightening of restraints on the non-nuclear weapon states, with nuclear disarmament receiving scant attention. Of the twenty-nine operative paragraphs of the resolution only two deal with nuclear disarmament and that, too, in a generic fashion, with no direct appeal to the nuclear weapon states to show greater sincerity and urgency in fulfilling their obligations in this regard, as required under Article VI of the treaty.

Similarly, the follow-on agreement to START I can hardly be termed as pathbreaking or spectacular, whether in regard to the time to be taken to effect the

reductions or the depth of the reductions to be effected. The proposed drawdown in the nuclear arsenals of the two countries is to be spread over as long as seven years, and the reductions are envisaged only in respect of operationally deployed strategic offensive nuclear weapons, and not in respect of nuclear weapons held back in reserve or tactical nuclear weapons. It may be recalled that SORT, concluded in 2002, had envisaged that by 2012 operationally deployed warheads would be reduced by each country to between 1700 to 2200 - a figure only marginally higher than the ceiling of 1550 warheads agreed to by Obama and Medvedev. There is, of course, a much sharper draw down in the numbers of delivery vehicles as compared to the START I level of 1600, but with the availability of MIRV technology this is not particularly meaningful. The only real advance of the new agreement between the USA and Russia is that it will have an effective verification mechanism.

Neither President Obama, nor the four high-ranking former officials, nor most of the think-tanks involved even in the prevailing more positive international environment for nuclear disarmament are seriously looking towards the elimination of nuclear weapons within a time-bound through universal, framework а multilaterally negotiated, nondiscriminatory and internationally and effectively verifiable convention. The absence of such an approach, barring on the part of the Global Zero campaign, raises suspicions that the entire objective of this exercise, in the lead-up to the 2010 NPT Review Conference, is to once again pressure the non-nuclear weapon states to take on even more onerous obligations,

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through a further tightening of the NPT regime, in return for some rather limited nuclear disarmament measures undertaken by the US and Russia and promises of a nuclear weapon free world in the very distant future.

These suspicions are further heightened by the fact that the four senior former US administration officials in an article in *The Wall Street Journal* of 19 January 2010 revealed that their conversion to the cause of a nuclear weapon free world was less than total. They not only recognized the "necessity to maintain the safety, security and reliability" of the US nuclear weapons as long as other countries had them but called for additional funding of three national laboratories involved in the modernization of the US nuclear arsenal.⁶¹ The US Strategic Posture Commission in its report in 2009 had made a similar recommendation.

As Mohamed El-Baradei has argued, it is unlikely that the non-nuclear weapon states will

move forward very much to tighten the nonproliferation regime except in sync with the NWS [nuclear weapon states] making good on their commitments. Only if the weapon states demonstrate that they are moving irreversibly towards disarmament through concrete [steps] can they have the moral authority to call on the rest of the world to tighten the nonproliferation regime. The shortcomings in the system will not be [remedied] unless the NWS understand the inextricable link between disarmament and nonproliferation.⁶²

⁶¹ See "How to protect our nuclear deterrent", *Wall Street Journal*, 19 January 2010, at http://online.wsj.com/article/SB10001424052748704152804574628344282735008.html>.

⁶² Mohamed El-Baradei's interview to *The Hindu*, 3 October 2009 and 7 October 2009.

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he route to a nuclear weapon free world is strewn with pitfalls, and the achievement of the desired end state would require sincerity of purpose on the part of the nuclear armed states, as well as statesmanship, perseverance and negotiating skill on the part of the international community as a whole. While the prime responsibility for the elimination of nuclear weapons rests upon the nuclear armed states, as it is they who have to give them up, the non-nuclear weapon states also have a role as they have to be prepared to take on even more onerous obligations, if need be, so as to provide credible assurances that they will never acquire nuclear weapons.

There are essentially two approaches to nuclear disarmament - one, timid and incremental; the other, bold and direct. The first envisages the adoption of several measures considered essential for working towards a nuclear weapon free world some time in the distant future. The second approach seeks to achieve nuclear disarmament not by a series of incremental moves but in a time-bound framework, through a multilaterally negotiated, non-discriminatory universal, and internationally and effectively verifiable convention or treaty.

The Incremental Approach

Many of the recent converts to the desirability of a nuclear weapon free world are proponents of the incremental approach to nuclear disarmament. Instances of this approach are provided in an essay entitled "The Vantage Point" by George Perkovich and Patricia Lewis written in January 2009, the report of the International Commission on Nuclear Non-Proliferation and Disarmament, co-chaired by Gareth Evans and Yoriko Kawaguchi, published in November 2009 under the title "Eliminating Nuclear Threats – A Practical Agenda for Global Policymakers", and the Global Zero Action Plan published in June 2009.

The main thesis of the Perkovich-Lewis essay is that in order to reach the Vantage Point - "a position of deep reductions in nuclear weapons" - from which abolition can be "envisaged, mapped and navigated", conditions for the same must first be created. However, it neither puts any precision on these conditions nor outlines the "exact shape and detailed content" of what should constitute the Vantage Point. These are expected to emerge from a series of "studies and experiments" to be completed by 2015 leading to the evolution of an "international action plan" to move to the Vantage Point.

The essay argues, however, that progress on getting to the Vantage Point is predicated on US-Russian-Chinese strategic cooperation and a host of other politicosecurity issues such as extended deterrence, US-China relations, the "low numbers challenge", imbalances in conventional weapon capabilities, China-India-Pakistan relations, etc. It also suggests that the main elements of the Vantage Point should, inter alia, be deep reductions in US-Russian nuclear arsenals, participation of all nuclear armed states in reductions and controls, doctrinal/deployment norms and rules

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reducing salience of nuclear weapons, CTBT operationalization, ban on fissile material production for weapon purposes, proliferation-resistant fuel cycle regime, tightening of the NPT regime, etc. Having discussed the Vantage Point, albeit somewhat ephemerally, the essay leaves the readers tantalizingly poised as it does not map out the progression therefrom to the elimination of nuclear weapons

The recommendations of the International Commission on Nuclear Non-Proliferation and Disarmament (ICNND), while not as nebulous as those contained in the Perkovich-Lewis essay, suffer from the same malaise of not setting any definite timeframe for the elimination of nuclear weapons. The ICNND postulates that the elimination of nuclear weapons could take place only some time beyond 2025 when, inter alia, the right political, military, verification and fuel cycle management conditions have been established.

The Global Zero Action Plan is much more forthcoming, suggesting that the elimination of nuclear weapons be undertaken in four phases by 2030. In Phase I (2010–2013), it envisages a bilateral agreement between USA and Russia whereunder the two would reduce their warhead holdings to one thousand each. In Phase II (2014–2018), a multilateral accord is envisaged amongst the nuclear weapon countries whereunder USA and Russia would reduce their nuclear warhead holdings to 500 each by 2021 and the others would freeze the number of their warheads until 2018 followed by proportionate reductions. This would be accompanied by the establishment of a comprehensive verification and enforcement system coupled with strengthened safeguards on the civilian nuclear fuel cycle. Phase III (2019–2023) would involve the negotiation of a global zero accord signed by all nuclear-capable countries for the elimination of nuclear weapons in a phased, verified and proportionate manner by 2030. Phase IV (2024–2030) would entail the actual implementation of the draw down of these nuclear arsenals to zero.

The incrementalists project their gingerly approach as being dictated by realism, but they expose themselves to the charge that they are not serious about actually getting to a nuclear weapon free world. The fact remains that the longer the world waits for the elimination of nuclear weapons the greater the risk of the use of these weapons. In these circumstances, common sense dictates that the goal should be expeditious achievement of a nuclear weapon free world. If the international community could eliminate chemical weapons through a Chemical Weapons Convention (CWC), why can it not eliminate nuclear weapons through a Nuclear Weapons Convention (NWC)?

The Bold and Direct Approach

The second approach, as mentioned earlier, seeks to achieve nuclear disarmament not by a series of incremental moves but in a time-frame, through a multilaterally negotiated, universal, non-discriminatory and internationally and effectively verifiable convention or treaty. To those who argue that it is unrealistic to pursue global zero in the near future, one can do no better than refer to Barry Blechman's firm assertion, in his article in the *New York Times* of 18 February 2010 that this is "not true". He argues that

The technical expertise necessary for air-tight verification has already been developed through past agreements and international supervision of the countries that have relinquished nuclear programmes. International precedents already exist for virtually every procedure necessary to eliminate nuclear weapons safely, verifiably, and without risk to any nation's security.

The vast majority of the non-nuclear weapon states are supporters of this more direct approach. Since the longer the time provided for any endeavour the lower the probability of success, a rapid approach towards the elimination of nuclear weapons would be more appropriate, rather than a timid one placing a premium on a plethora of confidence-building measures, arms control arrangements, and mechanisms to establish trust and promote cooperation amongst the major players. Each of these measures, arrangements and mechanisms, while useful in themselves, are immensely complex and carry the risk of failure. As Blechman has pointed out, "piecemeal control efforts will never work; we have to think more boldly if we are to achieve global nuclear disarmament."63

Accordingly, the summit of a nuclear weapon free world should be taken, not by the cumbersome process of establishing a base camp or vantage point, from which it may not even be clearly visible, but by aerial assault!

The challenges in negotiating an agreement on the elimination of nuclear weapons fall into two clusters, notably technical and politico-security. While the former are, in themselves, formidable, given the complexities of the issues involved, the politico-security factors which militate against the nuclear armed states working towards this end are far more serious. Technical issues always have technical solutions and can, ultimately, be resolved through sagacity and accommodation, but political-security factors, which condition the political will of the key players, notably the nuclear armed states, can be dealt with only through a radical change of mindset.

The Political-security Factors. The reluctance of the nuclear armed states to renounce nuclear weapons stems from a variety of factors. First, these weapons are a currency of power. It is not for nothing that the recognized nuclear weapon states are the only permanent members of the UN Security Council and have a preferential status under the NPT regime as compared to the non-nuclear weapon states. It is debatable if countries like the UK and France would remain permanent members of the UN Security Council in a nuclear weapon free world. Secondly, such weapons are regarded as the ultimate shield both against aggression or external destabilization. It could be argued that the nuclearization of Russia and China immunized them from US meddling. Similarly, the kid glove treatment of North Korea and of Pakistan by the US is explained by their having acquired nuclear weapons. Thirdly, nuclear weapons have become an integral part of the war-fighting capabilities of the nuclear armed states. Indeed, the US even envisages their employment in a pre-emptive and

⁶³ Barry Blechman, "Stop at START", New York Times, 18 February 2010, at http://www.nytimes.com/2010/02/19/opinion/19blechman.html. Blechman is a fellow at the Stimson Centre and Co-Editor of *Elements of a Nuclear Disarmament Treaty*.

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preventive mode. Fourthly, one or another of these countries sees nuclear weapons as an equalizer against the stronger country. This is true of both Russia and China vis-àvis USA, of Pakistan vis-à-vis India, and possibly of India vis-à-vis China. Some of these countries could thus well insist on a balanced reduction in conventional weapons before agreeing to renounce their nuclear weapons. Finally, the existence of political hot spots such as Taiwan, Palestine, the Russian periphery, North Korea, etc. involving the interests of one or another of the nuclear armed states makes their renunciation of nuclear weapons problematic. Accordingly, they may well insist on the stabilization of the situation in these hot spots before agreeing to renounce their nuclear weapons.

In addition, non-nuclear weapon states, enjoying the benefits of extended deterrence, may also have reservations about the elimination of nuclear weapons as this would lead to the attenuation of the security umbrella enjoyed by them.

Indeed, some have argued that the establishment of a new security framework is a prerequisite for the elimination of nuclear weapons in order to take care of the legitimate security concerns of states in a post-nuclear weapon world. Mohamed El-Baradei put this thought elegantly in his interview to *The Hindu* published on 7 October 2009:

.... once we decide to go to zero, we have to have in place a new security system that assures every country that its security is not diminished, that it is protected and that it has built in a very strong mechanism for detecting and deterring any country that might think of violating that. That's why I continue to argue that we need to start working on that alternative security system in parallel now. That obviously requires a different Security Council, a different security paradigm, a very robust verification system, a very transparent international community in so far as making sure that they are in compliance.

Such a perfect security system, though eminently desirable and one that would certainly promote the elimination of nuclear weapons, will come neither easily nor in the foreseeable future. The question, therefore, that needs to be addressed is whether the elimination of nuclear weapons is really so dependent on having in place the proposed security framework. The answer is in the negative because, given the political will the elimination of nuclear weapons is technically achievable with "a very robust verification system" designed to ensure the liquidation of all national nuclear weapon arsenals and calibrated to prevent any country from ever again going nuclear. The call for constructing a new security framework is something of a red herring because most states want the elimination of nuclear weapons with or without a new security framework. Those amongst the nuclear armed states who have security concerns about suddenly having to do without nuclear weapons are, in fact, much better equipped to look after themselves than most other countries. States enjoying extended deterrence can still enjoy the same through conventional weapons. Finally, if chemical weapons can be extinguished without insistence on a new security framework surely the same can be done in respect of nuclear weapons.

While at first blush the political-security factors cited above may appear weighty,

most of them lose their importance if weighed against the consequences of continuing with business as usual. Rapid progress on nuclear disarmament is critical to prevent proliferation. As long as nuclear weapons are not delegitimized and as long as some states are allowed to retain their nuclear arsenals there will always be some states wanting to weaponize. The realization of their ambition in this regard is progressively becoming easier through a variety of factors such as the spread of science and technology and the increasing popularity of nuclear power reactors. Equally worrisome is the possibility of nonstate actors, against whom deterrence will not work, acquiring nuclear weapons or materials for use in a dirty bomb. The consequences of such proliferation will greatly increase the security risk to the existing nuclear weapon states. Thus the balance of advantage clearly lies with the nuclear weapon states abandoning nuclear weapons which, far from advancing their security interests, actually impinge adversely upon them. Resolving the international hot spots or achieving balanced arms reductions may never be realized. On the other hand, each day lost in eliminating nuclear weapons means living an additional day under the fear of a nuclear holocaust or incident.

The complete elimination of nuclear weapons can most effectively be achieved through a multilaterally negotiated Nuclear Weapon Convention or Treaty which would, inter alia, prohibit the development, testing, production, stockpiling, transfer or use of nuclear weapons. It would also cater for the destruction of nuclear weapons in the possession of all states and set in place a verification system both to ensure the destruction of all existing nuclear weapon stockpiles and to make certain that no state ever again goes nuclear. As pointed out by Barry Blechman, "A comprehensive agreement for phased verified reductions to nuclear zero is not only feasible but far less risky than the ineffective path we have been on for so long."⁶⁴

Technical Issues. The technical complexities in concluding a Nuclear Weapons Convention or Treaty for the elimination of nuclear weapons are, of course, considerable. But given the will, these can be overcome through negotiations. Some of these technical issues are examined below.

A. What should be the scope of such a Convention? Should it be aimed at merely eliminating nuclear weapons or should it extend to erasing the capabilities to produce them? Should it extend also to delivery vehicles? Should ballistic missile defences need to be prohibited?

> Ironically, the NPT has no definition of nuclear weapons or nuclear explosive devices whose proliferation it was designed to halt! The 1967 Treaty of Tlatelelco, which preceded the NPT, has an acceptable definition which reads as follows: "A nuclear weapon is any device which is capable of releasing energy in an uncontrolled manner and which has a group of characteristics that are appropriate for use for warlike purposes." The adoption of such a definition would limit the scope of the proposed

⁶⁴ Ibid.

agreement to nuclear weapons per se and not extend it to delivery systems land-, sea- or air-based— or ballistic missile systems. It would not impose any obligation to erase the capabilities of the state to produce nuclear weapons.

Any extension of the scope of the proposed convention beyond that contained in the definition of nuclear weapons cited above would make policing much more difficult and expensive. The possibility of cheating could be minimized by effective verification and enforcement regimes.

Ballistic missile defences need not be proscribed. It has been argued that ballistic missile defences are destabilizing to deterrence. This is true in a nuclearized environment. With the elimination of nuclear weapons, there is no deterrence to be destabilized. In fact, such defences could facilitate the elimination of nuclear weapons as they would limit, if not completely nullify, the impact of any nuclear attack launched by a potential cheat with a handful of clandestinely acquired nuclear weapons. Ballistic missiles themselves shorn of nuclear weapons would be reduced to the role of very-long-range artillery.

B. In fixing a timetable for the elimination of nuclear weapons should there be an inter se differentiation between the nuclear armed states in terms of when each eliminates its warheads, as their respective holdings are disparate? How can it be ensured that each of them is not unduly threatened by the

other during the process of elimination?

Since the USA and Russia have holdings several times greater than any of the other nuclear weapon states they must first drastically reduce their stockpiles. Once these are down to about 500 warheads each, then all the nuclear weapon states should be required to go in for proportionate cuts in their respective holdings till they reach zero. In this manner all of these states would reach zero at the same time but the differential in holdings between each of the states would be maintained at current levels. Since all the nuclear armed states would reach zero simultaneously, none should feel overly disadvantaged vis-à-vis the other as it would till the very end retain some deterrent capability.

C. Since the nuclear fuel cycle lends itself to misuse for weaponization, should the right of countries to engage in nuclear fuel cycle activities be restricted? Specifically, should nuclear fuel cycle activity be permitted only under multinational/ international involvement/control?

> This issue assumes considerable importance as the increased salience of nuclear energy, in the context of the challenge of climate change, will inevitably lead to an increasing number of countries to want to acquire mastery over the nuclear fuel cycle. Curbing their right to engage in nuclear fuel cycle activities would be iniquitous as several countries are already exercising this right. One option is to allow all countries to

engage in such activities, provided that this is done with complete transparency and under IAEA safeguards. Another option is that no country should be allowed to independently engage in such activities and these should be conducted under multilateral/ international control and supervision. The basic principle to be applied at all times is that all countries should be treated equally. The rules for whatever option is adopted would need to be specified in the NWC.

D. What should be the standards of verification? How intrusive should verification be? Should there be challenge inspections? Should verification be entrusted to the IAEA or should another entity be set up for this purpose?

> Verification standards and enforcement must be of a very high order. This is essential as all the nuclear armed states would need to be assured not only that no other nuclear armed state is able to retain any of its weapons but also that no other state is able to clandestinely acquire them. highly Accordingly, intrusive verification should be the norm, including challenge inspections as provided for under the Chemical Weapons Convention. Since the IAEA is already operating the safeguards system under the NPT it would be the most appropriate organization to be entrusted with the task of verifying the elimination of nuclear weapons, and ensuring that no further weaponization is undertaken clandestinely.

E. What should be the mechanics of verification?

So far, the focus was on delivery vehicles. Now it will have to be on the dismantlement and elimination of nuclear warheads, the degradation and safe disposal of the fissile material recovered therefrom, and ensuring that there is no clandestine activity aimed at weaponization.

This will be a new area of work for the IAEA, but the problem is not insurmountable. It will be facilitated by the fact that factors of secrecy, which hitherto kept US and Russian inspectors from actually examining nuclear weapons, will no longer apply since all these weapons, and not just a few, will be destined for extinction. In these circumstances, as a first step the nuclear weapons to be eliminated by each country should be tagged, sealed and stored under IAEA control. Thereafter, action to deactivate and destroy them may be undertaken under IAEA control and supervision. The entire process would need declarations by each country of its weapon holdings, annual production of fissile material for weapon purposes, and past production thereof. This would be essential for the IAEA to get a fix not only on the magnitude of its task in each nuclear armed state but also in order to be able to engage in meaningful material accountancy critical to verification.

Several verification technologies would need to be used in order to establish a robust verification regime, as mentioned in Annexure X. Some are

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already in use in existing treaties within the nuclear disarmament and verification regime, some in other international regimes, some developed and demonstrated but not yet implemented in any international regime, and some that need to be developed.⁶⁵

F. Who should pay for verification – the nuclear weapon states or the international community?

In respect of the CTBT, payments for verification are required to be made by the international community as a whole on the ground that prevention of testing is a common good and, therefore, each country should pay on the basis of the UN scale of payment. Under the CWC, however, each country is required to pay for the dismantlement of its own arsenal and the associated inspection costs. Other costs, particularly those of ongoing verification, are met by all the participating states on the basis of a variant of the UN formula. The payment model for verification in respect of the CWC may be the most appropriate one to be adopted for the proposed Convention for the Complete Elimination of Nuclear Weapons.⁶⁶

G. What should be the enforcement mechanism – the UN Security Council, the P9, or a separate entity? Will there be a veto on decisions?

The enforcement mechanism for

sanctions has traditionally been the UN Security Council. Its enforcement capability has been compromised as political considerations have, more often than not, been the major determining factors of its decisions than merit. In rather these circumstances, it may be more appropriate to have the nine nuclear armed states to be the enforcement mechanism authorized to take decisions on the basis of a majority ruling.

H. How will enforcement actually be undertaken? In what manner will violations be penalized? In order to take the politics out of enforcement should there be automatic enforcement or should ambiguity be maintained?

> One of the major drawbacks under the current system in addressing NPT violations has been the inability to deal with defaulters in an even-handed manner. It is commonly perceived that this inequity is the result of political factors. Thus, some argue that countries like Egypt and South Korea have got off relatively lightly for having violated the IAEA safeguards obligations, while those like Iran have been treated too harshly. Moreover, notorious proliferators like China and Pakistan have got off scot-free. Accordingly, it would be germane in advance to grade different types of violations and stipulate the type of sanctions applicable to each case. This

⁶⁵ See Securing our Survival: the Case for a Nuclear Weapons Convention, at http://www.icanw.org/files/SoS/SoS_section4.pdf, p. 168.

⁶⁶ Perkovich and Acton, "Abolishing Nuclear Weapons".

would minimize the politics in the application of sanctions and introduce an element of automaticity and transparency in imposing sanctions, which would make for a far more effective and fair enforcement regime.

I. Should there or should there not be an internationally controlled nuclear deterrent or arsenal and in what manner should it function?

While the elimination of national nuclear weapon arsenals must be undertaken, it is important that a few nuclear weapons remain available under international control to deter use or threat of use of a nuclear weapon which a state may somehow have clandestinely acquired. Perhaps, ten to twenty nuclear bombs each may be kept for this purpose in the USA and Russia under international control. Such an international stockpile of nuclear weapons would also come in handy for any emergent use, such as addressing an imminent meteor strike to the planet.

J. Should there be a withdrawal clause?

A withdrawal clause weakens any international regime. Accordingly, for as critical an agreement as an NWC, there should be no such clause. This alone would ensure that the elimination of nuclear weapons is irreversible.

These are but a few of the technical issues which present themselves while contemplating the conclusion of a Convention on the Complete Elimination of Nuclear Weapons (CCENW). Some argue that these issues should first be thoroughly debated amongst the parties concerned before commencing negotiations in order to find appropriate solutions. It is felt however that these can best be resolved in the CD in the process of negotiating the CCENW. Only through such negotiations will solutions to knotty issues emerge on the basis as much of technical feasibilities as of political give and take.

No one can underestimate the complexity of these negotiations, which will have to grapple not merely with the extremely difficult technical issues involved but also with the establishment of a new nonproliferation regime, necessary in a nuclear weapon free world. The latter will have to be put in place as the current NPT regime, based upon nuclear haves and have-nots, would be an anachronism in a world devoid of nuclear weapons. It would have to be much more equitable and designed to keep the world free of nuclear weapons, barring those under international control, and in which the same rules would apply uniformly to all states whether in terms of processing conditionalities, fuel inspections, or sanctions. Indeed, the focus of many of the protagonists of the graduated approach nuclear to disarmament on the NPT regime is misplaced, because in the new world order it would simply have no place and, therefore, if one gets into the negotiation on the elimination of nuclear weapons many of the problems facing the NPT regime would be finessed.

It is to be expected that the proposed negotiations in the CD will be difficult, stormy and protracted, but they should be able to secure the elimination of nuclear weapons within a time-bound framework.

Route to the Elimination of Nuclear Weapons

It is entirely possible for these negotiations to last three to four years and arrive at an agreement calling for the elimination of nuclear weapons spread over a further five to ten years. It is essential, however, as stated earlier, that the agreement or convention arrived at is multilaterally negotiated, universal, non-discriminatory and internationally and effectively verifiable.

Simultaneously with the commencement of negotiations on the proposed convention, which are expected to be long drawn out, it would be desirable to take the following actions in parallel:

- The US and Russia should agree to enter into bilateral, legally binding and verifiable agreements for reductions in their nuclear arsenals to levels of about 500 to 1000 warheads.
- The nuclear armed states should dealert their nuclear weapons to prevent their unintentional or accidental use.

- A UN resolution should be adopted declaring that the use of nuclear weapons would be a crime against humanity.
- All nuclear armed states should reduce the salience of nuclear weapons in their respective doctrines and declare that they would not use nuclear weapons against non-nuclear weapon states under any circumstances and in any case would not be the first to use nuclear weapons. Their sole purpose pending their elimination would be to deter nuclear attack.
- The CTBT should be operationalized by requiring all countries to sign and ratify it.
- Negotiations on the FMCT should be started forthwith in order to stop the production of all fissile material for weapons production.

POLICY CHOICES FOR INDIA

he groundswell of opinion in favour of a nuclear weapon free world blends well with India's position on the issue, both traditional and current. India has always been a staunch advocate of the elimination of nuclear weapons. Over two decades ago, Prime Minister Rajiv Gandhi proposed an Action Plan (Annexure XI) to the Third Special Session on Disarmament for a nuclear weapon free world to be achieved by 2010. India's position on this issue remains the same. Thus, India's Nuclear Doctrine, as enunciated in January 2003 (Annexure XII), pledges India's "continued commitment to the goal of a nuclear weapon free world through global, verifiable and nondiscriminatory nuclear disarmament." This approach has since been reiterated on several occasions.

Most recently, India's approach has been comprehensively articulated in the statement made in the UNGA First Committee by its Permanent Representative to the CD on 10 October 2008 (Annexure XIII). In the aforesaid statement India, inter alia, called upon the nuclear weapon states to negotiate a nofirst-use agreement, an agreement for nonuse of nuclear weapons against non-nuclear weapon states, to reduce the salience of nuclear weapons in their security doctrines, and to adopt nuclear risk reduction measures. Most important of all, India urged the negotiation of a nuclear weapons convention "leading to the global, nondiscriminatory and verifiable elimination of nuclear weapons with a specified timeframe". In these circumstances, it is not surprising that George Perkovich and James M. Acton have suggested, in the backdrop of this history that India is "the most willing of all nuclear-armed states to participate in the global elimination of nuclear arsenals."⁶⁷

There is sound logic in India's commitment to a nuclear weapon free world. India's security would be much better served in an environment where there are only conventional weapons. It would not only obviate the possibility of a global nuclear holocaust, a regional nuclear exchange, or a terrorist attack with nuclear weapons or materials, but would also deprive Pakistan of a nuclear shield behind which to engage in terrorist actions against India. Some have argued that nuclear weapons provide India an equalizer against China. This argument may have been valid if India had hostile intentions vis-à-vis China, much as Pakistan has vis-à-vis India. Since this is not the case, India will not need nuclear weapons if all nuclear armed countries, including China, do not have them. For India, its conventional forces are sufficient to keep China's possible hostile intentions in check. India's need for nuclear weapons has arisen only because China and Pakistan had them. India's use for nuclear weapons, as reiterated in its nuclear doctrine, is purely for deterrence and not for first use.

Therefore, it makes sense for India, even as a nuclear armed state, to lead the current movement for the elimination of nuclear

⁶⁷ Ibid.

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weapons. India's traditional advocacy of nuclear disarmament, its security interests, and the international acclaim that is there to be garnered, demand that India plays a proactive role in promoting the cause of nuclear disarmament and takes a leadership role in this regard.

Since the surest route to the elimination of nuclear weapons is through an NWC, as detailed in the previous chapter, India should continue to press for the immediate commencement of negotiations on it in the CD, which it has for long been urging. In so doing, India should emphasize that such a direct approach is far superior to the incremental approach being commonly touted by most other advocates of a nuclear weapon free world. Not only will any forward movement achieved under an incremental approach be susceptible to reversal but, above all, the slow progress implicit in such an approach will expose the international community for many more decades to the nuclear menace.

India should suggest that simultaneously with the negotiation of the NWC aimed at the elimination of nuclear weapons within a time-bound framework and setting in place a robust verification and control system to supplant the NPT regime, a number of other steps be taken, as detailed in the previous chapter. These steps are essential to minimize the danger of use of nuclear weapons pending their elimination, which will take at least another five to ten years in a best-case scenario, following the commencement of the proposed NWC negotiations.

India does not appear to have a problem with any of the measures detailed in the previous chapter barring, perhaps, signing and ratifying the CTBT. India's hesitancy on this issue was signalled by former Foreign Secretary Shyam Saran in an address at the Brookings Institution in March 2009, where he reportedly stated that India would not sign the CTBT unless the world moved "categorically towards nuclear disarmament in a credible timeframe".

It may be pointed out that the CTBT has been signed by 180 countries, of whom 148 have ratified it, including three nuclear weapon states, notably France, Russia and the UK. In order to come into force the treaty requires that the 44 states having nuclear technological capabilities, prevailing at the time of the finalization of the treaty, must sign and ratify it. Of these, North Korea, India and Pakistan are yet to sign the treaty. China, Egypt, Indonesia, Iran, Israel and the USA, having signed it, have yet to ratify it. The US, though the major player, has so far been unable to get Senate approval for ratification. But President Obama, putting his full weight behind ratification, may succeed. In the event, India's opposition to the CTBT could become a stumbling-block to operationalizing it, as most of the other hold-outs are likely to fall in line with the US.

It may be recalled that India's reservations on the CTBT began to be expressed from the autumn of 1995 and peaked in the period leading up to Pokhran II in May 1998. The sharp change in the Indian position was attributed at the time to the loosening link between the process of nuclear disarmament and the CTBT. Shyam Saran's assertion, cited above, merely echoes this thought process. The basic flaw

in this line of argument is that India had not, ab initio, firmly predicated its support to the CTBT on any definitive progress on nuclear disarmament. Thus the UNGA resolution of December 1993 calling for negotiations on the CTBT in the CD, which was co-sponsored by India, makes no such definitive linkage. Moreover, right up till the autumn of 1995 India remained an active and constructive participant in the negotiations on the CTBT in the CD. It is possible therefore, that the real reason that led to the change in its position was that India wished to retain its testing option. This is corroborated by Prime Minister Atal Bihari Vajpayee's assertion at the 1998 UNGA session that "The treaty, as it emerged, was not accepted by India on grounds of national security."68

In any case, post-Pokhran II there has been a sharp diminution in India's visceral opposition to the CTBT. Indeed, Prime Minister Vajpayee stated categorically at the 1998 UNGA session that India was prepared to bring the discussions that it was having with key interlocutors on, inter alia the CTBT, "to a successful conclusion, so that the entry into force of the CTBT is not delayed beyond September 1999". He added: "We expect that other countries, as indicated in Article XIV of the CTBT, will adhere to this Treaty without conditions".69 Moreover, since Pokhran II India has not shown signs of wanting to test. This is borne out by its repeated commitments to a moratorium on testing and its signing the nuclear deal rules out testing.

logical for India to stand in the way of the finalization of CTBT. Indeed, since it cannot itself test, it should welcome a Treaty which forecloses the testing option for other countries as well. Moreover, by continuing to oppose the CTBT or being seen as lukewarm in its support, India would needlessly sully its disarmament credentials. It has sometimes been argued that India must keep open its testing option. To ensure that its deterrence remains credible, India may need more tests. In response, two points may be made. First, because of Indo-US civilian nuclear deal, testing may not be a desirable proposition. Second, while a few questions have been raised about India's hydrogen bomb capability, the government ha refuted this view. In any case, it must be emphasised that India's atomic bomb capability has at no stage been questioned. In other words, India's deterrent capabilities are in place and testing is no longer critical for the country for this purpose. India will, of course, be constrained by not being able to bring about improvements in its design, etc. of its warheads as it cannot test. This approach however would not be consistent with a policy of nuclear disarmament.

As regards the FMCT, India should have no objection to working along with other like-minded countries on the issue. India first proposed the FMCT in 1954 and cosponsored the resolution in its support in December 1993. India is also committed by the nuclear deal to work in support of it. India must, of course, ensure that the FMCT should be strictly as per the mandate

In these circumstances, it would not seem

⁶⁸ Address of Prime Minister Vajpayee at UN General Assembly, 24 September 1998, at <http://www.indianembassy.org/ special/cabinet/Primeminister/pmspeech%28UN%29.htm>.

⁶⁹ Ibid.

accorded to the CD in this regard. Specifically, the treaty should exclude "past production", which is being insisted upon by countries belonging to the Non-Aligned Movement, led by Pakistan, and that it should be "internationally and effectively verifiable". The treaty should also not debar production of fissile material for the propulsion of India's nuclear submarines.

India also needs to note that the United States' adherence to the mandate under which the FMCT is to be negotiated has been suspect for some time. The draft FMCT tabled by the US in the CD does not include any verification provisions: this is because the US lacks confidence in the possibility of monitoring compliance. This goes against the considered view that verification, though it would be challenging, is technically feasible. The situation was muddied further by the assertion of the US Acting Assistant Secretary on 18 May 2006, while tabling the text of the FMCT, indicating that verification would rest on national technical means. To quote:

Consistent with our conclusions regarding the verifiability of an FMCT, which Ambassador Jackie Sanders announced to the Conference in July 2004, our text includes no provisions designed to provide verification. This does not mean that compliance with the treaty would be unverified, but rather that the primary responsibility for verification would rest with the parties using their own national means and methods – or, said another way, through the exercise of the sovereign responsibilities of the states parties to monitor compliance.⁷⁰

Fortunately, the Obama Administration has begun to talk of a verifiable FMCT. It is the

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hope of the international community that this means an internationally and effectively verifiable treaty as with a treaty verifiable through national technical means the USA would call all the shots on verification by virtue of having the most advanced national technical means. Moreover, it would rob the FMCT of all transparency and reduce it to a US-operated enterprise. India must, therefore, insist that the FMCT to be negotiated should be strictly as per the originally approved mandate of 1993.

The case for adopting a direct route to a nuclear weapon free world through the initiation of early negotiations for a NWC towards this end may not be acceptable to the nuclear weapon states, but India has nothing to lose by championing it. Indeed, in so doing it will have the diplomatic advantage of seizing the moral high ground and getting the support of the majority of the international community. In this context, it is germane to recall that in December 2006 at the UNGA 125 governments – including those of China, India and Pakistan – called upon states to immediately fulfil their nuclear disarmament obligations "by commencing multilateral negotiations leading to an early conclusion of a nuclear weapons convention prohibiting the development, production, testing, deployment, stockpiling, transfer, threat or use of nuclear weapons and providing for their elimination" (Resolution 61/83) (Annexure XIV). Indeed, a draft NWC was already crafted way back in 1997 in response to the ICJ Advisory Opinion and was updated in

⁷⁰ Stephen G. Rademaker, "Rising to the Challenge of Effective Multi-Lateralism", at <http://www.fissilematerials.org/ipfm/site_down/rad06.pdf>.

2007 by an international consortium of lawyers, scientists and physicians with inputs from many disarmament experts. Significantly, the ICNND has acknowledged that it enjoys considerable support from civil society groups around the world as well as many non-nuclear weapon states.

The nuclear weapon states will, in all probability, settle for the more tardy stepby-step approach. In keeping with such an approach one is likely to witness, amidst some bilaterally negotiated US and Russian reductions in their nuclear arsenals, calls for doctrinal changes designed to reduce the salience of nuclear weapons, efforts to address political hot spots around the world, adoption of arms control measures like the CTBT, FMCT, etc., a plethora of measures designed to tighten the NPT regime with a view to making horizontal proliferation more difficult and steps aimed at preventing non-state actors acquiring access to nuclear weapons.

While remaining critical of this piecemeal approach on the grounds that it would not lead to a nuclear weapon free world, India should react to each move on a case by case basis so that India is not viewed as being obstructionist. The litmus test for supporting any move should depend on whether it is in India's interest. Accordingly, it would need to be ensured that the moves proposed do not in any way differentiate between India and the nuclear weapon states.

India should, thus, flatly resist calls for the universalization of the NPT as it is an unequal treaty and will perpetuate the possession of nuclear weapons with the nuclear weapon states, with all the attendant dangers of this phenomenon. Under the current non-proliferation regime, India is not likely to be formally acknowledged as a nuclear weapon state. It should be India's endeavour to promote an alternative and more equitable nonproliferation regime so that it is not treated in a manner inferior to other nuclear weapon states. India may, similarly, oppose efforts at the multilateralization of the nuclear fuel cycle unless it is embedded in an NWC or equally applicable to all. India may also resist all moves urging it to observe a moratorium on fissile material production.

On the other hand, India should have no hesitation in signing the CTBT provided all others required to come on board for its operationalisation do so. It should also be ready to participate in the FMCT negotiations on the lines detailed above. Such moves should be made irrespective of whether or not these arms control arrangements are part of a comprehensive programme of nuclear disarmament. India should also, in principle, have no difficulty in supporting measures aimed at preventing non-state actors securing access to nuclear weapons and materials and at curbing the trafficking in them. Thus, it should readily cooperate in the USsponsored CSI, as it would not only prevent movement of such materials from and through India to the US, but, by upgrading its own capabilities, would help in preventing the illicit ingress of all manner of prohibited materials into India.

ANNEXURES

COUNTRY	STRATEGIC	NON-	OPERATIONAL	TOTAL
		STRATEGIC		INVENTORY
Russia	2790	2050 ^a	4840	13,000 ^b
US	2200	500 ^c	2700 ^d	9400 ^e
France	300	n.a.	~300	300 ^f
China	180	?	~180	240 ^g
UK	160	n.a.	<160	185 ^h
Israel	80	n.a.	n.a.	80 ⁱ
Pakistan	60	n.a.	n.a.	60 ^{<i>i</i>}
India	60	n.a.	n.a.	60 ^{<i>i</i>}
North Korea	<10	n.a.	n.a.	<10 ^j
Total ^k	5850	2550	8190	23,335

STATUS OF WORLD NUCLEAR FORCES 2009

a. Russia's total inventory of non-strategic warheads is approximately 5390 warheads, down from 15,000 in 1991.

- b. The estimate for the size and composition of the total Russian inventory comes with considerable uncertainty but is based on Cold War levels, subsequent dismantlement rates, and official Russian statements. Perhaps as many as a quarter (~3000) of the weapons listed may be awaiting dismantlement.
- c. Approximately 200, probably including some inactive warheads, are deployed in Europe.
- d. An additional 2500 warheads are spares and in reserve to increase the operational force if necessary but are not counted as operational.
- e. In addition to the 5200 warheads in the DOD stockpile, approximately 4200 retired warheads are awaiting dismantlement. In addition, more than 12,000 plutonium cores (pits) and some 5000 Canned Assemblies (secondaries) are in storage.
- f. France is thought to have a small inventory of spare warheads but no reserve like the United States and Russia. An additional reduction announced by President Sarkozy in March 2008 will reduce the inventory to slightly less than 300 warheads in 2009.
- g. Many "strategic" warheads are for regional use. The status of a Chinese non-strategic nuclear

arsenal is uncertain. Some deployed warheads may not be fully operational. Additional warheads are in storage, for a total stockpile of approximately 240 warheads.

- h. Only 50 missiles are left, for a maximum of 150 warheads. "Less than 160" warheads are said to be "operationally available," but a small number of spares probably exist too. Forty-eight missiles are needed to arm three SSBNs with a maximum of 144 warheads. One submarine with "up to 48 warheads" is on patrol at any given time. In addition to the operationally available warheads, Britain probably has a small inactive reserve.
- i. All warheads of the four lesser nuclear powers are considered strategic. Only some of these may be operational.
- j. On October 8, 2006, North Korea announced it had conducted a nuclear test. There is no publicly available evidence that North Korea has operationalized its nuclear weapons capability.
- k. Numbers may not add up due to rounding and uncertainty about the operational status of the four lesser nuclear weapons states and the uncertainty about the size of the total inventories of three of the five initial nuclear powers.

Source: <http://www.fas.org/programs/ssp/nukes/ nuclearweapons/nukestatus.html>

TEXT OF THE NUCLEAR NON-PROLIFERATION TREATY

The States concluding this Treaty, hereinafter referred to as the Parties to the Treaty,

Considering the devastation that would be visited upon all mankind by a nuclear war and the consequent need to make every effort to avert the danger of such a war and to take measures to safeguard the security of peoples,

Believing that the proliferation of nuclear weapons would seriously enhance the danger of nuclear war,

In conformity with resolutions of the United Nations General Assembly calling for the conclusion of an agreement on the prevention of wider dissemination of nuclear weapons,

Undertaking to co-operate in facilitating the application of International Atomic Energy Agency safeguards on peaceful nuclear activities,

Expressing their support for research, development and other efforts to further the application, within the framework of the International Atomic Energy Agency safeguards system, of the principle of safeguarding effectively the flow of source and special fissionable materials by use of instruments and other techniques at certain strategic points,

Affirming the principle that the benefits of peaceful applications of nuclear technology, including any technological by-products which may be derived by nuclear-weapon States from the development of nuclear explosive devices, should be available for peaceful purposes to all Parties to the Treaty, whether nuclearweapon or non-nuclear-weapon States,

Convinced that, in furtherance of this principle,

all Parties to the Treaty are entitled to participate in the fullest possible exchange of scientific information for, and to contribute alone or in co-operation with other States to, the further development of the applications of atomic energy for peaceful purposes,

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament,

Urging the co-operation of all States in the attainment of this objective,

Recalling the determination expressed by the Parties to the 1963 Treaty banning nuclear weapons tests in the atmosphere, in outer space and under water in its Preamble to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to this end,

Desiring to further the easing of international tension and the strengthening of trust between States in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery pursuant to a Treaty on general and complete disarmament under strict and effective international control,

Recalling that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, or in any other manner inconsistent with the Purposes of the United Nations, and that the

Annexure II

establishment and maintenance of international peace and security are to be promoted with the least diversion for armaments of the world's human and economic resources,

Have agreed as follows:

Article I

Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

Article II

Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

Article III

1. Each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system, for the exclusive purpose of verification of the fulfilment of its obligations assumed under

this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Procedures for the safeguards required by this Article shall be followed with respect to source or special fissionable material whether it is being produced, processed or used in any principal nuclear facility or is outside any such facility. The safeguards required by this Article shall be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of such State, under its jurisdiction, or carried out under its control anywhere.

- 2. Each State Party to the Treaty undertakes not to provide: (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any nonnuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by this Article.
- 3. The safeguards required by this Article shall be implemented in a manner designed to comply with Article IV of this Treaty, and to avoid hampering the economic or technological development of the Parties or international co-operation in the field of peaceful nuclear activities, including the international exchange of nuclear material and equipment for the processing, use or production of nuclear material for peaceful purposes in accordance with the provisions of this Article and the principle of safeguarding set forth in the Preamble of the Treaty.

4. Non-nuclear-weapon States Party to the Treaty shall conclude agreements with the International Atomic Energy Agency to meet the requirements of this Article either individually or together with other States in accordance with the Statute of the International Atomic Energy Agency. Negotiation of such agreements shall commence within 180 days from the original entry into force of this Treaty. For States depositing their instruments of ratification or accession after the 180-day period, negotiation of such agreements shall commence not later than the date of such deposit. Such agreements shall enter into force not later than eighteen months after the date of initiation of negotiations.

Article IV

- 1. Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty.
- 2. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so shall also cooperate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world.

Article V

Each Party to the Treaty undertakes to take appropriate measures to ensure that, in accordance with this Treaty, under appropriate international observation and through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions will be made available to nonnuclear-weapon States Party to the Treaty on a non-discriminatory basis and that the charge to such Parties for the explosive devices used will be as low as possible and exclude any charge for research and development. Non-nuclear-weapon States Party to the Treaty shall be able to obtain such benefits, pursuant to a special international agreement or agreements, through an appropriate international body with adequate representation of non-nuclear-weapon States. Negotiations on this subject shall commence as soon as possible after the Treaty enters into force. Non-nuclear-weapon States Party to the Treaty so desiring may also obtain such benefits pursuant to bilateral agreements.

Article VI

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

Article VII

Nothing in this Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

Annexure II

Article VIII

- 1. Any Party to the Treaty may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Depositary Governments which shall circulate it to all Parties to the Treaty. Thereupon, if requested to do so by one-third or more of the Parties to the Treaty, the Depositary Governments shall convene a conference, to which they shall invite all the Parties to the Treaty, to consider such an amendment.
- 2. Any amendment to this Treaty must be approved by a majority of the votes of all the Parties to the Treaty, including the votes of all nuclear-weapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties, including the instruments of ratification of all nuclearweapon States Party to the Treaty and all other Parties which, on the date the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment.
- Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the

operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realised. At intervals of five years thereafter, a majority of the Parties to the Treaty may obtain, by submitting a proposal to this effect to the Depositary Governments, the convening of further conferences with the same objective of reviewing the operation of the Treaty.

Article IX

- This Treaty shall be open to all States for signature. Any State which does not sign the Treaty before its entry into force in accordance with paragraph 3 of this Article may accede to it at any time.
- 2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of the United Kingdom of Great Britain and Northern Ireland, the Union of Soviet Socialist Republics and the United States of America, which are hereby designated the Depositary Governments.
- 3. This Treaty shall enter into force after its ratification by the States, the Governments of which are designated Depositaries of the Treaty, and forty other States signatory to this Treaty and the deposit of their instruments ratification. For the purposes of this Treaty, a nuclear-weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967.
- For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date

of the deposit of their instruments of ratification or accession.

- 5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession, the date of the entry into force of this Treaty, and the date of receipt of any requests for convening a conference or other notices.
- 6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article X

1. Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

2. Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of the Parties to the Treaty.¹

Article XI

This Treaty, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the undersigned, duly authorized, have signed this Treaty.

DONE in triplicate, at the cities of London, Moscow and Washington, the first day of July, one thousand nine hundred and sixty-eight.

Source: <http://disarmament.un.org/wmd/npt/ npttext.html> '13 STEPS' - NPT 2000 REVIEW CONFERENCE OF THE PARTIES TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS, FINAL DOCUMENT, ARTICLE VI AND PREAMBULAR PARAGRAPHS 8 TO 12, SECTION 15

The Conference agrees on the following practical steps for the systematic and progressive efforts to implement Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and paragraphs 3 and 4(c) of the 1995 Decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament":

- 1. The importance and urgency of signatures and ratifications, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty.
- 2. A moratorium on nuclear-weapon-test explosions or any other nuclear explosions pending entry into force of that Treaty.
- 3. The necessity of negotiations in the Conference on Disarmament on a nondiscriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices in accordance with the statement of the Special Coordinator in 1995 and the mandate therein, contained taking into consideration both nuclear disarmament and nuclear non-proliferation objectives. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate commencement of negotiations on such a treaty with a view to their conclusion within five years.

- 4. The necessity of establishing in the Conference on Disarmament an appropriate subsidiary body with a mandate to deal with nuclear disarmament. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate establishment of such a body.
- 5. The principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures.
- 6. An unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament to which all States parties are committed under Article VI.
- 7. The early entry into force and full implementation of START II and the conclusion of START III as soon as possible while preserving and strengthening the ABM Treaty as a cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with its provisions.
- The completion and implementation of the Trilateral Initiative between the United States of America, Russian Federation and the International Atomic Energy Agency.
- 9. Steps by all the nuclear-weapon States leading to nuclear disarmament in a way

that promotes international stability, and based on the principle of undiminished security for all:

- a. Further efforts by the nuclearweapon States to reduce their nuclear arsenals unilaterally
- b. Increased transparency by the nuclear-weapon States with regard to the nuclear weapons capabilities and the implementation of agreements pursuant to Article VI and as a voluntary confidence-building measure to support further progress on nuclear disarmament
- c. The further reduction of nonstrategic nuclear weapons, based on unilateral initiatives and as an integral part of the nuclear arms reduction and disarmament process
- d. Concrete agreed measures to further reduce the operational status of nuclear weapons systems
- e. A diminishing role for nuclear weapons in security policies to minimize the risk that these weapons ever be used and to facilitate the process of their total elimination
- f. The engagement as soon as appropriate of all the nuclearweapon States in the process leading to the total elimination of their nuclear weapons

- 10. Arrangements by all nuclear-weapon States to place, as soon as practicable, fissile material designated by each of them as no longer required for military purposes under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside of military programmes.
- 11. Reaffirmation that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control.
- 12. Regular reports, within the framework of the NPT strengthened review process, by all States parties on the implementation of Article VI and paragraph 4 (c) of the 1995 Decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament", and recalling the Advisory Opinion of the International Court of Justice of 8 July 1996.
- 13. The further development of the verification capabilities that will be required to provide assurance of compliance with nuclear disarmament agreements for the achievement and maintenance of a nuclear-weapon-free world.

Source: http://www.armscontrol.org/act/2000_06/docjun

UN SECURITY COUNCIL RESOLUTION 255, 'QUESTION RELATING TO MEASURES TO SAFEGUARD NON-NUCLEAR WEAPON STATES PARTIES TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPON', 19 JUNE 1968

The Security Council,

Noting with appreciation the desire of a large number of States to subscribe to the Treaty on the Non-Proliferation of Nuclear Weapons, and thereby to undertake not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly or indirectly, not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices;

Taking into consideration the concern of certain of these States that, in conjunction with their adherence to the Treaty on the Non-Proliferation of Nuclear Weapons, appropriate measures be undertaken to safeguard their security,

Bearing in mind that any aggression accompanied by the use of nuclear weapons would endanger the peace and security of all States,

1. *Recognises* that aggression with nuclear weapons or the threat of such aggression

against the non-nuclear weapon State would create a situation in which the Security Council, and above all its nuclear weapon State permanent members, would have to act immediately in accordance with their obligations under the United Nations Charter;

- 2. Welcomes the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any nonnuclear weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act or an object of a threat of aggression in which nuclear weapons are used;
- 3. *Reaffirms* in particular the inherent right, recognized under Article 51 of the Charter, of individual and collective selfdefence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.

Source: http://daccess-dds-ny.un.org/doc/ RESOLUTION/GEN/NR0/248/36/IMG/ NR024836.pdf?OpenElement

UN SECURITY COUNCIL RESOLUTION 984

Adopted by the Security Council at its 3514th meeting, on 11 April 1995

The Security Council,

Convinced that every effort must be made to avoid and avert the danger of nuclear war, to prevent the spread of nuclear weapons, to facilitate international cooperation in the peaceful uses of nuclear energy with particular emphasis on the needs of developing countries, and reaffirming the crucial importance of the Treaty on the Non-Proliferation of Nuclear Weapons to these efforts,

Recognizing the legitimate interest of nonnuclear-weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to receive security assurances,

Welcoming the fact that more than 170 States have become Parties to the Treaty on the Non-Proliferation of Nuclear Weapons and stressing the desirability of universal adherence to it,

Reaffirming the need for all States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to comply fully with all their obligations,

Taking into consideration the legitimate concern of non- nuclear-weapon States that, in conjunction with their adherence to the Treaty on the Non-Proliferation of Nuclear Weapons, further appropriate measures be undertaken to safeguard their security,

Considering that the present resolution constitutes a step in this direction,

Considering further that, in accordance with the relevant provisions of the Charter of the United Nations, any aggression with the use of nuclear weapons would endanger international peace and security,

- Takes note with appreciation of the statements made by each of the nuclearweapon States (S/1995/261, S/1995/262, S/1995/263, S/1995/264, S/1995/265), in which they give security assurances against the use of nuclear weapons to non- nuclear-weapon States that are Parties to the Treaty on the Non-Proliferation of Nuclear Weapons;
- 2. Recognizes the legitimate interest of nonnuclear- weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to receive assurances that the Security Council, and above all its nuclear-weapon State permanent members, will act immediately in accordance with the relevant provisions of the Charter of the United Nations, in the event that such States are the victim of an act of, or object of a threat of, aggression in which nuclear weapons are used;
- 3. Recognizes further that, in case of aggression with nuclear weapons or the threat of such aggression against a non-nuclear-weapon State Party to the Treaty on the Non- Proliferation of Nuclear Weapons, any State may bring the matter immediately to the attention of the Security Council to enable the Council to take urgent action to provide assistance, in accordance with the Charter, to the State victim of an act of, or object of a threat of, such aggression; and recognizes also that the nuclear-weapon State

permanent members of the Security Council will bring the matter immediately to the attention of the Council and seek Council action to provide, in accordance with the Charter, the necessary assistance to the State victim;

- 4. Notes the means available to it for assisting such a non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons, including an investigation into the situation and appropriate measures to settle the dispute and restore international peace and security;
- 5. Invites Member States, individually or collectively, if any non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons is a victim of an act of aggression with nuclear weapons, to take appropriate measures in response to a request from the victim for technical, medical, scientific or humanitarian assistance, and affirms its readiness to consider what measures are needed in this regard in the event of such an act of aggression;
- 6. Expresses its intention to recommend appropriate procedures, in response to any request from a non-nuclear- weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is the victim of such an act of aggression, regarding compensation under international law from the aggressor for

loss, damage or injury sustained as a result of the aggression;

- 7. Welcomes the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear-weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act of, or an object of a threat of, aggression in which nuclear weapons are used;
- 8. Urges all States, as provided for in Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons, to pursue negotiations in good faith on effective measures relating to nuclear disarmament and on a treaty on general and complete disarmament under strict and effective international control which remains a universal goal;
- 9. Reaffirms the inherent right, recognized under Article 51 of the Charter, of individual and collective self- defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security;
- 10. Underlines that the issues raised in this resolution remain of continuing concern to the Council.

Source: <http://www1.umn.edu/humanrts/ resolutions/SC95/984SC95.html>.

UN SECURITY COUNCIL RESOLUTION 1540

Adopted by the Security Council at its 4956th meeting on 28 April 2004

The Security Council,

Affirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery,* constitutes a threat to international peace and security,

Reaffirming, in this context, the Statement of its President adopted at the Council's meeting at the level of Heads of State and Government on 31 January 1992 (S/23500), including the need for all Member States to fulfil their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction,

Recalling also that the Statement underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability,

Affirming its resolve to take appropriate and effective actions against any threat to international peace and security caused by the proliferation of nuclear, chemical and biological weapons and their means of delivery, in conformity with its primary responsibilities, as provided for in the United Nations Charter,

Affirming its support for the multilateral treaties whose aim is to eliminate or prevent the proliferation of nuclear, chemical or biological weapons and the importance for all States parties to these treaties to implement them fully in order to promote international stability,

elcoming efforts in this context by multilateral arrangements which contribute to nonproliferation, Affirming that prevention of proliferation of nuclear, chemical and biological weapons should not hamper international cooperation in materials, equipment and technology for peaceful purposes while goals of peaceful utilization should not be used as a cover for proliferation,

Gravely concerned by the threat of terrorism and the risk that non-State actors* such as those identified in the United Nations list established and maintained by the Committee established under Security Council resolution 1267 and those to whom resolution 1373 applies, may acquire, develop, traffic in or use nuclear, chemical and biological weapons and their means of delivery,

Gravely concerned by the threat of illicit trafficking in nuclear, chemical, or biological weapons and their means of delivery, and related materials,* which adds a new dimension to the issue of proliferation of such weapons and also poses a threat to international peace and security,

Recognizing the need to enhance coordination of efforts on national, subregional, regional and international levels in order to strengthen a global response to this serious challenge and threat to international security,

Recognizing that most States have undertaken binding legal obligations under treaties to which they are parties, or have made other commitments aimed at preventing the proliferation of nuclear, chemical or biological weapons, and have taken effective measures to account for, secure and physically protect sensitive materials, such as those required by the Convention on the Physical Protection of

Annexure VI

Nuclear Materials and those recommended by the IAEA Code of Conduct on the Safety and Security of Radioactive Sources,

Recognizing further the urgent need for all States to take additional effective measures to prevent the proliferation of nuclear, chemical or biological weapons and their means of delivery,

Encouraging all Member States to implement fully the disarmament treaties and agreements to which they are party,

Reaffirming the need to combat by all means, in accordance with the Charter of the United Nations, threats to international peace and security caused by terrorist acts,

Determined to facilitate henceforth an effective response to global threats in the area of non-proliferation,

Acting under Chapter VII of the Charter of the United Nations,

- 1. Decides that all States shall refrain from providing any form of support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery;
- 2. Decides also that all States, in accordance with their national procedures, shall adopt and enforce appropriate effective laws which prohibit any non-State actor to manufacture, acquire, possess, develop, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery, in particular for terrorist purposes, as well as attempts to engage in any of the foregoing activities, participate in them as an accomplice, assist or finance them;

- 3. Decides also that all States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials and to this end shall:
 - a) Develop and maintain appropriate effective measures to account for and secure such items in production, use, storage or transport;
 - b) Develop and maintain appropriate effective physical protection measures;
 - c) Develop and maintain appropriate effective border controls and law enforcement efforts to detect, deter, prevent and combat, including through international cooperation when necessary, the illicit trafficking and brokering in such items in accordance with their national legal authorities and legislation and consistent with international law;
 - d) Establish, develop, review and maintain appropriate effective national export and trans-shipment controls over such items, including appropriate laws and regulations to control export, transit, trans-shipment and re-export and controls on providing funds and services related to such export and trans-shipment such as financing, and transporting that would contribute to proliferation, as well as establishing end-user controls; and establishing and enforcing appropriate criminal or civil penalties for violations of such export control laws and regulations;

- 4. Decides to establish, in accordance with rule 28 of its provisional rules of procedure, for a period of no longer than two years, a Committee of the Security Council, consisting of all members of the Council, which will, calling as appropriate on other expertise, report to the Security Council for its examination, on the implementation of this resolution, and to this end calls upon States to present a first report no later than six months from the adoption of this resolution to the Committee on steps they have taken or intend to take to implement this resolution;
- 5. Decides that none of the obligations set forth in this resolution shall be interpreted so as to conflict with or alter the rights and obligations of State Parties to the Nuclear Non-Proliferation Treaty, the Chemical Weapons Convention and the Biological and Toxin Weapons Convention or alter the responsibilities of the International Atomic Energy Agency or the Organization for the Prohibition of Chemical Weapons;
- 6. Recognizes the utility in implementing this resolution of effective national control lists and calls upon all Member States, when necessary, to pursue at the earliest opportunity the development of such lists;
- 7. Recognizes that some States may require assistance in implementing the provisions of this resolution within their territories and invites States in a position to do so to offer assistance as appropriate in response to specific requests to the States lacking the legal and regulatory infrastructure, implementation experience and/or

resources for fulfilling the above provisions;

- 8. Calls upon all States:
 - a) To promote the universal adoption and full implementation, and, where necessary, strengthening of multilateral treaties to which they are parties, whose aim is to prevent the proliferation of nuclear, biological or chemical weapons;
 - b) To adopt national rules and regulations, where it has not yet been done, to ensure compliance with their commitments under the key multilateral non-proliferation treaties;
 - c) To renew and fulfil their commitment to multilateral cooperation, in particular within the framework of the International Atomic Energy Agency, the Organization for the Prohibition of Chemical Weapons and the Biological and Toxin Weapons Convention, as important means of pursuing and achieving their common objectives in the area of non-proliferation and of promoting international cooperation for peaceful purposes;
 - d) To develop appropriate ways to work with and inform industry and the public regarding their obligations under such laws;
- Calls upon all States to promote dialogue and cooperation on non-proliferation so as to address the threat posed by proliferation of nuclear, chemical, or biological weapons, and their means of delivery;

Annexure VI

- 10. Further to counter that threat, calls upon all States, in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials;
- 11. Expresses its intention to monitor closely the implementation of this resolution and, at the appropriate level, to take further decisions which may be required to this end;
- 12. Decides to remain seized of the matter.

Source: <http://www.state.gov/t/isn/73519.htm>.

^{*} Definitions for the purpose of this resolution only:

Means of delivery: missiles, rockets and other unmanned systems capable of delivering nuclear, chemical, or biological weapons, that are specially designed for such use.

Non-State actor: individual or entity, not acting under the lawful authority of any State in conducting activities which come within the scope of this resolution.

Related materials: materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery.

UN GENERAL ASSEMBLY RESOLUTION, 'ESTABISHMENT OF A COMMISSION TO DEAL WITH THE PROBLEMS RAISED BY ATOMIC ENERGY', 24 JANUARY <u>1946</u>

Resolved by the General Assembly of the United Nations to establish a Commission, with the composition and competence the setout hereunder, to deal with the problems raised by the discovery of atomic energy and related matters:

- Establishment of the Commission: A Commission is hereby established by the General Assembly with the terms of reference set out under Section 5 below.
- 2. Relations of the Commission with the Organs of the United Nations
- (a) The Commission shall submit its reports and recommendations to the Security Council, and such reports and recommendations shall be made public unless the Security Council, in the interest of peace and security, otherwise directs. In the appropriate cases the Security Council should transmit these reports to the General Assembly and the Members of the United Nations, as well as to the Economic and Social Council and other organs within the framework of the Untied Nations.
- (b) In view of the Security Council's primary responsibility under the Charter of the United Nations for the maintenance of international peace and security, the Security Council shall issue directions to the Commission in matters affecting security. On these matters the Commission shall be accountable for its

work to the Security Council.

3. Composition of the Commission

The Commission shall be composed of one representative from each of those states represented on the Security Council, and Canada when that State is not a member of the Security Council. Each representative on the Commission may have such assistance as he may desire.

4. Rules of Procedure

The Commission shall have whatever staff it may deem necessary, and shall make recommendations for its rules of procedure to the Security Council, which shall approve them as a procedural matter.

5. Terms of Reference of the Commission

The Commission shall proceed with the utmost dispatch and enquire into all phases of the problem, and make such recommendations from time to time with respect to them as it finds possible. In particular, the Commission shall make specific proposals:

- (a) for extending between all nations the exchange of basic scientific information for peaceful ends;
- (b) for control of atomic energy to the extent necessary to ensure its use only for peaceful purposes;

- (c) for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction;
- (d) for effective safeguards by way of inspection and other means to protect complying States against the hazards of violations and evasions.

The work of the Commission shall proceed by separate stages, the successful completion of each of which will develop the necessary confidence of the world before the next stage is undertaken.

The Commission shall not infringe upon the responsibilities of nay organ of the Untied Nations, but should present recommendations for the consideration of those organs in the performance of their tasks under the terms of the United Nations Charter.

Source: http://daccess-dds-ny.un.org/doc/ RESOLUTION/GEN/NR0/032/52/IMG/ NR003252.pdf? OpenElement

UN GENERAL ASSEMBLY RESOLUTION 1653, 'DECLARATION ON THE PROHIBITION OF THE USE OF NUCLEAR AND THE RMONUCLEAR WEAPONS', 24 NOVEMBER 1961

The General Assembly

Mindful of its responsibility under the charter of the United Nations in the maintenance of international peace and security, as well as in the consideration of principles governing disarmament;

Gravely concerned that, while negotiations on disarmament have so far not achieved satisfactory results, the armaments race, particularly in the nuclear and thermo-nuclear fields, has reached a dangerous stage requiring all possible precautionary measures to protect humanity and civilisation from the hazard of nuclear and thermo-nuclear catastrophe,

Recalling that the use of weapons of mass destruction, causing unnecessary human suffering, was in the past prohibited, as being contrary to the laws of humanity and to the principles of international law, by international declarations and binding agreements, such as the Declaration of St. Petersburg of 1868, the Declaration of the Brussels Conference of 1874, the Convention of The Hague Peace Conferences of 1899 and 1907, and the Geneva Protocol of 1925, to which the majority of nations are still parties,

Considering that the use of nuclear and thermonuclear weapons would bring about indiscriminate suffering and destruction to mankind and civilisation to an even greater extent than the use of those weapons declared by the aforementioned international declarations and agreements to be contrary to the laws of humanity and a crime under international law,

Believing that the use of weapons of mass destruction, such as nuclear and thermonuclear weapons, is a direct negation of the high ideals and objectives which the United Nations has been established to achieve through the protection of succeeding generations from the scourge of war and through the preservation and promotion of their cultures,

- 1. Declares that:
- (a) The use of nuclear and thermo-nuclear weapons is contrary to the spirit, letter and aims of the United Nations and, as such, a direct violation of the Charter of the United Nations;
- (b) The use of nuclear and thermo-nuclear weapons would exceed even the scope of war and cause indiscriminate suffering and destruction to mankind and civilisation and, as such, is contrary to the rules of international law and to the laws of humanity;
- (c) The use of nuclear and thermo-nuclear weapons is a war directed not against an enemy or enemies alone but also against mankind in general, since the peoples of the world not involved in such a war will be subjected to al the evils generated by the use of such weapons;

- (d) Any State using nuclear and thermonuclear weapons is to be considered as violating the Charter of the United Nations, as acting contrary to the laws of humanity and as committing a crime against mankind and civilization;
- 2. *Requests* the Secretary-General to consult the Governments of Member States to ascertain their views on the possibility of

convening a special conference for signing a convention on the prohibition of the use of nuclear and thermo-nuclear weapons for war purposes and to report on the results of such consultation to the General Assembly at its seventeenth session.

Source : http://daccess-dds-ny.un.org/doc/ RESOLUTION/GEN/NR0/167/06/IMG/ NR016706.pdf?OpenElement

UN SECURITY COUNCIL RESOLUTION 1887 ON NUCLEAR SECURITY, 24 SEPTEMBER 2009

The Security Council,

Resolving to seek a safer world for all and to create the conditions for a world without nuclear weapons, in accordance with the goals of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), in a way that promotes international stability, and based on the principle of undiminished security for all,

Reaffirming the Statement of its President adopted at the Council's meeting at the level of Heads of State and Government on 31 January 1992 (S/23500), including the need for all Member States to fulfil their obligations in relation to arms control and disarmament and to prevent proliferation in all its aspects of all weapons of mass destruction,

Recalling also that the above Statement (S/ 23500) underlined the need for all Member States to resolve peacefully in accordance with the Charter any problems in that context threatening or disrupting the maintenance of regional and global stability,

Reaffirming that proliferation of weapons of mass destruction, and their means of delivery, constitutes a threat to international peace and security,

Bearing in mind the responsibilities of other organs of the United Nations and relevant international organizations in the field of disarmament, arms control and nonproliferation, as well as the Conference on Disarmament, and supporting them to continue to play their due roles,

Underlining that the NPT remains the cornerstone of the nuclear non-proliferation regime and the essential foundation for the

pursuit of nuclear disarmament and for the peaceful uses of nuclear energy,

Reaffirming its firm commitment to the NPT and its conviction that the international nuclear non-proliferation regime should be maintained and strengthened to ensure its effective implementation, and recalling in this regard the outcomes of past NPT Review Conferences, including the 1995 and 2000 final documents,

Calling for further progress on all aspects of disarmament to enhance global security,

Recalling the Statement by its President adopted at the Council's meeting held on 19 November 2008 (S/PRST/2008/43),

Welcoming the decisions of those non-nuclearweapon States that have dismantled their nuclear weapons programs or renounced the possession of nuclear weapons,

Welcoming the nuclear arms reduction and disarmament efforts undertaken and accomplished by nuclear-weapon States, and underlining the need to pursue further efforts in the sphere of nuclear disarmament, in accordance with Article VI of the NPT,

Welcoming in this connection the decision of the Russian Federation and the United States of America to conduct negotiations to conclude a new comprehensive legally binding agreement to replace the Treaty on the Reduction and Limitation of Strategic Offensive Arms, which expires in December 2009,

Welcoming and supporting the steps taken to conclude nuclear-weapon-free zone treaties and reaffirming the conviction that the establishment of internationally recognized nuclear-weapon-free zones on the basis of arrangements freely arrived at among the States of the region concerned, and in accordance with the 1999 United Nations Disarmament Commission guidelines, enhances global and regional peace and security, strengthens the nuclear nonproliferation regime, and contributes toward realizing the objectives of nuclear disarmament,

Noting its support, in this context, for the convening of the Second Conference of States Parties and signatories of the Treaties that establish, Nuclear-Weapon-Free Zones to be held in New York on 30 April 2010,

Reaffirming its resolutions 825 (1993), 1695 (2006), 1718 (2006), and 1874 (2009),

Reaffirming its resolutions 1696 (2006), 1737 (2006), 1747 (2007), 1803 (2008), and 1835 (2008), Reaffirming all other relevant non-proliferation resolutions adopted by the Security Council,

Gravely concerned about the threat of nuclear terrorism, and recognizing the need for all States to take effective measures to prevent nuclear material or technical assistance becoming available to terrorists,

Noting with interest the initiative to convene, in coordination with the International Atomic Energy Agency (IAEA), an international conference on the peaceful uses of nuclear energy,

Expressing its support for the convening of the 2010 Global Summit on Nuclear Security,

Affirming its support for the Convention on the Physical Protection of Nuclear Material and its 2005 Amendment, and the Convention for the Suppression of Acts of Nuclear Terrorism,

Recognizing the progress made by the Global

Initiative to Combat Nuclear Terrorism, and the G-8 Global Partnership,

Noting the contribution of civil society in promoting all the objectives of the NPT,

Reaffirming its resolution 1540 (2004) and the necessity for all States to implement fully the measures contained therein, and calling upon all Member States and international and regional organizations to cooperate actively with the Committee established pursuant to that resolution, including in the course of the comprehensive review as called for in resolution 1810 (2008),

- Emphasizes that a situation of noncompliance with non-proliferation obligations shall be brought to the attention of the Security Council, which will determine if that situation constitutes a threat to international peace and security, and emphasizes the Security Council's primary responsibility in addressing such threats;
- **2.** Calls upon States Parties to the NPT to comply fully with all their obligations and fulfil their commitments under the Treaty,
- **3.** Notes that enjoyment of the benefits of the NPT by a State Party can be assured only by its compliance with the obligations thereunder;
- **4.** Calls upon all States that are not Parties to the NPT to accede to the Treaty as non-nuclear-weapon States so as to achieve its universality at an early date, and pending their accession to the Treaty, to adhere to its terms;
- 5. Calls upon the Parties to the NPT, pursuant to Article VI of the Treaty, to undertake to pursue negotiations in good faith on effective measures relating to

nuclear arms reduction and disarmament, and on a Treaty on general and complete disarmament under strict and effective international control, and calls on all other States to join in this endeavour;

- 6. Calls upon all States Parties to the NPT to cooperate so that the 2010 NPT Review Conference can successfully strengthen the Treaty and set realistic and achievable goals in all the Treaty's three pillars: non-proliferation, the peaceful uses of nuclear energy, and disarmament;
- 7. Calls upon all States to refrain from conducting a nuclear test explosion and to sign and ratify the Comprehensive Nuclear Test Ban Treaty (CTBT), thereby bringing the treaty into force at an early date;
- 8. Calls upon the Conference on Disarmament to negotiate a Treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices as soon as possible, welcomes the Conference on Disarmament's adoption by consensus of its Program of Work in 2009, and requests all Member States to cooperate in guiding the Conference to an early commencement of substantive work;
- **9.** Recalls the statements by each of the five nuclear-weapon States, noted by resolution 984 (1995), in which they give security assurances against the use of nuclear weapons to non-nuclear-weapon State Parties to the NPT, and affirms that such security assurances strengthen the nuclear non-proliferation regime;
- **10.** Expresses particular concern at the current major challenges to the non-proliferation regime that that the Security

Council has acted upon, demands that the parties concerned comply fully with their obligations under the relevant Security Council resolutions, and reaffirms its call upon them to find an early negotiated solution to these issues;

- 11. Encourages efforts to ensure development of peaceful uses of nuclear energy by countries seeking to maintain or develop their capacities in this field in a framework that reduces proliferation risk and adheres to the highest international standards for safeguards, security, and safety;
- **12.** Underlines that the NPT recognizes in Article IV the inalienable right of the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II, and recalls in this context Article III of the NPT and Article II of the IAEA Statute;
- **13.** Calls upon States to adopt stricter national controls for the export of sensitive goods and technologies of the nuclear fuel cycle;
- 14. Encourages the work of the IAEA on multilateral approaches to the nuclear fuel cycle, including assurances of nuclear fuel supply and related measures, as effective means of addressing the expanding need for nuclear fuel and nuclear fuel services and minimizing the risk of proliferation, and urges the IAEA Board of Governors to agree upon measures to this end as soon as possible;
- **15.** Affirms that effective IAEA safeguards are essential 10 prevent nuclear proliferation and to facilitate cooperation in the field of peaceful uses of nuclear energy, and. in that regard:

Annexure IX

- a. Calls upon all non-nuclear-weapon States party to the NPT that have yet to bring into force a comprehensive safeguards agreement or a modified small quantities protocol to do so immediately,
- Calls upon all States to sign, ratify and implement an additional protocol, which together with comprehensive safeguards agreements constitute essential elements of the IAEA safeguards system,
- c. Stresses the importance for all Member States to ensure that the IAEA continue to have all the necessary resources and authority to verify the declared use of nuclear materials and facilities and the absence of undeclared activities, and for the IAEA to report to the Council accordingly as appropriate;
- **16.** Encourages States to provide the IAEA with the cooperation necessary for it to verify whether a state is in compliance with its safeguards obligations, and affirms the Security Council's resolve to support the IAEA's efforts to that end, consistent with its authorities under the Charter;
- 17. Undertakes to address without delay any State's notice of withdrawal from the NPT, including the events described in the statement provided by the State pursuant to Article X of the Treaty, while noting ongoing discussions in the course of the NPT review on identifying modalities under which NPT States Parties could collectively respond to notification of withdrawal, and affirms that a State remains responsible under international law for violations of the NPT committed prior to its withdrawal;

- **18.** Encourages States to require as a condition of nuclear exports that the recipient State agree that, in the event that it should terminate, withdraw from, or be found by the IAEA Board of Governors to be in non-compliance with its IAEA safeguards agreement, the supplier state would have a right to require the return of nuclear material and equipment provided prior to such termination, non-compliance or withdrawal, as well as any special nuclear material produced through the use of such material or equipment;
- **19.** Encourages States to consider whether a recipient State has signed and ratified an additional protocol based on the model additional protocol in making nuclear export decisions;
- **20.** Urges States to require as a condition of nuclear exports that the recipient State agree that, in the event that it should terminate its IAEA safeguards agreement, safeguards shall continue with respect to any nuclear material and equipment provided prior to such termination, as well as any special nuclear material produced through the use of such material or equipment;
- **21.** Calls for universal adherence to the Convention on Physical Protection of Nuclear Materials and its 2005 Amendment, and the Convention for the Suppression of Acts of Nuclear Terrorism;
- 22. Welcomes the March 2009 recommendations of the Security Council Committee established pursuant to resolution 1540 (2004) to make more effective use of existing funding

mechanisms; including the consideration of the establishment of a voluntary fund, and affirms its commitment to promote full implementation of resolution 1540 (2004) by Member States by ensuring effective and sustainable support for the activities of the 1540 Committee;

- Reaffirms the need for full 23. implementation of resolution 1540 (2004) by Member States and, with an aim of preventing access to, or assistance and financing for weapons of mass destruction, related materials and their means of delivery by non-State actors, as defined in the resolution, calls upon Member States to cooperate actively with the Committee established pursuant to that resolution and the IAEA, including rendering assistance, at their request, for their implementation of resolution 1540 (2004) provisions, and in this context welcomes the forthcoming comprehensive review of the status of implementation of resolution 1540 (2004) with a view to increasing its effectiveness, and calls upon all States to participate actively in this review;
- **24.** Calls upon Member States to share best practices with a view to improved safety standards and nuclear security practices and raise standards of nuclear security to reduce the risk of nuclear terrorism, with the aim of securing all vulnerable nuclear material from such risks within four years;
- **25.** Calls upon all States to manage responsibly and minimize to the greatest extent that is technically and

economically feasible the use of highly enriched uranium for civilian purposes, including by working to convert research reactors and radioisotope production processes to the use of low enriched uranium fuels and targets;

- **26.** Calls upon all States to improve their national capabilities to detect, deter, and disrupt illicit trafficking in nuclear materials throughout their territories, and calls upon those States in a position to do so to work to enhance international partnerships and capacity building in this regard;
- **27.** Urges all States to take all appropriate national measures in accordance with their national authorities and legislation, and consistent with international law, to prevent proliferation financing and shipments, to strengthen export controls, to secure sensitive materials, and to control access to intangible transfers of technology;
- **28.** Declares its resolve to monitor closely any situations involving the proliferation of nuclear weapons, their means of delivery or related material, including to or by non-State actors as they are defined in resolution 1540 (2004), and, as appropriate, to take such measures as may be necessary to ensure the maintenance of international peace and security;
- **29.** Decides to remain seized of the matter.

Source: <http://www.america.gov/st/texttrans english/2009/September/ 20090924173226ihecuor0.5509411.html>.

NWC VERIFICATION TECHNOLOGIES

- **1.** Technologies which are already implemented in existing treaties within the nuclear disarmament and verification regime
- Nuclear material accountancy, limited by Materials Unaccounted For (NPT)
- Containment and surveillance of nuclear materials (NPT)
- Identification and item counting of objects by tagging, fingerprinting, registration (NPT and others)
- Personal observation of suspected activities and destruction (NPT, INF, START)
- Remote sensors in the visible spectrum based on satellites (INF, START)
- On-site sensors for non-destructive characterisation of containers and transport vessels, e.g. for portal perimeter monitoring; measurement of weight, length (INF, START)
- Seismological, radionuclide, hydroacoustic and infrasound monitoring (CTBT)
- Challenge inspections of suspected facilities without any restrictions, i.e. anytime and anywhere, limited by political acceptability and costs (UNSCOM)
- **2.** Technical approaches which are established in other international regimes and can be adopted for the NWC
- Preventive controls at nuclear facilities (Convention on Physical Protection)
- Joint overflights with remote sensors in the visible spectrum (Open Skies)

- Managed access (CWC)
- **3.** Technical means which are already developed or demonstrated, but not yet implemented in any international control regime
- Accounting, surveillance and containment of nuclear warheads, limited by access
- Verification of dismantling of nuclear warheads, limited by the interest to protect sensitive design information
- Remote sensors in the infra-red or radar spectra based on satellites, aircraft or on the ground
- Passive radiation measurement, active irradiation using x-ray, gamma ray, beta particles, protons or neutrons, limited by free mean path depending on shielding of nuclear radiation (e.g. Black Sea experiment for the detection of hidden warheads)
- **4.** Technological options which need further research, development or demonstration of their capabilities and limits, before they can be adopted for the NWC
- Wide area radionuclide monitoring to detect uranium enrichment or plutonium separation (e.g. krypton-85)
- Nuclear archaeology to reconstruct the working history of production reactors
 - **Source:** Securing our Survival: the Case for a Nuclear Weapons Convention, at <http://www.icanw.org/ files/SoS/SoS_section4.pdf>, p. 169.

RAJIV GANDHI'S 'ACTION PLAN FOR USHERING IN A NUCLEAR WEAPON-FREE AND NON-VIOLENT WORLD ORDER', 9 JUNE 1988

- Humanity stands at a crossroads of 1. history. The world has lived too long under the sentence of extinction. Nuclear weapons threaten to annihilate human civilization and all that humankind has built through millennia of labour and toil. Nuclear weapon States and non-nuclear weapon States alike are threatened by such a holocaust. It is imperative that nuclear weapons be eliminated. The recently signed INF Treaty between the United States and the Soviet Union is a first major step in this direction. This process must be taken to its logical conclusion by ridding the world of nuclear weapons. The time has also come to consider seriously the changes in doctrines, in policies, in attitudes, and in the institutions required to usher in and manage a nuclear weapon-free and nonviolent world. Peace must be predicated on a basis other than the assurance of global destruction. We need a world order based on non-violence and peaceful coexistence. We need international institutions that will nurture such a world order.
- We call upon the international community to urgently negotiate a binding commitment to an action plan for ushering in a non-violent world free of nuclear weapons. We suggest the following action plan as a basis for such negotiations.

3.1 STAGE 1 (Duration: 6 years, from 1988-1994)

3.1.1 Nuclear Disarmament:

- **3.1.1.1** Elimination of all Soviet and United States land-based medium and shorter-range missiles (500-5,500 kms) in accordance with the INF Treaty
- **3.1.1.2** Agreement on a 50 per cent cut in Soviet and United States strategic arsenals (with ranges above 5,500 kms)
- **3.1.1.3** Agreement on a phased elimination by the year 2000 AD of United States and Soviet short range battlefield and air-launched nuclear weapons
- **3.1.1.4** Cessation of the production of nuclear weapons by all nuclear weapon States
- **3.1.1.5** Cessation of the production of weapon-grade fissionable material by all nuclear weapon States
- **3.1.1.6** Moratorium on the testing of nuclear weapons
- **3.1.1.7** Commencement and conclusion of negotiations on a comprehensive test ban treaty

3.1.2 Measures Collateral to Nuclear Disarmament:

3.1.2.1 Conclusion of a convention to outlaw the use and threat of use of nuclear weapons pending their elimination

- **3.1.2.2** Declaration by the United States and the Soviet Union that the fissile material released under the INF Treaty would be utilized for peaceful purposes only and accordingly be subjected to supervision by the International Atomic Energy Agency
- **3.1.2.3** Declaration by all nuclear weapon States of their stockpiles of nuclear weapons and weapon-grade fissionable material
- **3.1.2.4** Cessation of direct or indirect transfer to other States of nuclear weapons, delivery systems, and weapon-grade fissionable material
- **3.1.2.5** Non-nuclear weapon powers to undertake not to cross the threshold into the acquisition of nuclear weapons
- **3.1.2.6** Initiation of multi-lateral negotiations to be concluded by 195, for weapons by the year 2010. This treaty would replace the Non-Proliferation Treaty, which ends in 1995
- **3.1.2.7** Non-nuclear weapon powers to undertake not to cross the threshold into the acquisition of nuclear weapons
- **3.1.2.8** Initiation of multi-lateral negotiations to be concluded by 1995, for a new treaty eliminating all nuclear weapons by the year 2010. This treaty would replace the Non-Proliferation Treaty, which ends in 1995.
- 3.1.3 Other Weapons of Mass Destruction:

- **3.1.3.1** Conclusion of a treaty banning chemical weapons
- **3.1.3.2** Conclusion of a treaty banning radiological weapons
- 3.1.4 Conventional Force:
- **3.1.4.1** Substantial reduction of NATO and Warsaw Pact conventional forces, especially offensive forces, and weapon systems in Europe from the Atlantic to the Urals
- **3.1.4.2** Multilateral discussions in the Conference on Disarmament or in the United Nations on military doctrines with a view to working towards the goal of a purely defensive orientation for the armed forces of the world. The discussion would include measures to prevent surprise attacks.
- 3.1.5 Space weapon systems:
- **3.1.5.1** A moratorium on the testing and deployment of all space weapon systems
- **3.1.5.2** Expansion of international cooperation in the peaceful uses of outer space
- 3.1.6 Control and management of the arms race based on new technologies:
- **3.1.6.1** Arrangements for monitoring and assessing new technologies which have military applications as well as forecasting their implications for international security
- **3.1.6.2** For research in frontier areas of technology where there are potential military applications, new technology projects and

technological missions should be undertaken under the auspices of the United Nations in order to direct them exclusively to civilian sectors

- **3.1.6.3** Commencement of work, under the aegis of the Untied Nations, for the formulation of guidelines to be observed by governments in respect of new technologies with potential military applications
- **3.1.6.4** Commencement of negotiations for banning technological missions designed to develop new weapon systems and means of warfare

3.1.7 Verification:

- **3.1.7.1** Acceptance in principle of the need to establish an integrated multilateral verification system under the aegis of the United Nations as an integral part of a strengthened multilateral framework required to ensure peace and security during the process of disarmament as well as in a nuclear-weapon free world
- 3.2 STAGE 11 (Duration: 6 years, from 1995-2000)

3.2.1 Nuclear Disarmament:

- **3.2.1.1** Completion of Stage I reductions by the United States and the Soviet Union and the induction of all other nuclear weapon States into the process of nuclear disarmament
- **3.2.1.2** Elimination of all medium-and shortrange, sea-based, land-based and airlaunched nuclear missiles by all nuclear weapon States;
- **3.2.1.3** Elimination of all tactical battlefield nuclear weapons (land, sea and air)

by all nuclear weapon States

- **3.2.1.4** Entry into force of the Comprehensive Test Ban Treaty
- 3.2.2 Measures Collateral to Nuclear Disarmament:
- **3.2.2.1** Negotiations on the withdrawal of strategic nuclear weapons deployed beyond national boundaries
- **3.2.2.** Completion of the ratification and entry into force of the convention prohibiting the use and threat of use of nuclear weapons
- **3.2.2.3** Conclusion of the new treaty eliminating all nuclear weapons by the year 2010 to replace the Non-Proliferation Treaty

3.2.3 Space Weapons:

3.2.3.1 Agreement within a multilateral framework on banning the testing, development, deployment and storage of all space weapons

3.2.4 Conventional Forces:

- **3.2.4.1** Further reduction of NATO and Warsaw Pact conventional forces to minimum defensive levels
- **3.2.4.2** Negotiations under the Conference on Disarmament on global conventional arms reduction
- **3.2.4.3** Removal of all military force and bases from foreign territories
- 3.2.5 New and Emerging Technologies:
- **3.2.5.1** Completion of negotiations on banning technological missions aimed at the development of new weapon systems

3.2.5.2 Completion of the negotiations on guidelines in respect of new technologies with potential military applications

3.2.6 Comprehensive Global Security System:

- **3.2.6.1** Negotiations on the establishment of a comprehensive global security system to sustain a world without nuclear weapons. This would include institutional steps to ensure the effective implementation of the provisions of the Charter of the United Nations relating to the non-use of force, the peaceful settlement of disputes, and the right of every State to pursue its won path of development.
- **3.2.6.2** Arrangements for the release of resources through disarmament for development purposes
- **3.2.6.3** Elimination on non-military threats to security by such measures as the establishment of a just and equitable international economic order
- **3.2.6.4** The strengthening of United Nations system and related multilateral forums
- **3.2.6.5** The commencement of negotiations for the establishment of an integrated multi-lateral verification system under the United Nations.

3.3 STAGE III (Duration: 10 years, from 2000-2010)

- **3.3.1** Elimination of all nuclear weapons from the world
- **3.3.2** Establishment of a single, integrated, multilateral comprehensive

verification system which inter alia ensures that no nuclear weapons are produced

- **3.3.3** Reduction of all conventional forces to minimum defensive levels
- **3.3.4** Effective implementation of arrangement to preclude the emergence of a new arms race
- **3.3.5** Universal adherence to the comprehensive global security system
- **4.1** There has been a historically unprecedented militarization of international relations during the last four decades. This has not only enhanced the danger of nuclear war but also militated against the emergence of the structure of peace, progress, and stability envisaged in the Charter of the United Nations
- **4.2** To end this dangerous militarization of international relations, we must build a structure firmly based on non-violence. It is only in a non-violent democratic world that the sovereignty of nations and the dignity of the individual can be ensured. It is only in a non-violent world that the intellectual and spiritual potential of human kind can be realized.
- **4.3** The prospect of a world free of nuclear weapons should spur us to start building a structure of international security in keeping with the fundamental changes that are taking place in the world political, economic and security environment
- **4.4** In a shrinking and interdependent world, such a structure has to be comprehensive, its components supportive of each other, and participation in it universal

- **4.5** A world order crafted out of outmoded concepts of the balance of power, of dominance by power blocs, of spheres of influence, and of special rights and privileges for a select group of nations is an unacceptable anachronism. It is out of tune with the democratic temper of our age.
- **4.6** The new structure of international relations has to be based on scrupulous adherence to the principles of peaceful coexistence and the Charter of the United Nations. It is necessary to evolve stronger and more binding mechanisms for the settlement of disputes, regional and international. The diversity among nations must be recognized and

respected. The right of each nation to choose its own socio-economic system must be assured.

4.7 Concomitant changes will be called for in the international economics order. The interdependence o all the economies of the world makes for a symbiotic relationship between development in the South and stability and growth in the North. In a just and equitable order, access to technology and resources, on fair and reasonable terms will be assured. The gap between the rich and the poor nations will be bridged.

Source: Appendix 6, in Manpreet Sethi, *Nuclear Strategy: India's March towards Credible Deterrence* (New Delhi: Knowledge World, 2009), pp. 383-388.

PRESS RELEASE, "THE CABINET COMMITTEE ON SECURITY REVIEWS OPERATIONALIZATION OF INDIA'S NUCLEAR DOCTRINE", 4 JANUARY 2003

- 1. The Cabinet Committee on Security (CCS) met today to review the progress in operationalising of India's nuclear doctrine. The Committee decided that the following information, regarding the nuclear doctrine and operational arrangements governing India's nuclear assets, should be shared with the public.
- **2.** India's nuclear doctrine can be summarized as follows:
- **a.** Building and maintaining a credible minimum deterrent;
- b. A posture of "No First Use": nuclear weapons will only be used in retaliation against a nuclear attack on Indian territory or on Indian forces anywhere;
- **c.** Nuclear retaliation to a first strike will be massive and designed to inflict unacceptable damage.
- **d.** Nuclear retaliatory attacks can only be authorised by the civilian political leadership through the Nuclear Command Authority.
- **e.** Non-use of nuclear weapons against nonnuclear weapon states;
- f. However, in the event of a major attack against India, or Indian forces anywhere, by biological or chemical weapons, India will retain the option of retaliating with nuclear weapons;
- **g.** A continuance of strict controls on export of nuclear and missile related materials and technologies, participation in the Fissile Material Cutoff Treaty negotiations, and continued observance of the moratorium on nuclear tests.

- **h.** Continued commitment to the goal of a nuclear weapon free world, through global, verifiable and non-discriminatory nuclear disarmament.
- **3.** The Nuclear Command Authority comprises a Political Council and an Executive Council. The Political Council is chaired by the Prime Minister. It is the sole body which can authorize the use of nuclear weapons.
- **4.** The Executive Council is chaired by the National Security Advisor. It provides inputs for decision making by the Nuclear Command Authority and executes the directives given to it by the Political Council.
- 5. The CCS reviewed the existing command and control structures, the state of readiness, the targeting strategy for a retaliatory attack, and operating procedures for various stages of alert and launch. The Committee expressed satisfaction with the overall preparedness. The CCS approved the appointment of a Commander-in-Chief, Strategic Forces Command, to manage and administer all Strategic Forces.
- **6.** The CCS also reviewed and approved the arrangements for alternate chains of command for retaliatory nuclear strikes in all eventualities.

Source: The High Commission of India in Ottawa, http://girder.docuweb.ca/India/news/pr/pr-030120.html>.

STATEMENT BY MR. HAMID ALI RAO, PERMANENT REPRESENTATIVE OF INDIA TO THE CONFERENCE ON DISARMAMENT, GENEVA, AT THE GENERAL DEBATE OF THE FIRST COMMITTEE OF THE 63RD SESSION OF THE UNITED NATIONS GENERAL ASSEMBLY ON 10 OCTOBER 2008

Mr. Chairman,

The Indian Delegation congratulates you on your election to the Chairmanship of the First Committee. We would like to assure you of our full cooperation in the discharge of your responsibilities. India associates itself with the statement made by Indonesia on behalf of the Non-Aligned Movement. The reference in that statement to universality of the NPT pertains to views of NAM states parties to the NPT and does not reflect India's position.

Mr. Chairman,

The United Nations is the embodiment of our faith in the benefits of collective action and of multilateral approaches in resolving global issues concerning global peace, stability and development. India's approach to addressing issues relating to disarmament and international security - the mandate of the First Committee, is underlined by our conviction that global contemporary challenges are best addressed through collective efforts imbibed by a spirit of genuine multilateralism. We must work together, in cooperation and partnership to address threats to international security, both old and new, and to show a new spirit of unity of purpose and vision to advance global disarmament and non-proliferation goals and objectives.

Mr. Chairman,

India attaches the highest priority to the goal of nuclear disarmament, as enshrined in the

Final Document of SSOD I. This year we mark the 20th Anniversary of the "Action Plan for Ushering in a Nuclear-weapon free and Non-Violent World Order" proposed by Prime Minister, Rajiv Gandhi, to the Third Special Session on Disarmament of the General Assembly. India's commitment to universal, non-discriminatory nuclear disarmament leading to the total elimination of nuclear weapons was reiterated by our Prime Minister on June 9, 2008 as well as by our External Affairs Minister on September 5, 2008. Speaking at the 63rd session of the General Assembly on 26th September, Prime Minister Dr. Manmohan Singh reiterated India's proposal for a Nuclear Weapons Convention prohibiting the development, production, stockpiling and use of nuclear weapons and providing for their complete elimination within a specified time frame.

While the end of the Cold War created new space for action on global disarmament, with notable results such as the conclusion of the Chemical Weapons Convention eliminating, on a universal and non-discriminatory basis, an entire category of weapons of mass destruction, the goal of nuclear disarmament has remained a distant one. We call upon the First Committee to reinforce the message, now being echoed even by prominent statesmen and experts in the field, in favor of generating a new momentum to achieve the goal of a world free of nuclear weapons. No effort must be spared in building consensus to this end. India has put forward both at the General Assembly and in the Conference on Disarmament a set of practical measures to stimulate debate and promote consensus on the way forward. The measures we suggest include:

- Reaffirmation of the unequivocal commitment of all nuclear-weapon States to the goal of complete elimination of nuclear weapons.
- Reduction of the salience of nuclear weapons in security doctrines.
- Taking into account the global reach and menace of nuclear weapons, adoption of measures by nuclear-weapon States to reduce nuclear danger, including the risks of accidental nuclear war, de-alerting of nuclear weapons to prevent unintentional and accidental use of nuclear weapons.
- Negotiation of a global agreement among nuclear-weapon States on 'no-first-use' of nuclear-weapons.
- Negotiation of a universal and legallybinding agreement on non-use of nuclear weapons against non-nuclear weapon States.
- Negotiations of a convention on the complete prohibition of the use or threat of use of nuclear weapons.
- Negotiation of a nuclear weapons convention prohibiting the development, production, stockpiling and use of nuclear weapons and on their destruction, leading to the global, non-discriminatory and verifiable elimination of nuclear weapons with a specified time frame.

Mr. Chairman,

It is clear that nuclear disarmament and nuclear non-proliferation are mutually reinforcing processes and require concerted and cooperative international efforts. India supports such efforts aimed at realizing global non-proliferation objectives. Expansion of international cooperation in the peaceful uses of nuclear energy by increasing the share of nuclear energy as a non-polluting energy source, in a manner that is safe, secure and consistent with non-proliferation objectives, will have a positive impact on global energy security and international efforts to combat climate change. We attach importance to carrying forward this process through dialogue and mutually beneficial cooperation with our international partners.

India supports the negotiation in the CD of an FMCT that is universal, non-discriminatory and verifiable. India joined the consensus, as reflected in the UNGA Resolution 48/75 L which envisaged FMCT as a significant contribution to nuclear non-proliferation in all its aspects. We support efforts towards building the necessary international consensus so as to enable the CD to move forward on this important issue. India has continued to observe a moratorium on nuclear explosive tests.

India supports negotiation with a view to reaching agreement on effective international arrangements to assure non-nuclear weapon states against the use or threat of use of nuclear weapons. As part of its credible minimum nuclear deterrent, India has espoused a policy of "no first use and non-use against nonnuclear weapon states and is prepared to convert these undertakings into multilateral legal arrangements.

We support international efforts to strengthen the present international legal framework to ensure the safety and security of space assets and to prevent the placement of weapons in the outer-space. While noting that there is no legal regime governing the possession and use of missiles, we believe that any initiative to address these concerns in a sustainable and comprehensive manner should be through an inclusive process based on the principle of equal and legitimate security.

India has contributed actively to UN efforts to strengthen regulation of small arms and light weapons as we believe that it is necessary to break the nexus between small arms proliferation and terrorism and organized crime. We remain strongly committed to the CCW process which offers the only forum of a universal character that brings to together all the main producers and users of major conventional weapons, thus ensuring that the instruments that emerge have a greater prospect of making a meaningful impact on the ground.

Mr. Chairman,

As in the previous year, India seeks the support of the First Committee for the following three resolutions:

- i. Convention on the Prohibition of use of nuclear weapons.
- ii. Reducing nuclear danger.
- iii. Measures to prevent terrorists from acquiring weapons of mass destruction.

Mr. Chairman,

In order to save time during the plenary debate we will make our detailed presentation on these resolutions during the time allocated for that purpose.

In conclusion, let me assure you of India's strong commitment of working together to ensure a successful outcome to this Committee's deliberations.

Thank you.

Source: <http://www.un.int/india/2008/ ind1474.pdf> 'FOLLOW-UP TO THE ADVISORY OPINION OF THE INTERNATIONAL COURT OF JUSTICE ON THE LEGALITY OF THE THREAT OR USE OF NUCLEAR WEAPONS', UN GENERAL ASSEMBLY RESOLUTION 61/83, 18 DECEMBER 2006

The General Assembly,

Recalling its resolutions 49/75 K of 15 December 1994, 51/45 M of 10 December 1996, 52/38 O of 9 December 1997, 53/77 W of 4 December 1998, 54/54 Q of 1 December 1999, 55/33 X of 20 November 2000, 56/24 S of 29 November 2001, 57/85 of 22 November 2002, 58/46 of 8 December 2003, 59/83 of 3 December 2004 and 60/76 of 8 December 2005,

Convinced that the continuing existence of nuclear weapons poses a threat to all humanity and that their use would have catastrophic consequences for all life on Earth, and recognizing that the only defence against a nuclear catastrophe is the total elimination of nuclear weapons and the certainty that they will never be produced again,

Reaffirming the commitment of the international community to the goal of the total elimination of nuclear weapons and the creation of a nuclear-weapon-free world,

Mindful of the solemn obligations of States parties, undertaken in article VI of the Treaty on the Non-Proliferation of Nuclear

Weapons,⁷¹ particularly to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament,

Recalling the principles and objectives for nuclear non-proliferation and disarmament adopted at the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,⁷²

Emphasizing the unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament, adopted at the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,⁷³

Recalling the adoption of the Comprehensive Nuclear-Test-Ban Treaty in its resolution 50/ 245 of 10 September 1996, and expressing its satisfaction at the increasing number of States that have signed and ratified the Treaty,

Recognizing with satisfaction that the Antarctic Treaty⁷⁴ and the treaties of Tlatelolco,⁷⁵ Rarotonga,⁷⁶ Bangkok,⁷⁷ Pelindaba⁷⁸ and

⁷¹ United Nations, *Treaty Series*, vol. 729, No. 10485.

⁷² 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of NuclearWeapons, Final Document, Part I (NPT/CONF.1995/32 (Part I) and Corr.2), annex, decision 2.

⁷³ 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, vol. I (NPT/CONF.2000/28 (Parts I and II)), part I, section entitled "Article VI and eighth to twelfth preambular paragraphs", para. 15:6.

⁷⁴ United Nations, *Treaty Series*, vol. 402, No. 5778.

⁷⁵ Ibid., vol. 634, No. 9068.

⁷⁶ See *The United Nations Disarmament Yearbook*, vol. 10: 1985 (United Nations publication, Sales No. E.86.IX.7), appendix VII.

⁷⁷ United Nations, *Treaty Series*, vol. 1981, No. 33873.

⁷⁸ A/50/426, annex.

Semipalatinsk,⁷⁹ as well as Mongolia's nuclearweapon-free status, are gradually freeing the entire southern hemisphere and adjacent areas covered by those treaties from nuclear weapons,

Stressing the importance of strengthening all existing nuclear-related disarmament and arms control and reduction measures,

Recognizing the need for a multilaterally negotiated and legally binding instrument to assure non-nuclear-weapon States against the threat or use of nuclear weapons,

Reaffirming the central role of the Conference on Disarmament as the sole multilateral disarmament negotiating forum, and regretting the lack of progress in disarmament negotiations, particularly nuclear disarmament, in the Conference during its 2006 session,

Emphasizing the need for the Conference on Disarmament to commence negotiations on a phased programme for the complete elimination of nuclear weapons with a specified framework of time,

Expressing its regret over the failure of the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to reach agreement on any substantive issues,

Expressing its deep concern at the lack of progress in the implementation of the thirteen steps to implement article VI of the Treaty on the Non-Proliferation of Nuclear Weapons agreed to at the 2000 Review Conference of the Parties to the Treaty,⁸⁰

Desiring to achieve the objective of a legally binding prohibition of the development, production, testing, deployment, stockpiling, threat or use of nuclear weapons and their destruction under effective international control,

Recalling the advisory opinion of the International Court of Justice on the *Legality of the Threat or Use of Nuclear Weapons,* issued on 8 July 1996,⁸¹

Taking note of the relevant portions of the report of the Secretary-General relating to the implementation of resolution 60/76,⁸²

- 1. Underlines once again the unanimous conclusion of the International Court of Justice that there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control;
- 2. Calls once again upon all States immediately to fulfil that obligation by commencing multilateral negotiations leading to an early conclusion of a nuclear weapons convention prohibiting the development, production, testing, deployment, stockpiling, transfer, threat or use of nuclear weapons and providing for their elimination;

⁷⁹ Treaty on a Nuclear-Weapon-Free Zone in Central Asia.

⁸⁰ See 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, vol. I (NPT/CONF.2000/28 (Parts I and II)), part I, section entitled "Article VI and eighth to twelfth preambular paragraphs", para. 15.

⁸¹ A/51/218, annex; see also Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996, p. 226.

⁸² A/61/127 and Add.1.

Annexure XIV

- 3. Requests all States to inform the Secretary-General of the efforts and measures they have taken on the implementation of the present resolution and nuclear disarmament, and requests the Secretary-General to apprise the General Assembly of that information at its sixty-second session;
- 4. Decides to include in the provisional agenda of its sixty-second session the item entitled "Follow-up to the advisory opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons".

Source: http://disarmament2.un.org/vote.nsf/ 511260f3bf6ae9c005256705006e0a5b/ 29f78f3e7148aec785257205006b1a0d/\$FILE/ A%20RES%2061%2083.pdf

TASK FORCE MEMBERS

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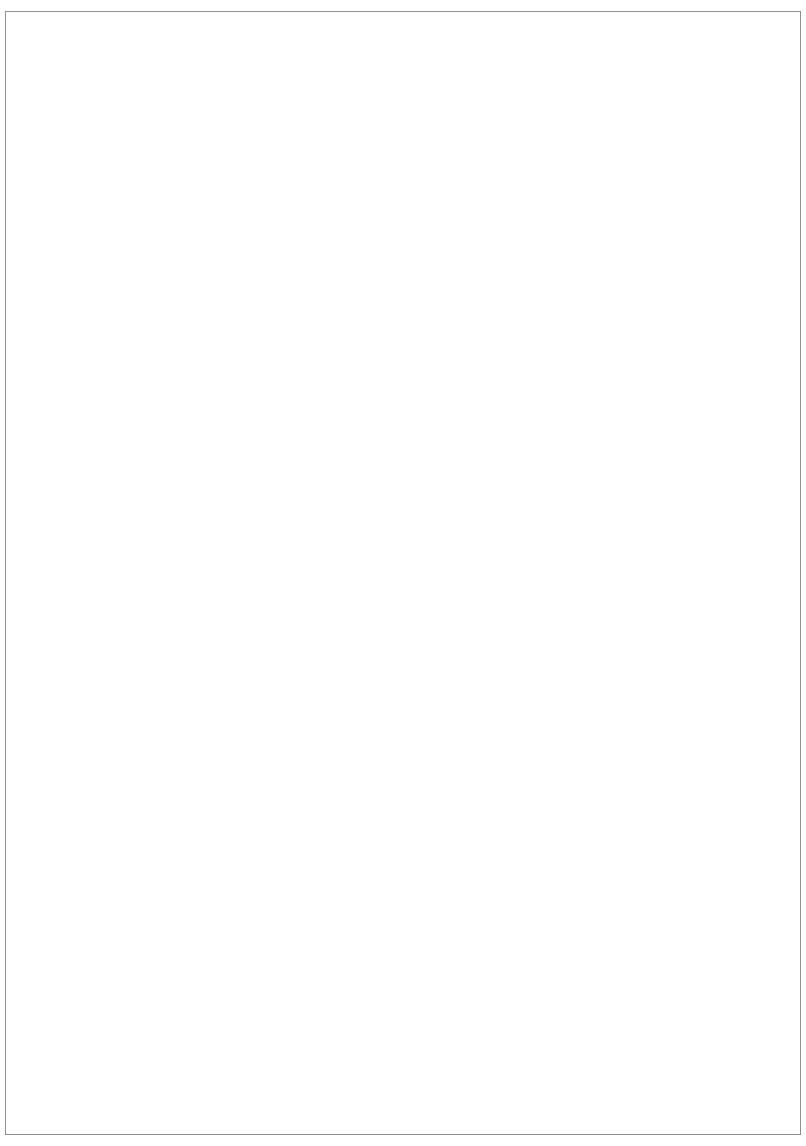
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