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THE SIGNIFICANT TROIKA OF THE NPT, IAEA AND UNSC IN THE NUCLEAR NON-PROLIFERATION REGIME

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ABSTRACT

Considering that Iran has announced that it intends to produce nuclear weapons, observers question whether the Treaty for the Non-Proliferation of Nuclear Weapons (NPT) and the International Atomic Energy Agency (IAEA), both created over fifty years ago, still serve a useful purpose in today's uni-polar world. Further, the United Nations Security Council (UNSC), while largely inactive in its role of guarantor of the NPT during the Cold War, has acted judiciously in cases of states that are highly suspected of developing nuclear weapons. The paper argues that, while states apparently continue to proliferate, the IAEA, NPT and the UNSC troika significantly contribute to the nuclear non-proliferation regime (NNR). Using the case studies of the proliferating states of Iraq and DPRK, this paper shows that despite being a super power, the United States (US) is in a lesser position than the UNSC to guarantee the NPT, largely due to its intelligence failure regarding a suspected Iraqi nuclear weapons programme. The NPT remains the heart of the NNR due to its universality and the IAEA has evolved by improving its inspection regime throughout changes in the world security context. The paper recommends that the IAEA could further contribute to the prevention of nuclear proliferation by expanding its means with imaging technology. Finally, rather than negotiating regional security measures and acting without UNSC approval in an effort to reduce proliferation, the US would be wise to defer to the significant efforts of the UNSC, IAEA and NPT troika to better contribute to the NNR and reduce the present greatest threat to its national security.

Sixty-one years after the only use of nuclear weapons in intra-state conflict, concerns regarding their proliferation remain at the fore of world events. In January 2006, the Islamic Republic of Iran (Iran) took steps to publicly announce its intentions of restarting its nuclear uranium enrichment programme for energy production, claiming that it has the right to do so as a signatory of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Given Iran's regional security situation in the unstable Middle East and the fact that it has substantial oil and gas resources that could be used for energy production, many states, significantly the United States (US), suspect Iran will take advantage of the dual use nature of nuclear technology to provide it with the capability of producing nuclear weapons. Negotiations between Iran and the EU 3 (France, Britain and Germany) did lead to a 2004 agreement to suspend Iran's nuclear programme.[1] However, the situation escalated after Iran announced that it would resume the programme stating that it was for peaceful purposes.[2] Intermittently, Iran has ordered International Atomic Energy Agency (IAEA) inspectors out of the country, preventing them from performing their primary role of verifying the true nature of Iran's nuclear programme. In sum, observers question whether the NPT and the IAEA still serve a useful purpose at stemming nuclear weapon proliferation in today's world.[3]

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[1] Associated Press, "Iran issues nuclear warning on eve of talks," *Toronto Star*, 6 March 2006, A11.

[2] IAEA.org: International Atomic Energy Agency, "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," http://www.iaea.org/Publications/Documents/Board/2006/gov2006-15.pdf; Internet; accessed 15 March 2006.

[3] Jonathan Manthorpe, "Can the spread of nuclear bombs really be arrested?," *Vancouver Sun*, 7 March 2006, A11, available from http://server09.densan.ca/archivenews/060307/pac/060307b5.htm; Internet; accessed 7 March 2006.

The IAEA Board of Governors has since recommended the Iran dossier to the United Nations Security Council (UNSC).[4] The UNSC considers the proliferation of all weapons of mass destruction (WMD) a threat to international peace and security. This has important legal ramifications "… since the UNSC is obliged to act to remove threats to the peace."[5] The International Court of Justice has ruled that the threat and use of nuclear weapons is generally contrary to international law.[6] In its role as guarantor of the NPT, the UNSC can select a variety of measures such as economic sanctions and military action against states to eliminate such threats. During the Cold War, UNSC powers were not prevalent as the threat was largely contained by the two nuclear super powers, the Soviet Union and the US, as a state of nuclear détente existed between them. However, when the Cold War came to an end, and the world became uni-polar with the US as the only superpower, the UNSC began to face challenges in containing threats and has indeed used its power to enforce its decisions. In 1991, the UNSC opted to use military power against Iraq, not only to evict it from Kuwait, but also as a state that was suspected of developing nuclear weapons. In 2002, the UNSC imposed economic sanctions on Iraq to coerce its cooperation with the IAEA as it was thought by some states that Iraq had rebuilt a nuclear weapons programme. Unable to wait, the US, who unsuccessfully tried

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[4] Lionel Beehner, "Iran headed to Security Council," *Council on Foreign Relations*, http://www.cfr.org/publication/10051/iran_headed_to_security_council.html; Internet; accessed 12 March 2006.

[5] A. Walter Dorn and Andrew Fulton, "Securing Compliance with Disarmament Treaties: Carrots, Sticks, and the Case of DPRK," *Global Governance 3* (1997), 19, available from http://www.rmc.ca/academic/gradrech/dorn15_e.html; Internet, accessed 14 March 2005.

[6] Roger K. Smith, "International Court of Justice Ruling: 1996 Decision Against Nuclear Weapons," *International Debates* (February 2006), 43.

to secure a second UNSC resolution that would have authorized the use of force, eventually led a "coalition of the willing" to remove what it thought was an immenent threat to world security. This raises questions regarding the utility of the UNSC in a uni-polar world and whether it is in the best position as the guarantor of the NPT.

This paper argues that, while states apparently continue to proliferate, the IAEA, NPT and the UNSC troika significantly contribute to the nuclear non-proliferation regime (NNR). Operating at arms length from the UN, one of the primary roles of the IAEA is to verify NPT compliance. While the NPT has not changed since its inception, it remains as the core of the NNR due to its universality and the fact that other measures, especially those led by the US, are biased. Further, rescinding the NPT may lead to a further increase in world instability. Concurrently, the IAEA, through a tightened system of safeguards, significantly improved its ability to contribute to the NNR. Finally, the UNSC, and not the US, is in the best position to perform the "guarantor" role of the NPT. Despite being the world's only superpower, a signatory to the NPT as a Nuclear Weapons State (NWS) and a permanent member of the UNSC (a P5 state), the US is unable to perform the role of guarantor. Rather, the US has been partly responsible for the increase in pressure on states to proliferate.

This paper reviews the origins of the IAEA and NPT, showing how each compliments the other. The actions of the IAEA, UNSC and the US are compared and contrasted in their dealings with the proliferating state of Iraq and the Democratic Peoples' Republic of Korea (DPRK), which is highly suspected of having nuclear weapons. These two cases show how the IAEA has evolved through changes in the world security context to successfully improve the strength of the NNR. After the 1991

Gulf War and a UNSC-mandated deployment of inspectors to destroy the Iraqi nuclear programme, the IAEA's inspection regime matured by resolving shortcomings related to the tracking of the complete nuclear fuel cycle. The IAEA experience in DPRK, which is regarded by the US to be the most serious international security problem facing the world today, provides an excellent example that demonstrates the IAEA's technical prowess.[7] While IAEA inspectors have not yet been able to complete their work in DPRK, they have had a significant impact in providing independent insight into the DPRK nuclear programme. Both cases also show that while the UNSC has been judicious in its role as the guarantor of the NPT, the US is unable to fulfil this role as it is pursuing a path that fulfils its own national security interests and therefore have biased its sponsored initiatives that contribute to the NNR. The paper concludes by offering recommendations on how the IAEA and the US could better contribute to the NNR.

In 1957, after considerable negotiations between the then two nuclear super-powers, the Soviet Union and the US, the IAEA statute was created in response to the deep fears relating to the development of nuclear weapons and the expectations relating to peaceful uses, such as energy.[8] The IAEA was charged with the dual responsibility of promotion and control of nuclear technology.[9] It would provide advice to recipient states to help them build nuclear power plants and transfer nuclear technology for peaceful purposes. By 1964, the IAEA published Information Circular Number 66, Revision 2

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[7] James Cotton, "Whither the Six-Party Process on North Korea?," *Australian Journal of International Affairs* Vol. 59, No. 3, (September 2005), 275.

[8] IAEA.org: International Atomic Energy Agency, "History of the IAEA," http://www.iaea.org/About/history.html; Internet; accessed 12 March 2006.

[9] IAEA.org: International Atomic Energy Agency, "The 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons," http://www.un.org/events/npt2005/presskit.pdf; Internet, accessed 13 March 2006.

(INFCIRC/66/Rev 2), which would define a *safeguard* system to promote and monitor nuclear material production in nuclear facilities such purposes.

However, the IAEA statute alone would not be enough to prevent states such as France and China from developing and testing their own nuclear weapons. Additionally, the 1962 Cuban missile crisis brought the US and the Soviet Union close to nuclear conflict. These factors led to the creation of the NPT, which was opened for signature in 1968. The NPT obligates the five NWS (China, France, Russia, UK, and US) not to transfer nuclear weapons or technology to non-nuclear weapons states (NNWS). Conversely, the NNWS are obligated not to acquire or produce nuclear weapons or develop attendant technologies. Since its inception, the NPT has become universal - 189 states have signed and ratified it. It has become one of the major pillars of arms control.[10] It is generally accepted that the NPT is the most "widely adhered to arms control treaty in existence."[11] The creation of the NPT can be seen as the first step in a series of changes in the NNR in reaction to the changing world security situation. Change is an important feature in remaining significant to the efforts of the NNR in preventing the spread of nuclear weapons.

Today, the key instrument of the NNR remains the NPT. A related treaty, the Comprehensive Test Ban Treaty (CTBT), which obliges signatory-states not to carry out or support nuclear explosions, is a measure that has potential to also significantly

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[10] IAEA.org: International Atomic Energy Agency, "Information Circular 140," http://www.iaea.org/Publications/Documents/Infcircs/Others/infcirc140.pdf; Internet; accessed 12 March 2006.

[11] Foreign Affairs Canada, "Global Partnership Programme," http://www.dfait-maeci.gc.ca/foreign_policy/global_partnership/glossary-en.asp; Internet; accessed 7 March 2006.

contribute to the NNR. However, it has not been ratified by the US or China, two of the NWS, and as such, it does not offer the same universality as the NPT.

In addition to treaties, states have either bilaterally or multilaterally, agreed to other measures that serve the aim of preventing the proliferation of nuclear weapons. The G8 Global Partnership programme serves to prevent terrorists or states that support them from acquiring or developing WMD.[12] Initiatives such as the Cooperative Threat Reduction Programme, which is a US Department of Defense programme that overarches a myriad of other defence programmes, has four objectives, one of which is the dismantle nuclear weapons of the former Soviet Union.[13] Another US-led initiative, the Global Threat Reduction Initiative (GTRI), aims to remove weapons-grade nuclear materials from civilian facilities worldwide recently received the largest share of new funding in the US Department of Energy.[14] A third US-led initiative, the Proliferation Security Initiative (PSI), introduces export-control measures to interdict shipments of WMD. Introduced in May 2003 by US President George W. Bush, the PSI is of particular interest, as it "appears to be a new channel for interdiction cooperation outside of treaties and multilateral export control regimes."[15] The GTRI and the PSI form the basis of one of two objectives to counter nuclear weapons proliferation, which is cited as the greatest

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[12] Foreign Affairs Canada, "Global Partnership ...".

[13] Defense Threat Reduction Agency, "Threat Reduction: Cooperative Threat Reduction," http://www.dtra.mil/Toolbox/Directorates/CTR/index.cfm; Internet; accessed 19 March 2006.

[14] National Nuclear Security Administration, "Focus on: NNSA 2007 Budget Request Highlights Important National Security Work," http://www.nnsa.doe.gov/; Internet; accessed 20 March 2006.

[15] United States Department of State, "Proliferation Security Initiative (PSI)," *CRS Report for Congress*, Order Code RS21881 [report on-line]; available from http://fpc.state.gov/documents/organization/48624.pdf ; Internet; accessed 16 March 2006.

threat to national security in the 2006 US National Security Strategy.[16] Each of these initiatives, and others, affects the supply and demand sides of nuclear proliferation to varying degrees.[17] These initiatives could be seen as complimentary to the objectives of the NNR. However, these initiatives also do not offer the same universality as the NPT as they are not specifically endorsed by the UNSC nor are they supported by all of the P5 states. In addition to being independent and the only binding commitment of states in the prevention of the spread of nuclear weapons and weapons technology, the most important fact about the NPT is that, unlike other parts of the NNR, it can be seen to be serving the universal interest of the world in stemming the proliferation of nuclear weapons.[18] Serving the universal interest is important in the significance of the NPT in its desired effect of stemming the proliferation of nuclear weapons.

Since the end of the Cold War, South Africa, Argentina and Brazil each at one time had nuclear weapons programmes, which they later abandoned to subsequently ratify the NPT.[19] Their decisions have provided modern day testimony to the relevance of the NPT. However, there are those who challenge even the very existence of the NPT. Others support maintaining it, despite its problems. "While it would make sense in many ways to add India [or any of the other NWS] to the list of recognized nuclear weapon

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[16] The White House: President George W. Bush, "The National Security Strategy: March 2006," http://www.whitehouse.gov/nsc/nss/2006/; Internet; accessed 26 March 2006.

[17] Chaim Braun and Christopher F. Chyba, "Proliferation Rings: New Challenges to the Nuclear Non-Proliferation Regime," *International Security*, Vol. 29, No. 2 (Fall 2004), 6. The supply side is the push towards proliferation and the demand side is the pull from it.

[18] Providence College: The Political Science Department, "The IAEA and the NPT," http://www.providence.edu/polisci/students/IAEA/histNPT.htm; Internet; accessed 12 March 2006.

[19] United States Department of State, "Nuclear Nonproliferation Issues," *CRS Issue Brief for Congress*, Order Code IB10091 [report on-line]; available from http://fpc.state.gov/documents/organization/62679.pdf; Internet; accessed 14 March 2006.

states, such a move would mean repudiating the NPT in order to reform it."[20] Repudiation of the NPT would leave a void in the NNR as guarantees for the security of NNWS would be nullified, which could have a significant destabilizing affect.[21] Rather than change the NPT, the UNSC has elected to keep it and is pursuing a path that deals with challenges to threats on a case-by-case or selective basis.[22]

At the UN-hosted 1995 Annual Review and Extension Conference on the NPT, member states decided to extend the treaty indefinitely.[23] Also at this conference and the one in 2000, an overwhelming majority of NNWS put significant pressure on the NWS to reduce their nuclear weapon stockpiles. The NWS agreed and subsequently announced bold reductions. This was a definite sign that the NPT is truly serving the needs of the signatory states. In the final analysis, it is the NWS (who are also the P5 states) that will ultimately decide whether changes are required.

After the 2005 Review Conference most observers suggested that the NPT was a huge failure, as it did not achieve any substantive agreements.[24] The source for the lack of progress has been cited as being the US and its National Security Strategy introduced

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[20] Robert Ayson, "Selective Non-proliferation or Universal Regimes?," *Australian Journal of International Affairs* Vol. 59, No. 4, (December 2005), 434.

[21] Bruno Tertrais, "Saving the NPT: Past and Future Non-Proliferation Bargains," http://www.npec-web.org/Essays/Essay050129%20NPTTertraisSaving%20the%20NPT.pdf#search='UNSCR%20255'; Internet; accessed 21 March 2006. Security guarantees of NNWS are provided by UNSCRs 255 and 984.

[22] Ayson, "Selective Non-proliferation ..."

[23] United Nations: Peace and Security Through Disarmament, "Weapons of Mass Destruction, Treaty on the Non-Proliferation of Nuclear Weapons (NPT)," http://disarmament.un.org/wmd/npt/index.html; Internet; accessed 16 March 2006. For actual text of the decision, see http://disarmament.un.org/wmd/npt/1995dec3.htm.

[24] Richard Leaver, "The failing NPT: The Case For Institutional Reform," *Australian Journal of International Affairs* Vol. 59, No. 4, (December 2005), 417.

in 2001 after the events of 11 September 2001 (9/11).[25] The US was unwilling to cede to the NNWS' demands and advance its disarmament programme, citing concerns with the proliferation of nuclear weapons. Given the US position (re-endorsed in 2006), it is difficult to foresee a change in the NPT is forthcoming in the near future.[26] Until the US changes its policy towards reducing their nuclear weapons, or indeed on how it is prosecuting its global war on terror, the NPT will remain as is, at the core of the NNR.

One of the limitations with the original IAEA safeguard system was that it required NNWS to only "volunteer" its nuclear facilities for inspection. NNWS were under no legal obligation to subject all of their nuclear-related activities to IAEA inspections.[27] In fact, it was the supplying NWS that initiated most inspections. The inception of the NPT changed this shortfall, as signatory states would be obligated not to acquire nuclear weapons. Further, the NPT introduced new safeguard requirements on the IAEA as NNWS would be required to declare all nuclear material in their possession or acquired by them and subject the material to safeguards. This requirement is enshrined in Article III of the NPT.[28] In 1972, the IAEA codified a new "comprehensive" safeguard system under INFCIRC/153, whose stated goal was the timely detection of the diversion of significant quantities of nuclear material from permitted peaceful nuclear activities to nuclear weapons programs. The introduction of a comprehensive inspection

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[25] Marianne Hanson, "The Future of the NPT," *Australian Journal of International Affairs* Vol. 59, No. 3, (September 2005), 304.

[26] The White House: President George W. Bush, "The National Security Strategy...".

[27] IAEA.org: International Atomic Energy Agency, "Origins of IAEA Safeguards," http://www.iaea.org/Publications/Booklets/Safeguards/pia3803.html; Internet; accessed 13 March 2006.

[28] *Ibid*.

system is example of the significant ability of the IAEA to prevent the spread of nuclear weapons.

Having discussed the origins of the IAEA and the NPT and established that the NPT remains at the core of the NNR, their impact in the NNR as well as the UNSC and US involvement regarding two cases of proliferating states, starting with Iraq will be analyzed. In 1991, the US led a coalition into the 1991 Gulf War with Iraq, which was sanctioned by UNSC Resolution (UNSCR) 678.[29] In addition to the objective of liberating Kuwait of Iraqi forces, the Iraqi WMD programme became a concern of the UN forces, resulting in them subsequently targeting suspected sites. However, the Iraqi nuclear programme was so dispersed and mobile that despite the accurate and destructive efforts of precision-guided bombing, the programme survived. In fact, in a report entitled the Gulf War Air Power Survey (GWAPS), commissioned by the United States Air Force (USAF), many of the "successful" coalition air strikes against Iraqi nuclear facilities during the Gulf War boiled down to precision bombing of more or less "empty" buildings.[30]

Prior to the 1991 Gulf War, the IAEA conducted routine safeguard inspections, with the last one in November 1990, which revealed that Iraq's nuclear fuel was intact. After the conflict, the UNSCR 687 created the UN Special Commission (UNSCOM) to monitor and assist with the destruction, removal or rendering harmless of Iraq's WMD. The UNSCOM inspection team was focused primarily on the known Chemical and

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[29] Federation of American Scientists, "Resolution 678 (1990)," http://www.fas.org/news/un/iraq/sres/sres0678.htm; Internet; accessed 12 March 2006.

[30] United States, Department of the Air Force, "Effects and Effectiveness" in "Operations and Effects and Effectiveness" in *Gulf War Air Power Survey*, (Washington, DC: Department of the Air Force, 1993), 345.

Biological weapons programmes; however, it was also mandated to work jointly with IAEA Action Team in the nuclear area.[31] The result of the team's efforts was significant as it confirmed the existence of an Iraqi short-term "crash" weaponization programme and one of a longer term, in which it had concealed 500 tons of nuclear material.[32] The USAF GWAPS report made the claim that inspection teams had identified and destroyed more of the Iraqi nuclear and missile programs than the air campaign.[33] This unlikely endorsement indicates that the efforts of the joint UNSCOM and IAEA action team was more significant than the use of coercive force in curbing the proliferation of nuclear weapons.

The war did however have the effect of disrupting the Iraqi nuclear weapons programmes. Following the conflict, the UNSC-mandated inspections also kept Iraq off track despite its lack of cooperation. The inspections revealed that the long-range programme might have produced enough highly enriched uranium for a small nuclear weapons arsenal by 1996.[34] In terms of their short-term "crash" programme to build a nuclear weapon, the Iraqis later claimed that they were going to confront the inspectors and the international community with "metal buttons" implying that they had enough time to divert and reprocess safeguarded nuclear material towards producing weapons-

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[31] Federation of American Scientists, "Resolution 687 (1990)," http://www.fas.org/news/un/iraq/sres/sres0687.htm; Internet; accessed 12 March 2006.

[32] David Albright and Robert Kelley, "Has Iraq come clean at last?," *Bulletin of the Atomic Scientists* vol. 51, no. 0 (November/December 1995) [journal on-line]; available from http://www.thebulletin.org/article.php?art_ofn=nd95albright; Internet; accessed 13 March 2006. Most of the nuclear material was natural uranium, which requires many years and significant cost to produce weapons grade nuclear fuel.

[33] United States, Department of the Air Force, "Effects and Effectiveness…", 343.

[34] The highly enriched uranium was provided from safeguarded nuclear material previously obtained legally by French and Russian suppliers.

grade fuel in the six-month time between routine IAEA inspections.[35] This would turn out to be an extremely hopeful plan due to their weak state of technology (and related infrastructure) and poor management; however, it did alert the IAEA to a flaw in their comprehensive safeguards regime. The INFCIRC/153-based safeguards did not include searches of undeclared sites.[36] In 1993, the IAEA initiated steps to again expand its role and tighten its inspection routines. In 1997, the IAEA published INFCIRC/540, which provided for a strengthened inspection regimen, known as the Additional Protocol (AP). Along with providing a system that verifies the non-diversion of declared nuclear materials, the AP provides assurances to the absence of undeclared nuclear material and activities in a State.[37] Thus, this new AP-based regime could now be used to identify all phases or the "fuel-cycle" that nuclear fuel goes through from inception (mining for example) to disposal (storage for example). The Iraqi experience also provided the IAEA with the impetus to change its inspection paradigm from one based on inspection of facilities to a more comprehensive statewide approach.[38] The introduction of the AP in a changed security context is another example that the IAEA is significantly contributing to the NNR.

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[35] Albright and Kelley, "Has Iraq… The material (85-87 percent enriched uranium) would have needed to go through several chemical conversion processes before ending up as purified uranium buttons that could have been sent for casting and fabrication into bomb components.

[36] A. Walter Dorn and Douglas S. Scott, "Compliance Mechanisms for Disarmament Treaties," http://www.rmc.ca/academic/gradrech/dorn28_e.html; Internet; accessed 12 March 13, 2006.

[37] IAEA.org: International Atomic Energy Agency, "IAEA Safeguards Overview: Comprehensive Safeguards Agreements and Additional Protocols," http://www.iaea.org/Publications/Factsheets/English/sg_overview.html; Internet; accessed 12 March 2006.

[38] Pierre Goldschmidt, "The Increasing Risk of Nuclear Proliferation: Lesson Learned," *The IAEA Bulletin* Volume 45, Number 2 (2003) [journal on-line]; available from http://www.iaea.org/Publications/Magazines/Bulletin/Bull452/article7.pdf; Internet; accessed 14 March 2006.

The Iraqi case also highlights the role of the UNSC as a guarantor of the NPT. Without the resolve of the UNSC, specifically UNSCR 678 (initial justification to eject Iraq from Kuwait), UNSCR 687 (creating UNSCOM and affirming IAEA role) and UNSCR 715 (approving the IAEA's inspection regime), the shortfalls of the IAEA comprehensive safeguards system may not have been revealed. Additionally, a trade embargo, authorized on 25 August 1990 by UNSCR 665, had a positive impact in curbing the Iraqi nuclear weapons programme by stopping the flow of illegally obtained components and equipment critical to their nuclear weapons programme.[39] It is clear from its actions on Iraq that the UNSC took effective steps in exercising its authority as the guarantor of the NPT.

Despite fifty-six UNSC resolutions from 1990 to 2002, Iraq did not fully cooperate with the IAEA, evicting the inspectors on several occasions.[40] Although the IAEA and the UN Monitoring, Inspection and Verification Commission (UNMOVIC replaced UNSCOM in 1999) and IAEA were not able to fully complete their work, the UNMOVIC Chief Weapons Inspector testified to the UNSC that they had achieved significant progress in dismantling the Iraqi nuclear weapons programme.[41] It is noted, however, that although the Iraqi experience was fruitful in improving its safeguard regime, the IAEA role was the most intrusive to date.[42] The IAEA has stated that the

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[39] Albright and Kelley, "Has Iraq...".

[40] Federation of American Scientists, "Security Council Resolutions on Iraq," http://www.fas.org/news/un/iraq/sres/index.html; Internet; accessed 17 March 2006.

[41] CNN.com, "Transcript of Blix's Remarks," http://edition.cnn.com/2003/US/01/27/sprj.irq.transcript.blix/; Internet; accessed 14 March 2006.

[42] Albright and Kelley, "Has Iraq...".

Iraqi case was a unique situation due to the role it played in destroying the Iraqi nuclear programme, which went beyond its normal mandate of inspections.[43]

By January 2003 it was apparent to the US that an UNSC resolution to use military force to eliminate the WMD threat was not forthcoming. The patience of the US had been exhausted and it eventually led a "coalition of the willing" to invade Iraq two months later. The US used the principal argument that Iraq had rebuilt a WMD programme, including a nuclear weapons component to justify the use of military power to eliminate the threat it posed and put an end to years of Iraqi intransigence. However, once the conflict stopped, the US claim regarding the state of the Iraqi nuclear weapons programme was proved incorrect. In addition to underscoring the importance of having credible intelligence information (a critical and essential element in any effective UNSCR), the lack of a viable Iraqi nuclear weapons programme could be seen as a clear testimony to the significant impact of the IAEA inspection routines and the results of their efforts that were achieved prior to their final eviction. In addition to the significant steps of the UNSC to guarantee the NPT, it can be seen that the UNSC was judicious in exercising its authority in not authorizing military action simply due to the unproven claims extolled by the world's superpower. Indeed the actions of the US may have induced other states, including Iran, to hasten their nuclear weapons programmes as a means to assure their sovereignty.

Analyzing the IAEA, US and UNSC decisions with DPRK is also enlightening on how each participates in the NNR. Although the DPRK signed the NPT on 12 December 1985, it concluded a safeguards agreement on 30 January 1992, well beyond the 18-

[43] IAEA.org: International Atomic Energy Agency, "Fact Sheet: Iraq's Nuclear Weapon Programme," http://www.iaea.org/worldatom/Programmes/ActionTeam/nwp2.html#achieve; Internet; accessed 17 March 2006.

month time limit.[44] During this time, the DPRK had become increasingly isolated by the former Soviet Union and later by China.[45] The DPRK then joined the UN in late 1991. Earlier, in 1989, the DPRK began processing plutonium and although it may have possessed enough plutonium to produce up to eight nuclear warheads, there is still no hard evidence that supports that a single nuclear warhead exists.[46] In May 1992, the DPRK concluded a safeguards agreement with the IAEA, which although providing for increased inspector access, still did not provide complete access to all facilities required for tracing the entire fuel cycle. Notwithstanding, the IAEA did make significant efforts to ensure that the plutonium processing did not further a suspected nuclear weapons programme. In 1992, IAEA inspectors discovered the diversion of several kilograms of plutonium by following the reprocessing path of spent fuel, which demonstrates that the DPRK clearly underestimated the technical capabilities of the IAEA inspectors.[47] The IAEA labelled the discovery "inconsistencies with the DPRK submissions" that centred on "a mismatch between declared plutonium product and nuclear waste solutions and the results of the Agency's analysis."[48] The discovery eventually led to UNSCR 825, which, among other demands, called upon the DPRK to uphold the safeguards agreement that

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[44] IAEA.org: International Atomic Energy Agency, "Information Circular 403," http://www.iaea.org/Publications/Documents/Infcircs/Others/inf403.shtml; Internet; accessed 14 March 2006. As required under Article III of the NPT, states have 18 months after ratifying the NPT to conclude a safeguards agreement.

[45] Dorn and Fulton, "Securing Compliance ..."

[46] Jon B. Wolfsthal, "Facing Double Jeopardy: Nuclear Proliferation and Terrorism," *Georgetown Journal of International Affairs*, Vol. 6, Iss.1, Winter (2005) [journal on-line]; available from http://proquest.umi.com; Internet; accessed 28 September 2006.

[47] Braun and Chyba, "Proliferation Rings …", 9.

[48] IAEA.org: International Atomic Energy Agency, "In Focus: IAEA and DPRK: Fact Sheet on DPRK Nuclear Safeguards," http://www.iaea.org/NewsCenter/Focus/IaeaDprk/fact_sheet_may2003.shtml; Internet; accessed 14 March 2006.

provided the rights of IAEA inspectors full access to suspected nuclear waste storage sites.[49] The DPRK reacted by refusing any further access to the inspectors and then signalled its withdrawal from the NPT. The DPRK suspended its withdrawal notice at the eleventh hour after the US and DPRK negotiated 1994 *Agreed Framework* to freeze the plutonium production programme. The incentives used were that US would fund two light water reactors and South Korea and Japan would provide 500 tons of heavy oil annually to meet DPRK's energy needs.[50] Additionally, the US would provide DPRK security assurances against nuclear attacks. The agreement however did not provide IAEA inspectors access to the suspected nuclear material storage sites, thus limiting the fulfilment of the safeguards agreement. More importantly, the UNSC again lacked the means to act decisively due to a paucity of verifiable information regarding DPRK's true intentions.

Meanwhile, in the early 1990s, the DPRK clandestinely chose a second route to develop weapons-grade fuel, which was one of low-level uranium enrichment.[51] The DPRK admitted to the existence of the enrichment programme at an October 2002 meeting with the US envoy James Kelly.[52] The DPRK eventually removed IAEA safeguard seals at the Yongbyon nuclear facilities, shut down monitoring cameras and ordered IAEA inspectors out in December 2002 and finally withdrew from the NPT in

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[49] Federation of American Scientists, "Resolution 825 (1993)," http://www.fas.org/news/un/dprk/unsc825.html; Internet; accessed 14 March 2006.

[50] United States Department of State, "North Korea's Nuclear Weapon Program," *CRS Issue Brief for Congress*, Order Code IB91141 [report on-line]; available from http://fpc.state.gov/documents/organization/55822.pdf; Internet; accessed 14 March 2006.

[51] This was a development path similar to that of Iraq.

[52] United States Department of State, "North Korea's ...".

January 2003, although its status remains under review.[53] With the departure order, IAEA inspectors left with their verification work incomplete. On 10 February 2005, the DPRK announced publicly that it had produced nuclear weapons to be used for self-defence and has withdrawn its participation from the six party talks.[54] Having also apparently withdrawn from the NPT, the DPRK would be within its rights to provide for its own security.[55] In June 2005, the DPRK clarified its position announcing that it had enough nuclear weapons to defend against an attack from the US.[56] By their own intelligence estimates, the US agrees that DPRK has produced up to eight atomic bombs.[57] This claim does not undermine the IAEA's role or its efforts in contributing the prevention of nuclear weapons since IAEA inspectors have not been allowed to re-enter the DPRK in order to confirm these estimates. Further, even if they were, the IAEA has no power enforcement - it can only report discrepancies to the UNSC.[58] As the DPRK has restricted the IAEA from performing its role, the international community, specifically the UNSC, does not have verifiable information it needs to determine the true

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[53] Robert S. Norris and Hans M. Kristensen, "North Korea's Nuclear Programme," *Bulletin of the Atomic Scientists* vol. 61, no. 3 (May/June 2005) [journal on-line]; available from http://www.thebulletin.org/article_nn.php?art_ofn=mj05norris; Internet; accessed 16 March 2006.

[54] Cotton, "Whither the Six-Party ...".

[55] Bruno Tertrais, "Saving the NPT..." Per Article X of the NPT, a state is allowed to withdraw from the treaty if they consider their supreme interests are at stake. In the case of the DPRK their decision to withdraw remains a subject of debate.

[56] Norris and Kristensen, "North Korea's ...".

[57] United States Department of State, "North Korea's Nuclear Weapons: How soon an Arsenal?," *CRS Report for Congress,* Order Code RS21391 [report on-line]; available from http://fpc.state.gov/documents/organization/55786.pdf; Internet; accessed 16 March 2006.

[58] United States Department of State, "Nuclear Nonproliferation ...".

nature of the DPRK nuclear programme. As in the Iraq case in 2003, this explains why the UNSC has not opted to use military action against DPRK.

The 1994 *Agreed Framework* gave hope for a new regional multilateral regional confidence-building instrument.[59] This has yet to occur and is highly unlikely for many reasons, least of which is that the DPRK claims it has now has nuclear weapons and therefore would no longer require the US's security guarantee. Further, the stated reason that DPRK has apparently developed nuclear weapons is for self-defence purposes against an attack from the US. This undermines the ability for the US to act as a potential guarantor to the NPT.

As the DPRK has suspended its participation, the six party negotiations are stalled. It is clear that verifiable information regarding the state of the DPRK nuclear programme would be helpful in advancing the understanding of all parties. As in the Iraq case, the IAEA played a significant role in the DPRK providing verifiable information to the UNSC, until its inspectors were ordered out. Both of these facts lead to the conclusion that if the IAEA had another means, it could achieve the desired ends. Means such as imaging technology are available. They have been demonstrated as being effective as early as the 1973 Yom Kippur war, when the combatants, Israel and Egypt, agreed that the US KH-4 satellites and SR-71 over flights were helpful in verifying troop dispositions.[60] The imagery was also instrumental for the UNSC in establishing the UN Disengagement Observer Force, set up to monitor the ceasefire on the Israel's northern front with Syria. Indeed, such technologies have been used by the US to assist the IAEA

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[59] Cotton, "Whither the Six-Party ...".

[60] Dino A. Brugioni, "The Effects of Aerial and Satellite Imagery on the 1973 Yom Kippur War," *Air Power History*, Fall 2004, 13.

efforts in verifying state intentions; however, given the track record of the US intelligence in the Iraqi case and its views of DPRK, it would be unwise for the IAEA to rely solely on the US for this capability. Rather, an internal organic capability is recommended. Additionally, other means, such as those that would serve to achieve the objectives set out by UNSCR 1540, could be sought by the IAEA. UNSCR 1540, authorized in April 2004, requires states to criminalize WMD proliferation and institute effective export and financial controls.[61] The US has indeed stated that the PSI is a means to fulfill the intentions of UNSCR 1540.[62] While the PSI initiative appears to have merit, the IAEA would be unwise to rely on it, since it would undermine its impartiality.

As shown in the case studies above, the troika of the NPT, IAEA and UNSC are contributing significantly to the NNR in its aim of preventing nuclear non-proliferation. The heart of the NNR remains the NPT, as it has become the principle staple in the diet of states that purport eliminating nuclear weapons while simultaneously promoting the peaceful use of nuclear technologies. While the NPT is not perfect, there is no other treaty or agreement that can claim to be serving the universal interest of the world. Admittedly NNWS have concerns with those who are the "have" states; however, these are not significant enough to warrant change considering that this would mean repudiation of the NPT, which could possibly further exacerbate world security concerns by removing what has become the significant measure in the NNR. Changes to the NPT could only occur if agreement is reached by all NWS. The major obstacle to such an agreement is the present US National Security Strategy. The US, while being the world's

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[61] The White House: President George W. Bush, "The National Security Strategy..."

[62] United States Department of State, "Proliferation Security ...".

only superpower, is attempting to contribute to the NNR by sponsoring initiatives such as the GTRI and PSI. However, the US' hasty actions in pursuing its own security interests, such as with the invasion of Iraq, have served to increase proliferation pressures.

The NPT is approaching its fiftieth anniversary, a milestone the IAEA has already celebrated. Since their creation, and with the judicious enforcement of IAEA recommendations by the UNSC; the NNR has been significantly enhanced. By successfully reacting to changes in the world security context, the IAEA has proven to be an effective organization that offers an independent and credible perspective in providing verifiable truth regarding a state's nuclear programme. It has remained a significant contributor to the NNR by increasing the strength of its inspection regime by introducing the AP, which covers the entire nuclear fuel cycle. In Iraq and DPRK, the IAEA performed in a credible manner even in the face of state intransigence and external interferences. When the US stepped in to force a solution to prevent apparent nuclear weapon proliferation in Iraq, it only weakened its ability to act as a guarantor to the NPT and increased the pressure to proliferate on other states. The resultant effect has left its sponsored initiatives, such as the PSI, which it claims as supporting UNSCR 1540, as biased. Should the IAEA expand its mission and seek further means such as satellite imaging technology, it would be in an improved position to provide an even more significant contribution to the NNR as well as achieving the desires of the UNSC, vis-à-vis UNSCR 1540. In the DPRK, the US' efforts that led to the lauded *Agreed Framework* that was designed to stop the apparent nuclear weapons programme turned out to be an unsuccessful strategy that resulted in the IAEA inspectors being prevented from revealing its true nature. Rather than negotiating regional security measures and

acting without UNSC approval in an effort to reduce proliferation, the US would be wise to defer to the significant efforts of the UNSC, IAEA and NPT troika to better contribute to the NNR and reduce the present greatest threat to its national security.

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