

Nuclear Security 2012

: Challenges of Proliferation and Implication for the Korean Peninsula

edited by Jung-Ho Bae and Jae H. Ku



Korea Institute for National Unification

Nuclear Security 2012

: Challenges of Proliferation and Implication for the Korean Peninsula

Printed	December 2010
Published	December 2010
Published by	Korea Institute for National Unification(KINU)
Publisher	President, Korea Institute for National Unification
Editor	Center for International Relations Studies, KINU
Registration number	No.2–2361(April 23, 1997)
Address	275, 4.19(Sailgu)–Gil, Gangbuk–gu, Seoul, Korea(zip code 142–728)
Telephone	(82–2) 900–4300; (82–2) 901–2527
Fax	(82–2) 901–2543
Homepage	http://www.kinu.or.kr
Design · Print	Yeawon Creative House Co., Ltd.(82–2) 745–8090

ISBN 978-89-8479-572-3 93340 Price ₩15,000(US\$15.00)

All KINU publications are available for purchase at all major bookstore in Korea. Also available at Government Printing Office Sales Center Store (82–2) 734–6818; Office (82–2) 394–0337

Nuclear Security 2012 • Challenges of Proliferation and Implication for the Korean Peninsula

The analyses, comments and other opinions contained in the this monograph are those of the authors and do not necessarily represent the views of the Korea Institute for National Unification.



II. The Current Status of the Non-Proliferation Regime

Yong Shik Choo (U.S.–Korea Institute, USKI)

1. Introduction

North Korean nuclear weapon possession has been the primary issue of the ROK-U.S. alliance for the last 20 years. The reason for the existence of the ROK-U.S. alliance has been to deter threats by North Korea (raison d'être). However, for the past decade, the progressive government in South Korea, which wanted to implement appeasement, and the Bush administration, which wanted to keep a hard-line policy toward North Korea, have been in constant disputation concerning the strategic and doctrinal path of foreign policy toward North Korea. Paradoxically, the quality of North Korean threats, which are the essential reason for the ROK-U.S. alliance, has increased while the strategic bond of the ROK-U.S. alliance has weakened. There are two main reasons behind this. The first reason concerns the appearance of a progressive government in South Korea. Due to their worries that a hard-line policy toward North Korea might impede reconciliation and cooperation between the two Korean countries, the South Korean government of the past chose a passive strategy against the threat of North Korean nuclear power under the aim of shifting the competitive structure for hegemonic unification, which is the basic structure for division, to a peaceful coexistence structure with increasing economical assistance. This appeasement policy changed the quality of the dynamics of the Korean Peninsula. North Korea executed nuclear tests and launched the Taepodong antiballistic missiles. The second reason concerns the identity of North Korea itself. Although there was a lot of tension after North Korea abandoned the Nuclear Non-Proliferation

Ł

Treaty (NPT) in 1993, including military attack consideration under the Clinton administration, the issue was sealed after the Geneva Convention between North Korea and South Korea a year later. However, the North Korean nuclear issue once again became the most critical issue for global nuclear non-proliferation strategy after it expelled International Atomic Energy Agency (IAEA) inspectors in December 2002, subsequently withdrew from the NPT in January 2003, conducted its first nuclear weapons test in October 2006, and conducted its second nuclear weapons test in May 2009.¹

Even though some government officers and civilians in the United States claim that the world needs to acknowledge the possession of nuclear weapons by North Korea and shift the focus to nonproliferation policy, it is possible to expect that under the lens of the international security sector of the global governance system, the North Korean provocative actions of withdrawing from the NPT and continuing its nuclear development program will cause more a resolute and stronger response by international society. The resolution of the North Korean nuclear issue has been handled at four different levels: the inter-Korean relation level, the North Korea and the United States relation level, the Northeast Asian regional level with Six Party Talks, and the international regime level with the NPT. After considering the recently tightened inter-Korean relations since the conservative party took power in South Korea, the tension between

¹-Joel Wit, Daniel Poneman and Robert Gallucci, *Going Critical: The First North Korean Nuclear Crisis* (Washington D.C.: Brookings Institution Press, 2005).

North Korea and the United States after the second nuclear weapons test, and the difficulty of the Six Party Talks due to China's uncooperative attitude, the international regime level approach will need to become a more considerable part in the future when it comes to resolving the North Korean nuclear crisis issue. First, this paper looks at the meaning of the NPT structure within the international security fields and global governance; second, it analyzes the process of nuclear armament and denuclearization; and finally, it suggests policy implications after studying the birth and limitations of the NPT. The paper concludes with an analysis of what the future of the NPT means to resolving the North Korean nuclear issue.

2. The Change in International Security Dynamics and Global Governance

The effect of globalization within the international security division can be narrated into the diversification of security subjects, the appearance of new threats, and cooperation-oriented governance. The traditional ideas of national security are composed of the survival of the state, the integrity of national territory and institutions, the freedom of action to preserve these core interests, and the prosperity of the state and its citizens.² Simply put, survival, sovereignty, power, and prosperity are the key ideals of traditional national security. In

²-Graham Allison, "National and International Security," Joseph Nye and John Donahue (ed.), *Governance in a Globalizing World* (Washington D.C.: Brookings Institution Press, 2000), p. 76.

1769, the prominent scholarly journal International Security analyzed the influence of the interdependence of the global dimension on sovereignty, power, survival, and prosperity. It further looked at the effectiveness of primary means to achieve those key ideals while arguing that the world needs to consider the effect of transnational factors, including trade, terrorism, and the environment, as well as non-traditional factors, like energy security, technology, natural resources, and food, on national security and development at the comprehensive level rather than the state level. Hence, it forecasted the inevitability of the shift in state objectives and policy as globalization changed the international security environment.³

Brzezinski emphasized the trans-nationality of security threats, the strengthening of underground organizations, the contradiction between security and democracy, and the networking of the global order as characteristics of the international order of the 21st century.⁴ This points out that the role and authority of the sovereign state is relatively getting weaker. The new security environment of the post-Cold War and globalization era has changed rapidly. First of all, competition of ideology no longer exists and individual states pursue their own interests freely. At the same time, a new international order has emerged with a relatively weakened authority of the sovereign state and the appearance of international, transnational, and regional organizations. Therefore, global and regional conflicts, which transcend

^{3–}Center for Science and International Affairs, *International Security*, Vol. 1 (Cambridge, MA: MIT Press, 1976).

⁴⁻ Zbigniew Kazimierz Brzezinski, The Choice (New York: Basic Books, 2001).

the scope of a state, require worldwide and regional responses. State sovereignty faces challenges from the weakening of its power due to the strengthening of transnational networks and the increase of sub-state level influence. The emergence of a variety of actors is due to an increase in the power of civil society and the state's failure to deter and control conflicts of race, civilization, ethnicity, and religion. Now, states tend to handle national security issues by way of economic and diplomatic means rather than military and political ones as the level of interdependency increases. This attempts to enlarge security assurance by increasing the cooperation of sub-level politics rather than that of high-level politics, and this trend shows differences with the realist concept of sovereign state-centered security.⁵

The weakening of state-centered security logic is because of new threats that states cannot handle alone. The security concept is changing in a more comprehensive manner due to the increase of asymmetrical security threats, which are caused by actors' inclination to use others' weak points so they can maximize their own advantages. Moreover, transformation of nonessential issues, including global recession due to financial crises, terrorism, drug trafficking, human rights violations, global warming, cyber war and many others, into global level threats also contributes to the change. Many are suggesting new forms of social security to deal with threats such as poverty, civil

^{5–} Man-kwon Nam, "Anbo: Anboyoungyeok global governance hyeonhwanggwa Hanguk (Security: The Current Status of Global Governance in the Area of Security and Korea)," in Seung-Chul Lee (ed.), Global Governance-wa Hanguk (Global Governance and Korea) (Seoul: Hanyang University Press, 2007), pp. 267–302.

war, ethnic conflict, and religious conflict⁶; and economic security to handle defense weakening due to economic crisis and national security emergency; environmental security to manage environmental threats including destruction of ecological space, ozone destruction, climate change, desertification, pollution of sea, and natural erosion⁷; cyber security to protect a state from cyber attack⁸; human security to protect the safety of society, groups, and individuals from non-military threats⁹; and numerous others. These trends imply that the shift of the international security idea and governance paradigm is occurring because of globalization, which causes the convergence of the traditional state-centered security and the global-centered security paradigms.

The information technology, transportation, and communication revolutions had great influence on the formation of transnational networks and their effect on the international order. CNNization, often referring to the spatial and temporal compression of intelligence and information, facilitates accessibility to information on incidents in remote areas, and this effect increases the influence of public opinion on state behavior in the context of international society. As people witnessed American military warfare during the Kosovo Crisis in 1999,

⁶- Barry Buzan, Ole Waever and Jaap de Wilde, Security: A New Framework for Analysis (Lynne Reinner Publisher, Inc., 1998), pp. 120-121.

^{7–} Marc A. Levy, "Is the Environment a National Security Issue?" International Security, Vol. 20, No. 2 (Fall 1995), pp. 35–62; William C. Clark, "Environmental Globalization," Joseph S. Nye Jr. and John D. Donahue (ed.), Governance in a Globalizing World (Washington D.C.: Brookings Institution Press, 2000), pp. 86–108.

⁸- Seongyi Yoon, Jeongbosahoewa gookjepyonghwa (Information Society and International Peace) (Seoul: Oreum, 2002), pp. 81-104.

⁹- Ronald Paris, "Human Security: Paradigm Shift or Hot Air?" *International Security*, Vol. 26, No. 2 (Fall 2001), pp. 87–102.

military leadership groups started to show image making for the public during the warfare. This trend shows a significant difference from the realist perspective since security - the state's exclusive authority - started to be controlled by domestic politics and global public opinion.¹⁰ The expansion of transnational networks is also changing the dynamics of warfare. Traditional war is often prevented while the possibility of the breakout of limited and/or nontraditional war is increasing. As the world witnessed in Bosnia, Croatia, Kosovo, Macedonia, and other states, clashes between local militias, conflicts between local militia and regular military troops, intervention by peacekeeping forces, and humanitarian intervention by great powers show a different style of warfare than compared to the Cold War era.¹¹ The development of technology, transportation, and communication not only brought shifts in the qualitative aspect of military power by changing the relative importance of military power components from troops to weapons but also increased threats by weapons of mass destruction(WMDs). As WMDs - the exclusive property of great powers - proliferate to terrorists and non-state organizations, counter-proliferation and non-proliferation have become the most critical issues within the international security division of global governance.12

¹⁰- Graham Allison, "National and International Security," pp. 81-83.

¹¹-William R. Schilling (ed.), *Nontraditional Warfare: Twenty-first Century Threats and Responses* (Washington D.C.: Brassey's Inc., 2002), p. xv.

¹²- The White House, *The National Strategy of the United States* (December 2005),p. 14.

3. The Emergence of Global Governance

The Vienna System after the Napoleonic War, international federations to achieve a peace regime after World War I, and international organizations after World War Π were all created to provide a favorable security environment for the winners of the. In other words, international organizations and national security systems were primarily part of a state-centered governance system that represented the interests of hegemonic states. The period of post-Cold War global governance shows a trend of intersecting state-centered, regional-centered, and international organization-centered governance. For example, the current governance system shows collective security like the Gulf War; multinational peace-keeping forces like in the Rwanda, Somalia, and Bosnia crises; humanitarian military intervention under NATO and other regional force alliances like executed in Kosovo; and unilateral action by hegemonic powers like in the situations of Iraq and Afghanistan. Although the international security system has stability in terms of polarity, this trend continues because of the increased possibility of regional disputes due to instability within the region, weakened deterrence power as a result of bipolarity during the Cold War, increased freedom of action by individual states, and the decreased level of ties between the global and regional level.

The central questions are: How much does global governance change the national status? Can new security phenomena at the global level be analyzed without national security? The supporters of globalization argue for the degeneration of the state. That means the role of the state

will be weaker and the influence of global governance will be greater in the future since there will be a larger number of issues that need to be addressed by the global governance dimension and there will be an increase of transnational security threats.¹³ On the other hand, arguments that transnational phenomena do not regress the state but supplement the state are also convincing. There is no dispute of the fact that the state is the central actor of global governance in reality, even though the current international order within the context of globalization shows both the weakness of the state as a central actor in security and the diversification of threats.¹⁴ However, it is obvious that state- centered governance is shifting toward global governance in which a variety of actors are taking parts, especially with the increasing role of the international system or regime. On the issue of nuclear non-proliferation, analyzing the relationship between the interests of hegemonic powers and the nuclear non-proliferation system, and the latter's roles, can be one of the ways to approach the North Korean nuclear issue.

^{13–} Ian Clark, Globalization and International Relations Theory (Oxford University Press, 1999); James Rosenau, Along the Domestic-Foreign Frontier: Exploring Governance in a Turbulent World (Cambridge, U.K.: Cambridge University Press, 1997); Audrey Kurth Cronin, "Rethinking Sovereignty: American Strategy in the Age of Terror," Survival, Vol. 44, No. 2 (Summer 2002), pp. 119–140.

¹⁴– Stephen J. Flanagan, "Meeting the Challenge of the Global Century," in Richard I. Kugler and Ellen I. Frost, *The Global Century: Globalization and National Security*, Vol. 1 (University Press of the Pacific, 2002), pp. 16–22.

4. Nuclear Non-Proliferation Governance

The non-proliferation regime, the Treaty of Non-Proliferation and its enforcement are the issues that need to be considered when studying the NPT system in governance. The non-proliferation regime includes various concerns such as nuclear proliferation constantly threatens international peace, security, and individual life, doctrinarian of nuclear nonproliferation, expansion of the NPT, and a large frame of governance with regional organization and bilateral/multilateral cooperation structure. The NPT is a legal entity where the doctrine of non-proliferation and the rules and procedures of its execution are embodied under shared under-standings among state. The enforcement mechanism means actors like IAEA, UN, Nuclear Supplier Group (NSG) who carry out the NPT, control its execution or put pressure it implementation when violence occurs.

The Development Process of the Nuclear Non-Proliferation System

(1) The Establishment of the NPT System

The conception of nuclear nonproliferation system can be found from IAEA. In 1953 at UN General Assembly, President Eisenhower emphasized "Atom for Peace" and proposed the establishment of an international mechanism that would manage nuclear materials at the international level, while encouraging and promoting the use of nuclear energy for peaceful purposes, and through the conference among 12 countries which held in February 1956 at Washington D.C., IAEA draft charter has been adopted in April.¹⁵ But it can be seen that full-fledged initiative building the NPT regime came from the non-nuclear states. The debate about the NPT system was started from the nuclear nonproliferation proposals of Poland, Ireland, Sweden. Especially, the main ideas of Ireland's proposal were the non-nuclear production which banned the possession of nuclear weapons and production by nonnuclear states, and nuclear nonproliferation which banned the supply of nuclear weapons by nuclear states, and afterwards it was adopted by UN and became the model of the NPT. The important thing here is either duality or discrimination between nuclear states and nonnuclear states.¹⁶ Due to discrimination of not mandating nuclear disarmament of nuclear states, it was true that nuclear states such as the U.S., U.K., Soviet Union were able to participate with some leadership, this duality weakened the legitimacy and effectiveness of the NPT. In 1968, the U.S., U.K., Soviet Union, including France and China, which all possessed nuclear, proposed nuclear nonproliferation of outside those five countries, security of nonnuclear states, allowance of the peaceful uses of nuclear energy, implementation of nuclear non-proliferation and nuclear disarmament on nonnuclear states by nuclear states, induced consent for abandoning nuclear weapons development by nonnuclear states, submitted to UN General Assembly in March 1968.¹⁷ And in June 1968, UN Security Council resolution

¹⁵- Gwang-cheol Ryu, *et al.*, *Gunchugwa bihwaksaneeui segye* (The World of Arms Reduction and Non-Proliferation) (Seoul: *Pyeongminsa*, 2005), pp. 97–99.

¹⁶-Young-chae Hwang, NPT, eoddeon joyakinga? (NPT, What Kind of Treaty Is It?) (Seoul: Hanwool, 1995), pp. 38-40.

which supported the NPT treaty was adopted, and the NPT treaty came into effect in March 1970. The member states opens an evaluation meeting once every five years to examine progress and seek for improvements. Also in 1995 when 25 year validity was expired, the NPT system was extended indefinitely, at the same time, the principle of nuclear nonproliferation and nuclear disarmament was adopted. As assessment procedures were strengthened, it decided to hold a preparatory meeting every year. Also it agreed that it would conclude Comprehensive Nuclear-Test-Ban Treaty(CTBT) by 1996 and begin negotiations on banning nuclear materials production.¹⁸ The current number of the NPT member states is 189. But in case of states such as India, Pakistan, Israel which possessed nuclear weapons but were not member of the NPT, in case of North Korea which developed nuclear weapons under the NPT regime and withdrew, in case of Iran which was a member of the NPT and developed nuclear weapons, the NPT system's viability has been challenged continuously.

^{17–} Su Seok Lee, "Haekbihwanksanchejewha junggyeongukgaeui yeokhal (The Non-Proliferation System and the Role of Mid-size States)," Dongseoyeongu (East&West Studies), Vol. 21, No. 2 (Yonsei University, Institute of East&West Studies, 2009), p. 84.

¹⁸– Seongwhun Cheon, "*Haekbihwasanchejeeui jaengjeomgwa gaeseonbangan* (Controversial Issues in the Non-Proliferation System and Proposals for Its Reform)," *Journal of International Politics*, Vol. 49, No. 4 (The Korean Association of International Studies, 2009), pp. 273–274.

(2) Nuclear Non-Proliferation Cases

(a) Nuclear Non-Proliferation of Brazil and Argentina

Brazil and Argentina, as historical and territorial conflicts, have continued their nuclear development since the 1950s. Although nuclear negotiation was promoted and bilateral nuclear cooperation mechanism was configured in the early 1960s, due to domestic political situations, it has resulted in heightening tensions between the two countries rather than having positive results. In the 1970s, relations between the two countries began to improve gradually due to agreement on the territorial dispute of the Parana River, and a cooperation protocol about the peaceful use of nuclear energy was signed on 17 May, 1980. However, full-fledged cooperation began after the civilian government took office in both countries. As economic and political cooperation deepened in 1985, President Alfonsin of Argentina and President Sarney of Brazil adopted the Joint Declaration of Foz do Iguacu in order to resolve the nuclear problem. They installed measures on nuclear policy in order to provide the institutional framework for nuclear cooperation. In July 1987, during his visit to nuclear facilities in Argentina, President Sarney proclaimed the Declaration of Viedma to clarify that nuclear cooperation was for peaceful purposes. On 28 November, 1990, President Menem of Argentina and President Collor of Brazil announced the Declaration on Joint Nuclear Policy. The following information was included in the declaration:

First, we establish a Common System of Accounting and Control (SCCC) for the estimation and control of nuclear material, and this shall

apply to all nuclear activities of both countries. In addition, the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) is formed to implement that. Second, we begin negotiations with IAEA to achieve a pact regarding safeguard inspections which is based on SCCC. Third, after signing the protection inspection pact, we will undertake the necessary measures to implement the Treaty of Tlatelolco perfectly.

On 18 July, 1991, both countries completed legal actions to inhibit testing, manufacturing, possession and deployment of nuclear weapons by signing all the bilateral agreements and cooperation, covering the contents of agreements on the peaceful uses of nuclear energy, which were signed in the past (Guadalajara Treaty, Agreement for the Exclusive Peaceful Use of Nuclear Energy). Both countries also began negotiations with the IAEA and, on 13 December, 1991, the Quadripartite Agreement was concluded with the approval of the IAEA. Argentina joined the NPT in 1995 and Brazil joined in 1997.¹⁹ The abandonment of nuclear development in Brazil and Argentina was a crucial contribution to the denuclearization of Latin America. In the case of Brazil and Argentina, the two countries had a nuclear race because of geopolitical relations at first, however, they voluntarily abandoned nuclear armament as the domestic political situation and

^{19–} Julio C. Arasales, "The Argentina-Brazilian Nuclear Rapprochement," *The Nonproliferation Review* (Spring/Summer 1995); Seongwhun Cheon, "*Brazil, Argentina Wonjaryeokhyupryeok gyeongheom-eui hanbando jeokyong* (The Application of Brazilian and Argentinean Nuclear Cooperation Experiences to the Korean Peninsula)," *Journal of International Politics,* Vol. 35, No. 2 (The Korean Association of International Studies, 1996).

diplomatic relations improved and enhanced the non-proliferation system by joining the NPT. This case shows the importance of national political systems and geopolitical relations regarding nuclear non-proliferation In this case, it is difficult to see that the NPT reproduced and enhanced nuclear non-proliferation but, instead, this was a case where NPT norms were enhanced at the regional level – Latin America – due to the abandonment of nuclear armament by Brazil and Argentina.

(b) The Cases of Egypt, South Africa, and Libya

In 1960, Egypt was actively seeking to develop nuclear weapons after Prime Minister of Israel Ben-Gurion revealed the construction of nuclear reactors in the Dimona area, which prompted President Nasser of Egypt to give a warning that Egypt would develop nuclear weapons at any costs if Israel pursued nuclear armament. The international community was especially concerned about pan-Arabism against Israel that provides a legitimacy to the nuclear development of Egypt. However, due to 1968 Six-Day War, the closure of Suez Canal, the reduction of foreign support, and more, the Egyptian economy was weakening and the budget for the nuclear program was frozen. Egypt, which lacked economic competence, instead sought peace and stability in the Middle East through a peace treaty with Israel and eliminated the development of nuclear arms in late 1970s. After joining the NPT in 1981, Egypt became an active participant of nuclear non-proliferation and when the nuclear armament of South Africa

became a problem in 1980s, Egypt induced the nuclear abolition of South Africa by generating anti-nuclear public opinion in Africa. Egypt is currently a leader in the Middle East by their efforts to promote nuclear non-proliferation and establish zones free of weapons of mass destruction.²⁰

South Africa is the only NPT member state which dismantled its nuclear weapons on its own. In response to communist threats during the Cold War, South Africa acquired plenty of uranium in order to protect its sovereignty with nuclear weapons. But with the end of the Cold War and the imminent domestic regime change, there exist no longer justification for obtaining the nuclear sovereignty. The South African government decided to abolish nuclear armament and joined the NPT in 1993 in order to become an active participant in the international community. In 1994, the IAEA completed nuclear inspections in South Africa and declared that the nuclear weapons program had been completely eliminated. In contrast, Libya was covertly developing nuclear weapons after joining the NPT. Libya developed Chinese nuclear armament through the international nuclear proliferation network of Pakistani scientist A. Q. Khan. But through several secret negotiations with the U.S. and the U.K., Libya promised to abolish the development of nuclear armament and declared the abolishment of nuclear armament in 2003. The case of Libra may be viewed as a success story of nuclear diplomacy by the U.S. and the

^{20–} Egypt Profile, "NTI Country Profiles," (April 2009), <www.nit.org> (Accessed on 2010.10.29).

U.K. On the other hand, the Libyan case can be seen as Gaddafi political diplomatic breakthrough to receive economic aid by using the abolishment of nuclear armament to overcome diplomatic isolation, economic backwardness, and political crisis in the Middle East, to secure recognition from the international community.

(3) Nuclear Proliferation Cases: India, Pakistan, Israel and North Korea

India, Pakistan and Israel are not members of the NPT but possess nuclear weapons. India carried out nuclear tests in 1974, Pakistan carried out nuclear tests in 1998 respectively. Pakistan, which was threatened by nuclear-armed India, determined to have nuclear weapons for the purpose of national survival. Although India declares that it won't strike preemptive, it declines to join NPT because of China. Currently, it is estimated that India possesses about 150 nuclear warheads and Pakistan possesses about 80-120 nuclear warheads. Israel has started stockpiling nuclear warheads in Dimona area since 1958, it has been estimated that Israel currently possesses about 100-200 nuclear warheads, but it has kept the strategy of "NDNC(Non-Denial, Non-Confirmation)." These countries take the position of not accepting the moral validity, because the NPT is composed of majority of non-nuclear countries and small number of nuclear countries, and applies double standards. In 2007, the foreign minister of India declared "Just because India didn't sign the NPT, that doesn't mean India won't participate in nuclear nonproliferation.

We see that the NPT treaty has some problems. The NPT doesn't admit the need of universal, nondiscriminatory verification and processing."²¹ Moreover, in March 2006, the U.S. completed the treaty of transferring civilian nuclear technology to India. According to this treaty, India specified 14 of the 22 nuclear power plants to use in the private sector which would be under the IAEA safeguards. The U.S. Congress approved 'The United States- India Peaceful Atomic Energy Cooperation Act' in December and IAEA approved 'The India Safeguard Agreement' in August 2008. In addition, as NSG admitted India as an exception case, India became the only country that existed outside the NPT and used nuclear energy for peaceful purposes under the support of the international community.²² NSG inhibits the nuclear exports of Israel and Pakistan, because they were not inspected by IAEA. IAEA General Assembly requested IAEA's inspection acceptance and treaty compliance in the resolution of "Israel Unclear Capabilities", but Israel declined.

Although Iran is a NPT member state, it does not comply with NPT safeguards agreements. In 2003, IAEA Board of Directors decided that Iran did not comply with safeguards agreements, and reported to the UN Security Council. The UN Security Council demanded Iran to give up its uranium enrichment program, but Iran has propelled to develop nuclear continuously. The NIE(National Intelligence Estimate)

²¹- "India Seeks Japan's Support, Calls NPT 'Flawed'," <www.whereincity.com/ news/3/15197> (Accessed on 2010.10.29).

²²-"IAEA Board Approves India-Safeguards Agreement," <www.iaea.org/News Center/News/2008/board010808.html> (Accessed on 2010.10.29).

of the U.S. reported that Iran had stopped its nuclear development program from 2003 to mid 2007, it had stopped nuclear weaponization only temporarily and had stored up enriched uranium continuously, the U.S. began sanctions on Iran in 2010. But Iran claims that producing enriched uranium for peaceful purposes is not contrary to the NPT treaty. Iran's nuclear armament heightens tensions between Israel and Iran and is likely to be connected to Israel's tough stance on Palestine, also arouses Saudi Arabia's nuclear development, it may cause nuclear proliferation concerns in Middle East area. Another case of nuclear proliferation is the U.S.'s nuclear deployment in NATO. The U.S. had supplied about 180 B61 nuclear warheads to Belgium, Germany, Italy, Netherlands, Turkey, etc. by 2005. Many countries including nonaligned countries claim that the NATO nuclear deployment was a violation of the NPT treaty, while NATO and the U.S. claim that nuclear deployed in NATO nations is controlled under the U.S., the control power of nuclear weapons won't be transmigrated until deciding to go on war, so it is not contrary to the NPT treaty which doesn't apply once war breaks out. Over the validity of both claims, to nonnuclear states proposing questions on the moral validity of the NPT which applies double standards on both nuclear states and nonnuclear states, NATO nuclear deployment can worsen the righteousness of nuclear nonproliferation system.

North Korea case harms the NPT system in three ways. First, North Korea, as a member of the NPT, violated nuclear non- proliferation, the top priority goal of the NPT system, by having propelled to develop nuclear weapons continuously. It seems that since 1950s

North Korea has propelled to nuclear armed in order to defend its sovereignty in complete manner from the possession of nuclear weapons by the great powers around. But in 1993, through the first nuclear crisis, North Korea realized that nuclear weapons could be used as a leverage to take military, economic advantages, has used nuclear development threat as diplomatic means by provoking intermittently. However the second nuclear test in 2009 implies that North Korea propels the nuclear development as the only strategic choice in order to manage the internal turmoil and crisis in the process of succession and live out in the diplomatic isolation. In other words, it can be seen that North Korea case not only had political system issues, but also was strongly affected by the external requirements that nonnuclear states were tempted to nuclear armed, just like India, Pakistan, Israel. Second, North Korea also emerges as a very threatening presence to the NPT System which closely cooperates with A. Q. Khan Network and seeks economic gains through exporting nuclear weapons. Third, North Korea, as a member of the NPT, had secretly propelled to develop nuclear and withdrew from the NPT. This suggests that countermeasures towards those nations that received support from the NPT as member states and withdrew are needed urgently.

The Problems of the NPT Treaty

The NPT Treaty is consisted of the preamble and the 11 provisions, and its implementation details are reviewed once every five years (Review Conference of the Parties to the Treaty of Non-Proliferation of Nuclear Weapons). And during that period, the preliminary commission takes place to check the progress details (Sessions of the Preparatory Committee for the Review Conference).

(1) Contents

The three main goals of the NPT Treaty are nuclear nonproliferation, nuclear reductions and promoting peaceful uses of nuclear energy. Nuclear nonproliferation is stated in the preamble section 1-3, and Article 1, 2, the duty of nuclear states stipulates not to transfer nuclear weapons and the control power of nuclear weapons to nonnuclear states, not to assist the nuclear weapons development of nonnuclear states. The duty of nonnuclear states stipulates not to receive nuclear weapons or the control power of nuclear weapons from nuclear states, not to manufacture or acquire nuclear weapons. Member states agreed not to use nuclear except corresponding to a nuclear attack or conventional attack which was allied with a nuclear state, treaty didn't include this.

Nuclear reductions or nuclear disarmament is consisted of the preamble section 8-12, Article 6 was added because of the request of nonnuclear states that tried to associate with horizontal, vertical nuclear proliferation prohibition. Accordingly, in the preface it clearly reveals the purpose of creating a treaty that makes an environment where to ease international tension and to ban production of nuclear weapons, and removes nuclear weapons and nuclear transfer equipment,

general and complete disarmament, Article 6 evinces to pursue negotiations for this, but does not strictly require member states to conclude disarmament treaties, but instead, requires them to negotiate "in good faith." It obliges nuclear disarmament of nuclear states officially, but does not comply with the conditions, the treaty about nuclear disarmament is currently absent. Moreover the withdrawals from the NPT and nuclear development by nonnuclear states are increasingly spread, this nuclear proliferation has become an impediment to nuclear disarmament. Another dilemma of nuclear disarmament is that the temptation of nuclear development may increase, as the number of nuclear weapons decreases, the effectiveness of nuclear weapons increases, in order to ensure its own security and project forces to the international community.

NPT Treaty preamble section 6-7 and Article 4, 5 acknowledge the inalienable right of all countries to use nuclear energy peacefully. However, member states should prove that they do not use to develop nuclear weapons. Member states without nuclear should accept IAEA's stabilizer device in order to prove that they do not convert from the peaceful purpose of nuclear energy use to the military purpose of nuclear energy use by developing nuclear weapons or other explosive mechanism. While IAEA allows sovereign countries' use of nuclear energy for peaceful purposes, it still restricts rights according to nuclear nonproliferation provisions. However, the IAEA inspection requires full cooperation of the parties, in fact, it is not easy to distinguish between peaceful uses of nuclear energy and military uses of nuclear energy clearly. Moreover, since enriched uranium can be purchased on the international market, it is urgently needed to prevent the spread of enrichment and reprocessing technology. As of 2007, it was estimated that 13 countries had uranium enrichment technology.

In addition to the three main purposes, the NPT Treaty contains information about safety devices, secured guarantee on nonnuclear states, and treaty withdrawal. The preamble section 4-5 and Article 3 state that nonnuclear states should accept IAEA inspections, otherwise nuclear-related exports on those non-nuclear states are banned, provide reasons for economic sanctions. The safety on nonnuclear states is evinced in Article 7 and admits the rights of the nonnuclear zone in its territory for stability of nonnuclear states. But the temptation to develop nuclear is due to the existence fact of nuclear states, the real problem is security for nonnuclear states must be made fully on nuclear reductions. Treaty withdrawal is stipulated on Article 10, acknowledges the rights of special withdrawal cases which members of the highest national interests are infringed, needs to notify other member nations and the UN Security Council prior to.²³

²³Seongwhun Cheon, "Haekbihwasanchejeeui jaengjeomgwa gaeseonbangan"; Jang-hie Lee, "NPT cheje-eui bunseokgwa gugjebeopjeok pyungga (Analysis & Evaluations of NPT regime from International Law Point of View)," Goryobeophak (Korea Legal Studies), Vol. 50 (Korea University Legal Institute, 2008); U.S. Department of State, "Treaty of the Non-Proliferation of Nuclear Weapons," <www.state.gov/www/ global/arms/treaties/npt1.html> (Accessed on 2010.10.29).

(2) The Inherent Problem of the NPT System

The NPT system distinguishes between nuclear powers and non-nuclear powers in assigning differing requirements. Article 9, Clause 3 defines a "nuclear state" as a "one which manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January, 1967" and excludes these nations from the restriction of nuclear development. Therefore, nuclear powers are not restricted from producing nuclear weapons even in the NPT system. At the time the agreement was made, the countries which officially possessed nuclear weapons were the United States, Russia, England, France, and China. All of them are permanent members of the UN Security Council and the fact that they created the definition based on a date much earlier than when the NPT Agreement was agreed upon at the United Nations can be interpreted as the five superpowers' intention to prevent other countries from acquiring nuclear weapons. The requirement for nuclear arms reduction by nuclear powers was later added to the Agreement, but the NPT system is criticized for overly emphasizing the legal obligation for horizontal non-proliferation which limits the increase in nuclear powers, while merely declaring vertical non-proliferation which requires the nuclear powers to reduce their nuclear arms.²⁴ Such an inherent

²⁴- Sang-Wook Ham, "NPT cheje-eui hyeonhwang mit jeonmang: 2010 NPT pyunggahoeui je ilcha junbiwiwonhoe gyeolgwareul jungsimuro (The Current Status of NPT System and Its Prospects: with a Focus on the Results from the First Preparatory Committee of the 2010 NPT Review Committee)," The 46th Institute of Asian Social Science Conference: the Evaluation of the NPT system and its Policy Implications (Seoul: Institute of Asian Social Science, 2010), pp. 16–18.

discrimination in the NPT system and the poor execution of nuclear arms reduction by the superpowers are provoking non-nuclear powers' opposition.²⁵ From the realist perspective, the development of nuclear weapons is the most certain method of ensuring one's nation's security. From the view of defensive realism, the possession of nuclear weapons by all countries can even prevent a nuclear war by strengthening deterrence.²⁶ Driven by this logic, non-nuclear powers who feel threatened by nuclear powers are developing and increasing nuclear arms, which currently poses a problem.²⁷

Another inherent limit of the NPT system is the dualism of nuclear weapons having both military and peaceful functions. Massive murder weapons called nuclear weapons should be restricted but their peaceful use as alternative energy sources should be promoted at the same time. Therefore, the NPT would allow countries who give up nuclear arms production to use nuclear weapons peacefully. However, the technology for creating nuclear explosive devices for peaceful purposes is very similar to that which is necessary for regular nuclear arms production, making the implementation of the NPT system difficult. Nuclear proliferation in the 20th century has not progressed much relatively. In this respect, the NPT system can be said to have been effective to some extent. However, while nuclear proliferation

²⁵– Hwang, NPT, eoddeon joyakinga? pp. 28–30.

²⁶- Michael Mandelbaum, *The Nuclear Future* (Ithaca, NY: Cornell University Press, 1990), pp. 19-20.

^{27–} Kenneth Waltz, "Nuclear Myths and Political Reality," *American Political Science Review*, Vol. 84, 1990, p. 740.

took place among the superpowers in the 1940s and 1950s, it has extended to non-superpowers since the 1960s, thus exposing the problems of the NPT system. The suspicion of North Korea and Iraq's possession of nuclear arms at the beginning of the 1990s, and Indonesia and Pakistan's nuclear experiments in May 1998, can be said to have demonstrated the limitations of neoliberalist thought with regard to the NPT in a realist situation of nuclear politics. Non-nuclear powers have been driving nuclear development under the logic of threat from nuclear superpowers within the NPT system. Under the safety measures of the IAEA, nuclear development is possible for member nations through uranium enrichment and plutonium reprocessing.²⁸ The inspection by IAEA is limited because it is in most cases allowed only for facilities and equipment reported by the nations concerned.²⁹ The existence of terrorist organizations and cross-border networks for nuclear proliferation are also acting as factors weakening the NPT system.

Measures for Improvement

(1) Critical Issues

Some critical issues about the NPT system were exposed at the third NPT Review Conference which took place in New York in May

²⁸– Su Seok Lee, "Haekbihwanksanchejewha junggyeongukgaeui yeokhal," p. 87

^{29–} Sang-hwan Lee, "Je-samsegyegukgadeul-eui haekjeongchaek saryeyeongu (A Case Study of the Third World Nations' Nuclear Policies)," Gookbang jeongchaekyeongubogoseo (Report on Defense Policy) (Seoul: Korea Research Institute for Strategy, 2004), pp. 13–20.

2009. The main point was moving away from the Bush administration's unilateralism to executing nuclear proliferation and denuclearization within a multilateral framework. The two most important provisions were "The Principles and Objectives for Nuclear Non-Proliferation and Disarmament" selected at the 1995 NPT Review and Extension Conference and "The 13 Practical Steps for the Systematic and Progressive Efforts to Achieve Complete Disarmament" from the 2000 Review Conference. The member nations viewed nuclear disarmament between the United States and Russia as the most critical issue and pressed for "transparent, verifiable and irreversible" nuclear disarmament. They also pressed the United States and China to establish a nuclear-free zone by quickly ratifying the Comprehensive Test Ban Treaty. In regards to non-proliferation, thinking that a universalization of the NPT should take place whereby all countries would become NPT member nations, they urged for Israel, Indonesia, and Pakistan's registration, called on North Korea's return, and demanded a stronger restriction of countries like Iran who utilize uranium enrichment programs. In addition, they promoted a peaceful use of nuclear energy as a measure to prevent climate change, likening it to a "renaissance of nuclear energy," while also expressing concern that the dissemination of nuclear energy technology could negatively affect nonproliferation. As a measure to support each nation's nuclear energy improvement without grossly violating the belief in the peaceful use of nuclear energy, IAEA's nuclear fuel bank and Russia's International Uranium Enrichment Center(IUEC) in Siberia were specifically mentioned, which could serve as multi-national nuclear fuel facilities

to curb each nation's reprocessing and establishment of uranium enrichment facilities. However, there is also concern that nations which provide nuclear fuel could abuse their power for their own good, disrupt IAEA activity, or damage the NPT's legitimacy by helping certain other countries in a discriminatory way like the recent conclusion of the U.S.-Indonesia nuclear energy agreement demonstrates. Also emphasizing the need for generalization of the IAEA's additional protocols and for strengthening the security measures, the conference suggested that no nations should be able to withdraw from the NPT after receiving support and, in the case of withdrawal, should still not violate NPT regulations.³⁰

(2) Measures for Improvement

Lewis Dunn suggested the following points for discussion at the 2010 8th NPT Review Conference for strengthening the nuclear non-proliferation system. First, in order to prohibit the relocation and provision of nuclear weapons, Article 1 of the NPT should be double-checked and the prohibition of nuclear development should be applied to all member nations possessing nuclear weapons. Progress in the development of nuclear technology both for peaceful and military purposes and in transportation and communication systems has enabled non-nuclear powers to provide direct and indirect support

^{30–} Miles Pomer, "Report from the NPT Preparatory Committee 2009," CNS Feature Stories, Monetary Institute of International Studies (26 May, 2009), <cns.miis.edu/stories/090526 npt report.htm> (Accessed on 2010.10.29).

to each other. The secret trafficking of Pakistani Dr. Khan goes through Malaysia, Dubai, and others. The Security Council resolution 1540, which called for nuclear non-proliferation measures, needs to be approved and determined as an obligation for all member nations so that nuclear proliferation of non-governmental actors, such as terrorist organizations, can be prevented. Second, in order to prohibit the registration, production, and acquisition of nuclear weapons, Article 2 should be strengthened and, for this to happen, there should be a detailed agreement between member nations about what production of nuclear weapons means and what actions violate Article 2. Also, we should make an example out of North Korea, who has withdrawn its membership, thus violating Article 2 by reacting aggressively against it. Third, all the NPT-registered non-nuclear powers should be obligated to sign up for the IAEA's additional protocols and the IAEA's right to special inspection should be strengthened.³¹ Fourth, all member nations should agree that the right to peaceful use of nuclear energy provided by Article 4 is granted only to nations who faithfully fulfill the nuclear non-proliferation duty and, in order to receive agreement from non-nuclear powers, nuclear powers should fulfill their duty of nuclear arms reduction.

Fifth, nuclear disarmament evinced on Article 6 "As nuclear states fully dispose their holdings of nuclear weapons, all of the NPT members should reaffirm the clear mission of realizing nuclear

³¹- General inspection is the authority the IAEA holds to inspect nuclear sites and facilities only declared by inspected states, however, with special inspection IAEA is authorized to inspect non-declared ones.

disarmament that promised in Article 6" declaration pledges and specific measures should be taken. Especially, they should execute CTBT ratification and 13 steps which were agreed at the evaluation meeting in 2000 immediately, in order to increase providing information and transparency of nuclear policy and nuclear disarmament of nuclear states, "systematized report" on the NPT implementing progress should be accomplished. Also, by substantial efforts on nuclear disarmament 'Military Fissile Material Cut-Off Treaty(FMCT)' which was proposed by President Clinton should be propelled. And it must be stipulated that nuclear states beyond their territory will not possess, deploy or use nuclear weapons towards nonnuclear states. The nonnuclear states in the third world realize nuclear weapons' political military usefulness, their system maintenance interests help decided to develop and try to develop nuclear.³² Nuclear weapons illegalization rules such sentiments extirpate and possession of nuclear and validation of use extirpate.

Sixth, nuclear weapon free zone deployment of nuclear weapons and use to mortify nonnuclear states can use as a primary mean nuclear weapon free zone positively support. Currently five nuclear states nonnuclear states' security guarantee positive secured guarantee and conditions affix negative secured guarantee provide, nonnuclear states want more comprehensive and perfect secured guarantee. Therefore the concept of new comprehensive secured guarantee is needed, it needs

^{32–} George Quester and Victor Utgoff, "Toward an International Nuclear Security Policy," *The Washington Quarterly*, Vol. 7, No. 4 (Fall 1994).

to be differentiated between the NPT members and the NPT nonmembers. Seventh, it needs to restrict withdrawal rights and conditions of the members. Especially, the UN Security Council withdrawal problems intervene situation and specific rules on member states' agreement needed, in case of withdrawal the additional plans on nuclear exporting countries also need to be taken. For example, in case of North Korea, after withdrawal NPT requirements declined IAEA inspections there could be an empty space in monitoring. Therefore, a member which declared withdrawal even if declined IAEA inspection nuclear materials and nuclear technologies provided by advanced countries by separate inspections can be processed action is needed.

5. Conclusion

Due to the changes in the environment of the international security because of globalization, the problem of nuclear non- proliferation has also become one which has to be solved through the nations' and various actors' cooperation, like other global issues. Therefore, despite its inherent and realistic limitations, it seems that the importance of the NPT for nuclear non-proliferation global governance will continue to increase. Of course, this does not mean that the superpowers' like the United States, China, Russia's political logic will be eliminated, but that the international regime will control and supplement the nations' political logic. Concerning the problem of North Korea's nuclear weapons, solutions have been searched for in respect to the U.S.-North Korea relations and to the region of Northeast Asia. However, due to the lack of trust between North Korea and the United States and China's geopolitical issues, a fundamental resolution of this problem is difficult at present. The activation of the NPT can not only increase the probability of regional and certain nations' denuclearization by normalizing nuclear non-proliferation, but also strengthen the legitimacy of nuclear non-proliferation. In similar ways, the activation of the NPT cannot be a complete alternative to a solution in respect to the U.S.-North Korea relations and certain regions, but can be a useful supplement for also solving North Korea's nuclear problem. Only, in order for the NPT to become a substantial/real central axis, the inherent conception of superpowers should be lessened. And considering that the fundamental reason for possessing nuclear weapons is the existence of other nuclear powers, the goal of the NPT for nuclear powers to normalize nuclear non-proliferation, is substantially and effectively executing nuclear reductions.

References

1. Books

(Korean)

- Hwang, Young-chae. NPT, eoddeon joyakinga? (NPT, What Kind of Treaty Is It?). Seoul: Hanwool, 1995.
- Ryu, Gwang-cheol. *et al.* Gunchugwa bihwaksaneeui *segye* (The World of Arms Reduction and Non-Proliferation). Seoul: Pyeongminsa, 2005.
- Yoon, Seongyi. *Jeongbosahoewa gugjepyonghwa* (Information Society and International Peace). Seoul: Oreum, 2002.

(English)

Brzezinski, Zbigniew Kazimierz. *The Choice*. New York: Basic Books, 2001. Buzan, Barry, Ole Waever and Jaap de Wilde. *Security:* A New

Fraemwork for Analysis. Lynne Reinner Publisher, Inc., 1998.

Center for Science and International Affairs. *International Security*. Vol. 1. Cambridge, MA: MIT Press, 1976.

Clark, Ian. *Globalization and International Relations Theory*. Oxford: Oxford University Press, 1999.

Mandelbaum, Michael. *The Nuclear Future*. Ithaca, NY: Cornell University Press, 1990.

Rosenau, James. Along the Domestic-Foreign Frontier: Exploring Governance in a Turbulent World. Cambridge, U.K.: Cambridge University Press, 1997.

- Schilling, William R. (ed.). Nontraditional Warfare: Twenty-first Century Threats and Responses. Washington D.C.: Brassey's Inc., 2002.
- The White House. *The National Strategy of the United States*. December 2005.
- Wit, Joel, Daniel Poneman and Robert Gallucci. Going Critical: The First North Korean Nuclear Crisis. Washington D.C.: Brookings Institution Press, 2005).

2. Articles

(Korean)

Cheon, Seongwhun. "Brazil, Argentina Wonjaryeokhyupryeok gyeongheom-eui hanbando jeokyong (The Application of Brazilian and Argentinean Nuclear Cooperation Experiences to the Korean Peninsula)." Journal of International Politics, Vol. 35, No. 2 (The Korean Association of International Studies), 1996.

_____. "*Haekbihwasanchejeeui jaengjeomgwa gaeseonbangan* (Controversial Issues in the Non-Proliferation System and Proposals for Its Reform)." Journal of International Politics, Vol. 49, No. 4, 2009.

Ham, Sang-Wook. "NPT cheje-eui hyeonhwang mit jeonmang: 2010
NPT pyunggahoeui je ilcha junbiwiwonhoe gyeolgwareul jungsimuro (The Current Status of NPT System and Its Prospects: with a Focus on the Results from the First Preparatory Committee of the 2010 NPT Review Committee)." The 46th Institute of Asian Social Science Conference: the Evaluation of the NPT system and its Policy Implications. Seoul: Institute of Asian Social Science, 2010.

- Lee, Sang-hwan. "Je-samsegyegukgadeul-eui haekjeongchaek saryeyeongu (A Case Study of the Third World Nations' Nuclear Policies)." Gookbangjeongchaek yeongubogoseo (Report on Defense Policy). Seoul: Korea Research Institute for Strategy, 2004.
- Lee, Su Seok. "Haekbihwanksanchejewha junggyeongukgaeui yeokhal (The Non-Proliferation System and the Role of Mid-size States)." Dongseoyeongu (East&West Studies), Vol. 21, No. 2 (Yonsei University: Institute of East&West Studies), 2009.
- Lee, Jang Hie. "NPT cheje-eui bunseokgwa gugjebeopjeok pyungga (Analysis & Evaluations of NPT regime from International Law Point of View)." Goryobeophak (Korea Legal Studies). Vol. 50 (Korea University Legal Institute), 2008.
- 4. Nam, Man-kwon. "Anbo: Anboyoungyeok global governance hyeonhwanggwa Hanguk (Security: The Current Status of Global Governance in the Arear of Security and Korea)." Seung-Chul Lee (ed.). Global Governance-wa Hanguk (Global Governance and Korea). Seoul: Hanyang University Press, 2007.

(English)

Allison, Graham. "National and International Security." Joseph Nye and John Donahue (ed.). *Governance in a Globalizing World*. Washington D.C.: Brookings Institution Press, 2000.

Arasales, Julio C. "The Argentina-Brazilian Nuclear Rapprochement." The Nonproliferation Review. Spring/Summer 1995.

Clark, William C. "Environmental Globalization." Joseph S. Nye Jr. and John D. Donahue (ed.). *Governance in a Globalizing World*. Washington D.C.: Brookings Institution Press, 2000.

92

Ł

- Cronin, Audrey Kurth. "Rethinking Sovereignty: American Strategy in the Age of Terror." *Survival*. Vol. 44, No. 2, Summer 2002.
- Flanagan, Stephen J. "Meeting the Challenge of the Global Century." Richard I. Kugler and Ellen I. Frost. *The Global Century: Globalization and National Security.* Vol. 1. University Press of the Pacific, 2002.
- Levy, Marc A. "Is the Environment a National Security Issue?" International Security. Vol. 20, No. 2, Fall 1995.
- Paris, Ronald. "Human Security: Paradigm Shift or Hot Air?" International Security. Vol. 26, No. 2, Fall 2001.
- Quest, Georger and Victor Utgoff. "Toward an International Nuclear Security Policy." *The Washington Quarterly*. Vol. 7, No. 4, Fall 1994.
- Waltz, Kenneth. "Nuclear Myths and Political Realities." American Political Science Review. Vol. 84, No. 3, September 1990.

3. News Articles, Electronic Resources, etc.

Egypt Profile. "NTI Country Profiles." April 2009. <www.nit.org>.

- "IAEA Board Approves India-Safeguards Agreement." <www.iaea.org/ NewsCenter/News/2008/board010808.html>.
- "India Seeks Japan's Support, Calls NPT 'Flawed'." <www.whereincity. com/news/3/15197>.
- Pomper, Miles. "Report from the NPT Preparatory Committee 2009." CNS Feature Stories, Monetary Institute of International Studies (May 26, 2009). <cns.miis.edu/stories/090526_npt_report.htm>.
- U.S. Department of State. "Treaty of the Non-Proliferation of Nuclear Weapons." <www.state.gov/www/global/arms/treaties/npt1.html>.

2010년도 KINU KOREA-U.S. 민간전략대화 및 국제적 공동연구 KINU-USKI JOINT RESEARCH PROJECT

Nuclear Security 2012 : Challenges of Proliferation and Implication for the Korean Peninsula

edited by Jung-Ho Bae and Jae H. Ku





