ZABMUN X

RESOLVING DISPUTES | REACHING MILESTONES

INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA)

TOPIC A : REVIEWING THE NON-PROLIFERATION TREATY

TOPIC B : NUCLEAR PROLIFERATION ISSUES IN ASIA

LETTER FROM THE PRESIDENT

Honourable participants,

ZABMUN has been the crown jewel of SZABIST since the past ten years, and being the President of ZABMUN X, the honor of meeting the standards falls upon me.
ZABMUN has always been a conference par excellence and within this year's theme: Resolving Disputes | Reaching Milestones, we intend to go further than we ever have.
Our aim is to promote the art of diplomacy and creating dialogue about the important world issues.
This year, ZABMUN not only promises to provide you an exhilarating conference but it even promises you to provide extensive training sessions which would provide you th e best quality debate.

It would be an immense pleasure to host your brilliant minds at the 10th conference.

Kind regards,

Syed Ahmer Hussain Qadri,
President
ZABMUN

LETTER FROM THE SECRETARY GENERAL

Greetings everyone!

My name is Syeda Romaiza Ibad and I am currently in my Junior Year, pursuing BSc in International Relations and Political Science. Being an advocate of debate, diplomacy and discourse, I am honoured to welcome the leaders of tomorrow to the 10th Edition of Szabist Model United Nations. ZABMUN is a conference built on proud traditions and a legacy of MUNs at SZABIST. This conference is a timely reminder of the succeeding generations that have dedicated their hard work, blood and sweat in making this conference exceptional.

This year, we will be celebrating a Decade of Diplomacy with committees serving as 10 pillars, created with a blend of ambition, comprehensive concepts and internationally diverse topics, affirming high hopes of all. ZABMUN is modelled on open minds and fresh ideas where delegates are challenged and asked to represent national agendas or stands that they may personally disagree with. They will do so fairly and forcefully. This open-mindedness is the essence of successful diplomacy -- the ability to understand and analyse all positions, including those that they oppose.

As the Secretary-General of the conference, I recognize the value of having accomplished Committee Directors on board and how it contributes to making the conference a success and so, I have handpicked for you a mixture of ZABMUN Alumni and renowned Chairpersons from within the debating coterie, who have a profound knowledge and knack for Parliamentary discussions and debates.

I want this acceptance of differing viewpoints to clearly distinguish this conference from the rest. I believe it will prove crucial as delegates assume leadership roles in the twenty-first century. This year, the theme is quite simple: Resolving Disputes & Reaching Milestones. We want to harbour diversity and inculcate in our delegates the art of conflict resolution. I can assure all the delegates that by participating in this simulation and using this platform, these students can surely become better speakers. ZABMUN encourages each individual to trigger their analytical thinking skills, by stepping into the world of daily crisis and policy changes and enable their minds to interpret situations and suggest solutions.

Good luck to all those participating! Can't wait to see you all in December!

Kind regards,

Syeda Romaiza Ibad,
Secretary General
ZABMUN

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TOPIC A: REVIEWING THE NUCLEAR NON-PROLIFERATION TREATY

1. Nuclear Non-Proliferation treaty; an introduction

The NPT is a landmark international treaty and its' objective is to prevent the spread of nuclear weapons to promote cooperation in the peaceful uses of nuclear energy and to further the goal of achieving nuclear disarmament and general and complete disarmament.[1]

The treaty was open to signature in 1968 however it entered into forced in 1970. A testament to the treaty's significance happens to be how more member states have ratified it in comparison to any other arms limitation or disarmament agreement.

To further the aim of denuclearization and non-proliferation, and in order to establish confidence between state parties, the Treaty establishes a safeguards system under the responsibility of the International Atomic Energy Agency (IAEA)[2]. Safeguards are used to verify compliance with the Treaty through inspections conducted by the IAEA. The Treaty promotes cooperation in the field of peaceful nuclear technology and equal access to this technology for all States parties, while safeguards prevent the diversion of fissile material for weapons use.[3]

With the near-universal membership of the treaty, the NPT has the widest adherence of any arms control agreement, with only a handful of states outside of the treaty.

The treaty segregates the countries as Nuclear Weapon States (NWS) and Non-Nuclear Weapon States (NNWS), with the establishment of the fact that all the countries that manufactured and exploded their nuclear weapons prior to 1stJanuary 1967, would be the NWSs. For countries who manufactured and tested their arsenals later than the aforementioned date would have to join the treaty as NNWSs, implying for them to have to dismantle their arsenals and put their nuclear materials under international safeguards, hence, the dilemma by Pakistan, India and Israel, which are either known or suspected to possess nuclear weapons.

1.1 The Three Pillars

The NPT's substantiality rests upon three primary pillars; the non-proliferation, the peaceful use of nuclear energy and disarmament.

a. Non-proliferation

In accordance to the NPT, the nuclear weapon states pledge not to transfer nuclear weapons or other nuclear explosive devices to any recipient or in any way assist, encourage or induce any non-nuclear-weapon state in the manufacture or acquisition of a nuclear weapon. And the non-nuclear-weapon states pledge not to acquire or exercise control over nuclear weapons or other nuclear explosive devices and not to seek or receive assistance in the manufacture of such devices. They also pledge to accept IAEA safeguards to verify that their nuclear activities serve only peaceful purposes.

[1]Office of the Disarmament Affairs npt
[2]The International Atomic Energy Agency https://www.iaea.org
[3]Ibid https://www.un.org/disarmament/wmd/nuclear/npt/

b. Peaceful uses

The treaty also acknowledges the right of all Parties to develop nuclear energy for peaceful purposes and to benefit from international cooperation in this area, in conformity with their nonproliferation obligations, also confirming the words of President Eisenhower, 'Atoms for Peace', the notion behind the formation of the IAEA.

c. Disarmament

With the ratification of the NPT, all parties undertake to pursue good-faith negotiations on effective measures relating to cessation of the nuclear arms race, to nuclear disarmament, and to general and complete disarmament.

2. The chronology of denuclearization efforts

2.1 1945-70

The basic efforts started in 1945, when UNGA adopted a resolution to establish the United Nations Atomic Energy Commission. The proposals were never implemented.
The issue of international atomic energy control was revisited following the President Eisenhower's speech 'Atoms for peace'. On 8thDecember 1953. He proposed to not disarm the world of nuclear capability, but to open atomic energy to world community.

Atoms for peace led to the formation of IAEA on 29thJuly 1957. Although it became considerably functional until after 1960s to monitor and implement that the materials are not being used for military purposes.

In the late 1950s, the discussions also began for CTBT in context of moratorium of Soviet, UK, USA and calls for three to engage in nuclear disarmament. It could not be successful because of failure of establishment of certain assessment verifications such as the detection of violations and underground testing.

In 1963, the three states, however, did sign the PTBT, where they cannot test their weapons under water, in atmosphere, or in outer space, but only underground.
The first NWFZ applied to a populated region is the Treaty for the prohibition of nuclear weapons in Latin America.

In 1961, the UNGA adopted the Irish Resolution which called for limitation to prevent additional states from acquiring nuclear weapons and for all states to refrain from transfer or acquisition of such weapons.

A breakthrough came in nuclear nonproliferation as a result of UNGA Res 2028 in 1965. And the tabling of a US-Soviet Draft in 1968. Following further amendments, the treaty was open for signature on 1stJuly 1968, and NPT formally entered into force in 1970

2.2 1970 onwards

In 1971, IAEA negotiated INFCIRC/153 safeguards document, which provides a model for all safeguards negotiated with parties to the NPT.

In 1971, the Zangger Committee adopted guidelines or a 'trigger list' pursuant to the NPT allowing for IAEA safeguards to be applied on nuclear transfers, especially those involving the equipment or material for the processing, use or production of special fissionable materials.

Later in 1975, Nuclear supplier's group was founded, which agreed that additional conditions should be attached to sensitive nuclear exports like reprocessing and uranium enrichment plants.
In 1987, Missile Technology Control Regime came into being. This supply arrangement seeks to limit the risk of nuclear proliferation by controlling transfers of technology which could make a contribution to nuclear weapons delivery systems other manned aircrafts. It prevents proliferation of UAVs capable of carrying 500kg for more than 300 km.

Though, there are concerns over the long-term viability of MTCR, it has fulfilled its initial purpose. Missile defenses are another means for dealing with the problem. Other solutions are global or regional test notification centers. And multilateral arms limitation measures for missiles with certain ranges.

In 2002, The Hague Code of Conduct was launched, it seeks to develop standards of appropriate behavior in the transfer of missiles and missile parts.

Later, a fissile material cut off treaty was attempted to be negotiated and neither the proposal of U.S not Russia would prohibit the production of fissile material for non-weapon purposes. In December 1993 the UN General Assembly adopted resolution 48/75L calling for the negotiation of a "non-discriminatory, multilateral and international effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices." The Geneva-based Conference on Disarmament (CD) on 23 March 1995 agreed to establish a committee to negotiate "a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.".[2] However, substantive negotiations have not taken place.

One issue that comes up is whether the treaty should only prevent future production of fissile materials or deal with an agreement to remove existing stockpiles. What requires attention is how, as safely and cost efficiently as possible, any excess fissile material can be exposed of, given the large quantities involved.

Later, a document tabled at the 1995 conference by the Arab States party to the NPT, known as resolution on the middle east calls for all states in the region to accede to NPT. Though there have been 188 members already; still the question as to how the treaty can be made universal remains unanswered.

In response to evolving proliferation dynamics, new initiatives were devised. Such as the counter proliferation and antiproliferation.

> Counterproliferation refers to diplomatic, intelligence, and military efforts to combat the proliferation of weapons, including both weapons of mass destruction (WMD), long-range missiles, and certain conventional weapons. With prime focus on long range missiles.

> Anti-proliferation refers to the traditional non-proliferation agenda as well as new elements responding to political and military implications of the proliferation process itself.

By the end of second decade of 21stcentury, a number of initiatives had taken place. Namely, the proliferation security initiative, the global initiative to combat nuclear terrorism, the new start treaty, global nuclear energy partnership.

Finally, there have been calls for reappraisals for creating new multi-lateral nuclear fuel centers. A regional safeguards organization such as EURATOM.

3. POLITICAL SIGNIFICANCE

Neither the Non-Proliferation Treaty nor disarmament negotiations in general can be viewed in isolation. Disarmament negotiations are a part and parcel of international politics. They are subject to the same forces and influences as international politics in general.

The Non-Proliferation Treaty has become an integral part of the relaxation of international tensions. In the relations between the USA and the USSR, it first took shape at the Geneva disarmament negotiations in the aftermath of the Cuban Missile Crisis. The first important result of the negotiations was the Moscow Test Ban Treaty of 1963. But their most significant achievement to date is the 1968 Treaty on the Non-Proliferation of Nuclear Weapons.

The political significance of the Treaty for relations between the major powers stands in even clearer light when we bear in mind that the talks were brought to a successful conclusion in an international situation burdened by armed conflicts in Vietnam and the Middle East.

In assessing the political significance of the NPT, one also has to keep in mind that the SALT negotiations are a direct outgrowth from Article VI of the NPT. In addition to the agreements already achieved and those to be expected on the limitation of strategic nuclear arms and associated measures, the continuing strategic dialogue at the SALT-negotiations has a vital political importance for the relations between the USSR and the USA in the context of detente..

4. AN ASSESSMENT OF SUCCESSES

From 43 parties in 1970 to an adherence of 190 parties, NPT is now the most widely adhered arms control agreement in history. In 1995, Parties convened a Treaty-mandated review and extension conference which agreed to extend the Treaty indefinitely. Only three states; India, Israel, and Pakistan, have never adhered to the Treaty. Only one state; North Korea, has announced its withdrawal from the NPT.

The overarching benefit provided by the treaty is that of enhanced international peace and security. The norm of nonproliferation--the international consensus that the further spread of nuclear weapons would weaken all states' security, as well as global and regional stability--remains strong. Peaceful applications of nuclear energy have grown in number and importance, as have the number of states with peaceful nuclear programs and the level of international cooperation aimed at bringing the peaceful benefits of nuclear energy to the greatest number of people.

4.1 The Non-Proliferation regime

NPT is the cornerstone of the non-proliferation regime. The regime also includes the International Atomic Energy Agency's (IAEA) safeguards system, a network of bilateral and multilateral nuclear cooperation agreements, the system of multilateral export controls, and a series of UN Security Council Resolutions, including Resolution 1887 (2009).

The Zangger Committee and the Nuclear Suppliers Group are the two bodies committed to developing export controls to prevent the diversion of nuclear and nuclear related exports from peaceful to weapons purposes without hindering cooperation on the peaceful use of nuclear energy. UN Security Council Resolution 1540 (2004) and associated resolutions bolster this system by mandating that all UN Member States develop and enforce appropriate legal and regulatory measures against the proliferation of weapons of mass destruction and their means of delivery.

4.2 Peaceful use of Nuclear Energy

In the 40 years since the NPT's entry into force, there has been tremendous growth in the peaceful use of nuclear energy. Nuclear applications in food security, disease prevention, medicine, water resources, and environmental management improve the lives of people around the world every day. More than 60 countries are currently considering new civil nuclear power programs, and efforts to help these states develop their infrastructure through civil nuclear cooperation have expanded in response. Today, the benefits described in Article IV are being exercised to a degree not seen in decades, if ever before.

4.3 Disarmament and Security

The NPT is critical to sustaining progress toward disarmament because it is the principal legal barrier to the spread of nuclear weapons, and because its parties undertake to pursue negotiations in good faith for the sake of general and complete disarmament under strict international governance.
There has been significant progress on disarmament since the NPT's entry into force. Treaties banning chemical and biological weapons are now in force. At the 2000 NPT Review Conference, the five NPT nuclear weapon states reiterated their commitment to the elimination of nuclear weapons.

5. LOOPHOLES AND CHALLENGES

Over the past few decades, the denuclearization regime has confronted and adapted itself to several challenges.

5.1 Non-compliance issues

One of the key challenges to the Treaty continues to be noncompliance with nonproliferation obligations by a few NPT non-nuclear-weapon states. The overwhelming majority of NPT Parties do comply with their nonproliferation obligations, but continuing compliance challenges make clear the need for the international community to remain vigilant about compliance, to strengthen continually the Treaty's implementation and the nonproliferation regime, and to continue to pursue international efforts to bring non-compliant states back into compliance.

a. The case of North Korea:

North Korea announced its intention to withdraw from the NPT n 2003. In September 2005, in the Joint Statement of the Six-Party Talks, North Korea committed to abandoning all nuclear weapons and existing nuclear programs and to return, at an early date, to the NPT and to IAEA safeguards. North Korea has not honored its commitments and currently faces sanctions under two UN Security Council Resolutions for its announced nuclear tests in 2006 and 2009. The full implementation of the Joint Statement remains the core objective of the Six Party Talks.

b. Iran:

For many years, Iran has conducted unreported nuclear activities, including enrichment. In 2005, the IAEA found Iran in noncompliance pursuant to Article XII.C. of the Agency's Statute because of its failure to comply with its NPT-mandated safeguards agreement. Since 2005, the UN Security Council has passed five resolutions, three of which are legally binding, calling on Iran to suspend its enrichment-related activities and heavy water-related projects and imposing sanctions on Iran for its lack of compliance. Later, however, a deal by the name Joint Comprehensive Plan of Action was negotiated, from which U.S later withdrew making accusations of violations on Iran. Some call these accusations facts, others, speculations.

5.2 The Safeguard System

The safeguards systems in accordance to the NPT, and by extension, the small quantities protocol and the additional protocols have a significant role in assuring the key chunks of the treaty and guarantying denuclearization. The 1990-91 gulf war and the withdrawal of the U.S from Iran Nuclear Deal, speculations which may be argued as, are some instances of weak international governance and safeguard implementations.

The IAEA safeguards system is also facing the challenge of a growing imbalance between its workload and its resources. As peaceful uses of nuclear energy and the demand for them have grown, so have the number of facilities and the amount of material worldwide that are under IAEA safeguards. As the Agency's responsibilities have grown, its resources have not increased proportionately.

A global expansion of nuclear power will not serve the international community's collective interest in peace, security, and sustainable development if it is accompanied by a dramatically increased risk of nuclear proliferation. This would be the case if all states embarking on nuclear power programs opted to pursue uranium enrichment or spent fuel reprocessing, which the IAEA Board of Governors has classified as "sensitive technological areas." One constructive way of addressing this challenge is through the development of mechanisms to assure nuclear fuel supply, such as international fuel banks followed by guaranteed safeguard mechanisms.

5.3 The Withdrawal clause

Article X of the NPT sets forth the right of Parties to withdraw from the Treaty and the requirements that must be followed in doing so. However, there is a growing concern among Parties about the potential for abuse of the withdrawal clause, particularly withdrawal by a Party while it is in violation of its Treaty obligations. It is clear that a state would remain responsible under international law for violations of the NPT committed prior to withdrawal, and the UN Security Council has indicated that it would address "without delay" any notice of withdrawal from the NPT under Article X.

An instance of such a case is the withdrawal of the DPRK from the treaty. DPRK provided necessary statements and in its statement, the DPRK argued that those military exercises, as well as the IAEA's demand for special inspections to military sites unrelated to nuclear activities, constituted an encroachment on its sovereignty and national security. [1]

[1]Democratic People's Republic of Korea, Statement of the Government of the Democratic People's Republic of Korea (Pyongyang, 12 March 1993), 1993.

5.4 The transnational threat

Among other threats, the one posed by the transnational third party actors is worth the attention given the devastation it has caused at various incidents be it the 9/11 attack or other acts of mayhem. The A.Q Khan network and the extent of its illicit activities made clear the potential of non-state actors to further the nuclear proliferation. A nuclear arsenal in the hands of a transnational violent non-state actor is, indeed, one of the issues of grave concerns and needs be addressed.

5.5 Lack of Safeguards in international trade

In its Final Declaration, the Review Conference recognized that the accelerated spread and development of peaceful applications of nuclear energy will, in the absence of effective safeguards, contribute to further proliferation of nuclear explosive capacity. This rather flat statement defines in a nutshell the basic dilemma of nuclear proliferation, to wit: How to satisfy the legitimate aspirations of nations to benefit from nuclear energy for peaceful purposes while guarding against the dangers of putting its enormous destructive potential in the hands of an ever-growing number of States?

6. FURTHER READ

https://digitalcommons.lmu.edu/cgi/viewcontent.cgi?

referer=https://www.google.com.pk/&httpsredir=1&article=1709&context=ilr

https://kclpure.kcl.ac.uk/portal/en/theses/the-role-of-article-vi-in-debates-about-the-nuclear-nonproliferation-treaty(63e6f120-ce80-40df-a3f0-3ab2e8a8f12c).html

https://ndu.edu.pk/issra/issra_pub/articles/margalla-paper/Margalla-Papers-2012/01-Pakistan-and-the-NPT.pdf

https://www.sipri.org/sites/default/files/Reflections%20on%20the%20NPT_Dhanapala%20and%20Rauf.pdf

http://www.amacad.org/content/publications/pubContent.aspx?d=950

7. QARMA

· What steps further can be taken to strengthen the withdrawal clause of the treaty?

· How can a continued commitment to the cause of denuclearization be ensured via the nuclear non-proliferation treaty?

· What improvements in the safeguards can be made to enhance the global nuclear trade supervision and govern nuclear facilities?

· How can the treaty play a role in eradicating the or minimizing the threat of nuclear proliferation posed by the third-party actors?

TOPIC B: NUCLEAR PROLIFERATION ISSUES ASIA

1.Introduction:

Nuclear proliferation is the spread of nuclear weapons, fissionable material, and weapons-applicable nuclear technology and information to nations not recognized as "Nuclear Weapon States" by the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), commonly known as the Non-Proliferation Treaty or NPT. The global nuclear non-proliferation picture is in a state of flux characterized by the push and pull of positive and negative dynamics.The nuclear picture in Asia is therefore decidedly mixed. In terms of the strategic situation, the region is arguably in a state of flux characterized by a changing balance of power between the region's great powers and nuclear and conventional military asymmetries within key regional strategic relationships. Additionally, developments within these key strategic relationships, especially the Sino-US one, have the potential to have important spill-over effects on other regional relationships. On the NPT side of the equation we have seen that the regime remains characterised by long-standing tensions within and between the NWS and NNWS parties to the treaty. In particular, the division between those states seeking to emphasise the non-proliferation elements of the regime and those seeking to privilege the nuclear disarmament element continues to muddy the waters with respect to addressing the issues of sanctioning non-compliance and tightening conditions for nuclear cooperation. The modest expansion of demand for nuclear energy in Asia raises the potential not only for security and safety threats stemming from issues of governance and compliance but also the dilemma of spreading nuclear materials and technology in a region whose strategic environment that could change significantly in the immediate future.

On the positive side, there has been something of a 'sea-change' in the attitudes of the world's pre-eminent power, the United States, towards central elements of the arms control and non-proliferation architecture since the election of Barack Obama in November 2008. This has included a commitment to move toward eventual nuclear disarmament and the negotiation of a new Strategic Arms Reduction Treaty (New START) with Russia. This has taken place in a broader environment in which nuclear proliferation remains a major security concern in the Middle East and North-East Asia and the effectiveness of the international non-proliferation regime, based on the NPT, remains in question. Heightened concern regarding the security implications of climate change has also lead to a rise in the profile of nuclear energy as potential low-carbon emission energy. International nuclear affairs are therefore characterised by three major dynamics: a state of flux in the global strategic nuclear environment; the stasis of the international non- proliferation regime; and increasing global demand for nuclear energy.

The tensions within and between these three realms are especially prevalent in the Asia- Pacific context. Globally the NPT system is confronted by a series of challenges that have weakened both its effectiveness and its legitimacy – including the failure of the nuclear weapons states to move toward nuclear disarmament and ongoing proliferation activities of member states such as Iran. In the strategic realm, the region is increasingly defined by multiplayer asymmetries between the nuclear weapons states. The region's nuclear weapons states not only have vastly different nuclear capabilities but also operate within varied regional security environments. Combined with recent US-Russian nuclear arms reductions, continued uncertainty regarding the effectiveness of ballistic missile defenses (BMD), and the continued proliferation activities of North Korea, the region is arguably entering a new era in which there remain significant incentives for further vertical and horizontal nuclear proliferation. Finally, the market realm of the nuclear equation in Asia is increasingly defined by an expansion in demand for nuclear energy. The potential spread of nuclear materials/technologies that this would entail is cause for concern in a region characterized by changing strategic dynamics.

2. The Deconstruction of the Non-Proliferation Consensus:

The non-proliferation regime based on the Nuclear Non-Proliferation Treaty (NPT) concluded in 1968 has been seen as establishing a robust norm of nuclear non-proliferation. This norm has been founded on three main 'pillars' encapsulated in the NPT's six major articles – a non-proliferation commitment by both nuclear weapon states (NWS) and non- nuclear weapons states (NNWS) parties to the treaty (Articles I, II and III), a commitment to foster peaceful nuclear cooperation (Articles IV and V) and commitment to nuclear disarmament (Article VI) (IAEA 1970). The basic bargain at the heart of the NPT is one based on the 'anticipation of reciprocity' between the parties to it – i.e. in return for a commitment from the NNWS to not acquire nuclear weapons the NWS committed themselves to aid the NNWS in acquiring the 'peaceful benefits' of the nuclear age and to restrain, and ultimately end, their vertical proliferation.

Since the indefinite extension of the NPT in 1995 it has become clear that this central bargain is breaking down. This has largely been due to the inherent tension between the logics of the NWS and NNWS regarding the purpose of the NPT. For the NWS, it is further horizontal proliferation that is to be contained by the NPT, while for the NNWS it is nuclear weapons themselves that are the problem to be contained through nuclear disarmament measures. Although the Article VI disarmament obligation was considered a central element of the political bargain that the NNWS parties made with the NWS to forgo nuclear weapons, the treaty's inequality throughout the Cold War was justified under the heightened tensions of the US-Soviet arms race. The non-proliferation purpose of the treaty was also served by the superpowers' provision of extended nuclear deterrence to alliance partners and their attempts to manage nuclear proliferation within their spheres of influence. With the end of such systemic constraints in 1991 the NNWS have argued that the articles of the NPT make it clear that the possession of nuclear weapons by the five NWS is a temporary situation, with non-proliferation (Articles II, III) and nuclear disarmament (Article VI) seen as complementary goals. From this perspective nuclear disarmament tempers the discriminatory effects of the non-proliferation pillar and enhances the legitimacy of the regime by 'creating the expectation that the special rights of the nuclear weapons states will end at some point in the future'.

Since 1991 various factors have intervened to bring the tension between the non-proliferation and disarmament pillars of the regime to the fore. For the US the non-compliance of NNWS parties to the NPT such as Iraq, North Korea, Iran, Libya and Syria, the nuclear 'break-outs' of treaty outliers India and Pakistan, the events of 9/11 and the exposure of the proliferation network of A. Q. Khan over the past two decades contributed to an increasing emphasis on strengthening the non-proliferation pillar of the NPT, the development of counter-proliferation initiatives and the continued salience of the nuclear arsenal as a key plank of US national security policy. Additionally the US approach to proliferation also came to be based upon a series of judgments that nuclear proliferation was inevitable, there were 'good' and 'bad' proliferators, multilateral non-proliferation instruments were ineffectual, and US regional security and economic interests trumped non-proliferation.

Such judgments contributed to the US abrogation of the ABM Treaty in 2002 and underpinned the US-India nuclear cooperation agreement of March 2005, the latter of which was perceived as implying that Washington no longer supported the universal application of non-proliferation standards by approving outsiders who are judged to be 'good' proliferators on normative or strategic grounds. It was also increasingly clear that some NNWS parties to the Treaty had utilized Article IV to obtain the expertise and capacity to pursue nuclear weapons programs, violating their Article III obligations to forgo nuclear weapons and their agreements with the IAEA to place their nuclear materials and technology under international supervision. Such dynamics came to a head in 2005 to produce the worst NPT RevCon for many years in which the conflicting imperatives of the NWS and key NNWS, such as members of the Non-Aligned Movement (NAM), contributed to the failure to achieve a consensus approach to the prominent cases of non-compliance by NPT members (e.g. Iran) and a lack of progress on nuclear disarmament.

The May 2010 RevCon took place in much more favorable 'atmospheric' conditions due to President Obama's commitment in April 2009 to achieving the entry into force of the CTBT, the negotiation of a verifiable FMCT, and the negotiation of a new START agreement with Russia. Despite these favourable conditions the 2010 RevCon arguably made minimal progress on some of the key areas of tension between the NWS and NNWS. On the disarmament front, while the conclusion of New START was viewed positively, the majority of NNWS nonetheless perceived it as insufficient with elements of the NAM advocating for a legally binding and explicit timetable for nuclear disarmament. Predictably, this was resisted by the NWS, as were efforts to declare a moratorium on the upgrading and developing new types of nuclear weapons. While the US, Russia and China also all reaffirmed their commitment to disarmament at the RevCon, China stated that it would not join US-Russian reductions until their arsenals fell to Chinese levels – an unlikely development given the provisions of New START outlined earlier. China also blocked a proposal that called on the five recognized NWS to halt production of high enriched uranium and plutonium pending the conclusion of a FMCT.

The RevCon also saw the re-emergence of long-standing tensions between not only the NWS and NNWS but also western and non-western member states over the issues of compliance and non-proliferation. Contentious issues here included the status of the IAEA's Additional Protocol (AP), export controls, conditions for supply of nuclear materials/technologies and the US-India nuclear deal. The NWS and most western NNWS sought to make the AP the verification standard under the NPT, a precondition for the supply of nuclear materials/technologies and encourage members of the Nuclear Suppliers Group (NSG) to do likewise. NAM states objected to making the AP a pre-condition for the supply of nuclear materials/technologies, arguing that the export control regime has a double-standard given the exemption granted by the NSG to India in 2008. For these states the US-India deal contradicted a decision of the 1995 RevCon that required 'full scope safeguards' as a precondition to new nuclear supply arrangements. The US was that the 1995 decision was a political and not a legal obligation and therefore it would not be revisiting its deal with India, an argument that 'was viewed by many as suggesting that states can pick and choose to implement whatever elements of NPT RevCon decisions they care to while disavowing others that no longer strike their fancy—an approach that makes it very difficult to hold states to their NPT obligations'. As controversy over China's proposed sale of nuclear reactors to non-NPT member Pakistan testifies, the precedent of the US-India nuclear agreement is making it difficult for Washington to dissuade other NSG members from attempting to cut deals with other non- NPT states.

Nuclear Asia: Asymmetries and Uncertainties:

During the Cold War Asia was something of an afterthought with respect to nuclear issues as it was 'dominated by the ideological and strategic confrontation between the United States and the Soviet Union'. While there came to be Asian nuclear weapons states (e.g. China), they remained embedded in a strategic nuclear landscape shaped by the superpowers. If the strategic realm during the Cold War was shaped by US and the Soviet Union, that of the post-Cold War era is arguably being decided in Asia. A defining feature of the emerging Asian nuclear order is that at the basic level of arsenal size the region's current nuclear powers - US, Russia, China, India, Pakistan, and North Korea – are radically unequal. This asymmetry is not simply limited to the nuclear sphere but extends to conventional military capabilities and arguably to other areas of national power such as economic and diplomatic power. It has been argued that Asia's nuclear relationships can be understood as two triangles – a US-Russia-China triangle and an India-Pakistan-China triangle. Yet these triangles also inextricably involve a number of important non-nuclear weapons states and one could add two further triangles - US-China-Japan and US-China-Taiwan - and a US-China-North Korea-South Korea quadrilateral to Asia's nuclear equation. Significantly, China and the US are central to all of these relationships. The direction of this relationship will be a crucial element in shaping the Asian nuclear order as developments within it will have major spill-over effects for the others. For example, if China continues to modernise and expand its nuclear arsenal in order to counter perceived advantages of US prompt global strike (PGS) capabilities and BMD, it inevitably will impact on the South Asian nuclear equation as India will seek to counter Chinese force modernisation with its own. This in turn will likely compel Pakistan to keep pace with New Delhi. Given Beijing's long-standing policy of supporting Pakistan to balance against Indian predominance on the subcontinent, such a dynamic could also potentially result in further Chinese aid to Islamabad and heighten tension between Beijing and New Delhi.

Therefore the Asian strategic environment is characterised by shifting relativities of power amongst its major powers, nuclear (and conventional) asymmetries between its major powers and a dynamic of interconnectivity across key strategic relationships. In this environment the relative shifting of nuclear arsenal sizes and capabilities amongst Asia's nuclear powers may be of increasing importance. In May 2010 the US had approximately 1,968 deployed strategic warheads, while Russia had approximately 2,600. In contrast the three other major Asian nuclear powers have much smaller arsenals of deployed strategic warheads with China estimated to have between 180 and 400, Pakistan between 70 and 90, and India between 60 and 80. The extent of North Korea's nuclear arsenal remains uncertain with most estimates suggesting between 0 and 10, although there is no publicly available evidence that these have been operationalized.

Even with the provisions of New START, signed by Presidents Obama and Medvedev in Moscow on 8 April 2010, US and Russian nuclear arsenals will remain quantitatively and qualitatively well beyond the arsenals of the other Asian nuclear powers. While New START commits the US and Russia to reduce their deployed arsenals to 1,550 strategic warheads by 2017, the treaty's accounting rules mean that reductions may actually be much less than claimed. For example, heavy bombers – one key leg of the US nuclear triad – will be counted as one warhead despite the fact that such bombers often carry multiple nuclear-armed missiles or bombs. The treaty's accounting rules also permit both a significant 'upload' capacity by omitting the US's arsenal of 'reserve' warheads awaiting dismantlement and Russia's 'several thousand' tactical nuclear weapons. The reductions of New START have also been portrayed as practical evidence of US and Russian commitment to their nuclear disarmament obligations under the NPT. It is unlikely that such modest reductions will convince the other major Asian nuclear weapons states to exercise restraint in developing their respective nuclear capabilities in a changing strategic environment. China, for example, has characterised them as 'comparatively moderate' and urged Washington and Moscow to make further significant cuts before it joins any 'multilateral disarmament process'.

Three major aspects of the 2010 US Nuclear Posture Review (NPR) also make it unlikely that Asia's nuclear weapons states will act with restraint. First, it was hoped by some that the 2010 NPR would signal a major shift in US declaratory policy and nuclear posture by assigning to the US' nuclear arsenal the 'sole purpose' of deterring a nuclear attack by a hostile nuclear weapons state and making a 'no first use' declaration (i.e. stating that nuclear weapons would only be used in response to a nuclear attack by others). However it only signalled that it would move in this direction at some undisclosed point in the future by stating that the US would, 'continue to strengthen conventional capabilities and reduce the role of nuclear weapons in deterring non-nuclear attacks with the objective of making deterrence of nuclear attack on the United States…the sole purpose of US nuclear weapons'.

Second, with respect to the issue of when the US would contemplate nuclear use the 2010 NPR stated that the US would only consider it 'in extreme circumstances' and would 'not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations'. The effect of this statement is threefold. First, the US still threatens to use nuclear weapons against nuclear weapons states that are party to the NPT (e.g. China, Russia) if they were to attack with nuclear, biological or chemical weapons. Second, it implies that the US reserves the right to use nuclear weapons against states that are not party to the NPT, and explicitly disavows its negative security assurance to those that are in violation of the treaty. Third, as the new policy does not explicitly identify what it means for a state to be 'in compliance' with the NPT, the administration is reserving the right to determine for itself what constitutes 'compliance'. In sum, the administration has marginally shrunk the nuclear 'umbrella' by ruling out one particular scenario in which nuclear use would be contemplated while attempting to reward 'compliance' with NPT obligations with a negative security assurance. It is unlikely that such assurances will sway current proliferators who either remain outside the NPT (e.g. North Korea) or who are not abiding by their NPT obligations (e.g. Iran) to reign in their respective nuclear activities. Third, the 2010 NPR also identified the maintenance of 'strategic deterrence and stability at reduced nuclear force levels' and the 'strengthening of regional deterrence and reassurance of US allies' as core objectives. To maintain 'strategic deterrence and stability at reduced nuclear force levels' the NPR reasserts the US' retention of the traditional triad of SLBMs, ICBMs and heavy bombers and contemplates the 'possible addition of non-nuclear prompt- global strike capabilities' (i.e. conventionally armed ICBMS or SLBMs). The retention of these capabilities is clearly linked to concerns regarding the continued nuclear modernization efforts and strategic doctrines of both Russia and China. Not coincidentally the NPR also notes as some of its alliance partners 'feel the pressures of neighboring major powers asserting stronger regional roles', the US will continue to assure these partners through 'the continued forward deployment of US forces in key regions, strengthening US and allied non-nuclear capabilities and the continued provision of extended deterrence'. Key elements of this are the continued development of US PGS and BMD capabilities in partnership with US allies and the continued provision of extended nuclear deterrence to allies.

This is clearly designed to allay the fears of allies that the administration's stated goal of reducing the role of nuclear weapons in US national security strategy will result in the erosion of the credibility of US security commitments. The continued development of such capabilities as BMD are potentially threatening for Beijing as they could negate its 'minimum deterrent' nuclear posture. This could in turn spur further Chinese modernization efforts and contribute to the destabilisation of the Sino-US strategic relationship. However, it is also important not to overstate the impacts of the NPR on Asia's nuclear weapons states. Jeffrey Lewis, for example, has argued that China's nuclear force modernization is the culmination of a decades-long attempt to acquire the nuclear capabilities deployed by other nuclear weapons states. He therefore cautions against the view that sees contemporary changes in China's nuclear posture and force modernization as a 'mechanistic response to changes in US strategic capabilities'.

It is also clear that some of Asia's other nuclear relationships have their own specific dynamics not directly related to the question of US nuclear hegemony. Most significant here is the question of South Asia's nuclear equation. As noted above, this equation is a triangular one involving not only India and Pakistan but also China. While the India-Pakistan nuclear relationship has arguably stabilised over the last decade, there are concerns that a Sino-Indian strategic competition is emerging. The scope for Sino-Indian strategic competition and/or tensions is considerable given the existence of long-standing territorial disputes, conventional and nuclear imbalances, China's close military and nuclear ties to Pakistan, and New Delhi's close post-2005 alignment with the US. Indeed, Beijing's recent maneuvering to conclude a nuclear cooperation deal with Islamabad has been seen as part of a Chinese attempt to 'contain' India's rising strategic profile.

3. Asia's 'Nuclear Renaissance' and the Dilemma of Spreading Nuclear Latency:

The market realm of the nuclear equation in Asia is increasingly defined by an expansion in demand for nuclear energy. This expansion is often held to have been driven in equal measure by imperatives for energy security and growing concerns about climate change. The key driver however is a quest for energy security with concerns regarding climate change firmly relegated to the 'back seat'. Nevertheless the potential 'renaissance' of nuclear energy in a region characterised by changing strategic dynamics also presents major proliferation challenges. Before examining why this may be the case, it is first necessary to briefly note the scale and scope of the expansion in demand for nuclear energy in Asia.

Although there has been much talk about a 'nuclear renaissance' it is important to differentiate between the potential growth of nuclear energy production in states with existing nuclear power facilities/infrastructure and the potential spread of such technologies to states currently without them. If one were to look at simple metrics such as nuclear power's share of global electricity generation and the number of operating reactors one would conclude that the global nuclear energy industry was static rather than expanding as it has consistently accounted for 15-16% of global electricity generation since the 1980s, while the number of operating reactors has hovered around the 400 mark for the same period.

If we instead focus on the issues of growth in nuclear power in states with existing nuclear energy generation capacity and the spread of nuclear technologies to states currently without it, then it is possible to judge that much of the current expansion is occurring in states with established nuclear power generation capacity. However, there are a number of nuclear power aspirants in the region. Globally, there are currently 31 states operating 440 nuclear power reactors. In Asia, as noted in Table 1, there are currently six states who account for 112 operational nuclear power reactors – China (11), Japan (54), South Korea (20), Taiwan (6), India (19), and Pakistan (2). Of these seven Asian states China, South Korea, Taiwan, and India have begun construction of a significant number of new reactors, while China and India clearly plan the biggest expansion.

Table 1 Source: World Nuclear Association, 'Asia's Nuclear Energy Growth', April 2010, http://www.world-nuclear.org/info/inf47.html

Country	Operational Reactors	Reactors Under Construction	Planned Reactors	Proposed
Pakistan	2	1	2	2
India	19	4	20	24
Taiwan	6	2	0	6
South Korea	20	6	6	0
Japan	54	2	12	1
China	11	22	35	120

Additionally, a further 22 states throughout Asia have expressed an interest to the IAEA in developing a nuclear power generation capacity. This group of states includes twelve in the Middle East, two in South Asia and eight in South-East Asia. In the Middle East the states with the most advanced proposals are the United Arab Emirates, Turkey, Egypt and Bahrain. In South East Asia, Indonesia, Thailand and Vietnam have begun planning for two nuclear reactors each by 2020, plans that the IAEA has confirmed are well-advanced.

Although the proposed expansion of nuclear power reactors is relatively modest, it nonetheless raises a number of dilemmas for international security. A number of observers have noted that with respect to the issues of safety and security of this nuclear expansion it will matter a great deal which states will acquire which technologies.

Three major reasons for concern in this respect are commonly noted: levels of domestic governance; the record of compliance (or non-compliance) of NNWS with NPT obligations; and level of terrorist threat to potential new nuclear energy states. All of these issues are of concern with respect to the Asian states that are contemplating expanding existing nuclear power generation capabilities and for those aspiring to nuclear energy programs. The issues of domestic levels of governance and record of compliance with NPT obligations are clearly linked, with Miller and Sagan noting that 'each known or suspected case of a government starting a secret nuclear weapons program, while it was a member of the NPT and thus violating its Article II NPT commitment, was undertaking by a non-democratic government'.

There also exists the issue of the spread of 'nuclear latency' throughout the region as recent research suggests that civilian nuclear cooperation raises the potential for the proliferation of nuclear weapons. Civilian nuclear cooperation, according to this view, raises the potential for proliferation for two major reasons: all materials and technologies related to nuclear weapons production have legitimate civilian applications and civilian nuclear cooperation increases the nuclear-related knowledge-base of the recipient state. Although not every state that receives civilian nuclear cooperation acquires nuclear weapons Furhmann argues that security threats combined with civilian nuclear cooperation 'are a recipe for nuclear acquisition'.

This should be cause for some concern in a region characterised by a shifting balance of power amongst its great powers and pointed nuclear and conventional military asymmetries. In this sense the dilemma posed by the spread of nuclear latency in Asia is that while it does not pose an immediate proliferation problem it could well in the future as the strategic environment changes. A state such as Indonesia, for example, if it succeeds in developing its own nuclear energy program, would then have the capacity to initiate a weapons program if its perception of its security environment dramatically changed. This does not suggest that the spread of nuclear materials and technologies will inevitably lead to proliferation but rather that such a spread may become an enabling factor to weapons acquisition. Key to limiting this 'enabling' aspect of Asian nuclear expansion will be to control sensitive nuclear fuel cycle technologies (i.e. uranium conversion, uranium enrichment and reprocessing) and assure nuclear fuel supply guarantees. In the former respect it is notable that the AP is not in force in India, Pakistan, Vietnam, Thailand or Malaysia – all states that are either expanding existing nuclear power generation capabilities or seeking to develop them.

4. FURTHER READ

1. http://www.china.org.cn/opinion/2010-04/12/content_19799790.html
2. http://www.fas.org/programs/ssp/nukes/nuclearweapons/nukestatus.html
3. http://www.nytimes.com/2010/04/09/opinion/09feaver.html
4. http://www.carnegieendowment.org/files/nuclearsocieties_2-19-081.pdf
5. http://www.aei.org/outlook/24873
6. http://www.foreignpolicy.com/articles/2010/06/04/the_breach
7. http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf.
8. http://www.iaea.org/OurWork/SV/Safeguards/sg_protocol.html

5. QARMA

1. Is the current international statutory regime enough of an enforcement mechanism to stop states from obtaining nuclear power for the purpose of weaponry?

2. Has the international community's current measures been effective in stopping nuclear proliferation in the Asian Region?

3. What are some of the factors which promote nation states into acquiring nuclear weapons?

4. What possible incentive programmes can be created to give states a reason not to enter into a nuclear arms race?

5. What roles do different nuclear regulatory bodies play in ensuring the non-proliferation of Nuclear Weapons in the Asian Region?