

US-RUSSIA COOPERATION ON NUCLEAR NONPROLIFERATION

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DECLARATION

I declare that the dissertation entitled "US-Russia Cooperation on Nuclear Nonproliferation" submitted by me in partial fulfilment of the requirements for the award of the degree of **MASTER OF PHILOSOPHY** of Jawaharlal Nehru University is my own work. The dissertation has not been submitted for any other degree of this University or any other university.

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CERTIFICATE

We recommend that this dissertation be placed before the examiners for evaluation.

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Dedicated to my grandfather

Late Deva Prasad Borah (Koka)

thank you

...for everything

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CONTENTS

	Pages
1. Preface	i-iv
2. US-Soviet Nuclear Competition and Collaboration during Cold War	1-23
3. Soviet Disintegration and “Loose Nukes”: US Response	24-47
4. US – Russian Convergences in Promoting Nonproliferation	48-72
5. Washington, Moscow and Divergent Approaches to Nonproliferation	73-93
6. Conclusion	94-99
7. References	100-118

ABBREVIATIONS

ABM	Anti-Ballistic Missile
CD	Conference of Disarmament
CTBT	Comprehensive Test Ban Treaty
CTR	Cooperative Threat Reduction
DOD	Department of Defense
DOE	Department of Energy
DOS	Department of State
FMCT	Fissile Material Cut-Off Treaty
FSU	Former Soviet Union
GSE	Global Security Engagement
GTRI	Global Threat Reduction Initiative
HEU	Highly Enriched Uranium
IAEA	International Atomic Inspection Agency
INF	Intermediate-Range Nuclear Forces
IPP	Initiatives for Proliferation Prevention
LEU	Low Enriched Uranium
LTBT	Limited Test Ban Treaty
MLF	Multi-Lateral Force
MPC&A	Material Protection, Control and Accounting
MTCR	Missile Technology and Control Regime
New START	Strategic Arms Reduction Treaty of 2010
NMD	National Missile Defense

NPT	Nuclear Nonproliferation Treaty
NSG	Nuclear Suppliers Group
PNE	Peaceful Nuclear Explosion
PSI	Proliferation Security Initiative
SALT I	Strategic Arms Limitation Talks I
SALT II	Strategic Arms Limitation Talks II
SDI	Strategic Defence Initiative
SORT	Strategic Offensive Reductions Treaty
START I	Strategic Arms Reduction Treaty I
START II	Strategic Arms Reduction Treaty II
UN	United Nations
UNSCOM	United Nations Special Committee
US	United States

PREFACE

The United States (US) and Russia played an important role in countering the spread of nuclear weapons. The superpowers combined their resources throughout the Cold War to prevent the spread of nuclear weapons. They actively created the International Agency of Atomic Energy, the Nuclear Suppliers Group, the Zangger Committee, and the Nuclear Nonproliferation Treaty (NPT). The US ensured that West Germany, Japan, South Korea and Taiwan relinquished their nuclear desires by extending its nuclear umbrella to them, and Russia ensured that its satellite states did not have control of the nuclear weapons based in their territory. The US and Russia cooperated in the nonproliferation success in the Cuban case, shared intelligence regarding the South African case, and cooperated to ensure that Kazakhstan, Ukraine and Belarus signed the NPT as non-nuclear weapon states.

The US and Russia ensured the safety and control and protection of Soviet-era nuclear material. Their collaboration began with the Cooperative Threat Reduction Program (CTR), which included: the Megawatts to Megatons Plan, the Plutonium Disposition Plan, upgrading of the Russian Missile Control, Protection and Accounting Program among others. It created storage facilities in Russia and relocated Soviet-era nuclear scientists. The CTR ensured that nuclear weapons were shipped safely to Russia from the Ukraine, Belarus, and Kazakhstan.

During President Boris Yeltsin's era, Russia was reeling under the economic hardships left behind by the failed Soviet experiment. In order to avail financial assistance from the US, Russia followed a pro-US foreign policy line. However, President Yeltsin's kowtowing to the West was short-lived as with the non-arrival of US aid, domestic pressures built up demanding a 'Russia first' line in foreign and domestic policy. North Atlantic Treaty Organization (NATO) expansion into former Soviet space, US castigation of Russia on human rights violations in Chechnya, and NATO's Kosovo mission irked Moscow and relations with the US rapidly deteriorated. The Bush administration's uncompromising style of diplomacy and the unilateral abrogation of the Anti-Ballistic

Missile Treaty and consequent Russian withdrawal from START II, threatened to destroy cooperation between Moscow and Washington.

There was some reprieve from the rupture of the relations post the 9/11 attacks with President Vladimir Putin being the first to extend condolences to the US. Russia joined the 'Coalition of the Willing' and accommodated heavy presence of the US military in its 'near abroad'. President Putin's stand towards the West and particularly towards the USA was marked by pragmatism, which mixed elements of Eurasianist and Atlanticist traditions in Russian perceptions of itself. President Putin maintained cordial relations with the US but emphasized the independence of Russian policy making, and Russian insistence on multilateralism and multi-polar world governance system.

However, despite convergence of interests between the two, some major irritants continued to embitter relations. A second round of NATO expansion in 2004, Colour Revolutions which were thought to be manufactured by the US, non-admission of Russia to the World Trade Organization, and increased fear of US encirclement and containment were some of Moscow's concerns with regard to the US. Another Russian concern was the preservation of Russia's deterrent in the face of the US's existing and future deployments of ballistic missile defences. Putin's summed up Russian irritation with the US's hegemonic tendencies and unipolar actions in 2007 in Munich. Russian policy veered from a pro-US tilt to a 'Russia First' stand and this aggressive independent outlook was tantamount to the brewing of a new Cold War, a hypothesis which gained mileage with the Russian aggression into Georgia in 2008.

Nevertheless, on the nonproliferation front, Washington and Moscow worked together in the Six Party Talks on the North Korean nuclear issue and opened dialogue on the Iranian nuclear imbroglio. Russian relations with both the 'rogue' states were relatively better than those of the US, and cooperation between the two nuclear giants were important for curbing the further spread of nuclear weapons and abate the possibility of nuclear terrorism, theft and war. Promising unified steps by the US and Russia like the G8 global partnership against the spread of nuclear weapons and Russia's backing of the Bush Proliferation Security Initiative were measures worthy of mention. In April 2008, the US

and Russia Strategic Framework for the Prevention of Spread of Weapons of Mass Destruction was declared.

At the opposite end of the nonproliferation spectrum, some scholars observed that the US and Russia were responsible for weakening the nonproliferation regime by cooperating to ensure that the Nuclear Suppliers Group granted a waiver for India to avail civil nuclear commerce. A few are of the opinion that this attempt of selective allowance of proliferation gives fodder to the Non-Nuclear Weapons States to leave the NPT, and opens the gateway for others like China to insist on similar leniency towards Pakistan.

The Obama administration put special emphasis on the nonproliferation agenda and wished to 'reset' relations with Russia to strengthen the nonproliferation regime, among other goals. From Obama's speech in Prague in 2009, where he focused on the concept of 'Global Zero' to the signing of the New START in 2010 and the fresh sanctions on Iran, the nonproliferation regime received a boost and so did US-Russian cooperation on nonproliferation issues.

Cooperation in an anarchic world is subject to mutual interests of concerned actors, relative gains of parties involved or on hegemonic pressures. Cooperation in a world without an overarching authority remains dependent upon changing relations between nations, circumstantial conditions and other such dynamics which are constantly in a state of flux. Cooperation between the US and Russia on nuclear nonproliferation too was dependent upon the interests of the parties involved, and was often plagued by suspicions which stemmed from acrimony between Moscow and Washington at the diplomatic and political levels. However, a nonproliferation regime with recognized norms, principles, and decision making procedures came into existence in international relations. The US and Russia played a comprehensive role in cooperating to form nonproliferation instruments and this study intends to test the following hypothesis:

- Competing strategic goals and foreign policies did not obstruct the US and Russia from working together in preventing nuclear proliferation.

The following research questions will be raised to aid in testing the hypothesis:

- What were the strategic considerations of Washington and Moscow behind their decision in joining hands to prevent further proliferation of nuclear weapons?
- What were the key instruments of the U.S.-Russian Cooperation on issues of Nuclear Nonproliferation?
- What was the American perception of the Russian approach to nonproliferation and vice versa?
- Were there any differences on key proliferation issues between the two countries?

The study takes into account the historical background of the process of cooperation on nuclear nonproliferation between the US and Russia. It focuses on the changing contours of cooperative engagement between Washington and Moscow to tackle proliferation, and the policies adopted by them to deal with the growth of nuclear dangers. The study identifies the emerging trends of competing outlooks of the US and Russia, which were complicated by contentions between the two, politically, strategically and diplomatically. Source materials comprised of both primary and secondary literature. Speeches of government officials, online research portals, books and articles on this topic were utilized as source materials.

CHAPTER I

US-SOVIET NUCLEAR COMPETITION AND COLLABORATION DURING COLD WAR

The question of the spread of nuclear weapons holds the exalted position of being both an academic as well as a political concern. Since the advent of the atom bomb, the world has been grappling with a changed security complex and efforts have been directed at confronting the challenge of both vertical (increase in nuclear arsenals of a state) and horizontal (increase in the number of nuclear states/non state actors) proliferation of nuclear weapons. The conviction that the horizontal spread of the nuclear weapon needs to be prevented is far from universal. The Kenneth Waltz-Scott Sagan debate on this issue illustrates both sides of the proliferation debate. Waltz, a nuclear proliferation optimist, contends that the spread of nuclear weapons will produce stable deterrence and nuclear states will avoid using nuclear weapons for fear of retaliation. Sagan disagrees with Waltz and holds the view that military organizations are characterized by common predispositions, rigid customs and insular interests, which would lead to deterrence failures and accidental uses of nuclear weapons.

This chapter deals with the inception and growth of the nonproliferation regime during the Cold War with special emphasis on cooperation between the United States (US) and the Soviet Union in creating the principles, treaties and other mechanisms related to nuclear nonproliferation. The Cold War is widely regarded as an era of US-Soviet discord and competition on the ideological, political, economic, security and other levels. Despite acrimony which marked relations between the superpowers, they cooperated in the realm of nuclear nonproliferation to prevent the spread of nuclear weapons. There was no linear progression in the records of either the US or the Soviet Union in preventing nuclear proliferation and Cold War calculations did at times trump nonproliferation goals. In spite of such Cold War demands, Moscow and Washington

cooperated to a considerable extent, sometimes even at the cost of defying allies, to prop up a nuclear nonproliferation regime.

The chapter commences with the Manhattan project, the Baruch plan and the Gromyko plan. This was a period marked by nuclear secrecy. It proceeds to etch out the Atoms for Peace program which heralded a distinct change in proliferation policy as it permitted the US to selectively share nuclear know-how with non-nuclear weapons nations. Subsequently, the chapter mentions the creation of the International Atomic Energy Agency (IAEA), which heralded the safeguards era in nuclear nonproliferation. The chapter outlines US-Soviet cooperation, despite differences, in signing the Limited Test Ban Treaty (LTBT) and the Nuclear Nonproliferation Treaty (NPT). It continues to discuss the Nuclear Suppliers Group (NSG) and briefly mentions arms control measures, which bear an important relation to Article VI of the NPT. There is an attempt to relate existing international relations regime theory to the nonproliferation regime.

There were advances and regressions with regard to nonproliferation in each decade of the Cold War. Following initial confusion about trading nuclear weapons for allies, the superpowers concluded that prevention of horizontal proliferation and cooperating to this end served their national interest better and this provides the rationale behind the cooperative behaviour of the US and the Soviet Union in co-creating the nonproliferation regime, despite several contradictory beliefs, policies and interests.

1940s – Initial Attempts at Nonproliferation

Nuclear nonproliferation was a concern of the US since the inception of the Manhattan Project, which was initiated during the Second World War. The Manhattan Project was an Anglo-American collaboration which led to the creation of the first nuclear bomb. It was defined by the Quebec Agreement of September 1943, according to which the US, Britain and Canada decided against disclosing information regarding this endeavour to third parties without mutual consent (Goldschmidt 1977:70). Thus, the Manhattan Project was concealed from the Soviet Union. In addition, the US, Britain and Canada agreed to restrict dissemination of information on the practical industrial applications of atomic

energy before effective ‘safeguards against its misuse could be devised’ (Goldschmidt 1977:70). Furthermore, the US planned to corner the entire stock of uranium available in the world. Washington had to eventually abandon this quest as it became evident that it was ‘politically unrealistic and that uranium could be found in many more places than were originally known’ (Krass et al 1983:194). These were a few of the initial steps employed to prevent the spread of the atom bomb to other nations.

US President Harry S. Truman explicated on 3rd October, 1945, a few months after the first use of the atom bomb on Japanese cities that the international community ought to renounce nuclear weapons and utilize nuclear energy solely for ‘peaceful and humanitarian ends’ (Weiss 2003) The US Secretary of War (1940-45) Stimson attempted to place all nuclear weapons under collective international control but the success of this endeavour depended on cooperation between the US and Russia, which was ‘undone by Cold War politics’ (Chace 1996:130). On 15th November, 1945 the US, Britain and Canada proposed the setting up of an Atomic Energy Commission at the United Nations (UN) to prepare recommendations on eliminating the use of atomic energy for destructive purposes while promoting its peaceful uses. The Soviet Union enthusiastically agreed to this proposal but insisted that the planned commission be accountable to the UN Security Council, which reserved its veto option in case the commission was not to its taste.

Bernard Baruch of the US presented the Acheson-Lilienthal report (also called the Baruch plan) at the UN. The Baruch plan envisaged the elimination of state possession of nuclear weapons. It proposed to disallow the use of the veto by nations which violated safeguards regarding nuclear proliferation. It mentioned that the US would continue to possess atomic weapons until firm guarantees were in place preventing other nations from arming themselves with nuclear weapons (Goldschmidt 1977:71). These clauses were not accepted by the Soviet Union. Moscow responded with the Gromyko plan which required atomic weapons to be declared illegal and destroyed. The Baruch plan was approved by the UN but was killed by a Soviet veto in the Security Council (Weiss 2003).

During this period, the US followed a strategy of ‘strict secrecy’ with regard to nuclear proliferation. This policy prevented the transfer of nuclear technology and know-how from the US to other nations. The Soviet Union conducted its first nuclear test in September 1949, which set the stage for the nuclear arms race between the superpowers.

1950s- Atoms for Peace

In the 1950s, there arose two views regarding nuclear weapons in Washington. The ‘monopolists’ viewed nuclear weapons as a national asset which should be concealed from other nations. This school emphasized that the US ought to maintain its nuclear exclusivity by embarking on a policy which promoted nuclear nonproliferation as an international norm (Walsh 2004: 2). The ‘managers’ believed that nuclear weapons would eventually spread to other countries and thus, the US ought to distribute them to its allies to secure an edge in the nuclear arms race.

The US policy of ‘strict secrecy’ failed to prevent some countries from developing indigenous nuclear programmes. The American and British leaders were confronted by the possibility that the Soviet Union would be able to offer the benefit of peaceful applications of nuclear energy to nations and thereby gain allies in the Cold War. In order to trump any attempted Soviet efforts to spread nuclear energy among its allies, the US altered its nonproliferation policy from one of ‘strict secrecy’ to ‘selective secrecy and control by co-operation’ (Krass et al 1983:194). Washington decided to provide non-NATO nations access to nuclear technology as long as those nations pledged to refrain from diverting such technology to their military programme (Walsh 2004:3). This implied a significant shift in the way the US construed the proliferation issue. Until the Soviet bomb was developed the US had remained consistent on preventing proliferation but due to Cold War calculations the policy changed to ‘selective secrecy’.

In 1953, the ‘Atoms for Peace’ proposal was introduced by US President Dwight Eisenhower. This policy aimed to aid countries in developing civilian nuclear energy for peaceful purposes in return for the guarantee that they would not divert this assistance to

weapons programmes. While President Eisenhower aimed to enhance the diffusion of nuclear power solely for peaceful uses, the Atoms for Peace program was blamed for accelerating the spread of nuclear technology as the superpowers began sharing nuclear know-how with other nations to win allies and establish strategic ties. The US and the Soviet Union began to assist several nations in the nuclear field in the 1950s. The danger for the nonproliferation agenda was that not only was nuclear technology aggressively disseminated, but an 'acceptable safeguards regime' was not put into place until the late 1960s (Tucker 1967:1). Some scholars perceived that the 'Atoms for Peace' plan was driven by the US nuclear industry concerned about losing its market share to others. Other scholars believed that sharing nuclear technology with nations would strengthen American leadership and disprove communist propaganda that the US was solely concerned with destructive uses of the atom (Cirincione 2007: 25). These events possibly marked the most lenient policies of the US and the Soviet Union in nuclear history. They began assisting nations in building nuclear power and Cold War politics blinded them to possible proliferation consequences.

The 'Atoms for Peace' plan included a proposal to create an International Atomic Energy Agency (IAEA). The IAEA was to formulate methods to facilitate nations to build nuclear energy for peaceful purposes. Eisenhower advocated that the agency could be responsible for devising ways to allow fissionable material to be used for 'peaceful pursuits of mankind' (Eisenhower 1953). The agency was to be responsible for the 'impounding, storage and protection of these materials' (Goldschmidt 1977:71-2). Although apprehensive and critical at first, the Soviet Union agreed to enter into discussions with the US regarding the creation of the IAEA. The superpowers combined their efforts to create the IAEA, which emphasized safeguards in nuclear-related transfers among nations (Nye1982:32).

The IAEA was established in 1957. IAEA member nations agreed to file with the agency regular detailed reports on nuclear civilian activities and consented to permit international inspections into their military complexes. These measures enabled the IAEA to perform as an organization responsible for averting possible transfer of nuclear aid meant for

peaceful purposes to military pursuits. The IAEA signalled the dawn of an era of inspections and safeguards with regard to nuclear commerce, which has served as a pillar of nuclear nonproliferation.

The 1950s was a decade in which Moscow and Washington were struggling to define a nuclear nonproliferation policy. Neither superpower transferred nuclear weapons outright to another state though, for reasons of alliance politics, they came close to doing so under the 'Atoms for Peace' plan. Internationally recognized norms against nuclear proliferation were beginning to crystallize at this stage and had begun to form a part of international consciousness.

1960s - Decade of Regime Creation

In the 1960s, Moscow and Washington redefined their interests to give nuclear nonproliferation a higher priority and cooperated in advancing the nuclear nonproliferation regime. The detente period in the Cold War provided an atmosphere that was conducive for the superpowers to collaborate their efforts towards solving issues which were retarding cooperation in buttressing the nonproliferation regime. US President John F. Kennedy was an ardent supporter of countering nuclear proliferation. Kennedy proclaimed that as many as twenty five nations could emerge as nuclear nations in the world as early as the 1970s, which would prove to be the greatest possible danger and hazard for the international community (Kennedy 1963).

On the other hand, in the 1960s, the superpowers were constrained in their efforts to cooperate on promoting nuclear nonproliferation by a high priority of alliance maintenance demands. In the late 1960s, the relaxation of these constraints allowed them to agree on 'formal norms for achieving their nonproliferation interests' (Nye 1998:343). Thus, nonproliferation norms began to percolate into international consciousness and these served as crucial and as intangible aspects of the nonproliferation regime which was materializing.

The Cuban Missile Crisis took the world to the brink of a nuclear war. It provided an impetus to President Kennedy to renew negotiations for a Nuclear Test Ban agreement with the Soviet Union. President Kennedy signed the Limited Test Ban Treaty (LTBT) with the Soviet Union in 1963, which banned nuclear tests in the atmosphere, in space and underwater. The LTBT reflected lessons learnt from the Cuban Crisis and alluded to the pressure of popular tide on the superpowers and to their assumption of an almost paternal responsibility for drawing up notionally universal rules to prevent nuclear-related proliferation (Smart 1986:13). The US and the Soviet Union cooperated in preventing Cuba from acquiring nuclear weapons. The Cuban Missile Crisis produced a negotiated settlement in which Moscow made assurances that Cuba would not acquire nuclear weapons (Walsh 2004:17).

By 1964, there were five nations which had tested the nuclear bomb - the US, the Soviet Union, Britain, France and China. In addition, there were a number of countries considering the possibility of developing nuclear weapons and had launched nuclear programmes. The frequency of the spread of the bomb led to an increased sense of danger, which contributed to greater 'cooperation between the superpowers, at least on the subject of nonproliferation' (Walsh 2004:6).

The Soviet Union aided China on the latter's nuclear power programme but this assistance was halted after the Sino-Soviet split. Soviet nuclear assistance forwarded China's nuclear weapon quest by many years. Thereafter, Moscow adopted a more cautious nuclear export policy. Post-1958, the Soviet Union slowed down transfers of nuclear technology to nations. Many nuclear commitments made by the Soviet Union were 'drawn out, re-negotiated, or left unfulfilled' (Duffy 1978: 86). Moscow insisted that recipients of its nuclear reactors obtain the nuclear fuel for their operation from the Soviet Union and return the spent fuel rods (Potter 1985:470). In this manner, the Soviet Union restricted nations from developing their own uranium enrichment and plutonium reprocessing facilities, which in effect acted as safeguards against nuclear proliferation. This attested to the slow but certain evolution of the norms against nuclear proliferation in international politics.

Meanwhile, the US was debating the Multi-Lateral Force (MLF) plan which aimed to provide NATO countries 'access to their own nuclear weapons but in a NATO context' (Walsh 2004:8). It was hoped that the MLF would prevent individual NATO members from pursuing their own national nuclear weapons programmes. The MLF was distasteful to the Soviet Union as it was seen as a 'German route to the bomb' (Walsh 2004:8). Moscow was against the possibility of West Germany acquiring nuclear weapons as it feared the resurgence of an overwhelmingly powerful neighbour. This apprehension reinforced Moscow's urgency towards attempts to halt nuclear proliferation. The Soviet Union began interacting with the US to formulate an improved safeguards system with regard to nuclear proliferation (Orlov et al 2002:12-13). The superpowers entered into intense negotiations over the future of the nonproliferation regime.

A breakthrough was achieved when the US convinced Germany to forswear the nuclear weapons option. Germany abandoned its quest for obtaining nuclear weapons, which eased the American dilemma of balancing alliance interest and pursuing global nonproliferation norms (Nye 1998:343). The US shelved the MLF plan and consequently, 'Soviet and American interests were sufficiently in step to allow for the negotiation of the Nuclear Nonproliferation Treaty' (Sharp 1984:816). US rejection of the MLF plan implicitly ensured that Germany remained a non-nuclear nation.

The superpowers agreed to the creation of a treaty which planned to prevent non-nuclear weapon states from acquiring nuclear weapons but allowed existing nuclear states to retain their nuclear armoury. This treaty came to be called the Nuclear Nonproliferation Treaty (NPT). Several nations were sceptical about the NPT as it was perceived to be discriminatory in nature. This attack on the proposed NPT was led by the non-aligned nations. The US and the Soviet Union cooperated to persuade the non-aligned nations to agree to the proposed NPT. Moscow and Washington combined their efforts to ensure that the emergence of additional nuclear states would be prevented (Bourantonis 1997:354).

The NPT was signed in 1968. This treaty functioned as the basis of the nuclear nonproliferation regime. The NPT prevented nuclear weapon nations from aiding non-nuclear weapon nations in building or procuring nuclear weapons. It ensured that non-nuclear weapon states place their peaceful nuclear facilities under international safeguards. The NPT granted non-nuclear weapon signatories access to nuclear technology and allows peaceful nuclear explosions. The sixth article of the NPT required nuclear weapon nations to disarm. The NPT helped establish a normative presumption against proliferation and it created procedures for international verifications which helped build confidence and a degree of predictability in states' behaviour with regard to nuclear proliferation (Nye 1981:18). The NPT endeavoured to curb the spread of nuclear weapons and served as the bedrock of the nonproliferation regime.

With the accession of the superpowers to the NPT, they signalled a commitment to maintaining exclusivity of the nuclear weapons club. The US and the Soviet Union were firmly positioned to prevent proliferation of nuclear weapons to other states. This definitive concurrence in the official policies of Washington and Moscow established them as 'proliferation pessimists'.

1970s - Proliferation Concerns on the Rise

Despite the creation of the NPT, new circumstances prompted the need for further measures to prevent nuclear proliferation. Three events that occurred in the 1970s exposed the incompetence of the existing nonproliferation regime. These events acted as catalysts for superpower cooperation in further bolstering the regime.

The first event was the Indian peaceful nuclear explosion (PNE) in 1974. The Indian nuclear test of 1974 demonstrated the shortcomings of the NPT. It was feared that the Indian test would provide 'new incentives for other states to acquire nuclear weapons' (Bull 1975:175). The Indian test indicated that non-nuclear weapons nations could break the exclusivity of the nuclear weapons club recognized by the NPT. The Indian explosion proved to be a major test for the nonproliferation norm and urged the international community to reinforce the nonproliferation regime.

The US was critical of the Soviet response to the Indian PNE as Moscow did not condemn the Indian explosion. The Soviet response to the Indian 1974 test was at most 'politely noncommittal, (and) was not what one might have expected from a sponsor of the Nonproliferation Treaty' (Potter 1985:474). The passive Soviet response could have been influenced by Moscow's continuing domestic support for PNEs as a significant 'economic resource' (Potter 1985:474). Moscow's response to the Indian explosion was in sync with the official nonproliferation policy of the Soviet Union, which stressed that Washington and Moscow were to each ensure that their client states did not assemble nuclear weapons. The Soviet Union ensured that its client states refrained from rerouting nuclear assistance meant for peaceful purposes to military ends. Moscow was nonchalant about pressing nations other than its allies about nuclear nonproliferation safeguards. The Soviet reaction to the Indian nuclear test was indicative of this attitude (Duffy 1978:90). In addition, strong Indo-Soviet ties in the Cold War period could have influenced the Soviet response to the Indian PNE. Condemning the Indian test in a harsh manner would not have been politically prudent on the part of the Soviet Union.

The Indian PNE led to the passage of the Nuclear Nonproliferation Act in the US that made it mandatory for any nation availing nuclear aid from the US to undergo full-scope safeguards. The US also vowed to terminate nuclear co-operation with any state that engaged in activities related to the 'manufacture or acquisition of nuclear explosives' (Tate 1990:409). These measures signalled the onset of stringent US laws with regard to nuclear-related cooperation with non-nuclear weapon nations.

The defeat of the US in Vietnam led to trepidation among client states of the US regarding its ability to provide them with security in case of a military outbreak. By the 1970s, France, Germany, Britain, the Netherlands, Japan, and South Africa had begun to build their own enrichment capacity. There was a proposition to sell facilities capable of producing fissile materials to non-nuclear weapon nations without regard to their proliferation implications (Nye 1981:19). These developments could have led to an increase in the number of nuclear weapons states.

The oil crisis of the 1970s led to a sudden surge of exaggerated expectations around the world about the importance of nuclear energy (Nye 1981:19). The sudden increase in oil prices led several nations to consider substituting dependence on thermal power for nuclear energy. Intensifying interest of non-nuclear weapon nations in acquiring nuclear energy was a matter of concern for the US and the Soviet Union due to the possibility of nations redirecting nuclear power meant for civilian uses to military purposes.

These events generated renewed interest among the superpowers to cooperate in further strengthening the nonproliferation regime. The dual-use nature of nuclear energy became the central concern for the superpowers. Nuclear technology can be used for civil purposes as well as for military purposes. Civil uses of nuclear energy consist of generation of electricity and treatment of cancer. Military uses of nuclear energy include creation of atomic weapons. The superpowers created the Nuclear Suppliers Group (NSG) in 1974, whereby transfer of dual-use nuclear technology was barred to nations which did not agree to the safeguards created by the nonproliferation regime.

Nuclear Suppliers Group

The Soviet Union and the US began in earnest to cooperate in strengthening the nonproliferation regime in the 1970s. The main highlight of this decade was the formation of the Nuclear Suppliers Group (NSG) with the backing of the superpowers. Receding Cold War pressures in this decade enabled Washington and Moscow to shore up the nonproliferation regime.

It was Henry Kissinger, the US National Security Adviser during US President Richard Nixon's administration, who has been credited with conceiving the idea of a multilateral control arrangement in response to the Indian test (Cirincione 2007:37). The Indian PNE emphasized the dual-use quality of nuclear technology. The international community decided to tackle the dual-use dilemma of nuclear energy by adopting an export policy which disallowed trade in sensitive items with nations which remained outside international safeguards and inspections. The superpowers concurred to adopt denial of nuclear technology as the mainstay of their nonproliferation policies, despite possible

economic losses. This illustrated the significance Moscow and Washington attached to maintaining the exclusivity of the nuclear club.

The international community was keen to enforce safeguard mechanisms to prevent possible nuclear proliferation. The Zangger Committee, which was convened under the IAEA framework, aimed to formulate guidelines and procedures for nuclear fuel and equipment exports to non-nuclear weapon states. In 1974 the Zangger Committee released a 'trigger list' of equipment and materials related to the fuel cycle that were to be exported to non-nuclear weapon nations on the condition that they accepted IAEA 'comprehensive safeguards' (Tate 1990:406). The Zangger Committee intended to prevent nuclear exports meant for peaceful purposes from being deflected to military programmes. The US and the Soviet Union participated in the Zangger Committee and were instrumental in the formation of the 'trigger list', which portrayed growing understanding in Moscow and Washington about the absolute necessity for them to cooperate in preventing nuclear proliferation by forming norms and principles to pattern behaviour of states in the nonproliferation realm.

The allies of the US were sceptical about the proposed NSG. This uncertainty stemmed from the fear that restrictions and safeguards suggested by the NSG could adversely affect their nuclear industries. The US compromised with the French and Germans by not requiring full-scope safeguards in order to achieve consensus on a set of guidelines that could be forwarded to the IAEA for the finalization of the NSG (Nye 1998: 345). The Soviet Union ensured that its allies accepted the proposed NSG plan. The US-Soviet endeavour to ensure compliance by its allies demonstrated the extent to which the superpowers valued the need for fortifying the existing nonproliferation regime.

The superpowers strived to ensure that nuclear trade became exclusive and nuclear technology meant for peaceful uses was not siphoned off for weapons use. The NSG was formed in 1975 and contributed to the prevention of proliferation of nuclear weapons capable material to non-nuclear weapon states that remained outside the reach of international inspections. The NSG guidelines called for supplier nations to exercise

restraint with regard to transfers of enrichment and reprocessing technology to non-nuclear weapons nations. It required the provision of physical security for transferred nuclear facilities and materials. The NSG necessitated acceptance of safeguards on replicated facilities and prohibited retransfer of nuclear exports to third parties (CRS 2010a:18). These elements of the NSG enhanced the safeguards aspect of the nonproliferation regime.

The 1970s decade was crucial and fruitful as far as cooperation between the superpowers in further bolstering the nonproliferation regime is concerned. One can clearly notice the convergence of aims of the superpowers in preventing the misuse of nuclear technology meant for peaceful purposes to weapons programs. They cooperated to form the NSG and thereby annulled to a large extent their previous policy of 'nuclear sharing' without requiring mandatory safeguards and inspections. Instead of vying to win friends and allies as was the practice in the Cold War by sharing nuclear technology, the superpowers placed higher emphasis on maintaining the exclusivity of the nuclear club and further tightening nuclear trade.

Concern over Soviet Nonproliferation Commitments

In the 1970s, there was some concern, especially in the US, about possible relaxation of Soviet nonproliferation norms as the latter embarked on nuclear trade with Libya, India, Cuba and Argentina specifically and other developing nations in general. This development worried the US as it was perceived as a Soviet move to mould better ties with Third World nations instead of promoting stringent nonproliferation norms. This matter was of even greater concern as it was observed as a distinct shift in Soviet export policy, which was otherwise characterized by extreme stringency post the China fiasco in the 1950s. The concern about possible Soviet laxity in nonproliferation norms began in 1975 when it permitted sales of nuclear reactors and components outside the communist bloc. By this time, the Soviet Union had become a significant force in the world nuclear fuel market (Duffy 1978: 91). Increased intensity of Soviet nuclear commerce with non-nuclear weapons nations alarmed the US. There can be several explanations for the

renewed Soviet thrust in promoting nuclear commerce with nations. By promoting nuclear commerce, the Soviet Union stepped into the vacuum in the supply of nuclear commodities left by the Western countries. Unlike the US, Moscow did not reduce nuclear-related trade with countries after the Indian PNE. Additionally, increased nuclear trade provided economic benefits for the Soviet Union (Duffy 1978: 92-95). These explanations elucidated the motives behind the Soviet move to increase nuclear trade with nations.

Soviet nuclear trade with non-nuclear weapons nations was not completely devoid of safeguards as feared by the US. Moscow required adherence to nonproliferation norms from the countries with which it had nuclear trade relations. Soviet policy in the mid-1970s shifted towards 'pragmatism and cooperation in the area of nonproliferation' (Potter 1985:471). For instance, in 1973-1974, the Soviet Union rejected Iraq's request to sell a plutonium fabrication plant (Orlov et al 2004:13). In case of Soviet supplies of heavy water to India, 'Moscow convinced New Delhi to sign a safeguards agreement with the IAEA' (Orlov et al 2004:13). Libya's accession to the NPT before concluding an agreement involving the export of nuclear reactors is regarded as the result of concerted Soviet pressure (Duffy 1978:96). In case of Cuba, the Soviet Union insisted on the conclusion of a safeguards agreement between Cuba and the IAEA before it would make any transfer of power reactors (Potter 1985:483).

The Soviet Union maintained stringent nuclear exports in place when promoting nuclear-related commerce with non-nuclear weapons states. Moscow ensured that all non-nuclear weapons states receiving reactors from the Soviet Union returned spent fuel rods to the Soviet Union for processing to ensure that they were not used for military programmes. The recipients of nuclear-related aid from the Soviet Union were disallowed to develop 'reprocessing and enrichment plants which would enable them to prepare uranium or plutonium for explosive purposes' (Duffy 1978: 87-88). The Soviet Union required recipients of nuclear technology within the Bloc to sign the NPT and submit to the safeguards of the IAEA (Duffy 1978:87-88). Moscow ensured that nuclear cooperation with non-nuclear weapons states met safeguards required to avert proliferation. These

preventive measures against proliferation are testimony to the strong emphasis placed by Moscow on maintaining the exclusivity of the nuclear club. Even the exigencies of the Cold War could not lead them to transfer nuclear weapons know-how to allies. These examples prove that the Soviet Union was conscious not to disseminate nuclear technology that could have helped in assembling nuclear weapons. Furthermore, the Soviet Union cooperated with the US to halt a proposed South African PNE in the 1970s. Thus, in the 1970s, nuclear nonproliferation continued to assume international significance. The creation of the NSG in response to the Indian PNE was the most positive development with regard to preventing nuclear proliferation in this decade. On the other hand, despite the formulation of the NSG, Cold War calculations did not entirely recede. The Soviet-Cuba trade cannot be brushed off as a purely economic venture given the geographical proximity of the receiver nation to the US. Furthermore, the Soviet-India nuclear trade can be viewed as Moscow's attempts at securing closer Indian cooperation in a Cold War setup. The Soviet-Argentina nuclear trade can be comprehended as a way of offsetting the Brazilian nuclear programme. Hence, the Soviet practice of embarking in trade with Cuba, India, Argentina and others can be understood in a Cold War framework of coalition building and countering the Capitalist bloc.

Arms Control Initiatives

This section chronicles the several arms control measures that the US and the Soviet Union signed in the latter part of the Cold War. These measures were a partial fulfilment of the commitment of nuclear weapons states under Article VI of the NPT. President Ronald Reagan and President Mikhail Gorbachev combined efforts to abolish nuclear weapons. The superpowers remained unhindered in their pursuit of nonproliferation despite bilateral differences which cropped up following the Soviet invasion of Afghanistan. The US and the Soviet Union signed the Strategic Arms Limitation Talks I (SALT I) in 1972, which produced an Anti-Ballistic Missile Treaty. It limited strategic missile defences to 200 (later 100) interceptors each. Moreover, the SALT talks produced an Interim Agreement that capped US and Soviet ICBM and SLBM forces (Kimball 2010). The Strategic Arms Limitation Talks II (SALT II) in 1979 between the

superpowers resulted in an agreement that limited US and Soviet ICBM, SLBM, and strategic bomber-based nuclear forces to 2,250 delivery vehicles. It placed a variety of other restrictions on deployed strategic nuclear forces (Kimball 2010). The SALT I and SALT II agreements between the superpowers were products of intense negotiations. By this time, Moscow and Washington had amassed enormous numbers of nuclear weapons. Realizing the futility of the arms race, the superpowers coordinated their efforts in initiating a process by which a decrease in nuclear arms could be achieved in a verifiable manner.

The Ronald Reagan administration with its emphasis on Strategic Defence Initiative (SDI) threatened to disrupt relations the Soviet Union. Reagan's SDI plan proved to be a major impediment to US-Soviet cooperation in further limiting nuclear weapons. The SDI aimed to build a nuclear missile defence shield in space which would amount to a violation of the 1972 Anti-Ballistic Missile Treaty. The Soviet Union was wary that the SDI would render their nuclear deterrence invalid and tilt the nuclear balance in favour of the US.

Furthermore, SALT II was blocked by the American Senate in response to the Soviet incursion into Afghanistan. Conflicts between the superpowers from Kampuchea and Iran, to Afghanistan and Poland, strained the American-Soviet relationship to the point of 'inhibiting, although not destroying, their co-sponsorship of the NPT's purposes' (Smart 1986:14). These events hampered further nuclear arms reduction agreements between the superpowers.

Despite deteriorating relations between Washington and Moscow, cooperation on nonproliferation had not altogether ceased. Consultations and negotiations persisted between the superpowers on promoting nonproliferation and strengthening export controls on dual-use technology. By this time, emphasis on nonproliferation as an avowed principle had become an international preoccupation which could not be reneged on regardless of bilateral differences on political and strategic matters between the superpowers. The consultations covered nonproliferation issues, including the nuclear

situation in North Korea and the role of the IAEA as well as the improvement of the nonproliferation regime as a whole.

President Ronald Reagan was a known nuclear abolitionist. In addition, President Reagan championed US-Soviet cooperation in preventing the use of nuclear weapons (Reagan 1984). Reagan stressed the need for superpower cooperation to eliminate nuclear weapons in order to prevent the spread of nuclear explosives to additional countries (Reagan 1988). In 1985 Reagan voiced his search for a world free from nuclear weapons (Reagan 1985). These commitments made by Reagan provided an enabling environment for Moscow and Washington to collaborate to form an agenda for reducing nuclear weapons and preventing proliferation of nuclear weapons.

Soviet President Mikhail Gorbachev held similar views on nuclear disarmament. Reagan and Gorbachev held negotiations in order to formulate a strategy to reduce and eventually eliminate atomic weapons. At the Reykjavik Summit in 1986, Gorbachev and Reagan expressed their desire to pursue complete elimination of nuclear weapons (Craft: 2009). This was an ambitious project as it underscored the importance they placed on nonproliferation and the total elimination of nuclear weapons.

Although Reagan and Gorbachev failed at Reykjavik to conclude an agreement to rid the world of nuclear weapons, they succeeded in cooperating to reducing certain nuclear arms. They initiated steps leading to significant reductions in deployed long and intermediate-range nuclear forces, including the 'elimination of an entire class of threatening missiles' (Nunn et al 2011). The Intermediate-Range Nuclear Forces (INF) Treaty was signed on December 8, 1987 by Reagan and Gorbachev. This treaty required the US and the Soviet Union to verifiably eliminate all ground-launched ballistic and cruise missiles with ranges between 500 and 5,500 kilometres (Kimball 2010). This was a progressive step as far as arms control was concerned.

The international community took steps to counter the spread of nuclear weapon delivery systems. To this end, the Missile Technology and Control Regime (MTCR) was conceived which aimed to control delivery systems that could be used to launch nuclear

and other attacks. The MTCR came into effect on 16th April 1987. The MTCR intends to limit the risks of proliferation of weapons of mass destruction by controlling the transfers that could make a contribution to delivery systems for such weapons. Russia joined the MTCR in August 1995.

There were some regressive developments in the nonproliferation realm in this decade. The most significant were the nuclear weapon programmes of Pakistan and Iraq. The US cast a blind-eye to the Pakistani nuclear programme as the latter became a frontline state in the US strategy to counter the Soviet invasion of Afghanistan. The US refused to interdict Pakistani proliferation activities which eroded the ‘credibility of publicly stated U.S. nonproliferation commitments’ (Smith and Cobban 1989: 54). During the Iran-Iraq war of the 1980s, the superpowers sided with Iraq which prevented them from obstructing Iraq’s quest for nuclear weapons. The US had severed diplomatic relations with Iran following the 1979 Iranian revolution. The Soviet Union sought to preserve the valued Soviet-Iraqi bilateral relationship. These calculations prevented either superpower from actively preventing Iraq from pursuing nuclear weapons.

The Strategic Arms Reduction Treaty (START) was signed in July 1991 by the superpowers. It required the US and the Soviet Union to reduce their deployed strategic arsenals to 1,600 delivery vehicles, carrying no more than 6,000 warheads as counted using the agreement’s rules (Kimball 2010). START I reductions were completed in December 2001 and the treaty expired on Dec. 5, 2009.

US-Soviet cooperation in promoting nuclear nonproliferation in the 1980s produced mixed results. The blind-eye to proliferation activities of Pakistan and Iraq by the superpowers due to cold war constrictions weighed heavily on the nonproliferation records of Moscow and Washington. The invasion of Afghanistan by the Soviet Union and the SDI plan of the US threatened to ruin cooperation between the superpowers on nonproliferation matters. On the positive side, the superpowers managed to sign the INF and the START I treaties. They continued to profess support for the nuclear

nonproliferation norms and principles that had been established during the course of the Cold War.

Nonproliferation and Regime Theory

International regimes can be defined as a set of 'mutual expectations, rules and regulations, plans, organizational energies and financial commitments which have been accepted by a group of states' (Smith 1987:256). Security regimes are principles, rules and norms that permit nations to be restrained in their behaviour in the belief that others will reciprocate (Jervis 1982:357). Principles allude to beliefs of fact, causation, and rectitude. Norms implicate standards of behaviour defined in terms of rights and obligations. Rules involve specific prescriptions or proscriptions for action (Smith 1987:256).

There is a threefold division of scholastic take on the issue of the existence of regimes in international relations. First, Young, Hopkins and Puchala opine that regimes are a 'pervasive characteristic of the international system' (Krasner 1982:185). According to this view, a nonproliferation regime exists in the world and it patterns state behaviour in relation to nuclear proliferation. Secondly, Susan Strange contends that the concept of a regime is pernicious because it 'obfuscates and obscures the interests and power relationships that are the proximate, not just the ultimate, cause of behavior in the international system' (Krasner 1982:190). According to this view, powerful states steer the behaviour of states with regard to their views on nuclear proliferation. The third position explicates that in a world of sovereign states, the basic function of regimes is to coordinate 'state behavior to achieve desired outcomes in particular issue-areas' (Krasner 1982:191). This view helps explain the existence of the nonproliferation regime as a combined endeavour by many states to halt the spread of the bomb.

The prevailing explanation for the existence of international regimes is the egoistic self-interest of nations to achieve a certain goal. This position holds that regimes are interest-based. It suggests that there are times when rational self-interested calculation lead actors to abandon independent decision making in favour of 'joint decision making' (Stein

1982:316). For example, Russia or the US may have independently wanted to prevent nuclear proliferation but they realized that they could maximize their efforts by combining their resources to achieve this goal. Thus, they collaborated to formulate the nonproliferation regime.

Regimes may emerge spontaneously when expectations of many individual actors converge (Krasner 1982:196). For example, the interests of the US and Russia converged in the area of preventing proliferation which led them to collaborate their efforts in creating the nonproliferation regime. Regimes can also be formed by 'explicit agreements' (Krasner 1982:196). For instance, the creation of the NPT clearly enunciated a widely accepted nonproliferation norm in international relations.

Another causal variable used to explain regime development is political power. Oran Young developed the notion of 'imposed regimes' where dominant nations explicitly use a combination of sanctions and incentives to compel other actors to act in conformity with a particular set of pre-decided principles, norms, rules, and decision-making procedures (Krasner 1982:199-200). The current nonproliferation regime conforms to this explanation of 'imposed regimes', as it was created principally by the US and the Soviet Union, which were the dominant powers during the formative years of this regime.

Several norms and principles exist as part of the nonproliferation regime. For example, it is widely agreed by nations that the spread of nuclear weapons would further jeopardize prospects for international peace and security. Another case in point would be the concurrence among nations that nuclear-armed states must prevent others from attaining similar capacity (Smith 1987:257). These have become widely accepted views by most states in the world.

The series of treaties banning the deployment of weapons of mass destruction from geographical boundaries like the Antarctic Treaty of 1959, the Outer Space Treaty of 1967, the Treaty of Tlatelolco of 1967 and the Seabed Arms Control Treaty of 1972 attest to the nonproliferation norms that have materialized as part of the nonproliferation regime. The Nuclear Non- Proliferation Treaty (NPT) of 1970 serves as another example

of norms in the nonproliferation regime. Due to the existence of such treaties curtailing and directing the behaviour of states, noncompliance comes at the risk of sanctions and loss of prestige at the international level.

A.A. Stein provides two dilemmas which lead states to collaborate and cooperate in regime building. In the first kind of dilemma, the actors have a common interest in 'insuring a particular outcome' (Stein 1982:309). The superpowers had a common interest in preventing the spread of the bomb. This common interest could have provided the motivation for them to coordinate efforts to create the nonproliferation regime. In the second type of dilemma, the actors have a common interest in 'avoiding a particular outcome' (Stein 1982:309). The superpowers had a common interest in avoiding nuclear war, theft of the nuclear bomb and losing exclusive control over nuclear weapons. These mutual interests could have induced the superpowers to formulate the nonproliferation mechanisms. Hence, common interests and common aversions existed between the US and the Soviet Union in the nonproliferation arena and this helped boost cooperation between them in creating the nonproliferation regime.

Thus, a nonproliferation regime exists according to the theoretical postulations of international regimes. The US and the Soviet Union cooperated to form the nonproliferation regime. However, at no period in time did either state believe it to be sacrosanct. Power relations and self-interest did override nonproliferation goals. The US's blind-eye to Pakistani nuclear proliferation in order to gain its support in containing the Soviet Union in Afghanistan and the reticent Russian comments on the Indian explosion in 1974 as it did not wish to devalue its bilateral ties with India, served as examples of Cold War interests superseding nonproliferation goals. Hence regime theory helps one situate the nonproliferation regime in a theoretical context but it cannot be the sole explanation to comprehend US-Soviet Union cooperation in co-creating the nonproliferation regime.

Every decade of the Cold War was marked with some advances and some reverses with regard to the nonproliferation agenda. For example, in the 1940s, the Baruch and

Gromyko plans were attempts at advancing the nonproliferation agenda but the creation of the Soviet bomb was a reversal. In the 1950s, the Atoms for Peace program initiated by Eisenhower helped distribute nuclear technology which made conspicuous the reversals in this decade; while the establishment of the IAEA was a definite advance for the nonproliferation agenda. In the 1960s, the LTBT and the NSG were visible advances, while the Chinese nuclear test was the reversal. In the 1970s the Indian PNE was the setback, whereas the advance was noticeable by the formation of the NPT. The reversals in the 1980s was manifest by the Pakistani and Iraqi proliferation activities, while the arms control measures made discernible the advances.

Thus, the US and the Soviet Union were adversaries at the ideological level which entered the realm of politics, economics and diplomacy during the Cold War. There was an intense competition to obtain allies and secure spheres of influence. A security dilemma prevailed between the Cold War opponents, which launched a futile nuclear arms race. Cooperation between the superpowers seemed unlikely due to the antagonistic positions assumed by the rivals. However, the lethality of these weapons and power considerations of retaining exclusive control over them prompted the otherwise warring superpowers to combine their efforts to produce a nonproliferation regime to stymie the spread of atomic weapons. Despite Cold War temptations of trading nuclear weapons for allies, the superpowers largely resisted distributing nuclear technology and know-how for personal gains. The US and the Soviet Union coordinated efforts to create a nonproliferation regime which prevented a spiral of nuclear weapons states from emerging. The superpowers, despite the animosity which marked their relationship, harmonized their diplomatic resources to engineer nonproliferation norms and principles to ensure exclusivity of the nuclear club.

This chapter attempted to prove that the US and the Soviet Union cooperated to form the nonproliferation regime and endeavoured to sustain it despite manifold challenges that they confronted given the Cold War conditions which constrained their choices and actions. The superpowers overcame impediments at two levels to co-create the nonproliferation regime: First, nuclear technology was not bartered for allies and second,

mutual hostility between Moscow and Washington did not hamper cooperation in the fashioning a nuclear nonproliferation regime.

CHAPTER II

SOVIET DISINTEGRATION AND “LOOSE NUKES”: US RESPONSE

The end of the Cold War generated novel security considerations for the international community. With regard to the disintegration of the Soviet Union, the US had to formulate innovative policies to deal with its successor states. The prism of the Cold War had hitherto provided the necessary milieu for diplomatic posturing, regardless of any situation that arose in relations with the Soviet Union. With the demise of its Cold War opponent, the US was provided with the novel dilemma of dealing with a fragmented nuclear power, whose nuclear baggage lay strewn across four of the fifteen new entities that arose out of the Soviet experiment. The US needed to formulate a grand strategy to deal with these new republics, and mainly with Russia, which was accepted as the successor of the Soviet Union, which meant it was bequeathed both the United Nations veto and the nuclear weapons of the erstwhile Soviet Union. Debates ensued in the US as to whether it ought to counterbalance Russia or aid its transformation into a democratic capitalist country.

This chapter examines the cooperative initiatives that the US and Russia undertook to deal with the issue of handling and preventing the leakage of nuclear materials of the Former Soviet Union (FSU). The chapter has been divided into three parts: First, it tackles the Cooperative Threat Reduction (CTR) programme; secondly, it deals with the challenges faced by the CTR program and finally, it studies the globalization of the CTR efforts to secure nuclear materials beyond Russia.

Cooperative Threat Reduction Programme

As the Soviet Union entered its last days, there were many debates regarding the nature of support that the US ought to hand out to the ailing nuclear nation. A faction in Washington lobbied for doling out monetary assistance to the FSU to help dismantle its nuclear heritage. There was another group which was sceptical of the immediacy of a

security threat emanating from the nuclear weapons contained in the FSU and argued for a hands-off approach. Several in the US government were worried that US funding for the security of the FSU nuclear complex would free its former enemy to spend its own money on producing newer weapons. In addition, there was a suggestion that the peace which followed the end of the Cold War ‘should be spent solving problems in the United States’ (Weiner 2009: 218). Some even welcomed the emergence of several nuclear weapon states stating that it would keep Russia on its toes and would provide deterrence against possible Russian ambitions in re-conquering the newly independent states in the former Soviet space. Post much haranguing, the US agreed that a ‘democratic and market-oriented Russia firmly ensconced in the Western camp would best serve American national interests’ (Goldgeier and McFaul 2003:4).

The international community acknowledged the dangers which the nuclear weapon complex of the FSU posed to the world. There were qualms about accidental launches, unauthorized launches and miscalculations, which could lead to disastrous consequences (Allison 2000). At the time of the Soviet collapse, the Soviet Union possessed almost ‘30,000 nuclear devices and had produced approximately 1,200 tons of highly enriched uranium and another 200 tons of plutonium’ (Ellis 1997: 86). This nuclear material was based in Russia, Belarus, Kazakhstan and Ukraine. The US and Russia united to ensure that Russia emerged as the sole inheritor of the Soviet era nuclear weapons. Removing these nuclear weapons from Belarus, Kazakhstan and Ukraine became a national security priority for the George H.W. Bush and the William Clinton administrations. This could not be achieved without Russia’s assistance as ‘Russian cooperation was critical for keeping a balky Ukraine on track’ (Goldgeier and McFaul 2003:158). Ukraine perceived Russia as a threat to its ‘survival’ (Wolczuk 1999:19). Ukraine feared Russian aggression and this was the security side of its demand for retaining nuclear weapons, which had to be addressed to ensure a nuclear-free Ukraine.

The problems did not end with stray nuclear weapons alone. There was a danger with regard to the security of the chemical and biological weapons materials of the FSU. The international community had to tackle the issue of unemployed scientists, engineers, and

technicians who had been engaged in the development the Soviet Union's weapons of mass destruction (Felton 2002: 7). This could have had serious security implications as Russia was undergoing economic paralysis and these scientists had nothing but their nuclear expertise to sell. With the fall of the Soviet Union, the nuclear scientists had the freedom to visit or to emigrate to any country of their choice, including hostile nations which were assumed to seek weapons of mass destruction. FSU scientists could interact with ease with the outside world and could even sell their knowledge while remaining at home (Ball and Gerber 2005:50). Thus, Soviet era nuclear scientists facing unemployment became a security challenge for the US and prompted US-Russia cooperation to prevent brain drain.

The nuclear problems that emerged from the fall of the Soviet Union threatened to undo the nonproliferation regime. Post the fall of the Soviet Union, Russia was in a precarious economic and socio-political condition. There surfaced a likelihood of potential of nuclear smuggling and chances of theft of fissile material. Furthermore, there was the question of loose nukes or nuclear leakage. The international community had to secure and consolidate the Soviet Union's scattered arsenal of tactical and strategic nuclear weapons (Allison et al 1997: 185-6). Moreover, there arose questions about the quality of 'command and control of Soviet strategic and tactical nuclear weapons during a period of weak central authority' (Scarlott 1991: 687-8). There was the fear that precarious command and control could lead to accidental nuclear weapons launches followed by unimaginable destruction. The fall of the Soviet Union led to the decay of the command and custody and control system which 'eliminated a previous set of barriers to proliferation' (Lugar 1999:51). At issue was the prospect of a global surge in nuclear proliferation due to the diversion and export from the former Soviet Union to willing buyers (Potter and Shields 1997: 2). Russian cooperation with the US was crucial for preventing a nuclear catastrophe. There were fears of nuclear terrorism, which prompted the US and Russia to cooperate to prevent nuclear proliferation.

These negative probabilities were too significant for the US to neglect. They provided a strong rationale to the US to extend aid to the FSU to secure its nuclear materials. Russia

was interested in ensuring that its nuclear materials were protected, as it did not wish to emerge as a weak connection in the nonproliferation link. For reasons of prestige and power, Russia was interested in ensuring that none of the other republics formed with the collapse of the Soviet Union retained nuclear weapons. Thus, the interests of the US and Russia coincided with regarding to preventing proliferation, which formed a base for them to coordinate their efforts to prevent nuclear proliferation in the aftermath of the disintegration of the Soviet Union.

Another important development which aided US-Russian cooperation following the demise of the Soviet Union was that the ‘Atlanticists’ or the pro-west faction who controlled political affairs until 1993-4 in Russia were eager to cooperate with the US. The President of Russia, Boris Yeltsin was eager to demonstrate to the outside world that they were not radicals but were instead ‘reliable and cooperative partners of the West’ (Goldgeier and McFaul 2003:53). The economic crisis and the desire to prevent nuclear proliferation were additional incentives for Russia to engage the US (Newman 2001:86).

The G.H.W Bush and William Clinton administrations in the US were keen to synchronize efforts with Russia to tackle possible nuclear proliferation that could have occurred with the collapse of the Soviet Union. The US was eager to establish economic and close ‘security cooperation with Russia’ (Goldgeier and McFaul 2003:11). President Clinton was very determined to help Russia overcome its soviet past. The Clinton administration calculated that democratic regime change in Russia would lead to a new security relationship, which would lower the US’s defense budgets, which would in turn free resources for ‘domestic programs’ (Goldgeier and McFaul 2003:11). President Clinton aimed to bring Russia into the western orbit and offered financial and diplomatic support towards achieving this end. The US even turned a blind-eye to some of Yeltsin’s heavy-handedness in internal matters, due to the latter’s pro-west political stance, which suited the US. These attitudes of the political elite in the US and Russia ensured cooperation between them in tackling the threat of loose nukes that a fragmented nuclear confederation brought to the world.

The US and Russia even mulled over creating a joint missile defences programme together. To this end, the US Ballistic Missile Defense Organization engaged its Russian counterpart about an experimental joint project on early warning and missile defence, which produced the Russian American Observation Satellite program (RAMOS). This was the first-ever cooperation between the US and Russia in this highly ‘sensitive field’ (Goldgeier and McFaul 2003:50). This marked a break from the usual suspicions that strained US-Russia relations on missile defence.

To tackle the problem of the loose nukes, the US passed the Soviet Nuclear Threat Reduction Act in 1991. The act initiated the Cooperative Threat Reduction Program (CTR) which aimed to address concerns about the ‘loose nukes’ and ‘brain drain’ problems in the former Soviet Union. The CTR programme was also known as the Nunn-Lugar program. This programme was lauded as having been highly successful in preventing any nuclear calamity. The CTR program was praised for establishing a cooperative framework from which the US and the FSU have successfully reduced the ‘global threats from nuclear, chemical, and biological weapons’ (Felton 2002:2). The CTR became the newest manifestation of cooperation between the US and Russia in the nuclear nonproliferation arena.

The CTR began as part of a \$400 million package of humanitarian and nuclear security aid to the FSU. It evolved from a modest programme to a complex effort managed by multiple US government agencies: US Departments of Commerce, Energy, State and others, working in cooperation with a multitude of foreign government agencies’ (Thornton 2002: 140). It began as early as 1991 and continues till today. This resilience of the CTR programme attests to its success and the strength of cooperation between the US and Russia.

The Nunn-Lugar program envisaged the dismantlement and elimination of weapons of mass destruction and delivery systems. It aimed to prevent proliferation of nuclear weapons and to assist in preventing the drain of WMD specialists to the Third World countries and terrorist groups. It expanded military-to-military contacts between the US

and the FSU states (Orlov et al 2002: 163-4). The CTR aimed to transport, store, disable and safeguard weapons in connection with their destruction and establish verifiable safeguards against the proliferation of such weapons. It was to facilitate the transportation, storage, safeguarding and destruction of nuclear and other weapons (Ellis 1997: 86-88).

Broadly, the CTR committed to three principal threat reduction objectives: destruction and dismantlement of nuclear and chemical weapons, security along the 'chain of custody' of nuclear materials; and demilitarisation and defence conversion (Ellis 1997: 85-6). This part of the chapter will examine the CTR programmes under various departments of the US Government. Additionally, it will discuss the Megatons to Megawatts programme and the Expanded Threat Reduction Initiative.

Role of Executive Agencies:

Department of Defense (DOD)

For organizational purposes, CTR activity of the Department of Defense can be divided into three distinct project areas—chain of custody, destruction and dismantlement, and demilitarization. The first distinct project under the DOD was the 'chain of custody' area. The programmes under the 'chain of custody' project area of the CTR plan provided assistance to enhance weapons and fissile material security during storage and transport to dismantlement and storage sites, at every 'link' along the custody 'chain' (Ellis 1997:89). A crucial aspect under the 'chain of custody' project was 'transportation security'. In 1992, after signing the Lisbon Protocol to the START I Treaty, Ukraine, Belarus, and Kazakhstan pledged to return all the nuclear warheads to Russia. The US facilitated the transfer of the nuclear weapons to Russia. It supplied 125 railcars and 670 super-containers for transportation of fuel to interim storage facilities under the 'transportation security' aspect of the CTR plan (Orlov et al 2002:164). To bolster transport security, the US made available armoured blankets to protect nuclear material in transit and provided storage containers to house the weapons of mass destruction in transit. America helped secure railcars, which were used to transfer WMD to Russia. The

US provided Russia with emergency response vehicles, training, and support equipment for use in case of a ‘nuclear weapons transportation accident’ (CRS 2011a:13).

The ‘chain of custody’ project included ‘weapons storage security’ as a significant aspect of preventing nuclear proliferation. There existed the possibility of theft of nuclear fissile material and nuclear weapons from the FSU. The US and Russia cooperated on this front, despite a few hindrances. The US Department of Defense (DOD) enhanced security at both large national and smaller stockpile storage sites and storage sites at Navy, Air Force, and Strategic Rocket Force bases in the FSU. The DOD provided ‘perimeter fencing for vulnerable sites, and more comprehensive upgrades, including alarm systems and inventory control and management equipment to keep track of warheads in storage’ (CRS 2011a :13).

The intrusive nature of securing weapons storage faced many hindrances, as the Russian Government was apprehensive about allowing US officials into several of its nuclear weapons storage facilities. Russia even refused the US access to many of these sites. In order to resolve the trust deficit, the US and Russia completed agreements and promoted goodwill, which facilitated greater access to the US officials into weapons storage facilities. These agreements allayed Russian fears and paved the way for the DOD to achieve its weapons storage security agenda. This improvement marked the growing trust which facilitated cooperation between the former enemies.

Fissile material storage was another component of the ‘chain of custody’ project of the CTR. As even a small amount of unguarded fissile material could prove hazardous, safety of the multitude of Soviet era fissile material became an immediate concern for the US. Fissile material is a crucial element required to build a functional atomic weapon. The US aided Russia by providing more than 26,000 containers to hold the fissile materials and it helped Russia build a highly secure storage facility at Mayak to provide long-term safe and secure storage for these materials (CRS 2011a:15).

The second distinct project under the DOD comprised the dismantlement and destruction of nuclear-related material. The most effective way to prevent nuclear theft or smuggling was to destroy the WMD. The projects under this programme included the elimination of former Soviet nuclear weapons ‘launch vehicles and infrastructure, chemical weapons agents, and chemical and biological weapon production facilities’ (Weiner 2009:212-4). The US aided the destruction of WMD delivery platforms, such as, ballistic missiles, submarines, bombers and WMD infrastructure.

The Strategic Offensive Reductions Treaty (SORT) of 2002, led to the reduction of nuclear weapons of the US and Russia as the agreement settled the number of deployed strategic warheads between 1,700 and 2,200 for both states. The dismantlement and destruction component of the DOD’s CTR plan helped deactivate more than 7,500 warheads, 768 ICBMs, 651 SLBMs, and 155 heavy bombers (CRS 2011a:16).

The DOD’s dismantlement and destruction component of the CTR plan helped reduce nuclear weapons in Russia, Ukraine, Belarus, and Kazakhstan. The launchers and infrastructure associated with strategic nuclear weapons deployed on their territories were destroyed under the programme (CRS 2011a:16). They were provided with technology and expertise needed to ‘deactivate and dismantle missiles, launchers, submarines, and bombers’ (CRS a 2011:16). Nuclear infrastructure elimination formed another area of the DOD’s dismantlement and destruction component of the CTR. The US helped Ukraine ‘eliminate equipment and facilities that supported the deployment and operation of nuclear weapons’ (CRS 2011a:18). The US helped ‘Kazakhstan secure fissile materials and eliminate facilities at a nuclear weapons storage area and a former chemical weapons production facilities’ (CRS 2011a:18).

The third distinct project under the DOD dealt with the demilitarisation and defence conversion aspects of the CTR. The demilitarization efforts of the CTR emphasized the ‘long-term nature of threat reduction by reducing the capacity and economic pressures in the NIS to continue producing WMD’ (Ellis 1997: 92). Moreover, such defence conversion efforts encouraged the development of a market-based economy in the

recipient states and helped ‘prevent the proliferation and sale of advanced weaponry and the incentives for relying on such sales for income’ (Ellis 1997: 92).

The demilitarization aspects of the CTR were extensive and affected most of the FSU. The US added a new programme area—Global Nuclear Lockdown—in 2011 to secure weapons-usable materials in Russia and to fund centres of excellence outside the former Soviet Union (CRS 2011a:25).

Department of State (DOS)

The State Department of the US played an integral role in nuclear nonproliferation and threat reduction programs. The State Department was involved in preventing brain drain from the FSU, given the threat emanating from unemployed soviet-era nuclear scientists (Nuckolls 1995:1112). In 1996, the State Department managed and funded the science and technology centres in Kiev and Moscow. These centres were conceived to provide research opportunities to the nuclear scientists of the FSU. In 2005, the State Department combined these centres and the biological weapons redirect programme into a new category, called Nonproliferation of WMD Expertise.

In order to prevent theft of nuclear weapons from the FSU, the State Department created the Export Control and Related Border Security Assistance (EXBS) programme, which helped the FSU improve its capability to prevent nuclear smuggling and trafficking of WMD materials. It was envisaged to address four fundamental areas: First, it aided the recipient nations establish legal and regulatory bases for effective export controls; it then helped the nations develop appropriate export licensing procedures and practice. It enabled the recipient nations to establish and enhance effective enforcement capabilities, and finally, it facilitated the establishment of procedures that promoted effective interaction between government and industry (CRS 2011a:29).

Department of Energy (DOE)

The DOE of the US was engaged in securing Soviet-era nuclear materials. The DOE was involved in improving the Material Protection, Control and Accounting (MPC&A) of the FSU. It handled physical protection, material control and material accounting with regard to nuclear materials (Perry 1999:86). The US Department of Energy helped improve the MPC&A at Russian facilities by installing rapid upgrades designed to delay unauthorized access to the storage facilities (CRS 2011a:33). These included installations of ‘hardened doors and windows, locks and keys to control access, perimeter fences, and moveable barriers at entry points’ (CRS 2011a:33). The DOE provided upgrades tailored to meet security needs at each individual facility. These included monitoring and detection systems, the relocation of guard forces, the consolidation of materials, central alarm systems, and electronic access control systems. The DOE helped improve security at sites that housed a large amount of the former Soviet Union’s 600 metric tons of weapons-usable nuclear materials. It provided assistance to Russia’s navy and provided nuclear fuel storage sites and ‘completed security upgrades at warhead storage sites for Russia’s strategic rocket forces’ (CRS 2011a:34). Maximum installation of security was conducted to ensure that protection, control and accounting of nuclear weapons in Russia was not compromised.

The DOE assisted with the installation of security upgrades at 31 civilian nuclear sites throughout the FSU. These were mainly research facilities operating nuclear reactors (CRS 2011a:36). The DOE provided assistance to the FSU with regard to achieving consolidation and conversion of nuclear material in fewer sites to reduce the risk of proliferation. It concentrated its resources towards providing Russia with sustainable options with regard to guarding its nuclear materials. Sustainability efforts included ‘developing regulations, inspection capabilities, site safeguards, security programs, and other accounting capabilities’ (CRS 2011a:37).

To tackle leakage of nuclear materials from the FSU, the DOE implemented the ‘Second Line of Defense’ programme aimed at equipping customs checkpoints with radiation

control devices. To this end, the DOE upgraded existing systems and equipment to detect nuclear materials through joint efforts to improve their quality and reliability. It expanded the deployment of detection equipment at border checkpoints and its harmonization within a single network. The DOE enhanced the capabilities of Russian customs educational institutions to train specialists in the area of detecting and identifying nuclear and nuclear-related dual-use materials and goods through training personnel, elaborating educational programs, and providing necessary equipment (Orlov et al 2002: 170). The Megaports plan aimed to deploy radiation detectors at the Russian seaports which handled the container traffic headed for the US.

Besides the CTR programmes, which were exclusively implemented by specific departments of the US Government, there were other initiatives to tackle probable nuclear proliferation threats emanating from the FSU. The Global Initiatives for Proliferation Prevention programme was one such scheme. It included the 'Initiatives for Proliferation Prevention' and the 'Nuclear Cities Initiative'. The Initiatives for Proliferation Prevention (IPP) handled salaries given to Russian scientists for non-weapons projects (Weiner 2002:140). The IPP aimed at a level of partnership not between the governments of the US and Russia but between the scientists of the two nations (Weiner 2002:140).

The Soviet Union had created special nuclear cities to carry on their nuclear-related projects. These were secret locations which housed scientists and their families involved in the Soviet nuclear programme. With the collapse of the Soviet Union, the inhabitants of the nuclear cities were rendered jobless. Workers from these nuclear cities had difficulty relocating and finding employment as they continued to require the government's permission to move and the 'residents of the nuclear cities increasingly found comfort in their government-controlled isolation' (Weiner 2002:133). The US pioneered the 'Nuclear Cities Initiative' which concentrated on resettling the inhabitants of these nuclear cities. It included infrastructure development and employment generation in the nuclear cities.

The US and Russia agreed to halt plutonium production and took considerable steps to eliminate weapons-grade plutonium production. In the Plutonium Management and Disposition Agreement, signed in September 2000, each side agreed to dispose of ‘34 metric tons of weapons-grade plutonium’ (CRS 2011a:46).

The US and Russia established the ‘Megatons to Megawatts Program’ which down-blended highly enriched uranium (HEU) to low enriched uranium (LEU) as the former produces proliferation risks as it can be used to assemble nuclear weapons; whereas, LEU is exploitable solely for peaceful purposes. Russia and the US signed a 20-year HEU–LEU Purchase Agreement in 1993. Under this programme, Russia agreed to blend down 500 tonnes of HEU from dismantled nuclear warheads into LEU fuel (Weitz 2005:25). This LEU was shipped to US civilian nuclear plants and was used to provide fuel to power about half of the electricity-producing commercial nuclear reactors in the United States. Russia earned money while the US benefited with additional electricity. Russian officials channelled the money to fund research on ‘improving nuclear safety and civilian nuclear power within Russia’ (Weitz 2005:25).

The 1998 financial crisis led to a renewed sense of urgency in nonproliferation matters, as nations began mulling over substituting dependence on hydrocarbons to nuclear energy given the spiralling costs of the former. It prompted the US to formulate the Expanded Threat Reduction Initiative. President Clinton asked Congress for an additional \$1.8 billion for these programmes over the following five fiscal years and promised to push European countries, Japan, and other allies to make substantial new contributions to fund nonproliferation efforts. Congress balked at the scale of increases President Clinton requested but did boost funding for most Nunn-Lugar programmes during the subsequent two years (Felton 2002:10).

Hindrances to Effective Implementation

This part of the chapter will outline some impediments to the functioning of the CTR. Alan Simpson, the Senate minority whip (1987-1995) , commented: ‘If you're going to

start giving foreign aid to the hated commies ... you've got a real sales job to do in the US' (Zeuli and Ruttan 1996:509).

Delays constantly plagued CTR implementation. The delays in the implementation of the 'Nunn- Lugar programs reflected a wide range of bureaucratic, political, technical, and other problems—both in the United States and in the former Soviet republics' (Felton 2002:8). The Russian government made regular complaints about the slow expenditure of funds (Ellis 1997:93). The public in Russia and the US were hesitant and sceptical about a cooperative framework between the two nations in the form of the CTR programme, given the fact that high levels of distrust continued to exist between the former Cold War rivals. The CTR was afflicted by problems of a trust deficit between the former enemies. This lack of trust constrained free flow of information between Russia and America. Information about nuclear, chemical and biological weapons was closely held by the US and Russia and 'removing the veil of secrecy, even for a cooperative program, proved to be a difficult step' (Felton 2002:8). These impediments caused incessant delays in implementing the CTR.

Russia opposed and resented the 'Buy American' clause which required most equipment, supplies, and technology needs of the CTR to be purchased by Russia from US companies (Weiner 2009:220). In addition, the US government found it difficult to build a domestic consensus about the relationship between US security and 'cooperative work with Russia' (Weiner 2009:217-8). This hampered the efficient execution of the CTR and delayed its proposed agenda.

There was a nonexistence of a 'culture of cooperation,' between the US and Russia to sustain CTR efforts (CRS 2011a:48). There were cooperation hurdles inside the US Government. CTR's expansion was not accompanied by sufficient coordination between implementing agencies: DOD, DOE, and DOS of the US Government. As a result, CTR implementation suffered from duplication, inadequate communication, and lacked 'centralized leadership' (Weiner 2009:217-8).

Liability issues formed another aspect of contention between the US and Russia in their efforts to implement the CTR. In 1992, the former Cold War enemies signed an umbrella agreement that outlined the rights and responsibilities assumed by them regarding threat reduction assistance provided by the US. Under the agreement, Russia accepted complete liability for accidents and intentional acts of sabotage during project work. Russia objected to extending these stringent arrangements to later projects and insisted the US share some aspects of liability (Weiner 2009:222). Russia's fledging insurance markets, lack of capital at the national level for providing compensation, and rather capricious judicial system, raised serious questions about 'Moscow's ability to cover future claims for severe nuclear damage' (Brubaker and Spector 2003: 2). In 2006, the US and Russia completed successful negotiations and extended the liability agreement for another seven years, thereby settling insurance issues (CRS 2011a:51).

The US Government installed a system of certifications that had to be provided by the ruling US administration for the continuance of the CTR in Russia. The certification was based on the FSU meeting certain criteria prior to receiving US funds. These were checks to ensure that Russia did not misuse US aid by channelling them surreptitiously to enhance its military capability instead of using it to dismantle, destroy and eliminate Soviet-era nuclear weapons. At the beginning of the CTR effort, there were six certification conditions which needed to be fulfilled prior to certification for the release of US funds to Russia. These conditions necessitated Russia to make a substantial investment of its resources for dismantling or destroying nuclear weapons. Russia had to forgo any military modernisation programme that exceeded legitimate defence requirements and forgo the replacement of destroyed weapons of mass destruction. Russia had to relinquish the use of fissionable and other components of destroyed nuclear weapons in new nuclear weapons. Russia was to facilitate US verification of weapons destruction and comply with relevant arms control agreements; and it had to observe internationally recognised human rights, including the protection of minorities (Ellis 1997:97). On the successful fulfilment by Russia of these conditions, the US Government continued to sanction funds for the implementation of the CTR.

Certification came easy during the Clinton years (1992-2000) as it adopted a conciliatory attitude towards Russia and overlooked several inconsistencies of the Russian Government. Towards the latter years of the Clinton administration, the inconsistencies of the Russian Government increased in the political and economic fields, which were too difficult for the US to ignore. The US Congress added stricter certification requirements as conditions for funnelling US aid to Russia (CRS 2011a:54). These new conditions made CTR funds contingent on whether Russia was making reasonable progress toward the implementation of destroying a certain quantity of decommissioned nuclear weapons. They also depended on whether the US and Russia made substantial progress toward the resolution, to the satisfaction of the US, of outstanding compliance issues under the Wyoming Memorandum of Understanding and the Bilateral Destruction Agreement. The new conditions required Russia to fully and accurately declare all information regarding its ‘unitary and binary chemical weapons, chemical weapons facilities, and other facilities associated with chemical weapons’ (CRS a 2011:54).

In 2002, further conditions were attached to the release of funds. The US could not provide funding for chemical weapons destruction activities in Russia until the US Secretary of Defense certified that there was adequate information provided by Russia, regarding its size of the chemical weapons stockpile. Additionally, Russia had to demonstrate its annual commitment by allocating at least \$25,000,000 to chemical weapons elimination. Russia had to develop a practical plan for destroying its stockpile of nerve agents and had to enact a law providing for the elimination of all nerve agents at a single site. Moscow had to agree to destroy or convert its chemical weapons production facilities at Volgograd and Novocheboksark. Finally, it required a commitment from the ‘international community to fund and build infrastructure needed to support and operate the facility’ (CRS 2011a:54). In 2009, in an unprecedented move towards ensuring greater efficiency of CTR efforts, the US Congress eliminated all certification requirements.

The US Government was apprehensive about funding Russia’s nuclear transition. Lingering Cold War attitudes in the US created resistance to the use of ‘taxpayer money

to help a former enemy' (Felton 2002:8). Financial limits, political conditions, and legal restrictions imposed by Congress, provided impediments that prevented effective implementation of the CTR. The competing priorities of the Clinton administration and the meagreness of the contributions of the US's allies added to the list of obstructions to effective functioning of the CTR (Allison et al 1997:194).

Delays and lack of funds have been a constant problem for the CTR. The US allocated enormous sums of money towards the CTR effort, nearing slightly more than '\$1 billion per year' (CRS 2011a:55). Yet, some strategists opined that this sum of money has fallen short on many counts. The Bush Administration agreed to allocate greater monetary resources towards the CTR programme. Russia often failed to provide promised contributions to several CTR projects, which forced the US to dedicate greater sums than planned. Auditors accused government employees of misappropriating hundreds of millions of dollars of 'Western aid intended for nuclear dismantlement' (Weitz 2005:19). Most CTR funds currently bypass the government and flow directly to private Russian and Western contractors, which has been seen as hazardous as 'Russian institutions still often have only limited capacity – in terms of competent programme managers, qualified subcontractors and suitable facilities – to use threat-reduction funds effectively' (Weitz 2005:19).

Diplomatic and political differences between the former Cold War opponents threatened to annul the CTR program. The CTR was affected by the souring of US-Russia relations during the Kosovo war. Russia was vehemently against US intervention in the Kosovo war as it was perceived as an attempt by the US to enter its sphere of influence. It appeared as though the CTR would be the casualty of this conflict of interests between the US and Russia and for a time it seemed possible that Russia would allow its Nunn-Lugar agreement to expire. This fear prompted American foreign policy leaders to redouble their efforts to work with their Russian counterparts, and the US and Russia were then able to agree to continue strengthening the CTR despite political-diplomatic differences between them (Felton 2002:11).

The CTR became entangled in internal Russian political disputes, the reassertion of power by its internal security forces, and attempts by Russian leaders to reclaim power internationally. Domestic political developments in Russia endangered the CTR efforts to an extent. Until 1993, the Atlanticists were at the helm of political affairs in Russia, which allowed for a pro-US tilt in Russian policies. However, by the middle of the 1990s, the Eurasianists in Russia began to assert themselves, demanding policies which were more independent of the US. Russia perceived the CTR as a US ruse in controlling its external behaviour as there were efforts by the US to make CTR funding contingent upon Russia's behaviour in the war in Bosnia, Russia's respect for nationalism in the Baltic States, Russia's conventional weapon sales to India, and its nuclear power assistance to Iran, among other issues. Often this linkage was explicit. For example, in 1999-2001, the US Congress withheld funding for the Science Centres in an effort to force Russia to 'end work on the Bushehr nuclear power reactor in Iran' (Weiner 2009:222). These measures by the US were perceived as detrimental to Russian growth and were seen as intrusions into Russia sovereignty. The Eurasianists who wrested power from the Atlanticists by the mid-1990s threatened to refuse accepting the US's diktat. This unprecedented assertion of the Russian political elite put in jeopardy cooperation between the US and Russia, especially on the CTR front.

There was a difference of priorities between the US and Russia which affected their cooperation in the CTR plan. The US was concerned about preventing nuclear proliferation and terrorism while Russia was focused on coping with the ramifications of the failed Soviet experiment and dealing with its crippled economy and with the loss of superpower status. With the stabilization of Russia's economy and with its newfound oil wealth, Russia began to behave more independently with nuclear modernization plans and a more aggressive pursuit of foreign policy stance, like the 2008 conflict with Georgia. The US argued that Russia ought to bear more financial burden for the CTR programme, which was objectionable to the Russian Government. Furthermore, Russia was resentful of the US tendency to treat Russia not as a great power but as the loser of the Cold War. The Russian Government was upset with the manner in which the US tended to make CTR policy and implementation decisions on its own rather than as part

of a collaborative effort involving Russian policy makers (Weiner 2009:223-4). The US often left no room for Russian input and all the compromises were undertaken by the latter.

In addition, Russia complained that, in the process of helping to store, move and dismantle their excessive WMD stockpiles, the US gained insights and information about 'Russian military practices that were not reciprocated' (Weitz 2005:20). The US's expansion of NATO into the former Soviet space was resented by Russia, as it was perceived as a continuation of the Cold War policy of containment. American criticism of Russian military action against the separatist movement in Chechnya, Russian sales of reactor technology to Iran, and Russia's reluctance to meet its obligations under the Conventional Forces in Europe Treaty, threatened to rupture US-Russia cooperation in the CTR programme (Potter and Shields 1997: 8). The Russian Government opposed the US attack of Iraq and felt that 'they were deliberately excluded from the North Korean nuclear deal' (Newman 2001:96). These contestations between the US and Russia led to the escalation of discontent between the two nations, which affected the smooth implementation of the CTR plan.

Expansion of CTR

Despite political conflict that emerged between the US and Russia, the CTR programme continued to be implemented by the states. The bipartisan Baker-Cutler Task Force released a report released on January 10, 2001, highlighted the significance of continuing cooperation with regard to the CTR, which furthered the US and Russia to coordinate their support to the CTR. The report warned that the most urgent unmet national security threat to the US was the threat that weapons of mass destruction or fissile material in Russia could be stolen and sold to terrorists and unfriendly nation states and used against 'American troops abroad or citizens at home'(Felton 2002:11). In the aftermath of September 11, 2001, a consensus emerged that a 'terrorist group or outlaw state would be likely to use weapons of mass destruction if they possessed them' (Thorton 2002:136). In 2003, Abdul Qader Khan, the father of the Pakistani nuclear programme, was accused of

running a nuclear black market with nations like North Korea, Iraq, Libya and others. The revelations of the activities of the Khan network alerted the international community to the proliferation risks that existed in the world (Albright and Hinderstein 2005: 121). These events induced the US and Russia to consider strengthening the CTR to superior standards.

Due to the emergence of the abovementioned circumstances, the CTR programme was extended to enhance its ability to prevent nuclear proliferation. It was expanded to secure nuclear materials in nations beyond the FSU. One example was the Global Threat Reduction Initiative (GTRI), which extended the CTR to other nations. The GTRI integrated and upgraded efforts to secure and remove HEU from research reactors and civilian nuclear facilities around the world. It worked to convert civilian reactors from using HEU to LEU in locations across Europe and the US, and at facilities in ‘China, Libya and South Africa’ (Cortright 2009:138-9). The intention of this programme was to prevent HEU from falling into the wrong hands.

The 110th US Congress (2007-09) allowed CTR funds to be channelled outside the former Soviet Union and sanctioned the practice of streamlining the process of ‘identifying and approving potential projects’ (CRS 2011a:59). There was a suggestion that these new initiatives could include ‘programs and projects in Asia and the Middle East; and activities relating to the denuclearization of the Democratic People’s Republic of Korea’ (CRS 2011a:59). Over time, the CTR program expanded to include governmental agencies other than the DOD, DOE and DOS. As of 2011, the CTR included the Department of Agriculture, the Centers for Disease Control and Prevention, the Department of Commerce, the Environmental Protection Agency, the Department of Homeland Security, the Department of the Treasury, the US Agency for International Development, and other organizations (Kane 2011). This attested to the growth of the CTR and the importance attached to its expansion and survival.

The CTR activities became globally focused and threat-driven. The DOE and the DOS were involved with CTR programmes outside the FSU as early as 2003, in ‘Afghanistan,

Pakistan, Iraq, Libya, Indonesia, and Malaysia, and moved most recently into Africa' (Kane 2011). With the expansion of the CTR to newer areas there was the need to tailor projects to respond to the unique circumstances of each recipient country. There was an effort to institute centres of excellence and training hubs that would strengthen regional capacities to combat the proliferation of WMD. Such centres were to be established in 'Poland, Chile, Japan, India, China, and South Korea' (Kane 2011).

Eventually, the CTR was used to refer to a broad group of programmes spread across US government departments and agencies, including a range of chemical and biological security programmes. This constellation of programmes was dubbed 'CTR 2.0' (Kane 2011). CTR 2.0 referred to a set of programmes and projects undertaken by the US, as part of a cooperative network that included a wide range of countries, international organizations, and nongovernmental partners, to prevent, reduce, mitigate, or eliminate common threats to US national security and global stability that emerged in particular since the end of the Cold War. The preferred mechanism and long-term goal for the cooperation was partnership, which meant that the countries participating shared responsibilities for project definition, organization, management, and financing according to a rational division of labour, capacity or technical capability (National Academy Press Report 2009: 40). Therefore, cooperation and partnership were identified as the key ingredients that were essential for a successful policy to combat proliferation of nuclear materials.

The Global Security Engagement (GSE) denoted the expanded CTR programmes. The GSE further expanded the cooperative facet in the nonproliferation regime. The GSE included programmes like: the Global Initiative to Combat Nuclear Terrorism, the Proliferation Security Initiative, UN Security Council Resolution 1540, and the Nuclear Security Summit (Kane 2011). The 'G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction' programme was another effort to include a greater number of states to pool resources to combat nuclear proliferation.

In 2002, the G8 – the USA, Russia, Canada, Japan, France, the United Kingdom, Italy and Germany decided to launch the ‘G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction’. Under this initiative they pledged to support specific cooperation projects to address non-proliferation, disarmament, counter-terrorism and nuclear-safety issues. The G8 prioritized destruction of chemical weapons, dismantlement of decommissioned nuclear submarines, disposition of fissile materials and employment of former weapons scientists as their foremost objectives (Statement by G8 Leaders 2002). The G8 programme was to initially focus on ‘threat reduction and nonproliferation programs in Russia; it has since been extended to Ukraine’ (CRS 2011a:58).

The G8 Program was described as ‘a new initiative to formalize multilateral nonproliferation cooperation’ (Thornton 2001:135). The G8 agreed to promote multilateral treaties to prevent the spread of nuclear weapons, materials, and know-how. They agreed to account and secure these items and promote physical protection of facilities holding nuclear materials. The G8 consented to help detect, deter, and interdict illicit trafficking. They acquiesced to promote national export and trans-shipment controls; and dispose of ‘nuclear, biological, and chemical weapons materials’ (Butler 2002).

Thus, with the G8 plan, the original US-Russia cooperation on promotion of nonproliferation was expanded to include other nations, thereby leading to greater acceptance of the norms against nuclear proliferation and underscoring the need for cooperation between nations to combat proliferation-related threats. The funding for this programme was shared by the G8. The US ‘pledged to provide \$10 billion over 10 years to sustain ongoing threat reduction programs in Russia’ (CRS 2011a:57). The other nations of the G8 agreed to provide, together, up to \$10 billion over 10 years. Russia agreed to contribute ‘\$2 billion of its own money’ (CRS 2011a:57). The G8 plan helped the US share the financial burden of securing nuclear materials with the rest of the G8 nations. This underscored the importance attached to funding for nonproliferation causes

as well as the fact that most of the powerful nations in the world were prepared to put up a cooperative and combative fight against nuclear proliferation.

The participation of the G8 proved the international character of the threat of nuclear proliferation. There was an increase in the number of members in the G8 programme. In 2003, six other nations in Europe (Sweden, Finland, Norway, Poland, Switzerland and the Netherlands) joined the partnership. Seven additional nations (Australia, New Zealand, South Korea, Belgium, Denmark, Ireland and the Czech Republic) joined it in 2004 (CRS 2011a:58). The increase in the number of states committing finances and other kinds of aid in securing the world from nuclear proliferation and nuclear terrorism reflected the growing agreement about the significance of securing nuclear weapons-related material.

The G8 programme's effectiveness was questioned by many critics. Some sections in Russia were cautious of the G8 programme as they felt that Russia was being meted out the treatment of a beneficiary, not regarded as an equal (Thornton 2002:137). Gennady Zyuganov, member of the Russian Communist Party, asserted that the West allocated money to Russia 'to completely annihilate Russia's nuclear missile shield' (Thornton 2002:137). On the other hand, A. Arbatov and others pointed out that the G8 plan would help Russia focus more of its attention on Europe and away from the US, thus preventing what some sections in Russian viewed as an 'increasingly U.S.-dominated, unipolar world' (Thornton 2002:137). Thus, some quarters in Russia remained suspicious of the G8 plan, while others identified it as fortifying Russia's vision of a multi-polar world.

The G8 program faced several challenges to its effective implementation. In particular, 'tax and liability exemptions frequently prompt international disputes and project delays' (Thornton 2002:150). Russia complained about very few pledges being received in a timely manner which made 'project planning extremely difficult and at times impossible' (Walker 2007). The biggest obstacle to faster progress in the G8 Program was found in the gap between money promised and money spent. Other obstructions were created due

to problems over: ‘negotiating legal frameworks for cooperation, disputes over liability, and access to facilities’ (Flournoy 2005:6).

Thus, the promise of the Global Partnership was not completely realized. Funds remained short and pledges were not converted to projects. There remained several loopholes in the security architecture created to prevent the ‘spread of the world’s most dangerous materials to the most dangerous people’ (Flournoy 2005: 2-3).

Nonetheless, the G-8 programme did post some successful results. In 2011, the members of the G8 programme affirmed that when the Global Partnership's initial mandate ended in 2012, partners would have achieved noteworthy success in areas such as the destruction of Russia's chemical weapons, dismantlement of Russian decommissioned nuclear submarines, re-employment of former nuclear scientists, the strengthening of security surrounding nuclear materials, as well as improvement of physical protection of facilities containing weapons of mass destruction (Report from Deauville, France 2011). The G8 plan summit of 2011 held at Deauville, affirmed that due to the contributions of the participating members, the G8 programme made tangible contributions to international security, through specific cooperation projects, initially in Russia, and increasingly worldwide. It achieved measurable results in all the key priority areas, including the ‘destruction of chemical weapons, dismantlement of decommissioned nuclear submarines, the disposition of fissile materials and the redirection of former weapons scientists’ (Report from Deauville France 2011). Other successes included the destruction of chemical weapons and the dismantlement of nuclear submarines.

In conclusion, the CTR served as a conspicuous example of US–Russian commitments to strengthen the nonproliferation regime and limit the number of nuclear weapons states. US-Russian cooperation in the CTR efforts provided ‘practical mutual benefits to each side, deepened mutual understanding, and formed the basis for long term relations’ (Maslin 1997: 149). The Nunn-Lugar program yielded considerable dividends in the nuclear sphere and in the early post-Cold War efforts to secure a ‘democratic peace with the nascent post-Soviet states’ (Ellis 2001: 26). It was an influential tool in accomplishing

the 'denuclearization of Ukraine, Kazakhstan and Belarus' (Goettmoeler 1997: 61). The CTR programme prevented the spread of loose nukes to a considerable extent. It redirected scientific and industrial infrastructure that could have otherwise been used to assemble nuclear weapons (Newman 2001:98). The extension of the CTR geographically boded well for the nonproliferation regime as it attested to the fact that preventing nuclear proliferation had become a concern for the international community.

The US and Russia coordinated their efforts to create, sustain and enlarge the CTR programme as an integral segment of the nonproliferation regime. Stormy political weather did not derail US-Russia cooperation on the nonproliferation front (Newman 2001: 83). The CTR provided proof that the US and Russia agreed that, despite their bilateral skirmishes, in order to 'win the race between cooperation and catastrophe, preventing the spread and use of nuclear and other weapons of mass destruction should be the central organizing security principle of the twenty-first century' (Nunn 2006:49).

CHAPTER III

US – RUSSIAN CONVERGENCES IN PROMOTING NONPROLIFERATION

The US-Russia relationship underwent a major transformation in the post-Cold War world. The former Cold War opponents cultivated cordial ties to fight mutual challenges. They undertook several combined endeavours to strengthen the nonproliferation regime. Russia was eager to cooperate with the Clinton administration and the US reciprocated. However, due to the continuation of the fledging economic situation in Russia, the US's growing unilateralism and Russia's rising Eurasianist tinge, there emerged elements of acrimony in their relationship. Russia feared US encirclement due to the enlargement of NATO and 'colour revolutions' in Russia's backyard made matters worse. The US and Russia found themselves on opposite sides during the wars in Yugoslavia, Kosovo, Iraq and Georgia. These incidents threatened to end cooperation between the US and Russia. Nonetheless, nuclear nonproliferation remained an arena where these two powers shared mutual interests and cooperated despite manifold challenges.

Officially the US and Russia articulated their commitment to cooperate in combating the 21st century nuclear proliferation challenges and terrorism. For example, the 'Joint Statement' released by President George W. Bush and President Vladimir Putin, on 21st October 2001, stated that the leaders of the two countries viewed US-Russian cooperation as a critical element in the global effort against terrorism. They reaffirmed their personal commitment to cooperate and coordinate efforts to fight this challenge and consented to enhance bilateral and multilateral action to stem the export and proliferation of nuclear materials. Such intentions were reinforced in the 'Joint Statement' released in 2002 by President Bush and President Putin on Counterterrorism Cooperation, which mentioned that the nations would work to strengthen national, bilateral, and multilateral measures to prevent the proliferation of weapons of mass destruction.

The US and Russia continued to strive towards strengthening the nonproliferation regime and to conclude arms control treaties in the form of the Strategic Arms Reduction Treaty of 1993 (START II), the Strategic Offensive Reductions (SORT) of 2002 and the Strategic Arms Reduction Treaty of 2010 (New START). They jointly endeavoured to achieve the ratification of the Comprehensive Test Ban Treaty (CTBT) by the required number of states for it to come into force. The US launched the Proliferation Security Initiative (PSI) in 2003, which was joined by Russia in 2004. Their cooperation in the NPT review conferences in 1995, 2000, 2005 and 2010 was also remarkable. US President Barack H. Obama's nuclear agenda intended to speed up negotiations on the FMCT was backed by Russia. President Obama's Nuclear Security Summit and his support for Global Zero were endorsed by Moscow.

In 2010, the US and Russia reiterated the importance of cooperation in combating terrorism and nuclear proliferation challenges. The 'Joint Statement' by President Obama and President Dmitry Medvedev of Russia on 'Counterterrorism Cooperation' released on June 24, 2010 stated that terrorism had emerged as one of the greatest threats to global peace and security in the 21st century and that the US and Russia would continue to work closely together to combat nuclear terrorism. Similar commitments of cooperation were reiterated in the 'Joint Statement' by the Presidents on 'Counterterrorism Cooperation', May 26, 2011. It stated that they agreed to focus on all aspects of the nuclear terrorism challenge through cooperative actions of law enforcement, transportation security, intelligence sharing, combating terrorism finance, counterterrorism technology, and within the framework of multilateral fora.

This chapter has examined a few of the significant aspects of nuclear nonproliferation wherein the US and Russia demonstrated cooperation in the post-Cold War world. These are: the arms control measures, the Comprehensive Nuclear-Test-Ban Treaty (CTBT), the Proliferation Security Initiative (PSI), the NPT review conferences, and President Obama's Nuclear Nonproliferation agenda.

Comprehensive Test Ban Treaty (CTBT)

The CTBT was negotiated at the Geneva Conference on Disarmament during 1994-1996 and was opened for signature on September 24, 1996. The coming into force of the CTBT is contingent on its ratification by 44 designated nuclear-capable states. Yet, of the 44 specified countries, India, Pakistan, and North Korea still have not signed, and only 35 have ratified the treaty (Kimball 2011).

Under the CTBT, the parties would refrain from testing nuclear weapons in any environment. Supporters of the CTBT claimed that it contributed to nonproliferation by preventing nuclear testing, which was a prerequisite for modernizing or creating newer weapons. Opponents of the treaty claimed that it did not prevent nuclear proliferation as computer simulations made tests redundant for many nations.

There were factions in Russia which were apprehensive about ratifying the CTBT as it was perceived as sealing Russia's options of modernizing its nuclear weapons. Nevertheless, Russia secured the ratification of the CTBT on 30th June 2000. Russian ratification of the CTBT was meant as evidence that it was more committed to the 'principles and objectives of preventing nuclear proliferation than the US as the latter did not manage to secure the Senate's vote for its ratification' (Orlov 2002:196). The Russian Government was wary about the noncommittal stance which the US Senate had taken on the ratification of the CTBT. The formal pretext for the Senate's decision was an ineffective verification system, which would not enable the US to be sure that other nations did not conduct nuclear tests (Orlov 2002:196). Moscow calculated that if the US remained free of the CTBT commitments, it could continue modernizing nuclear weapons, which would destroy the nuclear weapons balance between Russia and the US.

Proponents of the treaty in the US felt that the Senate's rejection was a huge blow to the nuclear nonproliferation regime. General John M. Shalikashvili (Ret) of the USA, expressed that the CTBT was a very important part of global non-proliferation efforts and was compatible with keeping a 'safe, reliable U.S. nuclear deterrent' (Shalikashvili 2001). The US Senate's rejection of the CTBT was in sharp contrast to its ratification by

Japan, Britain, France, Germany and the entire NATO alliance. (Kimball1999). In an editorial published in 'The New York Times' in 1999, British Prime Minister Tony Blair, French President Jacques Chirac and German Chancellor Gerhard Schröder warned that the rejection of the treaty by the Senate would give great 'encouragement to proliferators' (Chirac et al 1999).

The Bush administration did not attempt to get the CTBT ratified. On June 25th, 2007, Secretary of State Condoleezza Rice stated that the Administration did not support the Treaty and that it did not intend to seek the Senate's 'advice and consent to its ratification' (CRS 2011c:4). However, the Obama administration reversed this policy. In his Prague Speech in 2009, President Obama articulated that his administration's policy was to 'immediately and aggressively pursue U.S. ratification of the Comprehensive Test Ban Treaty' (Obama 2009). Secretary of State Hillary Clinton considered the CTBT as an integral part of US nonproliferation and arms control agenda (CRS 2011c:4). Unfortunately, continuing economic woes, midterm election losses and sagging popularity of President Obama rendered the administration unable to campaign for the ratification of the CTBT.

Though most of the international community welcomed President Obama's public move to pursue greater nonproliferation goals, domestic critics of his policies abounded. The criticisms of the CTBT were mainly that it did not define what it purported to ban and that the US nuclear weapons complex had grown weaker in subsequent years. The critics insisted that a zero-yield ban on nuclear explosive tests remained unverifiable and they pointed out that the Obama Administration has imposed self-defeating output limits on the nuclear weapons modernization programme (Spring 2011). Nonetheless, the Russian Government welcomed President Obama's plan to reinvigorate the CTBT debate and push for its ratification.

Some scholars argued for greater US-Russia cooperation with regard to achieving the ratification of the CTBT. Lindemuth suggested an expansion of the scientific collaborations between the US and Russia in order to establish an integrated nuclear

strategy with Russia. Such a renewal would help guarantee Russia's commitment to the CTBT and would renew cooperation between the US and Russia (Lindemuth 2009:485). Fears remained regarding possible Russian withdrawal from the CTBT. In 2006, the Russian Defense Minister stated that the Russia test range, Novaya Zemlya, was kept in constant readiness and stated that certain large nuclear powers had not ratified the CTBT (Lindemuth 2009:501). This highlighted possible frustration in Russia about continual US deferral on the ratification of the CTBT.

Another view from Russia raised the prospect of the possible collapse of the CTBT. This view stated that Britain and France had ratified the treaty but did not have a moratorium on testing, that the reverse was the case for China and the US, that India, Israel, North Korea, and Pakistan had done neither, and that only Russia had ratified the treaty and has a moratorium on testing (CRS 2011c:8). It therefore became very difficult for Russia to be the only nuclear power which complied with its 'terms and conditions in full' (CRS 2011c:8). Thus, Russia perceived that it had conceded too much by ratifying the CTBT without extracting benefits from this act while other nuclear powers remained free of such commitments.

Russian support was seen as necessary for the Obama administration to secure the ratification of the CTBT. There were two major interrelated issues on which Russian interventions could be usefully made regarding the further processing of the CTBT. The first dealt with the scope of the CTBT and the second, with confidence-building measures. Regarding the matter of scope, opponents of the CTBT argued that since the CTBT did not contain a clear-cut definition of what constituted a nuclear test it left room for 'different interpretations of its prohibitions' (Slipchenko 2010). This apprehension could be dispelled by reaffirmations of statements like the testimony of Yuri Kapralov, who, in 2000, declared that the qualitative modernization of nuclear weapons was possible only through 'full-scale and hydronuclear tests with the emission of fissile energy, the carrying out of which directly contradicts the CTBT' (Slipchenko 2010). Reaffirmations of such testimonies by the Russian Government could help allay US fears about the Russian Government differing on its interpretation about the exact prohibitions

the CTBT contended to cover. Regarding confidence building measures, Moscow could assuage the US by reaffirming its earlier propositions like the one by Marshal Igor Sergeev, then assistant to the Russian President on issues of strategic stability in 2001 which stated that to strengthen confidence-building measures, Russia was ready to consider the possibility to develop verification measures for nuclear test ranges going beyond the treaty provisions. This could contain the ‘exchange of geological data and results of certain experiments, installation of additional sensors, and other measures’ (Slipchenko 2010).

NPT Review Conferences

Conferences to review the NPT have been held every five years since the NPT came into effect in 1970. Each conference sought to concur on a final declaration that would assess the execution of the NPT’s provisions and make recommendations on measures to further reinforce it. This part of the chapter examines all four review NPT review conferences held in the post-Cold War world.

The landmark moment of the 1995 NPT review conference was the indefinite extension of the NPT. The non-aligned states argued against the indefinite extension of the NPT, as the nuclear weapons states had not undertaken disarmament steps (Scheinman 2005). The US and Russia worked together towards achieving the ‘indefinite extension of the treaty with minimal concessions to the non-aligned states (Orlov et al 2002: 183). Russia exerted pressure on the FSU and Iran; the US applied pressure on Mexico and Egypt to give up their reservations against the indefinite expansion of the treaty. The success of the NPT review conference of 1995 can be attributed to ‘competent diplomacy, efficient conference management, and the availability of some persuasive evidence of real progress in achieving the treaty’s key goals’ (Rydell 2005). The US and Russia showed great convergence of interests despite problems on the diplomatic front; for instance, during the period of the NPT review conference, the US was pressurizing Russia to abandon the Bushehr deal in Iran (Orlov et al 2002: 191-2).

The events surrounding the NPT review conference of 2000 were not conducive to a positive outcome. The CTBT was in limbo and the Conference on Disarmament (CD) remained deadlocked (Johnson 2000). China and Russia were bitter about NATO bombings in Yugoslavia and their opposition to the US national missile defense (NMD) policies challenged the prospects for cooperation at the NPT review conference of 2000 (Wulf 2000). The nuclear tests by India and Pakistan in May 1998 were nonproliferation reversals, which highlighted the loopholes in the existing nonproliferation regime. The US responded with sanctions on India and Pakistan. Russia preferred ‘resolving the conflict with diplomatic means without any sanctions’ (Orlov et al 2002: 199).

The Preparatory meetings for the 2000 NPT review conference witnessed for the ‘first time, greatly varied positions of the U.S. and Russian in the course of discussion on the future of the NPT regime’ (Orlov et al 2002: 200). However, there was some semblance of cooperation between them. Russia decided not to bring up the NMD issue during the NPT review conference, to which it had great reservations, as it was perceived by the Russian Government as an effort to disrupt the nuclear balance between the US and Russia. Russia helped prevent the conference from deteriorating by interceding to break the ‘deadlock between the United States and Iraq over referring to Iraqi non-compliance with the Treaty’ (Johnson 2000). The 2000 NPT review conference adopted a Final Document which contained both a ‘backward-looking review of how the Treaty was operating and a forward-looking perspective of what could and should be done for the further strengthening of the international nuclear nonproliferation regime’ (Orlov et al 2002: 201). The 2000 review conference was noteworthy as it took place at a time of impasse in the ‘disarmament field and deep political divisions between some of the nuclear powers’ (Orlov et al 2002: 210).

Preceding the 2005 NPT Review Conference, many events had occurred which threatened to rupture the nuclear nonproliferation regime. The events were, mainly, the discovery of Pakistani scientist A. Q. Khan’s proliferation network, the revelation of Iran’s clandestine enrichment programme and North Korea’s April 2003 withdrawal from the NPT (CRS 2005:4-5). There were other issues ‘of the proliferation sensitivity of the

nuclear fuel cycle, the provision of security assurances, questionable progress on disarmament, and the need for compliance enforcement' (Crain& McMonigle 2005). These events necessitated strong action on part of the international community to resuscitate nonproliferation efforts.

Nevertheless, chances of US-Russia cooperation seemed bleak given the Bush administration's unilateralist turn in foreign policy matters and President Putin's aggressive foreign policy manoeuvres. The US attack on Iraq on the pretext of destroying Iraq's supposed Weapons of Mass Destruction (WMD) in 2003, enraged the Russian Government as they perceived that force-based methods of tackling nuclear proliferation was in conflict with the norm-based, consensual and persuasive methods of nonproliferation.

The NPT review conference of 2005 faced several hurdles which prevented its success. For example, the US refused to permit the commitments made under the treaty review process to be the basis for a working agenda and focused on the 'proliferation threats posed by Iran and North Korea' (Granoff 2006). Egypt demanded the universalization of the treaty. Iran bated the nuclear weapons states on their 'failure to make progress on disarmament' (Granoff 2006). There was a lack of leadership from the nuclear weapon states, the European Union, the NAM and the New Agenda Coalition (Johnson 2005). The US devalued both multilateralism and international law. The US during the Bush era focussed outside the NPT with regard to combating nuclear proliferation. Washington focused on 'the NSG, the PSI, UNSC Res. 1540, the G-8 Global Partnership, and its own military counterproliferation' (Muller 2005:5-6). Thus, it seemed as though the irreconcilable positions of the US, the non-nuclear weapons states and other organisations, such as, the NAM or the New Agenda Coalition, would render the 2005 NPT review conference a failure.

Little effort was invested in promoting 'common objectives in any of the main committees or subsidiary bodies' (Potter 2005:23). The 2005 review conference exposed how the US-led shift from norm-based non-proliferation to counter-proliferation

weakened the essential infrastructure that the international community needed for combating WMD and terrorism (Johnson 2005). The 2005 review conference failed to produce a final document.

Several tensions preceded the NPT Review Conference of 2010. The Iran situation, the NSG's waiver to India, and the indecision regarding the implementation of the Weapons of Mass Destruction Free Zone in the Middle East, all suggested that the 'parties would fail to adopt a final document by consensus' (Dhanapala 2010:3). Other worries were the failure of the 2005 Review Conference and North Korea's nuclear tests. These events 'fostered the perception that the NPT regime was in danger of falling apart' (Pomper et al 2010:3). On the other hand, there were some favourable developments preceding the 2010 Review Conference. President Obama's commitment to Global Zero, signing of the New START, the release of the new US Nuclear Posture Review and UN Security Council Resolution 1887 signalled a new emphasis on nuclear nonproliferation.

The US and Russia cooperated to make the 2010 review conference a success. Russia helped urge Iran to accept the final consensus. The US and Russia 'repeatedly beat back attempts to put specific language in conference documents related to non-strategic nuclear weapons' (Pomper et al 2010:9). Russia took special responsibility for the 'Middle East resolution' (Meier 2010). Russia opposed specific references to eliminate nonstrategic nuclear weapons and demanded that US nuclear arms be 'withdrawn from Europe' (Johnson 2010:6-7).

The 2010 review conference ended with the adoption of a final document which called for a conference in 2012 on the establishment of a WMD Free Zone in the Middle East. It called on states to comply fully with IAEA safeguards and ensure that the IAEA had the resources to meet its responsibilities. It encouraged states to ratify the CTBT (Albright et al 2010:1). It reaffirmed the importance of a Fissile Material Cut-off Treaty (FMCT). Thus, it touched on the most crucial aspects of the proliferation challenge. The document reinforced 'international commitment to the global nonproliferation and disarmament agenda' (Albright & Stricker 2010). However, the 2010 Final Document 'was unable to

go much beyond reaffirmations, exhortations, and language agreed in 1995 or 2000 on universality, safeguards, the additional protocol, export controls, nuclear safety, and security' (Johnson 2010:8). It failed to agree on ways to solve matters of collective concern, such as, the nuclear programmes of Iran and North Korea, the nuclear arsenals of India, Pakistan, and Israel and countries that cheated or withdrew from the treaty (Johnson 2010:8-9). This illustrated the inherent weaknesses of the nonproliferation regime and pointed to the challenges which the US and others continued to face in combating nuclear proliferation.

Arms Control Measures

Russia and the US, as the legatees of the Cold War nuclear superpowers, had a 'special responsibility with respect to the linkage between vertical nuclear disarmament and nonproliferation' (Cimbala 2008:431). The Strategic Arms Reduction Treaty of 1993 (START II) was an ambitious arms reduction treaty between the US and Russia signed in 1993. It was the result of a compromise between the interests of the two states (Arbatov 1993: 77). It established a limit on strategic weapons for each party, with reductions to be implemented incrementally. START II's ratification by Russia was seen as a step towards creating a more conducive environment 'in order to form new spheres of cooperation with the West' (Orlov et al 2002: 144). On 13 June 2002, the US withdrew from the Anti-Ballistic Missile Treaty of 1972, and on the following day, Russia announced that it would no longer be bound by START II provisions. Thus, START II was a failure; however, its implications were cushioned as the Strategic Offensive Reductions (SORT) had bypassed it in 2002. The SORT was signed by Russia and the US in Moscow on 24 May 2002 and it obligated the signatories to reduce the total number of deployed strategic nuclear warheads to a level below 1,700-2,200. SORT introduced no new verification provisions. The treaty lapsed on February 5, 2011, when the New START Treaty entered into force (CRS 2011b:1).

Post 9/11, President George W. Bush endorsed the concept of pre-emptive strikes 'to disarm regimes that might provide terrorists with WMD or give safe havens to those who

plotted attacks against the United States' (Cimbala 2010:3). The US National Security Strategy (NSS) of 2002 stated that the enemy is terrorism and the US would 'disrupt and destroy terrorist organizations of global reach' (Bush 2002:5). President Bush explicated that the US and Russia had moved from confrontation to cooperation as the hallmark of their relationship and he pledged to pursue reduction in the nuclear arsenals on both sides and cooperation in areas such as counterterrorism and missile defense (Bush 2002:13). Russia extended support to the US in its war in Afghanistan and joined the coalition of those willing to wage war on terrorism.

The NSS-2002 stated that the US would 'not hesitate to act alone, if necessary, to exercise our right of self defense by acting preemptively against such terrorists' (NSS 2002). Russia was adamantly against the US's stance with regard to pre-emptive wars. The Foreign Policy Concept of the Russian federation approved in 2000 summed up Russian apprehensions about a seemingly unilateral USA. It was articulated that new challenges to the national interests of Russia were emerging in the international sphere and that there was a growing trend towards the establishment of a unipolar structure of the world with the economic and power domination of the US. It mentioned that in solving principal questions of international security, the stakes were being placed on western institutions and fora of limited composition, and on weakening the role of the UN Security Council (Russian Foreign policy concept 2000).

Russia continued to become more assertive in its foreign policy stance. This could be attributed to many reasons: Russia's economic growth enabled its military to begin rebuilding its dilapidated conventional and nuclear forces. Second, the US invasion of Iraq in 2003, overriding the objection of Russia, became for Moscow a symbol of American aspirations for global hegemony. NATO enlargement raised the prospect of inserting a US directed military presence in the heartland of the former Soviet Union. The disclosure in 2007 of plans to deploy components of the US global missile defence system in Eastern Europe was interpreted as an aim for the nullification of Russia's nuclear deterrent (Cimbala 2010:4). These causes impeded cooperation between the US and Russia.

President Obama, however, was a refreshing change in US leadership. He emphasized multilateralism and engagement, which was welcomed by Moscow. President Obama declared the US–Russia ‘reset’ and vowed to increase cooperation between the US and Russia in matters of preventing nuclear proliferation. The NSS 2010 made it clear that the US would pursue the goal of a world without nuclear weapons and build ‘cooperation with Russia and other states’ (Obama 2010:3). In Prague 2009, President Obama announced that to reduce US nuclear warheads and stockpiles, it would negotiate a new Strategic Arms Reduction Treaty (New START) with Russia. The New START was to succeed the START I Treaty of 1991, which was set to expire on 5 December 2009. The New START became an increasingly urgent issue for Russia and the USA. This was because the START verification regime was the primary means by which the two countries monitored each other’s strategic nuclear forces (Kile 2010:380-1).

However, prior to successful finalization of a New START treaty, the US and Russia had to dispel Moscow’s apprehensions about the Bush administration’s NMD plan. Russia conditioned its agreement to a new arms reduction treaty on the successful withdrawal of the NMD plan. The USA subsequently announced that it had shelved the planned missile defence system in the Czech Republic and Poland and would, as a replacement, deploy elsewhere in Europe a ‘reconfigured system designed to intercept short- and medium-range missiles’ (Kile 2010:382). The New START was signed on 8 April 2010, and after ratification, entered into force on 5 February 2011.

Supporters of the treaty stated that the New START would reduce Russian and US strategic forces while allowing the US to maintain a ‘robust nuclear deterrent’ (Pifer 2010). It was credited for strengthening the US administration’s hand in seeking to ‘tighten the nonproliferation regime’ (Pifer 2010). The ‘Joint Statement’ by US and Russia on the New START Treaty, released on May 13th 2010, provided the link between arms control and nonproliferation. It stated that the US and Russia viewed the New START as a significant step on the path to nuclear disarmament and non-proliferation. It mentioned that by concluding the treaty, the US and Russia had demonstrated their unwavering commitment to fulfilling their obligations under Article VI of the NPT,

which ushered in the transition to a higher level of cooperation between Russia and the US with respect to ‘disarmament and non-proliferation’ (Joint Statement by the delegations of The Russian Federation and The US 2010).

The START II, SORT and New START agreements were attestations of Russian-American cooperation in reducing nuclear weapons. Although reductions did not explicitly address nuclear nonproliferation, they provided the safeguards necessary to prevent nuclear material and weapons from falling into the wrong hands. Additionally, they helped the US-Russia duo to comply with Article VI of the Nuclear Nonproliferation Treaty.

Proliferation Security Initiative (PSI)

The NSS 2002 stated that the US’s enemies had openly declared that they were seeking weapons of mass destruction and that the US would build defences against ballistic missiles and other means of delivery (Bush 2002). In addition, the Bush administration initiated the Proliferation Security Initiative (PSI) and expanded the G8 Global Partnership. It sought to limit the export of peaceful nuclear technology to states that signed the IAEA Additional Protocol (Bolton 2003:10). This part of the chapter concentrates on the PSI.

In 2002 the ‘So San’, a Cambodian ship, was interdicted and twelve scud missiles were found in it (Blecher 2011:3). In response to this incident, G.W. Bush announced the Proliferation Security Initiative in Poland in 2003, wherein he stated that when weapons of mass destruction were in transit, the PSI would enable the international community to seize them (Bush 2003). The US and a number of its close allies began working on new agreements to search planes and ships carrying suspect cargo and to seize illegal weapons or missile technologies. The PSI sought cooperation from any state whose ‘vessels, flags, ports, territorial waters, airspace, or land might be used for proliferation purposes’ (Kaliadine 2006:4).

The PSI symbolized the mutuality of interests of a number of nations which perceived nuclear proliferation to be an evil which required collaboration in order to be stemmed. The PSI received as a 'supplement to the existing multilateral non-proliferation mechanisms' (Kaliadine 2006:12). It was perceived as being based on the development of cooperative arrangements among a coalition of states (Roach et al 2005:256). Others mentioned that under the PSI, nations cooperated to prevent smuggling of 'WMD and ballistic missiles through interdictions' (Schneider 2010:49). It was identified as a 'multilateral instrument for preventing the transfer of critical WMD' (Flanagan and Schear 2008: 316). It was seen as a supplement to the existing principles, norms, rules, and decision making procedures in the nonproliferation regime (Winner 2005:130).

The UN Security Council Resolution 1540 adopted on 28th April 2004 helped form a way to resolve all legal aspects of the PSI interdiction activities. It called on states to take cooperative action to prevent trafficking in nuclear, chemical or biological weapons, their means of delivery, and related materials. It called for the development and maintenance of effective national border control and law enforcement efforts and measures to account for and secure such items in production, use, storage or transport. It called for the development and maintenance of 'effective physical protection measures, to combat the illicit trafficking and brokering in such items' (Kaliadine 2006:6).

Russia was initially sceptical of the PSI and its implications on international law. Russian officials expressed concerns that the PSI's land, sea, and air-based WMD interdiction activities could endanger international commerce, and give 'unwarranted powers to the U.S. Navy to act as a global police force' (Prosser & Scoville 2004). The proliferation concerns emanating from the 'axis of evil' identified by the US Government, was not shared by Russia. Moscow was not interested in relinquishing lucrative nuclear trade with Iran and others which, it feared, was endangered by the US's proposed PSI plan.

Regardless of Moscow's apprehensions, it eventually joined the PSI in 2004. Russia's main concern was that the PSI should not authorize activities which would 'create any obstacles to the lawful economic, scientific and technological cooperation of states'

(Ministry of Foreign Affairs of the Russian Federation 2004). Russia signed the PSI to combat the spread of fissile material and that ‘helped change the general climate in U.S.-Russian relations and create expectations for ongoing cooperation’ (Mankoff 2011: 1928). Russia, thus, put its economic calculations on hold in order to participate in the PSI, thereby proving its commitment to nonproliferation.

Russia contributed to the PSI in various capacities. It participated in patrolling missions and counterterrorist operations. However, Russian participation in the PSI was affected by its strategic calculations as was made evident in 2004 when it chose to participate only as an observer in the PSI maritime interdiction exercise in the sea off Sagami Bay in October 2004, probably out of fear of undermining its relations with North Korea (Kaliadine 2006). This reflected Moscow’s dilemma at having to side with the US on the PSI plan at the cost of alienating its ties with North Korea.

The PSI played an integral role in combating nuclear proliferation. For instance, it provided the framework for action in the interdiction of the ship ‘BBC China’ in 2003. This interdiction incident helped unravel the A.Q. Kahn network and figured in Libya's decision to eliminate its WMD and long range missile programs (Rice 2005). In 2006, Under-Secretary for Arms Control and International Security Robert Joseph reported that between April 2005 and April 2006, PSI partners worked together on approximately two dozen separate occasions to ‘prevent transfers of equipment and materials to WMD’(CRS 2010b:3).

However, the PSI had many flaws. It lacked a decision-making mechanism. Some analysts claimed that the PSI lacked transparency and legitimacy’ (Blecher 2011:7). Nevertheless, the PSI served as a useful supplement to the nonproliferation regime. It was constructive as an instrument that strengthened the nonproliferation regime and helped form greater cooperation between the US and Russia. It helped to establish greater intelligence, diplomatic and operational coordination among partners (Nikitin & Mærli 2008: 43).

Fissile Material Cut-off Treaty (FMCT)

The FMCT was a proposed international treaty to prohibit the further production of fissile material for nuclear weapons. The negotiations on the FMCT were held in the Conference of Disarmament (CD). The CD operated on the basis of consensus, therefore, with regard to the FMCT, a small number of states were able to block further negotiations finalizing a FMCT (McGoldrick 2008:54).

There existed two schools of thoughts regarding banning fissile material. The first school contended that the FMCT must ban further and future production of nuclear material. The second school of thought led by Pakistan, supported a Fissile Material Treaty (FMT), which intends to ban further and future production as well as to 'dismantle the existing stockpiles' (Baqai 2011:269). They contended that existence of unequal stockpiles of fissile material at the global, regional and sub-regional levels would result in continued vertical proliferation (Baqai 2011:269). The US and Russia wished to promote an FMCT which barred further production of fissile material and neither of them agreed with the Pakistani stand of deleting existing stocks of fissile material.

In 2006, the Bush Administration submitted a draft text for the FMCT. The proposed text contained no provisions for verification and the US Government explained that adequate verification would require extremely intrusive inspections including sampling in and around the US Department of Defense facilities, and it would be 'difficult or impossible to verify the absence of clandestine production facilities' (McGoldrick 2008:55). In 2009, President Obama reversed the US position and proposed to seek a new treaty that verifiably ended the 'production of fissile materials intended for use in state nuclear weapons' (Obama 2009). In May, 2009, the CD agreed to establish an FMCT negotiating committee which yielded no results, as the Pakistani delegation blocked all attempts at establishing the FMCT.

Russia's proposed FMCT plan stated that all parties to the treaty should refrain from producing weapons-grade uranium and plutonium for use in nuclear weapons; desist assisting other states in the production of these materials; abstain from transferring fissile

materials from civil to nuclear weapon use and accept 'international monitoring of nuclear materials and facilities for verification of compliance with obligations under the treaty' (Diakov 2008:42).

Pakistan remained concerned about maintaining fissile material parity with India. Its concerns included the burgeoning US-India nuclear relationship, especially the NSG waiver granted to India. On the other side, the US was unwilling to apply pressure on Pakistan due to its geographical value in the fight in Afghanistan. By blocking the FMCT talks, Pakistan continued to build fissile material stockpile and kept open the 'prospect of a nuclear deal of its own' (Mian and Nayyan 2010).

The Obama administration in 2010 proposed to take the FMCT talks outside the CD to avoid seeking Pakistan's consensus. China and Russia, on the other hand, wanted the talks to stay in the CD (Collina 2011). On 30th August 30th, the P-5 met in Geneva to discuss ways to break the logjam on the proposed FMCT. They decided to keep the FMCT talks in the CD, which meant that because of the forum's consensus rule for decision-making, Pakistan's concerns eventually would have to be addressed (Collina 2011). The UN General Assembly's first Committee on Disarmament met in October 2011 to discuss the impasse created by Pakistan on the FMCT. There were a number of important developments. The US and its allies accepted that until a consensus was forged, discussions rather than negotiations on an FMCT were the most that could be achieved (Lodhi 2011). The CD was left to consider a Russian proposal that sought an 'elaboration of elements' instead of 'negotiations' for an FMCT in the 2012 talks (Lodhi 2011). Therefore, the US and Russia held similar positions on the type of FMCT they sought, which augured well for possible future resolution of the FMCT impasse.

Nuclear Security Summit

In April 2010, President Obama convened an international summit, attended by over forty heads of state or their representatives, on the topic of international efforts to confront the threat of proliferation of nuclear materials' (Malz-Ginzburg 2011:50). It was a first of its kind but it did not attain any groundbreaking achievements. The aim of the Nuclear

Security Summit was defined as an attempt to find ways to secure all the nuclear materials in the world within four years. The conference achieved widespread agreement on the subject of improving the security of locations where nuclear materials were stored. The US and Russia announced that each would destroy ‘thirty-four tons of plutonium’ (Malz-Ginzburg 2011:51).

The participants of the summit encouraged the conversion of reactors that used highly-enriched uranium, a weapon useable nuclear material to low-enriched uranium’ (Luongo 2010:2). The work plan released at the summit noted the need to support the Global Initiative to Combat Nuclear Terrorism and the G-8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction. It recognized the continuing importance of the IAEA and its guidelines and underscored the need for robust and independent nuclear regulatory capabilities in all countries, the requirement for the prevention of nuclear trafficking, and the improvement in nuclear detection and forensics. It further highlighted the fundamental role of the nuclear industry in the nuclear security agenda and the importance of sharing best security practices and the human dimension of nuclear security. The work plan included the consideration of the consolidation of national sites where nuclear material was stored and the removal of nuclear materials no longer needed for operational activities (Luongo 2010:2). Thus, the members deliberated upon a variety of nuclear safety related issues, which highlighted the continued importance of nuclear safety and the need for cooperation to combat proliferation.

Individual countries made commitments for improving security at home at the Nuclear Security Summit. These included the removal of all the remaining HEU in Ukraine by 2012; Canada agreed to return a large amount of spent fuel containing HEU to the US; the US and Russia signed an agreement to implement the plutonium disposition agreement; and India and China decided to establish nuclear security centres of excellence. Finally, there were some funding commitments that were made at the summit. These included a pledge of \$6 million by the UK and \$300,000 by Belgium for the IAEA’s Nuclear Security Fund, \$100 million from Canada for security cooperation with Russia, and a call by President Obama for an additional \$10 billion for the G-8 Global

Partnership (Luongo 2010:2). Thus, the Summit was a forum for renewing commitment and raising funds for addressing nuclear security challenges.

President Medvedev stated that the Nuclear Security Summit was ‘a complete success’ (Medvedev 2010:4). President Medvedev explicated that issues like nuclear terrorism and cooperation in countering countries that were trying to obtain nuclear technologies by illegal means united the international community (Ria Novosti 2010). Therefore, it was clear that the Russian leadership agreed with the US’s apprehension about nuclear proliferation and nuclear terrorism. Russian Foreign Minister Sergei Lavrov and US Secretary of State Hillary Clinton signed an agreement stipulating that Russia and the US would each dispose of ‘34 metric tons of excess weapons-grade plutonium’ (Ria Novosti 2010). President Medvedev announced during the Nuclear Security Summit that Russia planned ‘to close its last weapons-grade plutonium manufacturing facility’ (RIA Novosti).

This summit highlighted the seriousness of the US in promoting nonproliferation and Russian participation demonstrated that the two countries desired to support each other in combating the spread of fissile materials and tackle other nuclear-related threats.

Global Zero

This part of the chapter attempts to study the official positions of the US and Russia on the elimination of nuclear weapons to evaluate the seriousness both attach to this vision. The two Wall Street Journal op-eds in 2007 and 2008 by former Secretaries of State George Schultz and Henry Kissinger, former Secretary of Defense, William Perry, and former senator Sam Nunn began the trend towards a renewed call for total abolition of nuclear weapons, which became known as ‘Global Zero’. They called on the US to provide leadership in reversing the ‘global dependence on nuclear weapons and ultimately moving the world toward the elimination of nuclear weapons’ (Trenin 2009:49). In 2008, in Paris, over a hundred leaders ‘came together under the banner of Global Zero to kick off a world-wide campaign to persuade the governments of the

nuclear weapons states to negotiate a treaty to eliminate nuclear weapons by a certain date' (Trenin 2009:49-50).

President Obama declared in Prague in 2009, that America was committed to seek a world without nuclear weapons. He outlined his view of how the goal could be achieved, beginning with the pursuit of CTBT ratification, the negotiation of a fissile materials cut-off treaty, a reduction of the role of nuclear weapons in the US national security strategy, and a strategic arms reductions treaty with Russia (Trenin 2009:50). However, there existed a faction in the US which preferred incremental approaches to arms reductions over total abolition of nuclear weapons. Therefore, there existed two competing visions regarding the method of eliminating nuclear weapons. While one view supported total and complete abolition of nuclear weapons, the other wanted a step by step approach to the elimination of nuclear weapons.

Many scholars were sceptical about the US's commitment to Global Zero. In addition, the disarmament pledges of the US and Russia were not bold enough to satisfy the non-nuclear weapons states. Russia and the US had divided the world into acceptable and non-acceptable nuclear proliferators. For instance, India was granted a de facto nuclear weapons status, but the US and Russia were very sceptical about the Pakistani nuclear weapons programme due to the instability of the administration and terrorism considered to emanate from Pakistan. The US was silent about the Israeli nuclear weapons but was adamant in stopping North Korean and Iranian nuclear weapons programmes.

It was uncertain whether Russia would embrace the 'Global Zero' plan given the role nuclear weapons played in Russia's policies, including that of 'deterrent and equalizer in the overall military balance between Russia and the U.S. and its NATO allies, and even between Russia and China' (Saradzhyan 2009:5). The 2000 national security concept of the Russian Federation documented that Russia considered the possibility of using military force to ensure its national security by employing all the manpower and resources, 'including nuclear weapons, in its possession in the event of need to repulse armed aggression, if all other measures of resolving the crisis situation have been

exhausted or proven ineffective' (National Security Concept of Russian 2000). The 2000 Defense Doctrine of Russia asserted that Russia reserved the right to use nuclear weapons in response to large-scale aggression using conventional weapons in situations critical to the national security of the Russian Federation (Saradzhyan 2009:9). These pointed to the important position nuclear weapons held in Russian military and defence strategy.

Russian leaders publically endorsed the vision of a world free from nuclear weapons, yet, the Russian Government continued to believe that the nation's nuclear arsenal was of vital importance to its 'defence, security, foreign and even domestic policies' (Saradzhyan 2009:6). Russia's nuclear arsenal reaffirmed Russia's great power status. Nuclear weapons played a number of key roles in Russia's defence and security posture. In peacetime, they prevented forceful pressure and deterred aggression against Russia or its allies. In wartime, they reserved a first-use option in response to large-scale aggression; de-escalating aggression or defeating an aggressor in a large-scale war; and achieving cessation of military operations under conditions that were acceptable for Russia (Saradzhyan 2009:6). Russian leaders assumed that their nuclear arsenal both enhanced regional security interests and prevented the US from 'gaining global dominance' (Trenin 2009:8). Moscow's prime interest lay in regulating the major-power competition through arms control and 'not in abolishing nuclear weapons altogether' (Trenin 2009:1).

On the other hand, several influential actors in Russia enumerated external conditions necessary for it to embark on the road towards eliminating nuclear weapons. These included, 'universal implementation of existing nuclear arms control and nonproliferation treaties; further and irreversible cuts in US-Russian nuclear arsenals; constraints on U.S. missile defense and enhancement of Russian conventional forces; and resolution of major conflicts' (Saradzhyan 2009:6-7). Thus, in Russia too, there are two camps on the 'Global Zero' plan. Some were apprehensive of total abolition of nuclear weapons as they were an integral part of Russian security imagination but others pointed to the problems caused by the continued existence of nuclear weapons in Russia.

The US's actions affected Russia's perception of nuclear weapons. The expansion of NATO, NATO's air war against Yugoslavia over Kosovo, the colour revolutions in Georgia, Ukraine, and Kyrgyzstan and the proposed National Missile Defense affected the way Russia viewed its nuclear armaments. These aggressive actions of the US made Moscow realize that nuclear weapons were the only instruments that prevented an outright US attack on Russia's sovereignty.

The Obama administration tried to appease the Russian leadership by signalling to Moscow that NATO's membership to Ukraine and Georgia stands, would not be a priority, and would not be pushed. It softened its approach to the issue of ballistic missile defenses in Central Europe, and indicated willingness to explore the potential for US-Russian collaboration on missile defense (Trenin 2009:12-3). These conciliatory gestures by the Obama administration were welcomed in Russia prompting President Medvedev to embrace the 'Global Zero' vision.

There were several official pronouncements from Russia which supported to the nonproliferation regime and to arms reduction. The 2008 Foreign Policy Concept of Russia noted that Russia reaffirmed its unfailing policy of developing 'multilateral foundations of nonproliferation of nuclear weapons' (Saradzhyan 2009:9). In 2010, Russia published a new Military Doctrine that declared that nuclear weapons were 'an important factor in the prevention of nuclear conflicts that use conventional assets (Perkovich 2010:5). The Strategy of National Security through the Year 2020 of Russia introduced an unequivocal commitment to the abolition of nuclear weapons. It stated that the formation of propitious conditions for Russia's sustainable long-term development was to be achieved through 'ensuring strategic stability, including consistent progress toward a world free of nuclear weapons' (Saradzhyan 2009:8). This boded well for US-Russian cooperation on pushing other nations towards accepting 'Global Zero'. President Medvedev asserted that prevention of deployment of weapons in outer space, prevention of a build-up of nonnuclear strategic systems, and a guarantee that a nuclear return potential would not be created were necessary steps towards 'Global Zero' (Trenin 2009:12-3). However, the draft Strategy of Development of the Armed Forces through

2030 of Russia affirmed the importance of the nuclear arsenal's roles as a deterrent and an offset for the country's relatively weak conventional forces' (Saradzhyan 2009:11).

Thus, Russia portrayed contradictory stands towards the 'Global Zero' plan. On the one hand, it endorsed the principle of 'Global Zero' but it continued to place emphasis on nuclear weapons in its military strategy. Moscow continued to rely on nuclear deterrence and its security strategy remained dependent on nuclear weapons. This was mainly due to Russia's lack of conventional weapons and its economic handicaps of being unable to increase or modernize its conventional weaponry. Moscow discovered that nuclear weapons were a relatively cheap way of ensuring its security vis-à-vis a much stronger, richer, and technologically accomplished counterpart. Nuclear weapons were considered to be the great equalizer in a situation of US 'global dominance, conventional military supremacy, and active interventionism' (Trenin 2009:18). Although Vladimir Putin and Dmitri Medvedev endorsed President Obama's 'Global Zero' plan, their support did not constitute a wholehearted embrace, 'of the actual goal of zero nuclear weapons' (Trenin 2009:18).

The US Government firmly endorsed the vision of 'Global Zero'. In April 2010 the Obama administration published the Nuclear Posture Review (NPR) which reiterated American commitment to renew the process of 'arms control and cooperation with Russia' (Malz-Ginzburg 2011:49). It aimed to prevent nuclear proliferation and enunciated that the US would consider using nuclear weapons only in extreme cases with the goal of defending the essential interests of the US, its allies and its partners. In the meantime, the US would continue to strengthen its conventional capabilities (Malz-Ginzburg 2011:48). However, it explicated that as long as nuclear weapons existed, the US would maintain a 'safe and effective nuclear force' (Malz-Ginzburg 2011:49). Thus, the US would not be the first to eschew nuclear weapons, which made its commitment to 'Global Zero' sound hollow. Therefore, in spite of the US and Russian official commitment to achieving total disarmament and global zero, Moscow and Washington continued to place a lot of importance on their nuclear weapons in their security calculus.

Hence, the US and Russia cooperated on various levels to promote the nonproliferation regime in the post-Cold War world. Despite several challenging situations that marred their relationship; they managed to negotiate, compromise and cooperate to promote mechanisms which would help in preventing nuclear proliferation. They signed arms control treaties, promoted talks on the CTBT and FMCT, cooperated in making the PSI a success and both the US and Russia supported 'Global Zero'. The Global Initiative to Combat Nuclear Terrorism (GICNT) which was initiated in 2006 by the US and Russia was another example of cooperation by them to bolster the nonproliferation regime. The GINCT enabled nations to voluntarily reinforce international cooperation in combating this threat. It was intended to fill the lacunae in the existing nonproliferation and counterterrorism architecture. Its emphasis was on securing civilian rather than military nuclear facilities, specifically on 'preventing terrorists from attacking nuclear reactors and nuclear power stations' (Boureston & Ogilvie-White 2010:7).

The Joint Statement by President Obama and President Medvedev on Nuclear Cooperation, 2009 summed up the US-Russian vision of cooperation on the nonproliferation front. It asserted that the US and Russia confirmed their commitment to strengthening cooperation to prevent the proliferation of nuclear weapons and stop acts of nuclear terrorism. It mentioned that they bore 'special responsibility for security of nuclear weapons' (Joint Statement by President Obama and President Medvedev on Nuclear Cooperation, 2009). It also confirmed US-Russia cooperation in continuing to prevent theft of nuclear materials, equipment and technologies. It declared their intent to increase cooperation in securing security nuclear facilities around the world and it reaffirmed their commitment to dispose of existing stockpiles of weapons-grade materials. They expressed their mutual interest in combating illicit trafficking of nuclear materials and radioactive substances at the borders of their nations.

Cooperation between the US and Russia in preventing nuclear proliferation was achieved despite competing priorities of these states. With the collapse of the Soviet Union, the main concern of the US was to ensure the safety of Soviet-era nuclear materials, whereas Russia was concerned with achieving economic consolidation. In the aftermath of the

attack on the US on the 11th of September 2001, preventing nuclear material theft and nuclear terrorism, once again assumed the primary position in the US national security agenda; whereas, the nuclear threat perceived by Russia was not of equal magnitude.

Nevertheless, Washington and Moscow cooperated in devising most of the post-Cold War nonproliferation endeavours. Several reasons can be cited for Russia's acquiescence to support the US's national security agenda, despite not suffering from a similar kind of nuclear threat. A key motive for Russian cooperation with the US to bolster the nonproliferation regime may have been the former's desire to act upon its official nonproliferation stand. Russia was interested to prevent an outbreak of accidental or inadvertent nuclear war. Russia did not want to be a nation which was responsible for nuclear proliferation and thus, welcomed support from the US to prevent nuclear theft and smuggling. US financial aid to secure Russian nuclear materials could have been accepted by Moscow as it was reeling under severe economic stress. Russia's compliance with the US's on nonproliferation matters could have been a manifestation of a hegemonic power being able to qualify its national security concerns as the security agenda of the world. Given the fact that nuclear terrorism was not a primary concern for Moscow, its conformity to promoting the nuclear nonproliferation regime can be perceived as an example of the US successfully imposing its national security agenda at the international level.

CHAPTER IV

WASHINGTON, MOSCOW AND DIVERGENT APPROACHES TO NONPROLIFERATION

This chapter examines divergences in the approaches of the US and Russia towards the Iranian nuclear issue, the North Korean nuclear issue and lastly, on the National Missile Defense (NMD) issue.

The US and Russia consented to the dangers that Iran and North Korea posed to the nonproliferation regime. Yet the intensity of this acknowledgement and the initiatives to combat further proliferation of these nations differed. The primary issue with regard to these two states was their nuclear weapons programmes, which were considered illegal from the perspective of the nonproliferation regime. Iran and North Korea's nuclear weapons programs signalled a failure for the nonproliferation proponents of the international community. The US and Russia often sparred on the relevance, existence, and degree of proliferation problem that these two states posed. The US, especially since the Bush administration, was vehemently opposed to the North Korean and Iranian nuclear programmes. Russia had better relations with Iran and North Korea, which it did not intend to jeopardize.

The US abrogated the Anti Ballistic Missile (ABM) treaty of 1971 and planned the NMD, stating that it was needed to ward off missiles from Iran and North Korea. The Missile Defence shield was linked to nonproliferation, by claiming that it would act as a nonproliferation measure, as it would make acquisition of nuclear weapons redundant, since the NMD would render them useless. Russia perceived the NMD plan as a method of destroying strategic deterrence. Russia threatened to abrogate existing arms treaties in retaliation to the NMD, which raised fears of another arms race.

Iran's Suspected Nuclear Ambition

The US was fervently opposed to the Iranian nuclear programme after the Iranian revolution in 1979. It claimed that Iran aimed to develop nuclear weapons under the garb of a peaceful nuclear programme. Some scholars opined that if Iran became a nuclear power, it would use nuclear weapons to 'intimidate its neighbors and dominate the Persian Gulf region' (CRS 2011d: 29). Nations feared that Iran would sell nuclear weapons to extremists or to other states.

Two schools of thought existed in Iran regarding the nuclear issue. The hardliners prioritized Iran's security needs instead of 'economic and diplomatic considerations' (Pollack & Takeyh 2005: 21). On the other hand, the pragmatists opined that fixing Iran's failing economy was the priority (Pollack & Takeyh 2005: 21). Iran could have pursued nuclear weapons for a plethora of reasons: to attain prestige or to deter pre-emptive attacks by Israel or the US. It could have wanted to use its nuclear weapons to bargain for favourable economic terms and conditions.

Until 1979, the US assisted Iran in its nuclear programme by providing reactors and training to scientists. France and Germany helped in the expansion of Iran's nuclear infrastructure. The Revolution in 1979 in Iran and the hostage crisis led to a permanent break in diplomatic relations between Iran and the US, which halted Western nuclear cooperation. All major nuclear projects were 'cancelled or left dormant' (Kibaroglu 2006:216).

The Iran-Iraq war made the Iranian regime realize the importance of a nuclear deterrent, and the severe energy crisis in the post-revolutionary period led to a reopening of nuclear plans in Iran. Iran claimed that it required nuclear programmes for peaceful uses of nuclear power and to treat its cancer patients. The US opined that an energy-rich nation like Iran did not require nuclear power and used its 'peaceful proposes' alibi to shield a nuclear weapons programme. The US and its allies refused to aid Iran's nuclear plants, and this led Iran to seek aid from Pakistan, Argentina, Spain, Czechoslovakia, China and the Soviet Union.

Russia provided assistance to Iran in its nuclear energy pursuits. The US protested Russian cooperation with Iran in the nuclear realm, especially with regard to the Bushehr plants; however, Russia felt that the protests were unjustified as Iran was a member of the NPT, which made it eligible for access to 'nuclear technologies' (Orlov 2002:125). There existed three schools of thought in Russia regarding Russia-Iran nuclear relations. The pro-Western faction opined that cooperation with the major industrial states, primarily the US, could benefit Russia much more than 'murky dealings with questionable partners like China, Iran, Iraq, or Libya' (Mizin 2004). There was another group which promoted ties with states other than the USA. They encouraged ties with China, India, Iran, Syria etc. Thirdly, there was a group of officials and managers who changed their positions depending on the context (Mizin 2004). All these groups influenced Russia's behaviour towards Iran which led to a complicated relationship between the two nations, as Russia was seen to be vacillating between lobbying for mild sanctions on Iran to issuing official statements condemning Iran's supposed nuclear transgressions.

The US applied pressure on Russia to curb its nuclear cooperation with Iran. For example, Russia was to supply Iran with a gas-centrifuge uranium enrichment facility, which was cancelled due to US pressure (Wehling 1999:136). The US imposed sanctions on seven Russian companies which had nuclear-related ties with Iran (Orlov 2002:129-130). The US enacted the Iran Nonproliferation Act (P.L. 106-178), which prohibited the US from making extraordinary payments to the Russian Aviation and Space Agency, which was known to have relations with Iran, unless the US President could certify that the agency or entities under its control had not transferred any WMD or missile technology to Iran during the previous year (CRS e 2011:27). The Russian Government undertook some actions to prohibit its companies and organizations from aiding Iran. It investigated the activities of some organizations suspected of involvement in missile-technology transfers, and cancelled some exports that could 'upgrade Iran's capability to produce fissile material usable in nuclear weapons' (Wehling 1999:134).

In 2002, a uranium enrichment facility at Natanz and a heavy water production plant at Arak, considered ideal for the production of plutonium, were discovered in Iran (CRS

2011d: 28). The US made it clear that the sites were a violation the NPT. Russia downplayed the discoveries at Arak and Nantaz, and stated that the photos were not sufficient to determine the plants' nature. In any case, Russia 'had nothing to do with the two plants' (Freedman 2006:18). However, the Russian atomic agency announced that Russia would supply nuclear fuel to Tehran, 'only if the Iranians guaranteed the return of the spent fuel to Moscow' (Freedman 2006:18). This implied that Russia was hedging its bets on the Iranian nuclear situation. It did not wish to consent to Iran's intransigence but it was not willing to turn a blind eye to the possibility of any transgression on Iran's part.

Despite the cautionary measures undertaken by Moscow in the aftermath of the discovery of Nantaz and Arak, Russia continued to support the Iranian nuclear programme on some levels. In 2002, Russia announced that it would finish the Bushehr power plant in Iran and would begin discussions on building five additional reactors for Iran (Freedman 2006: 16). The US tried to dissuade Russia from completing the Bushehr plant by threatening 'on the one hand to withhold \$20 billion in aid for the dismantling of the old Soviet military arsenal, while also promising \$10 billion in additional aid for Moscow' (Freedman 2006: 16-17). Thus, both carrots and sticks were used as pressure tactics by the US to try and prevent Russia from aiding Iran.

The EU-3 (Germany, France, and England), in 2003, extracted from Iran an 'agreement to stop enriching uranium temporarily and to sign the additional protocol, as well as to inform the IAEA of its past nuclear activities' (Freedman 2006:21). Iran agreed to this EU proposal in return for a promise of high-tech cooperation. President Putin put pressure on Iran by threatening to halt Russian work at Iran's Bushehr reactor if Iran refused to behave in an open manner and failed to 'comply with the IAEA's demands' (Freedman 2006:26).

Shortly thereafter, Russia changed its sharp stance against Iran and toned down its criticisms against Iran by 2005. This change could have occurred due to several challenges which President Putin had faced by that time. They began with the 'pro-Western Orange Revolution in the Ukraine' which highlighted the failures of Russian

foreign policy. In order to reassert Russian role in the world, President Putin could have calculated that reinforcing his alliance with Iran would be a way to do this (Freedman 2006:27).

Meanwhile, as the US became increasingly bogged down in Iraq, it appeared to agree to lessen its confrontation with Iran over the nuclear issue. In 2005 the US agreed to join the EU in offering economic incentives to Iran if it gave up its nuclear programme. Disappointingly, any chance of cooperation was halted with the election of Mahmud Ahmadinejad as the President of Iran in 2005. President Ahmadinejad rejected the EU proposal and announced the resumption of work at the 'uranium conversion plant at Isfahan, where it would transform uranium into nuclear fuel' (Freeman 2006:30). The US tried to gain Russian support for a set of United Nations Security Council sanctions against Iran. Russia refused to take the Iran matter to the UNSC. In addition, it was revealed that a Pakistani nuclear scientist, Abdul Qadeer Khan, had provided Iran with technical data to enable it to make nuclear weapons.

President Putin attempted to ensure that Iran did not enrich uranium on its own, and offered a Russian proposal to ensure that Iran received its nuclear energy without possessing weapons grade uranium. Moscow proposed enriching uranium to commercial grade in Russia for Iran but the latter refused. Putin in 2005 proposed 'that the enrichment be undertaken in Russia by a Russian-Iranian joint venture' (Katz 2008). This, too, was unacceptable. Therefore, the impasse continued. Iran's announcement that it would enrich additional uranium in mid-January 2006 effectively ended any chance of a negotiated solution. The EU-3 called on the Security Council to take action against Iran, and in 2006 the IAEA voted 27-3 to refer Iran to the UN Security Council.

The Iranian nuclear issue presented a dilemma for Russia. As Iran was a major arms purchaser, Russia did not want to alienate it. Neither did it want to alienate the EU or the US, nor did it 'wish Iran to acquire nuclear weapons' (Freedman 2006:40). Thus, Russia faced a diplomatic challenge with regard to the Iran situation. The US, UK, France, China, Russia and Germany tried to salvage the situation by offering a 'package of

inducements for Iran to suspend all nuclear enrichment and reprocessing activities as well as cooperate with the IAEA' (Katz 2008). Iran did not accept this offer. Iran made a proposal to France, to monitor uranium enrichment in Iran through the creation of a joint venture consisting of Iranian companies and French companies. The French Foreign Ministry turned down the offer (Katz 2008).

Eventually, the international community imposed several sanctions on Iran with regard to its nuclear programme. Russia acquiesced to all these sanctions despite its reservations (CRS 2011f:7). Russia could have agreed to the sanctions to fulfil its desire to be seen by Western governments as upholding the 'international nonproliferation regime' (Katz 2008). Furthermore, the Russian decision to accept the sanctions, despite its initial opposition to them, could have been motivated by the expectation that Iran would 'become more amenable to Moscow's wishes through realizing how dependent it was on Russia to protect Iran from the imposition of more stringent UNSC sanctions' (Katz 2008). In addition, Russia temporarily withdrew scientists from Iran and 'withheld delivery of nuclear fuel for the Bushehr reactor, pending agreement with Tehran about return of spent fuel to Russia for reprocessing' (CRS 2011g: 41). However, Russia resumed construction and shipment of nuclear fuel to Bushehr. Fuel delivery for the plant was completed in January 2008 (CRS g 2011:41) and the Bushehr plant began supplying power 'on September 3, 2011' (CRS 2011g: 41).

President Obama's administration asserted that the US would 'diplomatically dissuade Iran from expanding its nuclear program, and possibly to build a new framework for relations with Iran after the decades of estrangement and enmity' (CRS d 2011: 41). The Obama administration invested time in obtaining Russian support for sanctions against Iran, based on the conviction that it needed Russian support to curb Iran's proliferation threat (Blank 2010).

On September 21, 2009, a second uranium enrichment plant was discovered in Qom, Iran. In 2010, Iran stated that it would enrich uranium to 20% to fuel the Tehran Research Reactor (CRS 2011g: 41). There was an attempt in June 2010, at a joint venture by Iran,

Turkey, and Brazil to organize a uranium swap deal. The US, Russia, and France objected to this uranium swap deal, as Iran had a larger quantity of low-enriched uranium than was believed, under the swap deal (CRS 2011g: 41-2). The international community imposed another round of sanctions on Iran in the aftermath of the Qom discovery and Russia agreed to these sanctions. Simultaneously, with the Russian agreement to these sanctions ‘its state arms export agency, Rosoboronexport, and other Russian firms were removed from U.S. lists of sanctioned entities’ (CRS 2011g: 42). In September 2010 President Medvedev signed a decree which banned the supply of the S-300 surface-to-air missile system to Iran (CRS 2011g: 41-2). This proved that the Medvedev administration in Russia reinforced its nonproliferation commitments. In a testimony in December 2010, Under Secretary of State William Burns asserted that, without Russia’s partnership, new sanctions on Iran would have been unsuccessful (CRS 2011g: 41-2).

Consequently, Russia seemed to dither in its support for strong opposition against Iran. In mid-July 2010, Iran and Russia ‘jointly announced a thirty-year road map for bilateral cooperation in oil and gas’ (Blank 2010). The Bushehr reactor was formally inaugurated by Moscow in August 2010. These events pointed to the fact that, despite proliferation dangers, Moscow had gone ahead with its nuclear commerce and engagements with Iran as it was lucrative for it to do so, both economically and diplomatically. Moscow continued to oppose the imposition of ‘paralyzing sanctions’ against Tehran (Blank 2010). Instead, President Medvedev spoke publicly of smart sanctions, which meant that Russia would support only measures that induced Iran to stop enrichment and weaponization, and advanced Russian interests (Blank 2010).

Russian policy towards Iran seemed ambivalent. On the one hand, Russia did attempt to prevent Iran from attaining nuclear status by allowing UNSC sanctions, demanding that spent fuel be returned, by imposing other guarded measures on Iran, and by trying to cooperate with the US to prevent the emergence of a nuclear Iran. This behaviour of Russia may have been motivated by its official claim to promote nonproliferation. On the other hand, Russian efforts at constraining and punishing Iran were seen as lacklustre, as Moscow lobbied for mild sanctions and continued building the Bushehr power plant. Gas

contracts, trade, arms deals, and other considerations may have hampered Russia from being able to cooperate more intensely with the US in imposing even stronger sanctions on Iran.

Several other key reasons could have prevented Russia from cooperating with the US to be more forceful with Iran on nonproliferation. Russia did not share the same threat perception from nuclear weapons proliferation in the world as the US. Due to the worldwide decline in demand on the world armaments markets and the ongoing decline of the Russian military-industrial complex, Moscow may have been compelled to develop relations with such current or prospective buyers of cost-effective Russian weapons as Iran, China, India, or Syria (Mizin 2004). Another reason for Moscow's unwillingness to cooperate with Washington on the nuclear issue could perhaps be that Russia sought to gain economically from building reactors in Iran. By following an independent policy vis-à-vis the US, the Russian administration may have wanted to use it as a way to increase domestic support for the Duma and presidential elections. These reasons complicated Russian support for tougher sanctions on Iran.

There were several issues on which Iran and Russia found themselves on the same side. Both the countries sought to cooperate in the region covering 'south Caucasus, Central Asia, Afghanistan, and the oil and natural gas-rich Caspian basin' (Ozbay & Arasa 2008:48). They cooperated on issues ranging from 'disarmament, the struggle against terrorism, the Iraqi quagmire, the Palestinian problem, and the U.S. military expansion into Eurasia' (Ozbay & Arasa 2008:48). Russia may have perceived Iran as a partner and 'ally to challenge U.S. power through the expansion of Russia's regional and international influence' (Cohen 2010). These considerations may have made Russia less responsive to calls for tougher sanctions on Iran, thereby hampering the nonproliferation efforts of the US.

Nuclearization of Korean Peninsula

The US perceived the North Korean nuclear programme as a threat to international peace and stability. North Korea tested nuclear weapons in 2006 and in 2009 and thus

threatened 'serious vertical and horizontal nuclear proliferation' (Yongchool & Beomshik 2006:179). The international community feared that a cash-strapped North Korea may 'resort to selling fissile material, or even complete nuclear weapons, on the black market' (Gusterson 2008:22). In restricting North Korea's nuclear programme, the US found that getting other important players like China and Russia on board was a daunting task (Smith 2006:81). North Korea therefore was a challenge for the nonproliferation regime.

There were many explanations regarding the reasons behind North Korea's decision to pursue nuclear weapons. North Korea may have calculated that nuclear weapons would act as an insurance against 'South Korean conventional superiority' (Mazarr 1995:100). In addition, nuclear weapons would have acted as assurance against the loss of North Korea's traditional allies, China and Russia (Mazarr 1995:100). George Bush's pre-emptive doctrine may have accelerated North Korea's demand for the bomb. Some scholars attested that North Korea's main aim was 'regime survival' (Bleiker 2003: 26-7). North Korea was witness to the US invasion of Iraq, and perhaps calculated that nuclear weapons would provide a deterrent to future US plans of attacking it. These issues may have led North Korea to believe that the only reliable deterrent was the nuclear bomb.

North Korea signed the NPT in 1985. In 1992, it was revealed that North Korea had reprocessed 'more plutonium than the 80 grams it had disclosed' (Kim 2006:130). In 1993, the IAEA called for an inspection of two nuclear waste sites at Yongbyon. By mid-1994, North Korea and the US entered into negotiations to solve the nuclear issue. It led to the Agreed Framework of October 21, 1994, which contained a US 'commitment to provide North Korea with a package of nuclear, energy, economic, and diplomatic benefits; in return North Korea would halt the operations and infrastructure development of its nuclear program' (CRS 2006:16). Russia found itself excluded from the Agreed Framework solution (Kim 2006:131). Moreover, Russia was excluded from the Four Party Talks held between the US and North Korea to discuss the nuclear issue from 1996 to 1999.

The North Korean nuclear issue was raised for a second time in 2002. In October 2002, North Korea admitted, that for several years, it had been acquiring the capacity to build a plant for producing 'highly enriched uranium for nuclear weapons' (Deller et al 2003). This led the US to halt 'shipments of heavy fuel that it agreed to provide under the Agreed Framework' (Deller et al 2003). North Korea announced its decision to resume operations of the graphite reactors that had been frozen by the Agreed Framework, and ordered IAEA monitors to leave the country. On January 10, 2003, North Korea announced its immediate withdrawal from the NPT. The withdrawal of North Korea brought to the fore the ease with which a nation could drop its commitments to the nonproliferation regime, after having benefited from initially being a part of the NPT.

On the Russian front, President Putin undertook several measures to ensure a rapprochement with North Korea. Russia remained unsupportive of the US administration's pressure tactics with respect to North Korea (Kim 2006:129). Russian diplomacy was in a quandary as the events in North Korea unfolded. President Putin had persuaded the US to believe that North Korea could be a trustworthy partner and keep its international agreements, but North Korea's 'unveiling of its nuclear program put Russia in an awkward position' (Yongchool & Beomshik 2006:184-5). The Bush administration 'began to seek out Russian counsel in dealing with North Korea' (Moltz 2005:728). The then U.S. Ambassador to Russia, Alexander Vershbow, stated that Russia and America were closer to each other as never before in their history; and shared common economic and political interests that included fighting terrorism, and dealing with the North Korean crisis (Moltz 2005:727).

Russia was alarmed with Bush's pre-emptive doctrine. Alexander Konovalov of the Moscow State Institute for International Relations 'declared that Russia could not live with another powerful nuclear power close to its borders but neither could it accept the use of force to resolve the issue' (Buszynski 2009:818). Russia tried to resolve the situation by arranging a package deal. It included steps like dialogue with the North, and offers of a guarantee of security against attack (Buszynski 2009:818). This was proof of Russian efforts to mitigate the North Korea-US standoff in the nuclear arena; partly due

to proliferation concerns, but also due in part because Moscow did not want any conflict in the Korean peninsula, due to its proximity to Russia.

Although initially unwilling to accept the North Korean nuclear programme, Russia changed its stance over the years. In 2003, Moscow conducted unprecedented military exercises aimed at stemming potential North Korean 'refugee flows across the shared border in case of a crisis' (Moltz 2005:727). Russia carried out naval exercises aimed at stopping hypothetical North Korean vessels carrying a nuclear weapon. These actions sent a clear and unprecedented signal to Pyongyang, that a nuclear weapons programme would lead to major problems in its relations with Moscow, and closed any remaining gaps between the Russian and US positions (Moltz 2005:727). This implied that US-Russia positions on the North Korea nuclear programme had commonalities and they could work together to attempt to prevent proliferation.

In addition, Russia took part in the Six Party talks that were held from 2003-2007. This was evidence of US-Russia cooperation in trying to prevent North Korea from flouting nonproliferation norms. Russian entry into the Six Party Talks was only at the behest of North Korea. North Korea insisted on Russian participation in these talks. In most probability 'Pyongyang wanted a more balanced composition of the members of the talks and also wanted to exploit rivalries among them' (Toloraya 2008:49). Therefore, the negotiations to resolve the North Korean nuclear issue were expanded to include: China, South Korea, Japan and Russia. In 2003 and 2004, North Korea rejected the American demand for 'prior dismantling of the nuclear program before security guarantee and economic benefits could be granted' (Buszynski 2009:821). With this impasse, the North Koreans withdrew from the talks. The US urged China to engage the North Koreans. By 2005, the Bush administration buckled as it became bogged down in Iraq and was obliged to drop its insistence on the prior dismantling of the North's nuclear programme. North Korea agreed to abandon all 'nuclear weapons and existing nuclear programs' (Buszynski 2009:821).

On the whole, there were six rounds of the Six Party Talks from 2003-2007, all of which ‘yielded occasional incremental progress, but ultimately failed to resolve the fundamental issue of North Korean nuclear arms’ (CRS h 2011:9). The US and Russia did manage to find some common ground in the Six Party talks. They aimed to achieve the dismantlement of the North Korean nuclear weapons programme in return for a ‘phased series of economic incentives and opportunities for regional integration and acceptance’ (Moltz 2005:732).

North Korea tested a nuclear weapon in 2006, which led to the passage of ‘a critical Security Council resolution, moderated to win support from China and Russia’ (Rozman 2007:612). Russia together with China resisted American pressure for sanctions against North Korea. The Russia-China nexus in the North Korean issue was seen in the US as impeding its nonproliferation efforts. Russia and China tried to influence the Bush administration’s policy away from ‘confrontation toward dialogue and engagement with Pyongyang’ (Buszynski 2009:819).

The unity among the members of the Six Party talks began to fragment, as the Russian Government complained that the US reverted to bilateral negotiations with North Korea; and that the Six Party Talks simply approved what had been decided bilaterally, while the other members were obliged to bear the ‘political and financial responsibilities’ (Buszynski 2009:825). Talks resumed after the 2006 crisis, when North Korea shut its reactor at Yongbyon reactor and agreed to undergo IAEA inspection. The US consented to remove North Korea from the list of countries sponsoring terrorism, and to lift all remaining sanctions. Also, the other parties agreed to supply North Korea with ‘economic assistance and one million tons of heavy fuel’ (Buszynski 2009:827).

However, the optimism of resolving the issue reached a stalemate when North Korea ‘refused to allow inspections of nuclear facilities and would not permit samples of nuclear material to be removed’ (Buszynski 2009:827). On 5th April, 2009, it launched another missile, which ruined any hope of normalization of relations between North Korea and the other nations. The Security Council condemned the missile launch and

North Korea quit the Six Party Talks and expelled the IAEA's international monitors from the Yongbyon. On May 25, 2009, North Korea conducted its second nuclear test.

Russia expressed outrage at the tests of 2009 and supported resolutions against North Korea. Russia was quick to proclaim that it considered the expansion of the nuclear club as dangerous. On the other hand, Russia's Representative to the Security Council Vitalii Churkin 'stressed the importance of a balanced resolution, one that would avoid a worsening of the situation through sanctions and leave the door open for the North's return to negotiations' (Buszynski 2009:829). This reflected Russia's ambivalent nature with regard to the North Korean nuclear issue.

Russia had many apprehensions regarding the North Korean nuclear programme. Moscow was worried about 'possible implications of radioactive fallout on the Russian Far East in case of a nuclear conflict on the Korean Peninsula' (Moltz 2005:730). Russia feared that a nuclear North Korea would lead to a ripple effect, and South Korea and Japan might follow suit; which would effectively turn Russia's eastern neighbourhood into a nuclear minefield. Moreover, Moscow believed that if US allies like Japan and South Korea developed nuclear weapons, then such dynamics would create an atmosphere conducive for the US to 'greatly increase its military presence in the region' (Moltz 2005:730). Russia feared sudden changes in North Korea as it anticipated hundreds of thousands of starving North Korean refugees 'flooding into its territory as a result of a sudden collapse of the North Korean government or the initiation of military hostilities' (Jung 2005:72). These may be ascertained as the reasons behind the Russian approval of the sanctions against North Korea.

Nonetheless, despite allowing sanctions on North Korea, Russia's attitude towards its nuclear programme was far from harsh. Russia constantly toned down its criticisms about the North Korean nuclear efforts, and consistently counselled moderation towards North Korea; arguing for a 'resumption of multilateral diplomacy despite North Korea's provocative nuclear and missile tests' (Blank 2010). Russia was vociferously against military attack and urged the removal of sanctions if North Korea rejoined the talks.

Russia proclaimed its willingness to provide economic assistance. At the root of these conciliatory overtures was the belief, articulated by Moscow's envoy to South Korea, Gleb Ivashentsov, that the US was to blame for the unstable situation on the Korean Peninsula, and that Pyongyang's behaviour was the product of 'ultimatums and sanctions on the part of the international community' (Blank 2010). Moscow was resentful of the US for treating Russian participation in the North Korean nuclear imbroglio as cursory. Russia wanted to be an equal partner in finding a solution to the decades-old international problem bearing direct relevance to its interests (Toloraya 2008:57).

Additionally, Russia and North Korea continued to engage each other economically, particularly at the regional level. Complementarities existed because the Russian Far East continued to need cheap labour for its extensive raw material industries and for infrastructure development, while North Korea needed Russian help in repairing Soviet-era industries and providing investment funds (Moltz 2005:728). Furthermore, it was in Russia's interest to want stability in the Korean peninsula as that would help its economic goals. It has been asserted that by increasing cooperation with South Korea, Russia was attempting to enlarge its field of activity into ASEAN, APEC, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), and to strengthen its position in the Asia-Pacific region by joining ASEM' (Yongchool & Beomshik 2006:181). Perhaps due to these calculations, Russia did not want confrontation in the Korean peninsula and wanted to prevent provoking North Korea with tougher sanctions or military attack.

Thus, Russia and the US did cooperate on the North Korean nuclear issue, as was evident by their role in the Six Party Talks and the sanctions that both agreed to. Nevertheless, it could be affirmed that Russia had several economic, political, strategic interests in the Korean peninsula, which hindered its ability to cooperate more closely with the US in imposing harsher sanctions on North Korea.

Missile Defence: New Irritant

In the Cold War era, the US and the Soviet Union amassed nuclear weapons and delivery systems. In order to maintain deterrence, they agreed to an Anti-Ballistic Missile (ABM) treaty in 1972, which prevented them from creating a shield to prevent missiles from attacking them. Thus, the US and Russia agreed to maintain a situation whereby they lived in a world where each faced the possibility of a missile attack, which worked as a deterrent to either side and prevented them from attacking each other in fear of retaliation. In essence, they accepted the reality that the US and Russia could completely obliterate each other, and that, therefore, it was essential to anchor stability and national security on mutual assured deterrence (Rubin 2011:55).

The ABM treaty prevented the creation of any defensive shield by the US and Soviet Union. Nonetheless, in 1983, President Ronald Reagan announced the Strategic Defense Initiative (SDI) ‘to intercept ballistic missiles in flight, thereby rendering nuclear weapons ‘impotent and obsolete’ (Rubin 2011:55). It was terminated once President Clinton took office. Apart from the Strategic Defense Initiative (SDI), the USA had conducted research on a string of defensive systems since the 1950s. These included the Nike Zeus missile, the Nike X Program, Project Defender, the Sentinel system, the Safeguard system, the Global Protection against Limited Strikes (GPALS) system, and Theater Missile Defense (TMD) (Moltz 2000:63). Therefore, plans to create a defence shield had existed in the US, the AMB treaty notwithstanding.

A satellite launched by North Korea, the India-Pakistan nuclear tests, and Iran’s missile tests during the Clinton-era led to support in the US for the creation of a shield to protect the US from missiles. It created the momentum for the passage of the National Defense Authorization Act, which stipulated that the US would establish a National Missile Defense shield (NMD) against a limited attack of ballistic missiles on the US (Rubin 2011: 57-8). Some sections in the US security establishment argued that missile proliferation posed an increasing threat to the US, claiming that the proposed NMD was defensive and did not threaten anyone; that the NMD provided a means to render

offensive missiles increasingly irrelevant; and that the NMD prevented the US and the rest of the world from being held hostage at some future point (Moltz 2000:64).

The Russian Government opposed the US decision to create a national missile defence shield as it was perceived as a threat to its strategic deterrence. The NMD was perceived by the US as a counter-proliferation measure or a force-related way to prevent nuclear proliferation. Russia claimed that by introducing the very notion of counter proliferation, the US was attempting 'to shift the entire emphasis in attempts to prevent proliferation to force-related methods at Russia's expense, while more or less ignoring politico-diplomatic tools' (Kortunov & Shoumikhin 1997:159-160). Russia had historically favoured diplomatic tools, which included the NPT and others, to combat proliferation. Hence, the deployment of missile defences 'could set off a new, threatening international arms race' (CRS 2002:5).

Russia proposed cooperative measures instead of the US's NMD plan. In June 1999, Russia proposed a Global Missile and Missile Technology Non-proliferation Control System (GCS), as a part of the Missile Technology Control Regime and would help regulate 'the behavior of nations that might seek to acquire ballistic missile technologies; and, would operate under U.N. auspices' (CRS 2002:13). Furthermore, Russia proposed cooperation with nations in Europe in developing defences against theatre ballistic missiles in 2000 (CRS 2002:14). The Clinton administration tried to convince Russia, that the ABM Treaty would remain largely in place, that missile defences would remain relatively limited, and that they would be directed against 'possible small-scale attacks from 'rogue' nations' (CRS 2002:17). The main emphasis of the Clinton administration was the deployment of a limited defence shield so as to not nullify Russian missiles, but be effective in countering those from rogue states. President Clinton announced on 1st September, 2000 that the US would not authorize deployment of an NMD system because it did not have enough technology and operational effectiveness for an entire NMD system (CRS 2002:3).

The Bush administration used the 9/11 incident to attack the ABM treaty, and claimed that it was redundant and anachronistic. President Bush claimed that the US needed a new framework that allowed it to build missile defences to counter the different threats of the contemporary world (Bush 2001). The Bush Administration did not accept the 'limited approach to missile defences that had been pursued by the Clinton administration' (CRS 2002:17). President Putin questioned President Bush's reasoning on rogue states, expressing incredulity on the possibility of rogue states being able to amass the technology required to attack the US through intercontinental missiles (Rusten 2010:7). The US during the Bush administration preferred unilateral or joint withdrawal from the treaty in order to pursue missile defenses, whereas Russia wanted to preserve the accord or at least keep in place some 'limits on future strategic missile defences' (Rusten 2010:9).

The US abrogated the Anti-Missile Defense treaty in 2001, which opened the door to either side creating a Missile Defense shield which would destroy the balance of deterrence that the treaty had helped maintain. The US pulled out of the treaty claiming the need for the creation of a defence shield to secure the US from missile strikes anticipated from Iran or North Korea (CRS 2002:1). The US claimed that it was necessary to 'base national security on shutting off the skies to ballistic missiles by means of advanced technology defensive systems' (Rubin 2011:55).

President Putin called the US decision 'mistaken' but stated that 'the decision taken by the US did not pose a threat to the national security of the Russian Federation (Rusten 2010:10). This mild stand taken by Russia on the US's unilateral abrogation of the ABM treaty came as a surprise to many who had predicted a rupture in relations over the ABM treaty. In response to the US's abrogation of the ABM treaty, Russia announced that it would no longer be bound by START II, which turned out to be a symbolic move, given that START II never entered into force and that it was effectively superseded by SORT. In the wake of September 11, 2001, Putin apparently did not want to jeopardize warming relations with the US by 'unduly lamenting an action to which the Bush administration was dedicated and that could not be undone' (Rusten 2010:12). The defence system

became operational by 2004 and huge interceptors entered series production and were deployed on the West Coast of the US (Rubin 2011:59).

America's European allies complained that strategic defence of the American homeland with the creation of interceptors on the west coast would be tantamount to the decoupling of American national security from that of the rest of the Western allies, 'abrogating the basic principle of indivisible defense of the West' (Rubin 2011:59). To resolve this situation the Bush administration decided to build the third site in 'Eastern Europe, from where it could defend both Europe and the United States against Iranian missiles' (Rubin 2011:59).

Moscow had strong reservations about placing interceptors and radars in its former Soviet Space, which was perceived as effectively nullifying their deterrent capability. Russia threatened to deploy surface-to-surface missiles against third site assets and hinted that it might withdraw from the 1987 Intermediate-Range Nuclear Forces Treaty. Russia claimed that 'the paucity of Iran's capabilities in missile development did not represent a real threat against Europe, and even less so against the United States' (Rubin 2011:59-60). Russia considered the proposed shield as a threat to its security. President Putin mentioned that the US 'rogue state' excuse for creating the NMD was flawed as 'any hypothetical launch of, for example, a North Korean rocket to American territory through western Europe contradicted the 'laws of ballistics' (Putin 2007).

President Putin suggested that the Soviet-era radar station in Azerbaijan could be used instead of establishing a new system in the Czech Republic as proposed by the US (Mahapatra 2007:3699). On 14th July, 2007 Moscow notified the NATO that if the US went ahead with the NMD installation then Russia would suspend its cooperation with the Conventional Forces in Europe Treaty. (Cimbala 2008:436). Later, Russia toned down its anti-NMD rhetoric when the US shelved Georgia and Ukraine's pending membership to NATO (Shirinov 2008).

Russia had a political angle in its opposition to the NMD. Post-Soviet Russia found itself with conventional military forces that were inferior to those of NATO (Cimbala

2008:437). In addition, Russia faced several domestic challenges, like the Chechen problem. During this period of low credibility, only its nuclear weapons, and especially its strategic or intercontinental-range nuclear forces, gave Russia 'credible claim to major power status in the new world order' (Cimbala 2008:438). Moreover, the expansion of NATO into the former Soviet space worried Russia. To the south, Russia faced challenges posed by the new politics and economics of Central Asia, the unsettled economic competition related to oil pipelines and the Caspian basin, and various forms of ethno-nationalist separatism and terrorism in the Caucasus (Cimbala 2008:438). On its east, Russia confronted an increasingly assertive China. The pro-West governments which came to power after the colour revolutions in the Ukraine, Kyrgyzstan, and Georgia were not to the liking of Russia. These troubling developments could have prompted President Putin to vehemently oppose the NMD plans. The opposition that Russia mounted on the NMD plan could be assessed as an attempt on Russia's part to maintain its nuclear super power status.

President Obama altered the Bush administration's NMD plan. President Obama approved a phased, adaptive approach for missile defence in Europe. This approach was incremental in nature. It sought to increase the defence if the threat arose. The Obama administration's NMD plan envisaged that, in the first phase, defence of south-eastern Europe would be deployed by the stationing of ships in the eastern Mediterranean. In the second phase, a ground-based version of the naval system was to be deployed in Romania. In the third phase, the ground version would be deployed in Poland with additional advanced interceptors (Rubin 2011:61). Finally, if a threat developed against the US, even more advanced interceptors, capable of striking Iranian intercontinental missiles aimed at the US, would be deployed in Poland (Rubin 2011:61). The US even allowed Russia to maintain the right to oppose the deployment of powerful interceptor missiles, should the United States implement the fourth phase (Rubin 2011:63). This agreement resolved Russian apprehensions about being vulnerable in case the US completed the NMD plan.

Additionally, there arose the option of possible Russian participation in the revised missile defence plan. NATO Secretary General, Anders Fogh Rasmussen, stated that the US should 'explore the potential of linking the U.S., NATO and Russian missile defense systems at an appropriate time (Rasmussen 2009). Russian participation in the US' NMD could be fruitful in many ways. Russia could provide data from radars located to the north of Iran and thus contribute to a more comprehensive coverage of Iranian missile tests. Russian participation could help dilute a purely 'Western endeavour and make it more acceptable to a number of important regional actors' (Nikolai 2010:129). Russian cooperation would have 'put Moscow squarely into the anti-Iranian camp and put an end to attempts to straddle the fence on Iran' (Nikolai 2010:129). President Obama's NMD plan 'was intended to mollify Russian concerns about the possibility that American missile defenses deployed in Europe would nullify Russia's assured nuclear second-strike capability' (Cimbala 2011:349-350).

Thus, with respect to the NMD, the US was striving to base its policy vis-à-vis rogue states with a mix of deterrence and defence, while Russia refused to allow the US freedom of action in this regard (Rubin 2011:66-7). The Russian stand as viewed by the US was that, any American strategic defence was unacceptable even if meant to defend against a third party (Rubin 2011:66-7).

Iraq was another nation which was suspected of housing WMD. The Bush administration targeted Iraq in its war on terror on the pretext of its hidden WMD. Moscow was vociferously against the pre-emptive and force-driven nonproliferation tactic of the US. Prior to the US invasion, the IAEA had investigated the Iraq situation and the UNSC had passed sanctions on it. The United Nations Special Committee (UNSCOM) had conducted investigations and removed missiles and materials for making chemical weapons. However, economic sanctions continued, forcing Iraq to take a non-cooperative posture toward UNSCOM activities. UNSCOM withdrew its investigation, and the US and the UK bombed suspected WMD facilities in Iraq. The Bush Administration announced its intention of a pre-emptive strike on September 20, 2002 and gave an ultimatum on November 8, 2002. The UN Security Council passed Resolution No. 1441,

which increased ‘the possibility of military action, and Iraq finally agreed to accept United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) and IAEA investigations. These investigations found no evidence of Iraq’s nuclear program’ (Yongchool and Beomshik 2006:175). In spite of severe protests by Russia and other UN Security Council members, the US invaded Iraq. This action of the US of using force to remove supposed WMD was perceived by many in the international community as a unilateral act. Russia was against the use of force as a mechanism to prevent proliferation but the US went ahead with its military campaign notwithstanding such protests.

To conclude, the US and Russia were on opposite sides on many proliferation-related issues. The main cases in point were North Korea and Iran. The NMD posed many challenges for cooperation between the two nations. In spite of differences between them, they managed to put up a cooperative front to tackle the threats emanating from these quarters. Cooperation was evident in the UNSC sanctions and official condemnations of transgressions against Iran and North Korea released by the US and Russia. Russia compromised its economic and diplomatic leverage with Iran and North Korea to accede to the sanctions levied on these states. The US, on its part, toned down the harshness of the sanctions to achieve consensus on these sanctions, especially from Russia. Furthermore, on the missile defence issue, regardless of differences, there were ongoing negotiations about a larger Russian role in the NMD deployment. Thus, each side compromised and negotiated to successfully condemn and punish the nuclear outlaws despite differences in the way they perceived the problems. These steps boded well for the future of the nonproliferation regime, and suggested that Washington and Moscow concurred that cooperation was the key to tackle proliferation threats.

CONCLUSION

There were several strategic considerations behind the decision of Washington and Moscow to join hands in preventing proliferation of nuclear weapons. Power calculations of the US and the Soviet Union/Russia made them collaborate to maintain the exclusivity of the nuclear weapons club. It was in the interests of the US and the Soviet Union/Russia to obstruct the rise of powerful nuclear states which could have challenged the existing status quo in international relations. In addition, security concerns propelled the superpowers to consider pooling their resources to ensure that the spread of nuclear weapons was prevented. Furthermore, nuclear terrorism was considered as a possibility with the emergence of radical terrorist outfits, which enunciated the willingness to use nuclear weapons on identified targets. Deterring such possibilities prompted Washington and Moscow to club their efforts towards combining forces to combat proliferation of nuclear weapons.

During the Cold War, the bilateral relationship of the superpowers was marked by severe hostility and suspicion. They were rivals at the ideological level, which entered the realm of economics and diplomacy. There was a scramble for allies and spheres of influence. However, Moscow and Washington overcame several trust-related impediments to lay the foundations of the nonproliferation regime. They collaborated to foster a nonproliferation regime which sought to obstruct the proliferation of nuclear technology and know-how. The commitment undertaken by the superpowers to prevent their allies from acquiring nuclear weapons despite Cold War contingencies was evidence of their unconditional support to nonproliferation.

Numerous principles and norms emerged which formed the nuclear nonproliferation regime. A nuclear taboo materialized which rendered 'the use' and 'the spread' of nuclear weapons as unacceptable behaviour of legitimate nation states. There were manifold instruments which Washington and Moscow created that served as the principles and norms of nuclear nonproliferation. These nonproliferation instruments ranged from the International Atomic Energy Agency of 1957, to the Nuclear Nonproliferation Treaty of

1968, to the Nuclear Suppliers Group of 1974, among many others. The entire gamut of nonproliferation instruments helped promote nuclear nonproliferation in international consciousness. Adherence to these instruments was rewarded by the international community while defiance was met with sanctions. Non-nuclear weapons nations were compelled to observe nonproliferation principles and norms as noncompliance would render them as outlaw nations, unworthy of diplomatic and economic relations with the international community. These consequences obligated nations to join the nonproliferation regime despite their discriminatory nature.

In the post-Cold War world, Washington was apprehensive about Moscow's commitment regarding sustaining the nonproliferation regime. Despite continuity and consensus in Russia's adherence to a strict nonproliferation stance, there were indications of a difference in emphasis which implied shifts in Russian perception of the nonproliferation issue. The US perceived Russia as being insincere in its nonproliferation stance, especially with regard to Moscow's constant desistance to strict sanctions on nuclear outlaws. Russian nuclear cooperation with Iran was in stark contrast to its nonproliferation pledges. Additionally, Moscow's geostrategic considerations prevented it from taking a harsh stand on the North Korean nuclear programme. Thus, Iran and North Korea emerged as areas where the US and Russia had competing and divergent outlooks. Nonetheless, after much negotiation and compromise, the US and Russia were able to secure common ground with regard to Iran and North Korea. Russia agreed to sanctions on Iran and North Korea. This validated Moscow's nonproliferation commitments.

There was acrimony between the US and Russia on the issue of the National Missile Defense (NMD) shield. The US perceived the NMD as a counterproliferation measure which made acquisition of nuclear weapons by hostile states and non-state actors redundant given its ability to fend off nuclear missiles. Moscow, however, viewed the NMD as a measure to destroy nuclear deterrence parity between the US and Russia, which was the basis of the Anti-Ballistic Missile treaty of 1972. However, Washington and Moscow were able to secure an acceptable route out of the NMD impasse when the

US agreed to a phased missile defence contingent on the emergence of a threat instead of installing a defence shield regardless of the materialization of any danger to the US.

The trajectory assumed by the overall bilateral relationship between the US and Russia influenced their cooperation on the nonproliferation front. The nature of the government in power in the two nations affected their ability to combine resources to strengthen the nonproliferation regime. While President William J. Clinton attempted to aid the Russian transition to a democratic capitalist society, President George W. Bush perceived Russia as a rival state. President Barack Obama was intent on nurturing friendly relations with Russia. In Russia, President Boris Yeltsin was comparatively pro-West, while President Vladimir Putin asserted his independence in foreign policy matters. Dmitry Medvedev reciprocated President Obama's friendly overtures. The tenures of Presidents G.W. Bush and Putin witnessed the greatest amount of acrimony in the bilateral relationship between the US and Russia, which also affected cooperation on nonproliferation. The expansion of NATO into the former Soviet space, Colour Revolutions in Georgia, Ukraine and Kyrgyzstan, the wars in Bosnia and Kosovo and the invasion of Iraq threatened to rupture cooperation between the US and Russia on the nonproliferation aspects. These events took the US-Russian relationship to its lowest ebb. Nevertheless, Washington and Moscow managed to overcome these diplomatic hindrances and continued to cooperate in sustaining the nonproliferation regime. In the post-Cold War era, the nonproliferation efforts of the US and Russia expanded to include the creation of the Cooperation Threat Reduction programmes, the signing of the Comprehensive Test Ban Treaty and participation in the Proliferation Security Initiative, among others. Hence, cooperation on nonproliferation continued unhindered despite several impediments on the diplomatic front.

Preventing the proliferation of nuclear weapons was a greater priority for the US than it was for the Soviet Union and later Russia. In case of Russia, economic considerations and a dwindling superpower status were matters of greater urgency than preventing nuclear proliferation. Russia, in the post-Cold War era, had myriad economic problems which took precedence over nonproliferation concerns, yet it continued to discharge the

functions of a guardian of the nonproliferation regime even when its resources were strained, owing to the serious contingencies at the domestic level. Perhaps Russia's continued emphasis on nonproliferation was due to the fact that by this period nonproliferation had acquired the character of a norm of sacrosanct proportions in international relations. In addition, preventing theft and smuggling of their nuclear materials was a consideration which Russia was intent on averting. The need for aid from the US could have been another reason for Russian insistence on the strengthening of the nonproliferation norms in the post-Cold War world. These motives could have influenced Russia's decision to remain a bastion of nonproliferation and continue to be as committed as the US to the goals of nonproliferation.

It is important to consider the influence of the US on moulding the Russian response to fashioning and sustaining the nonproliferation regime. The interests of the US bore a significant level of influence on the narrative of nonproliferation in international politics. The US wielded enormous authority in the direction the nonproliferation regime assumed. It was mainly in the interest of US security to ensure the creation of an internationally-recognized architecture comprising several mechanisms which prevented the spread of nuclear weapons. The creation of the nuclear taboo which rendered 'the use' as well as 'the spread' of the nuclear weapon as unacceptable behaviour of nation states were in large part consciously woven into the fabric of international consciousness by the US. The US successfully devised instruments that prevented the rise of additional nuclear weapons states and thereby perpetuated the discriminatory nature of the division in the world between nuclear and non-nuclear weapons nations. Accordingly, the US's interest in preventing nuclear proliferation became the *raison d'être* of the nonproliferation regime, which had the consent and approval of a vast majority of nations.

The US, by virtue of being the most powerful state in the world, wielded significant influence on the agenda of world politics. Furthermore, its hegemonic stature enabled it to influence decision-making during negotiations of transnational issues, including nonproliferation. It exercised substantial levels of power at the ideational level as well.

By influencing the international agenda, moulding decisions and affecting ideas, the US affected the decisions of other nations. The Russian Government's resolution to implement nonproliferation objectives, despite other more pressing policy priorities could have been influenced by the US, given its hegemonic control over matters of international relevance.

Finally, it is important to take cognizance of the cases where geo-strategic or economic motives took precedence over nonproliferation concerns of the US and Russia. The US turned a blind-eye to Pakistani proliferation activities in the 1980s, when it served as a frontline state in the war in Afghanistan against the Soviet Union. The US, due to influential pro-Israeli lobbies at the domestic level, remained blind to the nuclear weapons known to be possessed by Israel. The recognition of the Indian nuclear programme by the US and subsequently by Russia was another example of accepting a reversal of nonproliferation principles. These cases elucidate that at no period in time did either state believe nonproliferation to be sacrosanct. Economic calculations, power relations and self-interest did override nonproliferation goals.

The US and Russia overcame impediments at three levels to promote nuclear nonproliferation: First, Moscow and Washington differed in the level of priority they attached to nonproliferation concerns. While, nonproliferation remained a constant security concern for the US, it was superseded by economic concerns for Russia with the fall of the Soviet Union. Secondly, on occasion, geo-strategic and the economic interests of the US and Russia prevailed over nonproliferation concerns. Russia's grudging acceptance of sanctions on Iran and North Korea and the US's blind eye to Pakistani nuclear proliferation owing to its frontline status in the war in Afghanistan served as cases in point. Finally, diplomatic tussles on the bilateral front occasionally threatened to disrupt cooperation between Washington and Moscow on preventing the spread of nuclear weapons. However, despite these impediments, cooperation on nuclear nonproliferation, to a large extent, prevailed over economic and strategic concerns of Washington and Moscow. The US and Russia cooperated to create the nonproliferation regime despite incongruity in the way they viewed certain proliferation concerns and

notwithstanding disagreements in their bilateral relations, from which it can be concluded that ‘competing strategic goals and foreign policies did not obstruct the US and Russia from working together in preventing nuclear proliferation.’

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