History of the Nuclear Non-Proliferation Treaty Review Conference

“The most spectacular event of the past half century is one that did not occur. We have enjoyed sixty years without nuclear weapons exploded in anger. What a stunning achievement—or, if not achievement, what stunning good fortune.”

History of the Nuclear Non-Proliferation Treaty

The Treaty on the Non-Proliferation of Nuclear Weapons, more commonly known as the Nuclear Non-Proliferation Treaty, or NPT, is one of the foundational documents of global security. It is the bedrock of the global movement toward nuclear nonproliferation and disarmament. Out of the grim specter of the bombing of Hiroshima and Nagasaki in 1945, the world began to realize how destructive a force nuclear technology could be. It was in that context that the United Nations General Assembly adopted its very first resolution on January 24, 1946, calling for the eradication of all atomic weapons. But the world also realized the great potential of nuclear technology. Between 1946-1949, the global community tried, but failed, to “create an international system enabling all States to have access to nuclear technology under appropriate safeguards …” Progress was made when, in 1957, upon a proposal by US President Dwight D. Eisenhower called “Atoms for Peace,” the United Nations established the International Atomic Energy Agency (IAEA), which is responsible for both the promotion and the oversight of nuclear technology. By the early 1960s, the notion of nuclear non-proliferation had gained significant momentum in the international community, and by 1968, the NPT had taken shape. The Treaty entered into force in 1970. To date, only three countries have not signed the NPT: India, Israel, and Pakistan. The Democratic People’s Republic of Korea (DPRK) withdrew from the NPT in 2003, citing what it called US aggression and claiming that its security and dignity had been “infringed upon.”

Compared to other international treaties, the NPT is a relatively uncomplicated document. The provisions contained therein seek to accomplish three principal things: stop the spread of nuclear weapons, make the peaceful use of nuclear technologies available to all countries, and eliminate existing nuclear weapons stockpiles. More specifically, the NPT embodies an interesting mix of rights and obligations for both nuclear weapon states. Article IX, Section 3 of the NPT defines a nuclear weapon state as “one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967,” namely China, France, the former Soviet Union (now Russia), the United Kingdom, and the United States. All other States are, therefore, non-nuclear-weapon states. The NPT was viewed by its framers as being in conformity with United Nations General Assembly resolutions calling for an agreement to prevent the “wider dissemination of nuclear weapons.” To that end, Article I of the NPT obligates all nuclear-weapon states not to transfer nuclear weapons to anyone, by any means, and also not to encourage non-nuclear-weapon states to build or acquire them. Article II of the Treaty requires that non-nuclear-weapon states refuse all nuclear weapons from anyone who would give or sell such devices to them. Non-nuclear-weapon states must not try to obtain any nuclear explosive device, and they are

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1 Schelling, Arms and Influence, 2008, p. 287.
11 United Nations, Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/140), n.d.
12 United Nations, Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/140), n.d.
13 United Nations, Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/140), n.d.
14 United Nations, Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/140), n.d.
15 United Nations, Treaty on the Non-Proliferation of Nuclear Weapons (INFCIRC/140), n.d.
also required to accept IAEA safeguards to make sure that nuclear material is not being used to manufacture weapons.\textsuperscript{16} It was also important to the framers of the NPT that the peaceful use of nuclear technology be accessible to all states, so the Article IV, Section 1 of the Treaty enshrines in law that all states party to the Treaty retain the inalienable right to "develop research, [produce] and use ... nuclear energy for peaceful purposes."\textsuperscript{17} It is further stipulated in Article V that all non-nuclear-weapon states must enjoy the benefits of the peaceful application of nuclear explosions.\textsuperscript{18} Article VI of the NPT calls upon states to begin making progress toward complete disarmament by taking appropriate steps to begin dismantling their nuclear arsenals.\textsuperscript{19} Article VII of the Treaty preserves the right of all states to establish nuclear-weapon-free zones.\textsuperscript{20}

**The NPT Review Process**

The NPT has two review provisions built into the text of the document. One of them calls for a Review Conference to be held every five years so that states party to the Treaty can assess its implementation and agree upon the publication of a Final Document consisting of “recommendations on measures to further strengthen [the NPT].”\textsuperscript{21} The other review provision, as outlined in Article X of the Treaty, provides for an Extension Conference to be convened 25 years after the entry into force of the NPT to decide whether the Treaty should remain in effect indefinitely, or whether it should instead be extended for a shorter, finite period of time.\textsuperscript{22} The treaty went into effect in 1970;\textsuperscript{23} therefore in 1995, the states party to the Treaty convened for an NPT Review and Extension Conference.\textsuperscript{24} At that Conference, the states party to the Treaty adopted measures to extend the NPT indefinitely.\textsuperscript{25} While they were not able that year to reach a consensus on the Final Document that assessed the Treaty’s implementation, they did adopt a package of decisions that consisted of “elements for a strengthened review process of the Treaty” and “principles and objectives for nuclear non-proliferation and disarmament.”\textsuperscript{26} The pursuit of an agreement on the Final Document is, unfortunately, not always successful, as was the case in 1980, 1990, and 1995. A Final Document was, however, achieved during the conferences of 1975, 1985, 2000, 2005 (though nothing of substance was agreed upon in that Document), and 2010.\textsuperscript{27}

At the 2010 NPT Review Conference, 190 member states came together to agree upon a Final Document that managed to, albeit incrementally, “advance the agenda further than the previous two conferences and lay the groundwork for future progress.”\textsuperscript{28} The conclusions and recommendations of the 2010 Final Document include a “recommitment of nations to the basic bargain of the NPT; [s]pecific action plans on nonproliferation, disarmament, and peaceful uses of nuclear energy; and proposed steps for implementing the 1995 Resolution calling for a WMD Free Zone in the Middle East.\textsuperscript{29} The “action plans” represent a significant step forward because “[f]or the first time, there are specific and measurable actions that states are asked to take in support of the three pillars of the NPT.”\textsuperscript{30}

\textsuperscript{16} United Nations, *Treaty on the Non-Proliferation of Nuclear Weapons* (INFCIRC/140), n.d.
\textsuperscript{17} United Nations, *Treaty on the Non-Proliferation of Nuclear Weapons* (INFCIRC/140), n.d.
\textsuperscript{18} United Nations, *Treaty on the Non-Proliferation of Nuclear Weapons* (INFCIRC/140), n.d.
\textsuperscript{19} United Nations, *Treaty on the Non-Proliferation of Nuclear Weapons* (INFCIRC/140), n.d.
\textsuperscript{20} United Nations, *Treaty on the Non-Proliferation of Nuclear Weapons* (INFCIRC/140), n.d.
\textsuperscript{22} United Nations, *Treaty on the Non-Proliferation of Nuclear Weapons* (INFCIRC/140).
\textsuperscript{26} United Nations, 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: Background, 2010.
**Challenges and Opportunities**

The 2010 NPT Review Conference produced the first substantive Final Document since 2000, which was a welcome change after the 2005 NPT Review Conference that “was widely considered a failure.” Despite the measured success of 2010, contentious issues remain. Disarmament, and whether nuclear-weapon states are doing enough to achieve it, is a perennial concern for non-nuclear-weapon states. Non-nuclear-weapon states “entered into legally binding commitments not to receive, manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices[,]” but the nuclear-weapon states, for their part, must acknowledge their “corresponding legally binding commitments … to nuclear disarmament in accordance with the Treaty.” For instance, “[a]t the 1995 NPT Review and Extension Conference, the nuclear-weapon states pledged their determined pursuit of ‘systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goals of eliminating those weapons.” Furthermore, “[a]t the 2000 NPT Review Conference, the nuclear-weapon states made an ‘unequivocal undertaking ... to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament.” More recently, at the 2010 NPT Review Conference, the nuclear-weapon states agreed on a 22-point action plan to implement Article VI of the Treaty. Yet, as Sergio Duarte, the UN High Representative for Disarmament Affairs, points out in a speech given on the occasion of the 19th World Congress on Nuclear Abolition, “as of August 2010, not one nuclear weapon has been physically destroyed pursuant to a treaty commitment and multilateral disarmament negotiations are still not underway.” Duarte goes on to lament that “[w]e are not seeing the establishment of nuclear disarmament institutions, laws, policies, and budgets in the states that currently possess such weapons.

One potential opportunity for progress came in April 2010, when President Barack Obama of the United States and President Dmitry Medvedev of the Russian Federation, signed the bilateral New Strategic Arms Reduction Treaty (New START), which would see the two countries significantly reduce their number of strategic missiles within seven years of the entry into force of the treaty. President Obama heralded the signing of this important treaty by saying that “[w]hile the New START treaty is an important first step forward, it is just one step on a longer journey.” He went on to say that the New START treaty “demonstrates the determination of the United States and Russia—the two nations that hold over 90 percent of the world’s nuclear weapons—to pursue responsible global leadership.” However, as of the drafting of this guide, the treaty has yet to be ratified. Additionally, even if the measures detailed in the New START treaty are achieved, it would still leave thousands of nuclear weapons between the two countries.

April 2010 was a very busy month for issues of nuclear non-proliferation, security, and disarmament. In addition to the signing of the New START treaty, President Obama and President Mahmoud Ahmadinejad of Iran both hosted separate nuclear security conferences. At President Obama’s Nuclear Security Summit, “47 presidents, prime ministers and senior officials” convened in Washington, DC to discuss ways to combat nuclear terrorism. Among the more notable accomplishments of the summit, Ukraine announced its decision to rid itself of all its stocks of highly enriched uranium (HEU) by the time of the next Nuclear Security Summit in 2012. Mexico, Canada, and the United States also announced a trilateral agreement to eliminate all of Mexico’s remaining highly enriched uranium by converting its research reactor, that currently runs on HEU, into one that runs on low enriched

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43 Hoffman, *Despite new START, the U.S. and Russia still have too many nuclear weapons*, 2010.
“This effort, a specific outcome of Nuclear Security Summit, will be completed under the auspices of the IAEA” and “will further strengthen nuclear security on the North American continent.”48 A few days after President Obama’s Nuclear Security Summit, the Iranian leadership hosted its competing conference called “Nuclear Energy for All, Nuclear Weapons for None.”49 The Iranian leadership largely used this conference as a platform to express its lack of interest in building a nuclear weapon and to chastise the United States and Israel.50

**Conclusion**

According to some estimates, only 25 years ago, the number of nuclear weapons in the world exceeded 60,000.51 Today, “[b]ased on official but unverified declarations, the world … has a little over a third of this number—a significant drop indeed.”52 Although many obstacles hinder the path of global non-proliferation and disarmament, now is not the time to lose sight of the incremental progress that has been made through the NPT and its Review Conferences. “For those who fear the nonproliferation regime is fraying, the results of the 2010 NPT Review Conference serve as a temporary reprieve.”53 However, it is the responsibility of every state party to ensure that the hard fought consensus of the 2010 Review Conference is not wasted through a lack of implementation.54 Taking action to strengthen the NPT need not wait until 2015.55

**I. Practical Measures to Implement Article VI**

"Let us realize our dream of a world free of nuclear weapons so that our children and all succeeding generations can live in freedom, security and peace."56

After the first use of nuclear weapons in 1945, the international community sought to control the spread of nuclear weapons and materials.57 However the initial concerns of nuclear proliferation were to maintain the control of nuclear weapons by a handful of states, namely the United States, the Soviet Union (now the Russian Federation), the United Kingdom, France, and China.58 While these efforts combined with significant technical barriers for the development of nuclear weapons initially limited the spread of nuclear technology, the eventual erosion of those barriers and the 20th century nuclear arms race between the existing nuclear-weapon states forced the international community to formulate agreements to reduce the spread and threat of use of nuclear weapons.59

**Early Development of the Nuclear Non-Proliferation Treaty**

The international community adopted the Nuclear Non-Proliferation Treaty (NPT) in 1968.60 The main goals of nuclear-weapons states were enshrined in Articles I and II, prohibiting the transfer of nuclear weapons technology from a nuclear-weapon state to a non-nuclear state.61 Article III further required non-nuclear weapons states to undergo mandatory inspections of their nuclear facilities by the International Atomic Energy Agency (IAEA) to ensure transparency in all nuclear related activities.62 For non-nuclear-weapons states, Article IV guaranteed any Member State of the NPT the right to develop, research, and use nuclear energy for peaceful purposes as well as

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56 Ban, Secretary-General’s remarks at the Hiroshima Peace Memorial Ceremony, 2010.
57 Dunn, Controlling the bomb, 2005, p. 2.
58 Dunn, Controlling the bomb, 2005, p. 2.
59 Dunn, Controlling the bomb, 2005, p. 2.
exchange equipment, materials, and scientific information for peaceful purposes.\footnote{United Nations, \textit{Nuclear Non-Proliferation Treaty}, 1968, Article VI.} Article V further complemented Article IV, providing for "potential benefits from any peaceful applications of nuclear explosions be made available to non-nuclear-weapon States Party to the Treaty on a non-discriminatory basis."\footnote{Beckman, Crumlish, Dobkowski, and Lee, \textit{The Nuclear Predicament}, 2000, p. 222.} Lastly, the concerns of all non-nuclear-weapons states are embodied in Article VI of the NPT, calling for all signatories of the NPT, nuclear-weapons states in particular, to work in good faith towards universal nuclear disarmament.\footnote{United Nations, \textit{Nuclear Non-Proliferation Treaty}, 1968, Article VIII.}

The NPT came into force in 1970 and in accordance with Article VIII, review conferences were held to determine the direction in which new efforts needed to be focused to support the work of the nonproliferation regime.\footnote{United Nations, \textit{Nuclear Non-Proliferation Treaty}, 1968, Article VIII.} The first review conference of the NPT convened in 1975 and focused on addressing the continuing arms race between the Soviet Union and the United States of America.\footnote{Nuclear Threat Initiative, \textit{Compliance and growth - NPT review conferences}, 2004.} Subsequent review conferences held from 1980 to 1990 witnessed increases in membership to the NPT, from an initial number of 91 to 140, but discussions were often not productive, allowing for little progress to be made towards achieving disarmament, and often were eclipsed by the continued arms race between the United States and the Soviet Union.\footnote{Nuclear Threat Initiative, \textit{Compliance and growth - NPT review conferences}, 2004.}

The collapse of the Soviet Union had various effects on nuclear discussions. One such effect was that the newly independent states created by the fall of the Soviet Union had access to nuclear weapons and the international community feared those weapons may be sold for hard currency to assist the development of the states.\footnote{Federation of American Scientists, \textit{Nuclear Weapons in the Former Soviet Union: Location, Command, and Control}, 1996.} In response to these concerns, the United States offered Russia and the other newly independent republics technical and financial assistance through the Nunn-Lugar program.\footnote{Federation of American Scientists, \textit{Nuclear Weapons in the Former Soviet Union: Location, Command, and Control}, 1996.} Among other initiatives, the Nunn-Lugar program aided with the transportation, storage and elimination of nuclear weapons in the newly independent states.\footnote{Federation of American Scientists, \textit{Nuclear Weapons in the Former Soviet Union: Location, Command, and Control}, 1996.}

Further review conferences of the NPT continued to show a lack of progress towards the realization of the goals in Article VI of the NPT, although new efforts were proposed to achieve such a goal, specifically at the 1995 Review Conference, which culminated in the creation of the Comprehensive Test Ban Treaty (CTBT) in 1996.\footnote{Nuclear Threat Initiative, \textit{Compliance and growth - NPT review conferences}, 2004.} Additionally, the mandate of the NPT was extended indefinitely, making it the cornerstone of all discussions related to nuclear weapons in the international community.\footnote{Nuclear Threat Initiative, \textit{Compliance and growth - NPT review conferences}, 2004.}

Despite the nominal success of the 1995 Review Conference, little progress had been made to witness the reduction of the nuclear stockpiles of the nuclear-weapons states, and at the 2000 Review conference, several non-nuclear-weapon states including Brazil, Egypt, Ireland, Mexico, New Zealand, South Africa, and Sweden joined together to form the New Agenda Coalition (NAC).\footnote{Federation of American Scientists, \textit{Nuclear Weapons in the Former Soviet Union: Location, Command, and Control}, 1996.} The NAC strongly advocated serious discussion on the implementation of Article VI of the NPT by proposing 13 practical steps that nuclear weapons states could follow to verifiably and irreversibly reduce their nuclear stockpiles.\footnote{Nuclear Threat Initiative, \textit{Compliance and growth - NPT review conferences}, 2004.} These 13 steps were adopted by the 2000 NPT Review Conference and have since become the basis and benchmarks for negotiations related to Article VI obligations.\footnote{Nuclear Threat Initiative, \textit{Compliance and growth - NPT review conferences}, 2004.} Other specific steps that were called for included the entry into force as soon as possible of the CTBT, the negotiation of a Fissile Material Cut-Off Treaty, the strengthening of the Anti-ballistic Missile (ABM) Treaty, and further bilateral negotiations between the United States and the Russian Federation under the auspices of the IAEA to further reduce nuclear stockpiles and safely reduce excess supplies of fissile material.\footnote{2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document Volume I, 2000, p. 14.}
The arguable progress came to a halt with the failure of the 2005 Review Conference, which has been deemed by experts as the one of the most challenging in the history of the Treaty.\textsuperscript{78} Progress towards the realization of the NPT was hampered by widespread disagreement between nuclear-weapon states, including the decision by the United States to withdraw from the both ABM and CTBT, as well as shifting negotiations with the Russian Federation to a bilateral basis as opposed to under the umbrella of the IAEA.\textsuperscript{79}

The most recent review of the NPT held in 2010 was heralded by many experts as a success, especially when compared to the recognized failure of the 2005 Review Conference.\textsuperscript{80} The Final Document of the 2010 Review Conference contains 64 specific actions and important agreements.\textsuperscript{81} The Final Document is composed of four sections including Nuclear Disarmament, Nuclear Non-Proliferation, Peaceful Uses of Nuclear Energy, and the Middle East, particularly the implementation of the 1995 Review Conference Resolution on the Middle East.\textsuperscript{82} Specific proposals dealing with devaluing nuclear weapons, nuclear doctrines, and the elimination of tactical nuclear weapons were very weakly worded or even removed from the document entirely.\textsuperscript{83} The proposals were weakened to the level from the 2000 Review Conference, so in that respect necessary progress was not attained in certain aspects of implementing Article VI of the NPT.\textsuperscript{84}

Nonetheless, the international community took many promising steps towards the achievement of Article VI goals at the 2010 Review Conference. Many Member States expressed support for the UN Secretary-General’s Five Point Plan for nuclear disarmament and its call for comprehensive negotiations on stronger disarmament measures, such as a nuclear weapons convention.\textsuperscript{85} The Five Point Plan towards a nuclear weapon free world, which was put forth in 2009 by Ban Ki-moon, begins with a call for Member States to pursue negotiations in good faith on nuclear disarmament, possibly through a new nuclear weapons convention.\textsuperscript{86} The Plan also stresses the importance of universality of multilateral treaties, such as the CTBT and regional Nuclear Weapons-Free Zones, accountability and transparency, and finally the elimination of other Weapons of Mass Destruction.\textsuperscript{87} Despite the mention of a nuclear weapons convention within the Conference’s action plan being weak, it remains a crucial step for the international community as it brings the concept of a new convention on nuclear weapons to the forefront of current negotiations and would serve to further disarm all States with nuclear weapons concurrent with Article VI of the NPT.\textsuperscript{88}

**Overview of International Efforts Towards the Reduction and Elimination of Existing Nuclear Weapons Stockpiles**

Article VI of the NPT briefly and simply states, "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."\textsuperscript{89} Article VI represented one of the great tradeoffs and leaps of faith in the adoption of the NPT, whereby nuclear weapons states agreed to pursue nuclear disarmament, in exchange for all other states not to pursue nuclear weapons programs.\textsuperscript{90}

Although many can argue that implementation of Article VI of the NPT has been highly limited, several bilateral legally-binding agreements and multilateral strategies have provided a small glimpse of hope towards the eventual elimination of nuclear weapons. One of the first bilateral endeavors by members of the international community to limit the spread of nuclear weapons was the Strategic Arms Limitation Talks (SALT I) undertaken by the United

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\textsuperscript{80} Johnson, *NPT: challenging the nuclear powers’ fiefdom*, 2010.

\textsuperscript{81} Johnson, *NPT one week after consensus adoption of agreed document*, 2010.

\textsuperscript{82} Johnson, *NPT one week after consensus adoption of agreed document*, 2010.

\textsuperscript{83} Johnson, *NPT one week after consensus adoption of agreed document*, 2010.

\textsuperscript{84} Johnson, *NPT one week after consensus adoption of agreed document*, 2010.

\textsuperscript{85} Johnson, *NPT one week after consensus adoption of agreed document*, 2010.

\textsuperscript{86} Johnson, *A five-point plan to rid world of nuclear bombs*, 2009.

\textsuperscript{87} Ban, *A five-point plan to rid world of nuclear bombs*, 2009.

\textsuperscript{88} Johnson, *NPT one week after consensus adoption of agreed document*, 2010.


\textsuperscript{90} Krieger, *Debating Article VI*, n.d.
States and the Soviet Union in November of 1969, shortly after the signing on the NPT.\textsuperscript{91} While the discussions moved forward slowly due to the fact that the terms of any final agreement were not decided before the talks began, both parties believed that entering into discussions, with the hope of laying the foundation for further negotiations in the future would prove useful.\textsuperscript{92} After two and a half years of negotiations, the SALT I talks culminated in the signing of the Anti-Ballistic Missile Treaty and the Interim Agreement on strategic offensive arms.\textsuperscript{93} While effective at beginning an international dialogue to limit nuclear arms, SALT I lacked the mechanisms to verify the agreements reached and also did nothing to reduce the number of nuclear weapons possessed by the United States and the Soviet Union.\textsuperscript{94}

Despite those shortcomings, SALT I paved the way for a second round of negotiations, named SALT II, in November of 1972 to discuss those issues that did not achieve agreement in the first round of negotiations.\textsuperscript{95} Progress was once again slow, but achieved its first success in November of 1974 when the United States and Soviet Union agreed upon a basic outline for a comprehensive strategic arms limitation treaty, which set physical limits on the number of nuclear delivery vehicles, including strategic bombers and intercontinental ballistic missiles.\textsuperscript{96} The SALT II Treaty was eventually signed in June of 1979, although it was never ratified by the United States due to external factors, most notably the Soviet invasion of Afghanistan and the discovery of a Soviet combat brigade in Cuba.\textsuperscript{97}

The next round of discussions between the United States and the Soviet Union led to the initiation of the Strategic Arms Reduction Talks in 1982 and sought to rectify the perceived flaws and criticisms of the SALT I and SALT II talks.\textsuperscript{98} Through these negotiations, the United States hoped to achieve several key objectives, most notably military reductions, equality of rights and limits to achieve equal levels of military capability between the two states, and lastly, effective verification of any agreement reached through both monitoring and compliance verification.\textsuperscript{99} As with previous efforts, progress on achieving these goals was again slow due to the fact that the Soviet Union at the time had greater nuclear capability and therefore wanted to maintain the status quo established through SALT II.\textsuperscript{100}

After years of negotiation, the two parties agreed in June 1991 to reduce existing stockpiles over a period of seven years of intercontinental ballistic missiles (ICBMs), ICBM launchers, ICBM warheads, and heavy bombers to specific targets of 6000 nuclear warheads on a total of 1600 delivery systems.\textsuperscript{101} Additionally, Article VIII of START also provided provisions to allow for the verification and sharing of information relating to the reduction of stockpiles between the United States and the Soviet Union, which represented a drastic change from the previous SALT agreements.\textsuperscript{102} The success of START led to a second round of negotiations in 1993 which sought to further reduce stockpiles of nuclear weapons as well as eliminate multiple independently targetable reentry vehicles (MIRVs) which enabled more than one nuclear warhead to be launched within a nuclear delivery vehicle.\textsuperscript{103} Regrettably, the second round of START never entered into force following the Russian announcement that it was void in response to the withdrawal of the United States from the ABM.\textsuperscript{104} With the expiration of the first START agreement in 2009, the United States and the Russian Federation recently negotiated the New START which set new limits for the amount of deployed ICBMs to 700, 1,550 for deployed warheads, and 800 for both deployed and non-

\textsuperscript{91} Payne, The Soviet Union and SALT, p. 71.
\textsuperscript{92} Payne, The Soviet Union and SALT, p. 71.
\textsuperscript{93} United States of America State Department, Strategic arms limitation talks (SALT I), n.d.
\textsuperscript{94} United States of America State Department, Strategic arms limitation talks (SALT I), n.d.
\textsuperscript{95} Payne, The Soviet Union and SALT, p. 87.
\textsuperscript{96} Payne, The Soviet Union and SALT, p. 88.
\textsuperscript{97} Caldwell, The dynamics of domestic politics and arms control, p. 190.
\textsuperscript{98} Kartchner, Negotiating START, 1992, p. 32.
\textsuperscript{99} Kartchner, Negotiating START, 1992, p. 43.
\textsuperscript{100} Kartchner, Negotiating START, 1992, p. 268.
\textsuperscript{101} United States of America State Department, Treaty between the United States of America and the Union of Soviet Socialist Republics on the reduction and limitation of strategic offensive arms, 1991.
\textsuperscript{102} United States of America State Department, Treaty between the United States of America and the Union of Soviet Socialist Republics on the reduction and limitation of strategic offensive arms, 1991.
\textsuperscript{103} United States of America State Department, Treaty between the United States of America and the Russian Federation on the further reduction and limitation of strategic offensive arms, 1993.
\textsuperscript{104} Reaching Critical Will, Disarmament and arms control treaties.
deployed nuclear launchers. While it was hoped by the U.S. executive branch that the New START would be an agreeable means to continue nuclear disarmament and work to achieve Article VI of the NPT, progress has been stalled in the United States Senate with the discussion of the New START to resume during its fall session.

While most of the attention towards the realization of Article VI of the NPT has focused on the efforts of the United States and the Russian Federation, both the United Kingdom and France have taken unilateral actions to make strides towards the irreversible reduction of their nuclear weapon stockpiles in recent years as well as create an environment conducive to the continued reduction of nuclear weapons. Recent activity of the United Kingdom came in March of 2009, when Prime Minister Gordon Brown announced a proposed reduction of existing nuclear weapon stockpiles concurrent with the replacement of the Trident nuclear deterrent system. While the United Kingdom was reluctant to propose reductions of its stockpiles to less than 160 operational nuclear warheads, it also signified a commitment towards a successful NPT Review in 2010 with the adoption of The Road to 2010, a proposal aimed at ensuring the safety of nuclear materials as well as witnessing continued reductions of existing nuclear stockpiles in all Member States. While this report encompassed a number of issues concerned with nuclear weapons and technology as a whole, on the subject of the reduction of nuclear weapons, the United Kingdom proposed three main areas of activity: transparency and control to promote verifiable and irreversible disarmament, arms reductions, and a concept entitled ‘steps to zero’, which seeks to aims to reduce technical barriers that impede the safe withdraw and dismantling of nuclear warheads as well as providing adequate security of dismantled nuclear warheads. The report also recognized that the final step to eliminating all nuclear weapons will be the most arduous, since it will include a sincere belief from recognized and declared nuclear-weapon states that nuclear weapons are no longer necessary and that if all nuclear weapons are disarmed, no state will ever seek to develop them again. To this end the United Kingdom proposed efforts on four technical areas including increasing access of inspectors to nuclear sites without compromising national security, improving the chain of custody of dismantled nuclear materials to ensure its irreversible destruction, and improving the monitoring of dismantled nuclear materials to ensure that materials cannot be removed without trigger a mechanism to alert the international community.

While the United Kingdom focused more heavily on the creation and implementation of policy efforts, France adopted efforts aimed more at the practical dimensions of disarmament in taking unilateral actions as a means to provide an example for other states to follow. France first began its nuclear reduction efforts in 1992 when it halted it production of plutonium for nuclear weapons and continued these efforts in 1996 when it halted all production of highly enriched uranium. Additionally, in 2008, France was the first and only state to announce its nuclear stockpile and maintain a stockpile of less than 300 nuclear weapons. Reductions of France’s stockpiles were also met with several strategic changes including the full dismantling of the ground to ground component of its nuclear weapon arsenal, the reduction of France’s naval component by one third, and the reduction of its airborne nuclear capabilities by one third.

In addition to bilateral negotiations and unilateral actions, multilateral negotiations also serve an important role in the implementation of Article VI of the NPT, most notably the 13 practical steps towards disarmament that mentioned previously that were achieved at the 2000 Review Conference of the NPT as a means to provide steps to

105 United States of America State Department, Treaty between the United States of America and the Russian Federation on measures for the further reduction and limitation of strategic offensive arms, 2010.


107 Kirkup, Britain prepared to cut nuclear arsenal as part of arms deal, 2009.


implement the nuclear disarmament obligation in the Treaty and the decisions reached at the 1995 conference. The decisions reached at the 1995 conference were to strengthen the review process and prove for intercessional Preparatory Committees, to adopt principles and objectives for achieving nuclear non-proliferation and disarmament, to extend the Treaty indefinitely (the Treaty was planned to last 25 years), and to adopt a resolution on the Middle East. Out of the 13 systematic steps reached in 2000 there are five readily applicable steps that pertain to Article VI, which include the negotiation of nuclear disarmament through the establishment, in the United Nations Conference on Disarmament (UNCND), of an appropriate body with a mandate to deal with nuclear disarmament. The UNCND was urged to agree on a program of work, which includes the immediate establishment of such a body. Further, the application of the principle of irreversibility to nuclear disarmament and other arms control and reduction measures is vital. The latter part of Article VI states that general and complete disarmament needs to be conducted under the guise of strict and effective international control. The eleventh step specifically reaffirms this objective, however, not offering a clear way forward. Finally, verification of nuclear disarmament agreements is needed to provide assurance of compliance to the international community. While none of these steps have been fully carried out, significant progress has been made on some of them.

Obstacles and Challenges to the Full Realization of Article VI of the NPT

Although the NPT has been largely successful in stemming the tide of illicit nuclear proliferation, several contentious issues remain that impede further progress towards the full elimination of nuclear weapons. One such issue is that despite the language in Article VI, nuclear-weapon states are under no legal obligation to reduce their stockpiles of nuclear weapons or subject themselves to IAEA inspections, while non-nuclear-weapon states must duly restrain themselves from pursuing nuclear weapons, as well as subject themselves to inspections and the safeguards system by the IAEA.

Consequently, the result of the lack of a legally binding agreement to disarm has led to painfully slow progress towards the reduction of strategic and non-strategic nuclear weapons as called for under Article VI of the NPT, particularly between the United States and the Russian Federation. On the issue of non-strategic (tactical) nuclear weapons, proponents of a legally binding disarmament agreement cite previous commitments made between the two states to reduce their stockpiles of weapons, particularly the 1991/1992 Presidential Nuclear Initiatives (PNI). All nuclear-weapon states under the NPT maintain that non-strategic weapons remain a vital part of its security force and therefore cannot be reduced; moreover the United States claims to have fulfilled its commitments to the PNI and therefore is not obligated to continue to reduce its non-strategic nuclear stockpiles under any current agreements.

Conclusion

Despite its shortcomings, the multilateral, bilateral and unilateral efforts of the international community have helped to establish an international non-proliferation norm, which entails a universally understood standard that states can generally expect from one another, contributing to predicable and sustainable peace. The 2010 review of the NPT and particularly the enhancement of ways and means to implement Article VI provides a great opportunity to make strides in creating an international community focused on sustainable peace by realizing the goals of general and complete disarmament by recognized nuclear and non-nuclear-weapon states. These efforts are also paramount to

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117 Reaching Critical Will, Non-Proliferation Treaty (NPT), 2000.
128 Arms Control Association, The Presidential Nuclear Initiatives (PNIs) on Tactical Nuclear Weapons At a Glance.
reduce the barriers towards universal adherence of the NPT by bringing more Member States under the standards established by the NPT to achieve irreversible and verifiable disarmament of nuclear weapons. Additionally, the international community must recognize that the enhanced implementation of Article VI will help to stem new threats to nuclear proliferation by limiting proliferation through reducing the physical numbers of nuclear weapons and the desire of states to pursue nuclear weapons for defense purposes while upholding the ability of every Member State to develop peaceful uses of nuclear technology.\textsuperscript{131}

As delegates prepare to address these issues, several important aspects must be addressed. How can the NPT achieve universal adherence? What more can be done to require nuclear-weapon states to reduce their stockpiles of strategic and non-strategic nuclear weapons? How can political will be strengthened to hasten the implementation of negotiated bilateral agreements? How can activities of the IAEA be improved so that verification measures increase transparency and ensure the peaceful uses of nuclear technology by all Member States? What can and should be the role of non-governmental organizations in compliance and verification or to facilitate in the negotiation process? This broad and far reaching topic has many more avenues to research than can be presented in these few pages and delegates are encouraged to use this foundation to develop a holistic plan that to produce a revitalized NPT for the next decade that works towards the realization of sustainable peace.

**II. Nuclear Security as the "Fourth Pillar" of the NPT**

“We must ensure that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global security.”\textsuperscript{132}

As the peaceful use of nuclear technology for energy production increases throughout the world, two distinct yet somewhat related threats increase just as well: the spread of nuclear weapons technologies amongst States and the threat that non-state actors (especially terrorist organizations) may acquire nuclear materials and build a nuclear weapon. While the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is concerned with the former issue – it limits the proliferation of nuclear weapon related technologies and materials amongst States – the threat of nuclear terrorism and the urgency to prevent it has received heightened attention after 9/11.\textsuperscript{133}

Intelligence agencies and some analysts have been persistent in warning that large, well-organized and global terrorist organizations have been strategically seeking a nuclear capability.\textsuperscript{134} A 2008 report by the US Commission on the Prevention of WMD (Weapons of Mass Destruction) Proliferation and Terrorism confirmed that “terrorist organizations are intent on acquiring nuclear weapons” and that “trafficking in nuclear materials and technology is a serious, relentless and multidimensional problem.”\textsuperscript{135} A 2003 report by the Belfer Center at Harvard University estimated that a ten-kiloton weapon detonated by a terrorist at Grand Central Station in Manhattan would kill more than half a million people, injure thousands more, destroy much of lower Manhattan and incur direct economic costs of US $1 trillion.\textsuperscript{136} However, other experts warn against exaggerating the nature of the nuclear terrorism threat and point towards the significant technological hurdles a terrorist organization needs to overcome to achieve a successful attack.\textsuperscript{137}

The International Atomic Energy Agency (IAEA) defines nuclear security as the “prevention and detection of and response to theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities.”\textsuperscript{138} Despite the breadth of the IAEA’s definition, in the last few years, “nuclear security” has become closely associated with the prevention of nuclear terrorism.\textsuperscript{139}

Drawing from the International Convention for the Suppression of Acts of Nuclear Terrorism (the Nuclear

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\textsuperscript{131} Pean, Driscoll, Forsberg and Webb, *Nonproliferation primer*, 1995, p. 73.

\textsuperscript{132} President Barack Obama, President of the United States, speaking in Prague, 2009

\textsuperscript{133} James Martin Center for Nonproliferation Studies, *Nuclear Terrorism Tutorial*, 2009


\textsuperscript{135} Commission on the Prevention of WMD Proliferation and Terrorism, *World at Risk*, 2008, p. xix

\textsuperscript{136} Bunn, *Controlling Nuclear Warheads and Materials*, 2003, pp. 15-19

\textsuperscript{137} Masse, *Nuclear Terrorism Redux*, 2010, pp. 312-315

\textsuperscript{138} IAEA, Nuclear Security Plan 2010-2013, 2009, p1. note 2

\textsuperscript{139} Boureston and Ogilvie-White, *Seeking Nuclear Security through Great International Coordination*, 2010, p. 2
Terrorism Convention), nuclear terrorism is the attempted or actual possession of radioactive material, nuclear material or a nuclear device by non-state actors with the intention to cause or threaten death or serious injury, or substantial damage to property or the environment.\(^\text{140}\) It also includes attempted, actual or threatened damage to a nuclear facility that releases or risks the release of radioactive material with similar intentions.\(^\text{141}\) When referring to nuclear security in this background guide, the emphasis is placed on measures to prevent non-state actors from obtaining nuclear materials or nuclear weapons.

How can nuclear security and the underlying terrorism threat be addressed in the NPT context? The NPT remains the cornerstone of the non-proliferation regime. With its broad member base and its non-proliferation verification mechanism provided by IAEA safeguards (as per NPT article III), the NPT’s success in limiting the spread of nuclear weapons between States lets it enjoy substantial international legitimacy.\(^\text{142}\) However, it was not intended to address the threat of nuclear terrorism and does not compel State parties to implement IAEA standards or other recommendations in relation to the physical security of their nuclear facilities and materials.\(^\text{143}\) The NPT is based on three “pillars”: (1) non-proliferation; (2) disarmament; and (3) the peaceful use of nuclear energy.\(^\text{144}\) Prior to the May 2010 NPT Review Conference (RevCon), the United Kingdom (UK) called for nuclear security to be made the "fourth pillar" of the NPT: that nuclear security should be given equal consideration on the agenda of NPT discussions next to the original three pillars.\(^\text{145}\)

This background guide first examines the threat of nuclear and radiological terrorism in more detail, before providing an overview of the current treaties, resolutions, conventions and initiatives that make up the “nuclear security regime”. The guide then summarizes how nuclear security issues have been treated in the context of past NPT Preparatory Committees (PrepCom) and the 2010 NPT RevCon. In closing, a few questions are raised to help discussions and negotiations at the NMUN 2011 NPT RevCon.

**Nuclear Security – Preventing Non-State Actors from Acquiring Nuclear Material or Nuclear Weapons**

A nuclear explosion can be caused by the nuclear reactions of highly enriched uranium (HEU) or weapon-grade plutonium.\(^\text{146}\) Either HEU or plutonium is the key ingredient in a nuclear weapon and they will be referred to as “nuclear materials” in the remainder of this guide. Nuclear materials are very difficult to produce and only medium-sized and larger States possess the industrial capabilities to make them.\(^\text{147}\) There are two ways in which non-state actors may acquire a nuclear weapon: first, via the theft of an intact weapon or its donation by a State, or second, and a little more likely, via the theft or purchase of nuclear material from State actors and the subsequent manufacturing of a device to explode the nuclear material.\(^\text{148}\) Manufacturing, or “weaponizing,” a nuclear weapon that way would lead to a so-called “improvised nuclear device” (IND).\(^\text{149}\)

Nuclear weapons or nuclear material may come into terrorist possession by ways such as theft, with or without insider help, or by deliberate transfers.\(^\text{150}\) Some identify weapons and nuclear material from States of the former Soviet Union and from Pakistan as being at particular risk of falling into terrorist possession, because nuclear security measures appear to be of lower standard there.\(^\text{151}\) The threat in Pakistan is also heightened by relatively strong extremist Islamic groups within the country.\(^\text{152}\) However, the threat is not limited to those States. Should non-state actors have to manufacture their own weapon device in order to use acquired nuclear material, they would face


\(^{141}\) Ferguson and Potter, *The Four Faces of Nuclear Terrorism*, 2010, p. 3

\(^{142}\) Luongo, *Making the Nuclear Security Summit Matter*, 2010, p. 3

\(^{143}\) James Martin Center for Nonproliferation Studies, *NPT Tutorial*, 2009

\(^{144}\) James Martin Center for Nonproliferation Studies, *NPT Tutorial*, 2009

\(^{145}\) UK Cabinet Office, *The Road to 2010*, 2009, p. 25

\(^{146}\) Bodansky, *Nuclear Energy*, 2004, p.482

\(^{147}\) Bodansky, *Nuclear Energy*, 2004, pp. 119, 214

\(^{148}\) Ferguson and Potter, *The Four Faces of Nuclear Terrorism*, 2010, p. 4

\(^{149}\) Ferguson and Potter, *The Four Faces of Nuclear Terrorism*, 2010, p. 4

\(^{150}\) Ferguson and Potter, *The Four Faces of Nuclear Terrorism*, 2010, pp. 54-65, 118-131

\(^{151}\) Ferguson and Potter, *The Four Faces of Nuclear Terrorism*, 2010, pp. 71-77, 151-161

\(^{152}\) Ferguson and Potter, *The Four Faces of Nuclear Terrorism*, 2010, pp. 77-79, 154-55
various technological hurdles. These technical challenges are multiple, but not impossible for a terrorist organization to overcome.

Although the threat of nuclear terrorism has received increased attention in recent years, it is not the aim here to create the impression that nuclear terrorism is a question of “when, not if.” Indeed, there are some voices that warn of exaggerating the threat. Stephen Younger, a former director of the U.S. Los Alamos National Laboratory, points out that even though some rudimentary sources on weapon design exist on the internet, none of them “has enough detail to enable the confident assembly of a real nuclear explosive.”

Nuclear terrorism is a high-consequence, low-probability challenge for policy-makers. It is irresponsible not to take any measures to prevent it. But taking such measures diverts attention from terrorist attacks using conventional means that are more likely to occur, while not reflecting the unsuccessful track record of terrorists using nuclear or radiological weapons. As noted further below, while Western States have devoted significant attention to nuclear terrorism, many other States do not share this threat assessment.

Nuclear security measures are often also meant to counter the threats of sabotage attacks and radiological terrorism. The latter does not cause a single devastating nuclear blast like nuclear terrorism. The effects of dispersing radioactive materials (for example through a “dirty bomb”) are predominantly of economic and psychological nature.

The Nuclear Security Regime

Multiple treaties, resolutions, conventions and initiatives make up the nuclear security regime. Each element of the regime helps, to a greater or lesser extent, to minimize the threat of nuclear terrorism. A selection of the regime’s elements is introduced here but a more comprehensive overview is available in the literature.

The only international legally binding agreement on the protection of non-military nuclear materials is the Convention on the Physical Protection of Nuclear Material (CPPNM). The original CPPNM entered into force in 1987 and essentially it only requires States to protect nuclear materials that are in transit from one country to another; it does not require the protection of material that is stored on site or during transport within a country. As of February 2010, 142 States are party to the convention, but these do not include a number of States with civilian and/or military nuclear programs such as the Democratic People’s Republic of Korea (DPRK), Iran, Thailand and Vietnam. In 2005, States addressed the severe shortcomings of the original CPPNM, agreeing on an amendment that makes it binding for States to protect nuclear facilities and nuclear materials in domestic use, storage and transport. It also facilitates cooperation in recovering lost nuclear material and encourages national legislation to criminalize offenses related to nuclear smuggling. The amendment to the CPPNM has not yet come into force: it will do so once two-thirds of the current parties to the Convention have ratified it, but as of June 2010, only 41 States have done so.

155 Masse, Nuclear Terrorism Redux, 2010, pp. 302, 313
156 Masse, Nuclear Terrorism Redux, 2010, p. 313
157 Masse, Nuclear Terrorism Redux, 2010, pp. 304-305
158 Ferguson, Radiological Materials and Jihadist Terrorism, 2009, pp. 173-190.
161 Harvey, Major Proposals to Strengthen the Nuclear Nonproliferation Treaty, 2010, p. 41.
162 Boureston and Ogilvie-White, Seeking Nuclear Security through Great International Coordination, 2010, p. 4.
164 Boureston and Ogilvie-White, Seeking Nuclear Security through Great International Coordination, 2010, p. 4.
Although the CPPNM and its amendment might be an “important milestone” and “vitally important,” critics point out that there remain significant gaps. The ambiguity of the text has meant that the actual standard of physical protection that the amendment demands remains mostly discretionary to the State. Furthermore, implementation of the CPPNM and its amendment are evaluated by the States themselves, rather than by multilateral organizations such as the IAEA. Even though a State might have ratified the amended CPPNM, the implementation of measures to prevent terrorists acquiring nuclear materials therefore remains unverifiable.

The closest the international community has come in defining what effective physical protection of nuclear materials and facilities means in practice is given in the IAEA information circular (INFCIRC) 225. The fourth revision (published in 1999) of INFCIRC/225 sets out recommendations of essential nuclear security measures, covering both peaceful and military nuclear materials and facilities, and their domestic as well as international use. Critically, the recommendations of INFCIRC/225 are nonbinding and there exists no treaty that legally requires the implementation of INFCIRC/225. Following pressure from the US and other States, INFCIRC/225/Rev.4 is to be comprehensively updated and INFCIRC/225/Rev.5 is expected to be published in the second half of 2010.

The Nuclear Terrorism Convention was adopted by the UN General Assembly in 2005 and it entered into force in 2007. The Convention primarily requires parties to criminalize nuclear terrorism-related offenses and to cooperate with each other and the IAEA in preventing and responding to nuclear terrorism. Shortcomings related to the Nuclear Terrorism Convention include its small number of 65 State parties. These do not include the DPR Korea, Indonesia, Iran, Iraq, Myanmar, Pakistan and Vietnam and of the nuclear weapon states (NWS) only Russia and the UK have ratified the Convention.

The United Nations Security Council has also passed a small number of relevant resolutions that significantly add to the nuclear security regime. United Nations Security Council resolution (UNSCR) 1373 (2001), adopted soon after 9/11, calls upon States to become parties of the existing international mechanisms to counter terrorism and to criminalize terrorism activities. UNSCR 1540 (2004) takes significant steps further. Adopted under Chapter VII of the UN Charter, Resolution 1540 legally obliges all UN Member States (including NPT non-parties DPR Korea, India, Israel and Pakistan) to “take appropriate effective measures” to prevent the proliferation of nuclear, chemical or biological weapons and related materials to non-state actors. That includes the implementation of material accountancy, physical protection, border controls and similar measures. UNSCR 1540 is a very comprehensive resolution in that it closes a gap in the non-proliferation regime, which until 2004 had only marginally addressed the proliferation of nuclear weapons to non-state actors. The resolution also establishes the Committee Pursuant to Security Council Resolution 1540 (the 1540 Committee) which has the task of monitoring the implementation of the decisions of the Security Council.

167 Boureston and Ogilvie-White, Seeking Nuclear Security through Great International Coordination, 2010, p. 4.
168 Boureston and Ogilvie-White, Seeking Nuclear Security through Great International Coordination, 2010, p. 4.
175 Boureston and Ogilvie-White, Seeking Nuclear Security through Great International Coordination, 2010, p. 4.
176 Boureston and Ogilvie-White, Seeking Nuclear Security through Great International Coordination, 2010, p. 4.
178 United Nations Security Council (S/RES/1540), Resolution 1540, 2004; Boureston and Ogilvie-White, Seeking Nuclear Security through Great International Coordination, 2010, p. 3.
180 Boureston and Ogilvie-White, Seeking Nuclear Security through Great International Coordination, 2010, p. 3.