

**Emerging of KEDO and the EU's accession to KEDO: in  
perspective of Prisoner's Dilemma and Suasion Game**

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## **Abstract**

This article focuses on two experiences: "How to explain emerging of KEDO?", and "Why suddenly and lately the EU participated in KEDO?" As answers to the questions, I consider the Prisoner's Dilemma and Suasion Game. In first case, to avoid sub-optimal equilibrium, the players establish the KEDO which is possible through a typical collaboration game. In second case, I prove that the EU chose the strategy participating in KEDO under tactical issue linkage. The U.S. as a senior power could either decrease the EU payoff with unilateral threat or increase the payoff for mutual cooperation. As a consequence, the U.S. takes a most preferred payoff by lobbying and side payments to junior partner, while the EU takes a second favourable payoff avoiding worst outcome. The U.S., however, face a credible problem with informal side payments. Thus, the U.S. new Administration has chosen to change the character of the regime from global level to a regional security one only for the Korean Peninsula without the EU, and at the same time try to resolve the dilemma as dissolving the KEDO.

## 1. Introduction

On March 12 1993, as DPRK (Democratic People's Republic of Korea)<sup>1</sup> declared that it refused to allow inspectors access to its nuclear sites and would plan to withdraw from NPT (Nuclear non-Proliferation Treaty), the Korean peninsula had faced to the political crisis. As a result of repetition of endurance and negotiation between concerning countries, however, the region had come to re-stable situation as signing the Agreed Framework<sup>2</sup> which anticipates establishing KEDO (Korean Peninsula Energy Development Organization). Before long time, the EU as an Executive board participated in KEDO regime and it decided to contribute to KEDO ECU 15 million annually for five years in 1997.

In these conditions, this article focuses on two experiences: "How to explain emerging of KEDO?", and "Why suddenly and lately the EU participated in KEDO?" In certain environment, international players try to make decisions in an attempt to optimize their outcome and efforts. If they are players of rational choice tendency, it is essential assumption to make their action. This behaviour naturally leads to create regime in given-issue areas because they could pursue the stable interest-maximizing strategy in the regime. Regime theory in IR field can be explained as choice matter and is beyond debates between Realists

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<sup>1</sup> 'DPRK' and 'North Korea', similarly 'ROK' and 'South Korea' are used interchangeably.

<sup>2</sup> Formally, the title is 'Agreed Framework Between the United States of America and the Democratic People's Republic of Korea October 21, 1994'

and Institutionalists because their main arguments all are based on rational choice – based on interests and power - of international players in anarchic system. Thus game theory based on rational choice assumption is a valuable instrument to describe KEDO emerging and the EU's accession to KEDO as empirical cases. That is to say, the former could be analyzed as Prisoner's game and latter as suasion game.

Furthermore, this article also tries to analyze “How did the U.S. solve the credibility dilemma?” If the dominant power adopted a linkage strategy in suasion game by informal bribes or lobbying, the power often faces to have to carry out promises. The Korean Peninsula crisis, it has important implication because instead of KEDO, the six-party talks have been developed since George W. Bush Administration has inaugurated in January 2001, and it has brought to change from global regime to regional one in East Asia.

## **2. International Regime in Realism and Institutionalism**

According to Krasner, “Regimes<sup>3</sup> can be defined as sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations”.<sup>4</sup> Regime theories among IR scholars

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<sup>3</sup> “Most regime theorists agree that international regimes can be regarded as a special case of international institutions”, (Volker Rittberger et als. 1997). Hence, this article will use the term ‘institution’ in lieu of ‘regime’.

<sup>4</sup> Stephen D. Krasner, “Structural causes and regimes consequences: regimes as intervening

traditionally have been developed by Institutionalists (Neoliberals). They insist that states build international regimes in order to promote mutually beneficial cooperation. In other words, international regimes may reduce transaction costs between states, alleviate problems of asymmetrical information, and limit the degree of uncertainty that members of the regime face in evaluating each other's policies. In this sense, international regimes alike usual other political institutions can be explained in terms of self-interests and rational choice theory. Furthermore, Institutionalists exert an impact on state policies largely by changing the costs and benefits of various alternatives. Regimes rather affect calculations of self interest than override self-interest. Institutionalization of regime could provide information, increase credibility, and generate focal points, thus reducing uncertainty.<sup>5</sup> In this point, Institutionalists argue that institutions could alter state preferences, therefore, even change state behaviour.

From perspective of classical tradition, in contrast to Institutionalists, Realists argues that more powerful players have a tendency to prefer bilateral relationship or alliance to make multilateral ties, while smaller players try to bind and balance the multilateral

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variables" in *International Regimes* by Stephen D. Krasner(ed), (Ithaca and London: Cornell University Press, 1983), p. 2

<sup>5</sup> Robert O. Keohane, *After Hegemony*,(First Princeton Classic Edition), (Princeton; Princeton Univ. Press, 2005), pp. X-XI, 256-259. Institutionalists insist that, "institutions have only marginal effects...[which] leaves it [neo-realism] without a plausible account of the investments that states have made in such international institutions as the EU, NATO, GATT, and regional trading organizations." Robert O. Keohane and Lisa L. Martin, "The Promise of Institutional Theory", *International Security*, Vol. 20, No. 1, Summer 1995, p. 47.

relationships (i.e. international organization) in coordination with other players.<sup>6</sup> Mearsheimer claims that institutions have merely minimal influence on state behaviour, and thus hold little promise for promoting stability in international politics.<sup>7</sup> Realists therefore believe that institutions are not an important cause of peace or conflict.

There are some Realists (e.g. Arthur Stein 1982), however, who recognize restrictively the importance of regime in perspective of rational choice theory because sovereign states their self-interests that lead them to create regime for eschewing dilemmas or impasse. If cooperation in given issue-area can assign benefits to provisional players, they create regimes. Moreover, they claim that the structure of international power distribution can lead to change the regime such as from colonialism to anti-colonialism and from the balance of power to bipolar system after the World War I, II. That is, GATT, IMF and NATO that are the kind of regimes created by dominant new super power the US instead of the former super power UK. Although anarchic environment, independent states have a rational incentive to create processes for joint decision-making when confronting dilemmas of common interests or common aversion.<sup>8</sup>

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<sup>6</sup> Bilateral alliances such as alliances of US-Japan security (1952), US-South Korea (1954), US-Taiwan (1955) and China-North Korea (1961) still prevail especially in East Asia. Reversely, US has often boycotted multilateral regime such as the Kyoto Protocol.

<sup>7</sup> John J. Mearsheimer, "The False Promise of International Institutions", *International Security*, Vol. 19, Issue 3 (Winter, 1994-1995), p. 7.

<sup>8</sup> Donald J. Puchala and Raymond F. Hopkins, International Regimes: lessons from inductive analysis," in *International Regimes* by Stephen D. Krasner(ed), (Ithaca and London: Cornell University Press, 1983), pp. 61-91; Arthur Stein, "Coordination and Collaboration: Regimes in an Anarchic World",

In this sense, one of important common points between Realists and Institutionalists is based on rational choice to create international regimes.<sup>9</sup> Lisa L. Martin (1992, 1993) as an Institutionalists argues that the power and interest can lead to form the successful cooperation, or norms and organization for player's interests. Similarly Arthur Stein (1982) from realism perspective insists that autonomy of states and their self-interests lead them to create regime when they face with dilemmas. Therefore, rational choice of states and pursuit of their interests are very important factors to deal with international regime regardless of realism and institutionalism,

### **3. Emerging of KEDO: Prisoners' Dilemma**

Multiple players in certain international situation make decisions in an attempt to optimize their payoff and efforts. Naturally, rational choice of players is essential assumption to optimize of their action.

In rational choice viewpoint, emerging of KEDO could be explained as a

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in *Neorealism and Neoliberalism – The Contemporary Debate*, by David A. Baldwin (ed.) (New York; Columbia Univ. Press, 1993) pp. 29-59

<sup>9</sup> The gap between realists and institutionalists is particularly about whether institutions affect the prospects for international stability. Realists maintain that institutions are merely a mirror of the distribution of power in international system. Because relationship between states depends on the self-interested calculations of the great power, institutions have no independent effect on small state behaviour. Waltz notes, that "the theory of international politics is written in terms of the great power of an era." Kenneth N. Waltz, *Theory of International Politics*, New York: McGraw-Hill 1979, p.72.

consequence of typical Collaboration problem, that is, alleviation from Prisoners' Dilemma.

The Prisoners' Dilemma are characterized by that equilibrium outcomes are suboptimal.

**Figure 1**

		<b>Player 2</b>	
		<b>g2</b>	<b>f2</b>
<b>Player 1</b>	<b>g1</b>	<b>(<math>\beta</math>, <math>\beta</math>)</b>	<b>(<math>\delta</math>, <math>\alpha</math>)</b>
	<b>f1</b>	<b>(<math>\alpha</math>, <math>\delta</math>)</b>	<b>(<math>\gamma</math>, <math>\gamma</math>)</b>

f: strategy confession

g: strategy silence

Greek characters: payoff

In Figure 1, where  $\beta$  is stands for 'reward' for collaboration,  $\alpha$  for 'temptation' to defect the counterpart,  $\delta$  for 'sucker's payoff' to the player who is defected, and  $\gamma$  for 'punishment' for playing it safe. (Brams 2004) The size of payoff is  $\alpha > \beta > \gamma > \delta$  whenever the Prisoner's



dilemma occurs.

In case of the conflict problem between the U.S.-North Korea, the U.S.'s dominant strategy is that its nuclear investigation would realize to North Korea as well as North Korea would reinstates to NPT (Nuclear non-Proliferation Treaty). In contrast to this situation, North Korea's dominant strategy is reversely that they maintain the nuclear strategy (e.g. withdrawal from NPT) and the U.S. give up the investigation strategy and sanction policy by its threats. This situation is depicted as in figure 2.

Figure 2

		North Korea	
		Abandon Nuclear Strategy	Maintain Nuclear Strategy
US	Non-Investigation	$(\beta, \beta)$ **	$(\delta, \alpha)$
	Investigation	$(\alpha, \delta)$	$(\gamma, \gamma)$ *

\*\* Equilibrium Outcome

\* Dominant Strategy

The Prisoners' Dilemma is on condition that two countries have neither a formal communication channel<sup>10</sup>, nor repeated game. Both players have strong temptation to defect from a cooperative outcome because they respectively have a dominant strategy as a defecting from common action and can get the better off by defection as shown figure 2( $\alpha$ ,  $\delta$ ) or ( $\delta$ ,  $\alpha$ ). However, the result of this mutual defection is deficient for them all ( $\gamma$ ,  $\gamma$ ). To eschew this mutual defection, political theorists insist on making the regime which may lead to communicate between them. That is to say, Institutionalists insist "(players) agreed to coerce one another in order to guarantee that no individual would take advantage of another's cooperation by defecting from the pact and refusing to cooperate".<sup>11</sup> Thus they need to create coercive regime that allow individuals to dodge their dominant strategy and to insure an optimal choice rather than suboptimal outcome. In other words, they agree to move away to new equilibrium ( $\beta$ ,  $\beta$ ) from the suboptimal equilibrium ( $\gamma$ ,  $\gamma$ ). In this sense, establishing KEDO can be evaluated as a result of eschewing the defection. In the following, it will show the processes that Prisoner's dilemma between the U.S. and North Korea has been transformed to regime.

### **3.1 Crisis Evolution**

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<sup>10</sup> They have not formal diplomatic relation since the Korean War.

<sup>11</sup> Arthur Stein, "Coordination and Collaboration: Regimes in Anarchic World", in David A. Baldwin (ed.) *Neorealism and Neoliberalism – The Contemporary Debate*, (New York; Columbia Univ. Press), pp.35-36

The Joint Declaration between South Korea and North Korea in 1992 Denuclearization Statement called for a bilateral nuclear inspection regime to verify the denuclearization of the peninsula and President George Bush pulled the U.S.'s tactical nuclear weapons off the Korean Peninsula. The Declaration, which came into force on February 19, 1992, states that the two sides "shall not test, manufacture, produce, receive, possess, store, deploy and use nuclear weapons," and that they "shall not possess nuclear reprocessing and uranium enrichment facilities."<sup>12</sup> As a result of this, Pyongyang finally signed the accord with the IAEA (International Atomic Energy Agency) in 1992.

North Korea's agreement to accept IAEA safeguards initiated a series of IAEA inspections of North Korea's nuclear facilities. However, this promising development was halted by the North's refusal to allow special inspections of two unreported facilities suspected of holding nuclear waste. Ignoring the South-North Joint Declaration of the Denuclearization of the Korean Peninsula, North Korea refused IAEA inspections and operated nuclear reprocessing facilities, making the world, specially, the United States suspicious of its nuclear intentions.

On April 1, 1993, the IAEA declared North Korea to be in noncompliance with the NPT. On April 2, 1993, the IAEA voted to refer North Korean violations of the Treaty to the

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<sup>12</sup> 동아일보(*Donga-Ilbo*), February 20, 1992

UN Nations Security Council. And on April 7, 1993, the IAEA issued a formal censure on North Korea for its noncompliance with the NPT, the first censure in the history of the IAEA. On May 11, 1993, the UN Security Council passed a resolution asking North Korea to allow IAEA inspections under the NPT, and on May 12, 1993, North Korea rejected the request of the United Nations Security Council and subsequently impeded or refused access to any of its sites by IAEA inspectors.<sup>13</sup>

### **3.2 Suboptimal Equilibrium**

Tensions ran increasingly high on the Korean Peninsula as the confrontation between North Korea and the U.S. deepened. The U.S.'s objective was to bring North Korea back into full compliance with its NPT obligations and to restart talks with South of Korea aimed at a denuclearized Korean peninsula as known well. On June 2, 1993, the U.S. and North Korea initiated a series of meetings in New York to discuss the impasse in nuclear site inspections, which continued until January 4, 1994, when Under Secretary of State Lynn Davis announced that North Korea must agreed to inspections of seven declared nuclear-related sites. Moreover, the Peninsula's tensions increased following the incursion into North Korean airspace in December 1994 of a small the U.S. helicopter that had lost its way in bad

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<sup>13</sup> <http://www.globalsecurity.org/>

weather. It had been shot down, killing one of the two crew members.

In March 1994, South Korea and the U.S. agreed to deploy 'Patriot Missiles' to South Korea in response to the threat posed by North Korea's ballistic missiles. By April 1994, however, diplomatic efforts reached an impasse. The North Koreans did not permit IAEA to conduct essential activities during its recent inspection. As a result, the IAEA was unable to certify that North Korea is not diverting or producing nuclear material for non-peaceful purposes, and the Agency's Board of Governors passed a resolution referring this matter to the UN Security Council. Thus North Korea also broken off negotiations with the South on exchanging envoys to discuss the nuclear issue as well as threatened to go to war if sanctions were imposed by the international community especially the U.S.

In Mid-May 1994 Defense Secretary U.S. Perry noted that "The North Koreans have stated that they would consider the imposition of sanctions to be equivalent to a declaration of war. ... We may believe, and I do believe, that this is rhetoric on their part, but we cannot act on that belief. We have to act on the prudent assumption that there will be some increase in the risk of war if we go to a sanction regime."<sup>14</sup> Moreover, On May 24 1994, Senator John McCain urged a number of additional military steps for the U.S. to prepare for such a contingency occur well ahead of any anticipated military action.<sup>15</sup>

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<sup>14</sup> *US Defense Department Report*. May 1994.

<sup>15</sup> *Reports on America Senate* May 24, 1994.

Throughout the crisis, U.S. sought to avoid escalation to a military conflict that might once again involve Chinese military intervention. According to published *US Defense Department Reports* in 1994,

### 3.3 New Equilibrium: KEDO Creating

In the other hand, after a period of high tension brought on by failure to resolve the nuclear issue, and Security Council discussion of UN sanctions against North Korea, former President Carter's visit to Pyongyang in June 1994 helped to defuse tensions and resulted in renewed South-North talks. A UN Security Council Resolution in May 1993 urged North Korea to cooperate with the IAEA and to implement the 1992 North-South Denuclearization Statement. It also urged all member states to encourage the North Korea to respond positively to this resolution and to facilitate a solution of the nuclear issue<sup>16</sup>.

A third round of talks between the U.S. and North Korea opened in Geneva on July 8, 1994. However, the sudden death of North Korean leader Kim Il-Sung on July 8, 1994 halted plans for a first ever South-North presidential summit and led to another period of inter-Korean animosity. The talks were resumed in August. Finally, an 'Agreed Framework' was signed between U.S. and North Korea in Geneva on 21 October 1994, capping the on-and-off bilateral negotiations which altogether had lasted for more than a year and a half.

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under the China-North Korea Friendship Treaty signed in 1961, China formulated plans to support North Korea by sending ground troops between 50,000 and 75,000 soldiers--who belong to the three divisions of the 39th Shenyang- Military District Army stationed in Dalian---as well as approximately 10,000 rapid deployment troops of the Jinan Military District to the latter.

<sup>16</sup> Resolution 825, <http://ods-dds-ny.un.org/doc/UNDOC/GEN/N93/280/49/IMG/N9328049.pdf?OpenElement>

In accordance with the terms of the Agreed Framework, in January 1995 the Washington eased economic sanctions against North Korea in response to North Korea's decision to freeze its nuclear program and cooperate with U.S. and IAEA verification efforts. North Korea agreed to accept the decisions of KEDO, the financier and supplier of the LWRs, with respect to provision of the reactors. KEDO subsequently identified Sinpo(신포) as the LWR project site and held a groundbreaking ceremony in August 1997. In December 1999, KEDO and the (South) Korea Electric Power Corporation (KEPCO) signed the Turnkey Contract (TKC), permitting full-scale construction of the LWRs.<sup>17</sup>

#### **4. The EU accession to KEDO: Suasion game**

In practical international relation, even multilateral institutions took often place under

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<sup>17</sup> The Supply Agreement stipulates the division of responsibility between KEDO and the DPRK regarding provision of the two LWR units (LWR project). KEDO is responsible for providing two units that meet, at a minimum, international and U.S. standards of safety. The DPRK is responsible for the ultimate operation, maintenance, and regulation of the reactors. Specifically, the DPRK operator will be responsible for the safe operation and maintenance of the units, appropriate physical protection, environmental protection, and safe storage and disposal of radioactive waste, including spent fuel. The operator of the LWR plant will be the DPRK's General Bureau of Atomic Energy. Responsibility for operation of each LWR plant will commence after initial system testing is complete and nuclear fuel has been loaded into the respective plant. The DPRK regulatory authority is responsible for issuing construction, commissioning, and operating permits based on its review of the licensing documents and a determination of whether the units meet these safety standards. The DPRK is also required to ensure that appropriate nuclear regulatory standards and procedures are in place to ensure the safe operation and maintenance of the units. See, <http://www.kedo.org>, *Light Water Reactor Project: Overview*.

conditions of significant asymmetry because the dominant super power such as the U.S. overwhelmingly exceeds other players in aspect of power sources. Oran Young describes this regime as “Imposed Order”, noting “Imposed order is deliberately established by dominant actors who succeed in getting others to conform to the requirements of these orders through some combination of coercion, cooptation, and the manipulation of incentive”.<sup>18</sup> Similarly, Lisa Martin asserts, “The hegemon would prefer other’s cooperation and is dissatisfied with the equilibrium outcome or unilateral action. I call this kind of asymmetric situation a ‘suasion’ game, since the dilemma facing the hegemon to persuade or coerce others to cooperate”.<sup>19</sup> In other words, ‘Suasion game’ has equilibrium outcomes that leave junior actor dissatisfied because the U.S.’s most preferred outcome but junior player’s second-most one as shown in figure 3.

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<sup>18</sup> Oran R. Young, “Regime dynamics: the rise and fall of international regimes” in *International Regimes* by Stephan D. Krasner(ed), (Ithaca and London: Cornell University Press, 1983), p. 100 In perspective of Young, therefore, KEDO is a kind of “Negotiated Order”. He describes it as “These are regimes characterized by conscious efforts to agree on their major provisions, explicit consent on the part of individual participants, and formal expression of the results.... Such order will take the form either of ‘constitutional’ contracts or of legislative bargains.” “Constitutional contracts involve the development of regimes in which those expecting to be subject to a give regime are directly involved in the relevant negotiations. Legislative bargains by contrast, occur under conditions in which those likely to be subject to a regime do not participate directly but are only represented in the pertinent negotiations”. p. 99

<sup>19</sup> Lisa L. Martin, “The Rational State Choice of Multilateralism” in *Multilateralism Matters* by John Gerard Ruggie (ed) (New York: Columbia University 1993), pp. 103-104



**Figure 3**

		<b>EU</b>	
		<b>Accession</b>	<b>Non-Accession</b>
<b>US</b>	<b>Seduction</b>	$(\alpha, \beta)$ **	$(\beta, \alpha)$
	<b>Non-Seduction</b>	$(\gamma, \gamma)$	$(\delta, \delta)$

\*\* Equilibrium Outcome

In the matrix (size of payoff,  $\alpha > \beta > \gamma > \delta$ ) , the U.S. has a dominant strategy to seduce the EU into the KEDO ( $\alpha, \beta$ ) and EU knowing the U.S.'s choice could get its most favoured payoff by refusing it ( $\beta, \alpha$ ). As the dominant partner, the U.S. has two ways to convince the EU to participate in KEDO.

Most of all, the U.S. could threaten to act non-seduction (that is, a disadvantage such as non-support the EU in other issue), in the short term if the EU refuses to participate in KEDO. This would lead to the EU's worst preferred payoff as well as the U.S. ( $\delta, \delta$ ) because the EU has been developing a Common Foreign and Security Policy (CFSP) to enable it to take joint action when the interests of the Union as a whole are at stake since signed the Maastricht Treaty on 1993.

If this threat is credible, therefore, the EU's strategy moves away from refusing to participating points ( $\alpha$ ,  $\beta$ ). If the EU is rational player, this equilibrium is naturally chosen because of  $\beta > \delta$ . At this time, establishing credibility of the U.S. is very important. According to Lisa Martin, "The United States would have to be willing to bear high short-term costs if player B does not respond to this threat. To make the threat credible, the United States would need to find a mechanism to make its defections automatic. This would involve a significant surrender of control over decision-making and seems an unlikely course of action".<sup>20</sup>

Secondly, the EU could choose second way in accordance with tactical issue linkage. This linkage could take the form of either threat or temptation such as side payments. By linking issues, the U.S. can either decrease the EU payoff with unilateral threat (disadvantage in the long-term) or increase the payoff for mutual cooperation (side payments). As a result, dominant player the U.S. has a most favourable outcome by threat or side payment to junior partner, while the EU has a second most favourable outcome eschewing the worst payoff.

#### **4.1 US's Strategy for Credibility: Side payments rather than threat**

On September 19 1997, KEDO and EAEC (European Atomic Energy Community),

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<sup>20</sup> Lisa L. Martin, (1993), p. 104

an organization within European Union, concluded accession agreement, calling for the Community's representation on the KEDO Executive Board for a term coincide with substantial and sustained support to KEDO.

This is the first involvement to East Asia by the EU since the 19<sup>th</sup>. As far as influence and interests on the Korean Peninsula are concerned, the EU (including EC) traditionally has not been considered to be a crucial player and hardly gets known at all despite of economic importance as a commercial trade partner. The major one reason of all, for as long as the cold war lasted, is that foreign policies and defence coordination among European states have been mainly focused on the Euro-Atlantic relation in the framework of the NAC (North Atlantic Treaty) not on East Asia since 1949.

For a long time, therefore, the EU has been following an approach of 'quiet diplomacy' seeking to concentrate on the Korean Peninsula policies particularly North Korea, and initiatives that do necessarily centre about security issues.<sup>21</sup> Faced with this situation, why did the EU suddenly participate in KEDO? Moreover, despite the EU was not included in KEDO, so called 'Original Members - US, Japan and South Korea' in 1995, they lately decided, that is, "Community's intention to contribute to KEDO ECU 15 million annually for five years as the Executive Board of KEDO" in 1997.<sup>22</sup>

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<sup>21</sup> On 'Quiet diplomacy' of the EU's to the Korean Peninsula, Axel Berkofsky, "EU's Policy Towards the DPRK-Engagement or Standstill?" in *Briefing Paper of The European Institute for Asian Studies (EISA)*, Brussels, 2003. pp. 3-4.

<sup>22</sup> "Agreement on terms and conditions of the accession of the European Atomic Energy Community to

First of all, it could be assumed that the U.S. would threaten to act non-seduction (disadvantage) in the short term as suasion game. Although most of side payment promises are behind a veil of negotiation process and not transparent, there have been indirectly several suspicions in case of the EU accession to KEDO. Practically, Michel E. Smith insists, "The EU involvement in KEDO also strongly depended on the U.S. **lobbying the Commission**, which in turn helped to engineer intra-EU support for new organization"<sup>23</sup>, which is based on interview with officials from the US mission to the EU, the Commission and COREPER. Furthermore, he asserts that France and the UK rival wanted to be the member of the Executive Board of the KEDO as well as the EU and this debate was heated. After all, the parties agreed to have the EC represent the EU on KEDO's board by virtue of its Euratom competencies.<sup>24</sup>

In fact, since the end of the Cold War, many nuclear companies of West Europe have entered into new international market East Asia in particular such as China, Taiwan, and Indonesia, and this trend depends heavily on financial support of the Euratom(EU). The financial ceiling of the Euratom was raised by various amendments of Council Decision on 1990 increased it by 1000 million ECU to 4000 million.<sup>25</sup> On the basis of this support,

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the Korean Peninsula Energy Development Organization", Brussels, 30 July 1997, p. 2

<sup>23</sup> Michael E. Smith, *Europe's Foreign and Security Policy*, (Cambridge: Cambridge Press, 2004), p. 203

<sup>24</sup> Michael E. Smith, 2004, p218

<sup>25</sup> Commission of the European Communities, "Proposal for a Council Decision amending Decision 77/271Euratom on the implementation of Decision 77/270Euratom empowering the Commission to

France's CEA (Commissariat à l'Énergie Atomique), Spain's Equipos Nucleares S.A, and Germany's KSB AG entered into Asia nuclear market. In other words, the EU as well as European nuclear companies evaluated highly the Asia market which could replace the shrinking European nuclear market. Thus the EU may consider the proposal of the US.

This suspicion is much more assured by the European Parliaments' reports. On February 26 1999, the European Parliament announced a *Report on EU-KEDO Agreement*<sup>26</sup> (Hereafter, 'European Parliament Report'). In the section of "Does the EU need to be need?" in the text, Parliament asked to the Commission, "Are there benefits to KEDO from the EU being involved? And could the EU help to solve some of KEDO's problem?" In this paper, Parliament especially approved at article XXIX, "the European Commission points out that membership of KEDO will **ensure that EU companies obtain a share of the contracts** associated with the project"<sup>27</sup>, and then they states that some contracts had been awarded already, asking to the Commission concretely "What are these contracts?"

At article XXX, furthermore, the Parliament pressed the Commission to assume responsibility for the action, citing the Commission "although the exact scope and value of

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issue Euratom loans for the purpose of contributing to the financing of nuclear power stations", Brussels, 6.11.2002 COM(2002) 457 final

<sup>26</sup> The title is officially "European Parliament Report on the Agreement on terms and conditions of the Accession of the European Atomic Energy Community to the Korean Peninsula Energy Development Organization (KEDO) (C4-0483/97)" by Leo Tindemans (Rapporteur), 26 February 1999. Hereafter, this article calls it "European Parliament Report".

<sup>27</sup> *European Parliament Report* p.13

these contract are still to be defined, they are expected to have a value **several times higher than total Euratom contribution**", and then Parliament conceal the Commission estimated that the value of the contracts could be as high as US \$ 1bn. And then on "Opinion" paper attached to "European Parliament Report" notes **European companies would be entitled to be for a range of contracts associated with the reactor construction project** as well as would contribute to KEDO ECU 15 million for five years.<sup>28</sup>

This side payment already was mentioned by the U.S. high official, although this was an indirect rhetoric. That is, on 27 August 1998, the U.S. state department requests that the EU provide further funding to help pay for the construction of the two light-water reactors at Sinpo. And then it is expected that the EU will want assurances that European companies will receive contracts to build the reactors.<sup>29</sup>

In this sense, the dominant power U.S.'s seduction strategy towards the EU was based on the side payment by a kind of construction contracts promises on project rather than threats. And it also assumes that this side payment was promised by the U.S. lobbying the Commission as Michel E. Smith referred, the promises have a possibility that EU companies would obtain a share of the contracts associated with KEDO project as shown Parliament Report. Moreover, from the first time, the EU expected that the project value size

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<sup>28</sup> Glyn Ford (Draftsman), "Opinion" on "European Parliament Report on the Agreement on terms and conditions of the Accession of the European Atomic Energy Community to the Korean Peninsula Energy Development Organization (KEDO) (C4-0483/97)", 26 June 1998, p. 26

<sup>29</sup> Mark Hibbs, *Nucleonics Week*, 27 August 1998, pp.8-9

would be higher than its contribution value to KEDO total ECU 75 million. The reason, “Why France and the UK rival wanted to be the member of the Executive Board of the KEDO”, is assumed that they wanted to get some initiatives to construct the nuclear project of KEDO as the European only nuclear power.

#### **4.2 The U.S.’s credibility dilemma: Regime Change**

If the U.S. adopted a linkage strategy by informal side payment regarding the EU’s participating in KEDO, at the time they could face a credible problem. Carrying out promises – obtain several times higher value than total EU contribution size - are costly because they will be made at the expense of the U.S. companies and other members’ firms. Practically, construction for LWR (the light-water reactor) project proceeded on the schedule prescribed in the Turnkey Contract with Korea Electric Power Corporation (KEPCO). Moreover, technical standards such as storage and maintenance of nuclear steam Supply system and turbine/generator components were completed in accordance with the nuclear quality assurance requirements of American Society of Mechanical Engineers standard NQA-1.<sup>30</sup> Therefore, the U.S. needed to make a credible commitment to linkage and has consequently tried to change regime for solving this problems.

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<sup>30</sup> *KEDO Annual Report*, New York, December 31, 2004 pp. 6-8

Firstly, there was a tendency of the U.S. to eliminate the KEDO. The President George W. Bush has tried to abandonment of KEDO, since New Administration has inaugurated in January 2001. In 2002, the Administration became aware that North Korea was developing a uranium enrichment program for nuclear weapons purposes. When the United States - North Korea direct dialogue resumed in October 2002, the uranium enrichment program was important on the U.S. agenda.<sup>31</sup> On October 3-5, 2002, the Assistant Secretary of State for East Asian and Pacific Affairs, James Kelly, set off for two days of talks in Pyongyang with his North Korean counterparts. North Korean officials acknowledged to a U.S. delegation, headed by James A. Kelly, the existence of the uranium enrichment program. Such a program violated North Korea's obligations under the NPT and its commitments in the 1992 North-South Denuclearization Declaration and the 1994 Agreed Framework. The U.S. stated that North Korea would have to terminate the program before any further progress could be made in U.S.- North Korea relations. The U.S. also made clear that if this program were verifiably eliminated, the U.S. would be prepared to work with North Korea on the development of a fundamentally new relationship. In November 2002, the member countries of KEDO's Executive Board agreed to suspend heavy fuel oil shipments to North Korea pending a resolution of the nuclear dispute.<sup>32</sup>

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<sup>31</sup> *U.S Department of State Reports*, <http://www.state.gov/r/pa/ei/bgn/2792.htm>

<sup>32</sup> In response to the U.S., North Korea terminated the freeze on its existing plutonium-based nuclear facilities, expelled IAEA inspectors and removed seals and monitoring equipment, quit the NPT, and resumed reprocessing of spent nuclear fuel to extract plutonium for weapons purposes in late 2002



Secondly, there was a tendency to change the character of the regime into a regional security level. KEDO was as a global regime including Non-Asia countries such as the EU, Australia, Canada, and Argentina. However, President Bush has made clear that the U.S. has no intention to invade North Korea and has also stressed that the U.S. seeks a peaceful end to North Korea's nuclear program in cooperation with **North Korea's neighbors**, who are most concerned with the threat to **regional stability and security** it poses. That is to say, it means that long distance power such as the EU has not the seat for new regional regime board. Beginning in early 2003, the U.S. proposed multilateral talks among the most concerned parties aimed at reaching a settlement through diplomatic means. North Korea initially opposed such a process, maintaining that the nuclear dispute was purely a bilateral matter between the U.S. and North Korea. However, under pressure from its neighbors and with the active involvement of China, North Korea agreed to three-party talks with China and the U.S. in Beijing in April 2003 and to six-party talks with the U.S., China, South Korea, Japan and Russia in August 2003, also in Beijing without the EU as well as previous KEDO members<sup>33</sup>.

From this perspective, change of regime in suasion game is valuable efforts to solve the credible commitment to linkage. In case of the KEDO, the global regime was changed to

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and early 2003. North Korea subsequently announced that it was taking these steps to provide itself with a deterrent force in the face of U.S. threats and the U.S.'s "hostile policy."

<sup>33</sup> New Zealand(1995), Australia(1995), Canada(1995), Indonesia(1996), Chile(1996), Argentina(1996), Poland(1997), Czech Republic(1999), Uzbekistan(2000), KEDO Article V (b)

regional regime six-party talk. As the result of this change, the EU's towards the East Asia strategy also has faced to be transformed because new regime - without the EU - developed by dominant power the U.S. has been estimated as alone regional level regime. At the same time, the U.S.'s credibility dilemma to the EU has solved.

## **5. Conclusion**

This article has depicted emerging of KEDO and the EU's foreign policy to KEDO in perspective of 'Prisoner's Dilemma' and 'Suasion Game' based on players' rational choice assumptions beyond Realism and Institutionalism debates.

In this empirical case, we may conclude the follow findings.

Firstly, the emerging of KEDO was a typical result of Collaboration game. Tensions of the U.S. and North Korea had deepened increasingly high on the Korean Peninsula as the confrontation of nuclear strategy since in the early 1990s. North Korea's strategy refused to allow inspectors access to its nuclear sites and would plan to withdraw from NPT while the U.S.'s goal in the Korea Peninsula was to bring North Korea back into full compliance with its NPT obligations. To avoid this sub-optimal equilibrium, they eventually created KEDO as new equilibrium. In this point, communications and contact channels (e.g. Carter's visit to Pyongyang) of the U.S-North Korea although they have not formal diplomatic relations, were

very important factor to make a new equilibrium.

Secondly, an influence and interests of the EU on the Korean Peninsula states traditionally had not been considered as crucial partners. For a long run, the EU's strategy has been following a frame of 'quiet diplomacy' on the Korean Peninsula particularly North Korea. Therefore, there could be questioned why the EU suddenly participated in KEDO. In 'Suasion Game' situation, the dominant power U.S. may lobby and promise providing side payment to the EU. To eschew the worst outcome, the EU chooses to participate in KEDO under tactical issue linkage because the U.S. could either decrease the EU payoff with unilateral threat (give disadvantage in the long-term) or increase the payoff for mutual cooperation (e.g. side payments). As a consequence, the U.S. takes a most preferred payoff by lobbying and side payments to junior partner, while the EU takes a second favourable payoff avoiding worst outcome.

Finally, regarding informal side payments to the EU, the U.S. could face a credible problem because it is difficult to persuade to junior partner, if the credibility is unbelievable. Moreover, side payments could be completed at the expense of US companies and other members' firms in KEDO project. Hence, the U.S. new Administration has chosen to change the character of the regime into a regional security level. Of course, the change of regime could be given risen by various causalities such as changes of power position, interests and regime structure. For the U.S. however, change of regime in suasion game is certainly

valuable efforts to solve the credible commitment to linkage.

Furthermore, this transformation has led to a change of regime character in East Asia environment - from global regime to regional regime -, stressing the role of neighbours on the Korea Peninsula. As the EU is excluded in new regime six-party talks, therefore, the EU's strategy in East Asia is faced with conceiving more favoured new one in response to new regime.

### **Bibliography**

Berkofsky, Axel "EU's Policy Towards the DPRK-Engagement or Standstill?" in *Briefing Paper of The European Institute for Asian Studies (EISA)*, Brussels, 2003

Brams Steven J, *Game Theory and Politics*, Mineola: Dover Publication, 2003

Ford, Glyn, "Opinion" on "European Parliament Report on the Agreement on terms and conditions of the Accession of the European Atomic Energy Community to the Korean Peninsula Energy Development Organization (KEDO) (C4-0483/97)", 26 June 1998

Commission of the European Communities, "Proposal for a Council Decision amending Decision 77/271Euratom on the implementation of Decision 77/270Euratom empowering the Commission to issue Euratom loans for the purpose of contributing to the financing of nuclear power stations", Brussels, 6.11.2002 COM(2002) 457 final

Hibbs, Mark *Nucleonics Week*, 27 August 1998, pp.8-9

Krasner, Stephen D. "Structural causes and regimes consequences: regimes as intervening variables" in *International Regimes* by Stephen D. Krasner (ed), (Ithaca and London: Cornell University Press, 1983)

Keohane, Robert O., *After Hegemony*, (First Princeton Classic Edition), (Princeton; Princeton Univ. Press, 2005),

Keohane, Robert O. and Lisa L. Martin, "The Promise of Institutional Theory", *International Security*, Vol. 20, No. 1, Summer 1995,

Mearsheimer, John J., "The False Promise of International Institutions", *International Security*, Vol. 19, Issue 3, Winter, 1994-1995

Puchala, Donald J. and Raymond F. Hopkins, "International Regimes: lessons from inductive analysis" in *International Regimes* by Stephen D. Krasner(ed), (Ithaca and London: Cornell University Press, 1983)

Rittberger, Volker et als. "Theories of International Regimes", (Cambridge: Cambridge University Press, 1997)

Smith, Michael E., *Europe's Foreign and Security Policy*, (Cambridge: Cambridge Press, 2004)

Stein, Arthur "Coordination and Collaboration: Regimes in an Anarchic World", in *Neorealism and Neoliberalism – The Contemporary Debate*, by David A. Baldwin (ed.) (New York; Columbia Univ. Press, 1993)

Tindemans, Leo "European Parliament Report on the Agreement on terms and conditions of the Accession of the European Atomic Energy Community to the Korean Peninsula Energy Development Organization (KEDO) (C4-0483/97)", 26 February 1999.

Waltz, Kenneth N. *Theory of International Politics*, (New York: McGraw-Hill, 1979)

Young, Oran R. "Regime dynamics: the rise and fall of international regimes" in *International Regimes* by Stephan D. Krasner(ed), (Ithaca and London: Cornell University Press, 1983)

Martin, Lisa L. "The Rational State Choice of Multilateralism" in *Multilateralism Matters* by John Gerard Ruggie (ed) (New York: Columbia University 1993)

"Agreement on terms and conditions of the accession of the European Atomic Energy Community to the Korean Peninsula Energy Development Organization", Brussels, 30 July 1997

"Agreed Framework between the United States of America and the Democratic People's Republic of Korea", October 21, 1994

*KEDO Annual Report*, New York, December 31, 2004

*Reports on America Senate* May 24, 1994

*UN Resolution 825,*

<http://ods-dds-ny.un.org/doc/UNDOC/GEN/N93/280/49/IMG/N9328049.pdf?OpenElement>

*U.S Department of State Reports,* <http://www.state.gov/r/pa/ei/bgn/2792.htm>

*U.S. Defense Department Report.* May 1994

동아일보(*Donga-Ilbo*), February 20, 1992

<http://www.globalsecurity.org>

<http://www.kedo.org>