

# NORTH KOREA, IAEA SPECIAL INSPECTIONS, AND THE FUTURE OF THE NONPROLIFERATION REGIME

by Matthias Dembinski

*Dr. Matthias Dembinski is a Senior Research Fellow at the Research Institute for International Affairs (Stiftung Wissenschaft und Politik) in Ebenhausen, Germany. Prior to joining that Institute, he worked with the Nuclear Nonproliferation Project at the Peace Research Institute in Frankfurt. His most recent publications include **Amerikanische Weltpolitik nach dem Ende des Ost-West-Konflikts** (edited with Peter Rudolf and Jurgen Wilzewski, 1994) and **NATO and Nonproliferation: A Critical Appraisal** (with Harald Muller and Alexander Kelle, 1994).*

On October 21, 1994, the United States and the Democratic People's Republic of Korea (DPRK) signed the "Agreed Framework between the United States of America and the Democratic People's Republic of Korea," outlining a formula that might eventually solve one of the gravest nuclear crisis since the end of the East-West conflict.

Since 1987, the possibility of a nuclear weapon program in North Korea has troubled experts and politicians. The crisis was dramatically aggravated in the spring of 1993 when the North Korean leadership refused to open its nuclear plants to an inspection and threatened to withdraw from the Non-Proliferation Treaty (NPT). In the spring of 1994, even the dire prospect of war loomed over the peninsula.

In the agreed framework, both sides consented to enter a process of carefully orchestrated steps which will, if implemented successfully,

result in the dismantling of North Korea's proliferation-prone fuel cycle, based on graphite-moderated reactors. In exchange, the DPRK will receive modern light-water reactors, compensation for lost energy in the form of heavy oil, and U.S. diplomatic recognition. Essentially, the agreement is based on a bargain whereby the DPRK is swapping its nuclear option for an American promise to do its utmost to stabilize one of the world's most totalitarian regimes.

Whether both sides are willing and capable of fulfilling their part of this bargain remains to be seen. A whole panoply of technical and financial questions still need to be solved under virtually unpredictable political circumstances.

Evaluating the agreed framework, its direct benefits, and its risks for the region is difficult enough. However, regional security is not the only issue at stake. The dispute regarding the North Korean nuclear pro-

gram is also the first test case for the reformed nonproliferation regime.

The crisis offers the opportunity to evaluate two sections of the reformed regime. The first issue is the ability of the International Atomic Energy Agency (IAEA) to discover a military nuclear program or the concealed production of fissile material in non-nuclear weapon states. It is undisputed that considerable loopholes in the safeguards system of the IAEA were discovered with the unveiling of the secret nuclear program in Iraq. In order to regain confidence, the IAEA undertook considerable reforms in 1990 to correct these deficiencies. However, the reforms rest on an uncertain legal basis and are politically disputed. In particular, the right of the IAEA to undertake special inspections has to be defined over time. For the prospect of expanding this convention, the attitude of the IAEA vis-à-vis North Korea sets a precedent.

The second issue is the ability of the states under the regime to punish a breach of contract. The traditional nonproliferation regime has lacked effective sanctions. This loophole was considered in the course of the reform. On January 31, 1992, the Security Council confirmed its competence when it declared that the proliferation of weapons of mass destruction could present a violation of international peace and security. However, both the appropriateness of sanctions and the practical meaning of the Security Council's new role need to be tested. Again, North Korea can be viewed as a first test case.

The outcome of this test will have a lasting effect on the future development of the nonproliferation regime. Accordingly, an assessment of the agreed framework needs to take these long-term effects into account.

#### **NORTH KOREA: A FIRST TEST-CASE FOR THE REFORMED IAEA SAFEGUARDS SYSTEM**

##### **Shortcomings of the Traditional Safeguards System**

IAEA safeguards in non-nuclear weapon states party to the NPT (INFCIRC/153 safeguards) rely heavily on material accountancy. Traditionally, they have been restricted to declared nuclear facilities.<sup>1</sup> This system has been quite successful in preventing the diversion of fissile material from the declared stock.<sup>2</sup> However, it is bound to fail if a state manages to obtain some undeclared source material, and succeeds either in secretly processing this material in declared facilities (evasion scenario) or in enriching uranium or respectively pro-

ducing and separating plutonium in undeclared, secret facilities (parallel program scenario). For many states, the acquisition of unrecorded source material should not be an insurmountable difficulty. Safeguards under INFCIRC/153 cover nuclear material only at the processing stage when the material can be enriched and processed into fuel (uranium hexafluoride and uranium oxide, respectively). Thus, the entire process from the mining of uranium ore to the production of uranium ore concentrate (yellow-cake) is not subject to surveillance.

This serious loophole in the IAEA safeguards system can only be explained by examining the origin of INFCIRC/153. The NPT was primarily aimed at the industrial nations in Europe and East Asia. On the one hand, those countries, notably Germany, rejected an overly restrictive system. On the other hand, no one assumed that these states would secretly produce nuclear weapons.<sup>3</sup> In this controversy, the United States managed to add Paragraphs 73 and 77, which give the IAEA the right to undertake special inspections. Nevertheless, special inspections were never actually used.<sup>4</sup>

The resistance of the West European states to an overly vigilant and strong control agency produced a series of further restrictions on the reach of the Vienna controllers. These limitations are partly tied to the safeguards agreement and have resulted from supplementary practices.<sup>5</sup> Probably the most meaningful consequence of these restrictive provisions is that over time a practice of cursory inspections of the operators of nuclear plants in member states evolved at the IAEA. The inspectors often limited themselves

to the routine implementation of their missions and gave up searching for indications of an infringement of the treaty, or following up on obvious infringements.

##### **Status of the Reforms**

The program to reform safeguards aims at improving the IAEA's ability to detect undeclared nuclear activities. It focuses on the activation of the special inspection rights and, simultaneously the development of additional information sources.

In February 1991, when Director General Hans Blix put the issue of special inspections on the agenda during the meeting of the Board of Governors of the IAEA, his request was resisted by a group of Third World States.<sup>6</sup> It took another year before a resolution passed confirming the right to conduct special inspections. Nevertheless, the circumstances under which the resolution was adopted must be interpreted as a sure indication that also in 1992 no more than a compromise was reached.<sup>7</sup> While the Director General believes he has the right to comprehensive special inspections at his disposal, the Board of Governors has not explicitly confirmed this right.<sup>8</sup> Thus, a convention in the use of special inspections will have to develop over time. Here the attitude toward North Korea sets a precedent.

This ambivalence also overshadows the problem of developing and using additional information.<sup>9</sup> The IAEA has created the organizational requirements necessary to receive intelligence information. However, standard procedures still need to be developed in this area. Also, no settlement has yet been reached on the comprehensive mandatory notification regarding the trade of nuclear material and goods. More

transparency in this area might allow the recognition of a procurement pattern. Currently, the European Union (EU) and several individual countries inform the IAEA about nuclear transfers on a voluntary basis.<sup>10</sup>

Additional reform steps are already being prepared by the Director General. Lasting improvements to the traditional safeguards system can be expected from a project called "Programme 93 + 2" which is expected to be presented to the Board of Governors for approval in spring 1995.<sup>11</sup> One element of "Programme 93+2" is the development of methods for the detection of radioactive substances in the environment [environmental monitoring techniques], which could provide information about undeclared nuclear activities. The IAEA and several member states expect a substantial strengthening of the verification regime from these methods. Analysis from a technical consultant group and the first field trials demonstrated that such an instrument is suitable to indicate hidden nuclear activities over a short range. As far as the detection of secret nuclear activities over a long distance, for example in an entire state, is concerned, the reliability of this technique must still be investigated.<sup>12</sup> The first field trials raised the expectation that these techniques will be able to indicate the operation of a concealed reactor or a reprocessing plant over the long range.<sup>13</sup>

### THE TEST: IAEA INSPECTIONS IN NORTH KOREA

North Korea is the first test case for the ability of the IAEA to gather information on undeclared nuclear activities and to conduct special in-

spections to follow up on indications of a breach of the safeguards agreement.

North Korea's nuclear program dates back to the 1950s. It was probably influenced by the experience of the atomic threat from the United States during the Korean War. Although outside observers agree that the nuclear threat has been fading since then, the nuclear fear has been kept alive through the permanent exaggerated presentation of alleged American nuclear capabilities and aggressive, imperialistic designs.

With initial assistance from Russia and China in basic nuclear technology, the DPRK succeeded in laying the foundations for an independent nuclear program.<sup>14</sup> Between 1980 and 1987, a graphite-moderated research reactor running on natural uranium with a capacity of 30 megawatts thermal (MWt) was built, using indigenous resources only.

Uranium processing plants, a fuel fabrication plant, and a rather large reprocessing facility complete the fuel cycle. The construction of two power reactors, the first with 150 to 200 MWt in Yongbyon and the second with a capacity of 600 MWt near Taechon is under way. The smaller reactor, to be completed in 1995, will produce approximately 50 kilograms of plutonium per year,<sup>15</sup> enough for eight to 10 implosion-type bombs.

The various perceptions on the status of North Korea's nuclear weapon program are based on different estimates of the research reactor's operational life. According to North Korea's declarations, the reactor has been run with many shorter interruptions since the beginning of 1987, and the first core was only discharged in 1994. By

contrast, American governmental authorities presume that the reactor was shut down in 1989 and that the entire core was possibly exchanged. North Korea could have gained 15 kilograms of plutonium, enough to build two bombs.<sup>16</sup>

North Korea acceded to the NPT in 1985 under pressure from the Soviet Union, but delayed the conclusion of a safeguards agreement at that time.<sup>17</sup> The DPRK government eventually signed the agreement in December 1991, after the United States had declared that the last 150 nuclear weapons would be removed soon from the south of the peninsula and after Japan had conditioned economic assistance upon the signing of a safeguards agreement.

Relations between North and South Korea improved as well, culminating in December 1992 with the signing of an agreement between the two Korean states to ban nuclear weapons on the peninsula. Enrichment and reprocessing plants would have been forbidden. North Korea ratified the agreement with the IAEA, but the conclusion of bilateral talks failed because the North constantly added new demands.<sup>18</sup> Nevertheless, South Korea and the United States cancelled their "Team Spirit" military training maneuvers in 1992.

On May 4, 1992, North Korea provided an allegedly complete list of its nuclear inventory, including the plants in which the material should have been contained. Thereupon, *ad hoc* inspections began. The IAEA initially was to investigate the accuracy and completeness of the North Korean information.<sup>19</sup> Six inspections took place prior to February 1993. They confirmed the existence of the declared North Ko-

rean plants but also created suspicion that the existing nuclear material was not completely registered. Specifically, the analysis from the plutonium samples indicated that in 1989, 1990, and 1991 plutonium had been gained. This contradicted North Korea's statement that in 1990 it had only removed a defective fuel rod from the reactor and separated 90 grams of plutonium on a trial basis.<sup>20</sup>

In order to clear up this inconsistency, the IAEA tried to obtain access to two undeclared storage areas, both located in the Yongbyon nuclear complex where waste from reprocessing was kept. The North Koreans had concealed the two plants from the inspectors, but the United States had informed the IAEA of their existence.<sup>21</sup> An analysis of the residues could have provided information about how much plutonium North Korea has at its disposal.

After an informal request for inspection of the storage sites had been denied by the DPRK, Director General Hans Blix formally requested a special inspection in accordance with Article 73 (b) (INFCIRC/153) on February 9, 1993. On February 25, the IAEA's Board of Governors latched onto this request. In response, North Korea declared its withdrawal from the NPT on March 12. On April 1, the Board of Governors declared that North Korea was not adhering to the safeguards agreement; it also stated that the IAEA could no longer guarantee that fissionable material was not being diverted. The IAEA then turned the case over to the U.N. Security Council as provided for in Article XII C of the IAEA statute.

## **NORTH KOREA TESTS THE ENFORCEABILITY OF THE NONPROLIFERATION NORM**

### **Sanctions and the Traditional Regime**

This was the first time in its history that the IAEA had made such a declaration and had appealed to the Security Council. As became apparent in the coming month, the Council was ill-prepared to handle the situation and to play its role as the enforcer of the nonproliferation regime.

This is hardly surprising. To what degree and with what means the Security Council would react to such a contingency was never clearly spelled out until 1992 for two reasons. First, the East-West confrontation blocked the Council. Second, whether the regime should have forceful sanction instruments at its disposal was disputed.<sup>22</sup>

Two questions deserve attention: What actions would infringe upon the safeguards agreement, and, second, can a state leave the NPT at any time, as provided in Article X?<sup>23</sup> Since the NPT allows the accumulation of plutonium or highly-enriched uranium and most of the groundwork for a bomb program, the question remains whether a member state could obtain all the necessary material and equipment for a nuclear force, exercise its right of withdrawal, and establish itself quickly as a nuclear weapon state.<sup>24</sup>

In the early 1970s, a withdrawal without specific grounds by one of the member states would have been accepted without opposition. However, the general interpretation regarding the right to denounce the NPT and to obtain nuclear weapons

is changing. Meanwhile, more and more members of the international community appear to be willing to deal with restrictions on national sovereignty rights in this regard. This shift was expressed in the declaration of the Security Council on January 31, 1992. The Council declared that the proliferation of all weapons of mass destruction constitutes a threat to international peace and security.<sup>25</sup> It can be concluded that in the case of a withdrawal from the NPT, the Council would also examine the extent to which this step presents a danger to international peace and security. What actions the Security Council adopts would be determined by the extent it is convinced of the credibility of the reasons for withdrawal, and whether it recognizes a threat to peace resulting from the withdrawal.<sup>26</sup>

With this declaration the Security Council entered uncharted legal grounds and a controversial new political arena. On the one hand, this declaration represents progress along the path to a consensual sanctions mechanism. On the other hand, the declaration raises delicate issues regarding political order. These will not be discussed at length here; yet, they should be noted. For example, the authority of the Council to limit the right of individual self defense is questionable, as long as the five permanent members of the Security Council (P-5) are still in the possession of several thousand atomic warheads. Therefore, sanctions can legitimately be applied only after all attempts to bring about compliance by negotiations and inducements have failed.<sup>27</sup>

A second question concerns political practice. The existence of a legal framework for action does not by itself create the political will to

act. Therefore, it becomes important to analyze the political interests and motivations of the P-5. Can it be assumed that the P-5 act as guardians of the regime and as disinterested, neutral enforcers of the nonproliferation norm? Or are they primarily pursuing their national interests? Even if the second hypothesis is correct, the Security Council might be capable of enforcing nonproliferation in individual cases. It can be assumed that the P-5 in general share the interest of preventing the further spread of nuclear weapons. However, nonproliferation is just one goal amidst others on their national security agendas. The Council would be able to act effectively in cases where all its permanent members place nonproliferation above their foreign policy interests. In other cases, the Security Council would likely remain ineffective.

### **NORTH KOREA AND SANCTIONS?**

After the IAEA had submitted the case to the Security Council in April 1993, the Council invited Director General Blix to report on the crisis. Its members, however, could not reach a clear decision about North Korea because of Chinese pressure not to mention the imposition of sanctions. Instead, two rounds of negotiations between North Korea and the United States, as well as North Korea and the IAEA, were initiated, and North Korea, according to its legal interpretation, suspended its withdrawal from the NPT.

The dialogue with the IAEA progressed very slowly with many confrontations. The North Korean negotiators dragged their feet whenever they could thereby increasing the pressure on the United States to

reach a solution in their talks.<sup>28</sup>

The U.S.-North Korean talks progressed equally tediously at the beginning; however, the possibility of a compromise emerged early on. North Korea demanded diplomatic recognition from the United States, as well as economic assistance and technological support in the civilian use of nuclear energy, as a precondition for its willingness to allow inspections of its nuclear plants. The Clinton administration hinted at the possibility of economic assistance and diplomatic recognition but demanded that North Korea freeze its nuclear program as a prerequisite for continuing the talks.<sup>29</sup>

The further enunciation of a U.S. position regarding North Korea's nuclear ambitions was disputed within the Clinton administration.<sup>30</sup> The debate revolved around North Korea's nuclear capabilities and, more generally, the appropriate strategy for the transformation of the communist regime. The U.S. State Department argued that it was improbable that North Korea had a bomb at its disposal. It was in America's interest to facilitate the inevitable change of the regime. If the nuclear program could be frozen, time and a regime change would favor the United States. The U.S. Department of Defense, the Joint Chiefs of Staff, and the Central Intelligence Agency (CIA) argued that North Korea already had plutonium for approximately two bombs at its disposal. The regime could not survive a political liberalization, and was not at all interested in a *détente*. Pyongyang would only become more incalculable and more dangerous with the increase of its nuclear potential. Consequently, time was working against the United States and its allies.

In late fall 1993, the State Department gained the upper hand and the Clinton administration decided to take a more flexible approach.<sup>31</sup> The administration developed a strategy of offering limited rewards in exchange for limited concessions on the verification question. Further concessions, including diplomatic recognition, the delivery of light-water reactors, and economic assistance were placed on the horizon.

A temporary rapprochement succeeded on this basis, enabling a resumption of the talks between North Korea and the IAEA. Nevertheless, an American ultimatum, as well as clear military signals, was needed to force the resumption of safeguards.<sup>32</sup> A six member IAEA team eventually arrived on March 1, 1994, in North Korea, after several complications and visa problems had been solved. However, during the course of the inspections, the IAEA was denied the previously negotiated access rights. Moreover, the Vienna inspectors determined that a seal, securing a section of the reprocessing plant, had been broken. Thereupon, the Board of Governors determined once again on March 21, 1994, that the IAEA was no longer in a position to assure that no fissionable material was being diverted and turned the matter over to the Security Council.<sup>33</sup>

The North Korean government was not impressed by this step. It even escalated the crisis by discharging the reactor before IAEA inspectors had arrived. With this step, the DPRK not only made the reconstruction of the history of its nuclear program more difficult, it also gained material containing plutonium for three to five bombs. By this time, the State Department had accepted the fact that the foundation

for a policy of moderation had eroded. The Clinton administration was thrown back to the alternative of either forcing North Korea to alter its behavior, thereby risking a military escalation of the crisis, or tolerating its nuclear ambitions.

However, the imposition of sanctions remained controversial. China was sending contradictory signals. On the one hand, Chinese President, Jiang Zemin assured the North Korean General Chief of Staff of the further support of his country and clearly rejected sanctions on June 7, 1994.<sup>34</sup> On the other hand, there were signals indicating stronger Chinese pressure on the DPRK to come to terms with the United States. The Chinese delegation did not vote against a decision of the IAEA Board of Governors to exempt North Korea from the technical support program of the Vienna organization. While the exclusion was only symbolic in nature, for the first time an international group had voted for sanctions against North Korea with a large majority. Twenty-eight states voted for the resolution, only Libya voted against it, and four states (China, India, Lebanon, and Syria) were undecided.<sup>35</sup>

Parallel to the Security Council's efforts, the United States began forming a coalition of states that would impose sanctions without formal authorization from the Council. The South Korean and Japanese governments, however, insisted on gradual actions due to the fragility of domestic support. A blockade of money transfers from the North Korean community in Japan, therefore, was to follow only in a later phase. Russia joined this "coalition of the willing" after the United States had agreed in principle to the Russian request for an international con-

ference to solve the crisis.<sup>36</sup>

North Korea reacted to the imposition of symbolic sanctions by the IAEA Board of Governors by further escalating the crisis. It declared its immediate withdrawal from the IAEA on June 13, 1994, and threatened to expel all inspectors. The climax of the crisis had been reached.

It is unknown whether a resolution in the Security Council would have succeeded. Instead, former U.S. President Jimmy Carter's mission in mid-June brought about an easing of tensions. Despite the death of Kim Il-Sung and the allegedly unresolved power struggle in Pyongyang, the subsequent high-level dialogue with the United States resulted in the October 21 agreed framework.

The agreement contains three phases. During the first phase, North Korea will remain a party to the NPT, restart the dialogue with the South, and freeze its nuclear program. Specifically, Pyongyang agrees not to refuel the research reactor and not to reprocess the approximately 8,000 fuel rods it has removed from the reactor. The reprocessing plant will be sealed, and construction work at the two power reactors stopped. IAEA inspectors are to monitor the freeze. In return, the United States will form a consortium under its leadership, which will finance and supply two large light-water reactors worth \$4 billion. To compensate for energy that allegedly would have been produced by the North Korean reactors prior to the completion of the light-water reactors, the consortium will provide the DPRK with up to 500,000 tons of heavy oil annually. In addition, the United States has agreed to establish diplomatic relations,

offer security assurances, and reduce barriers to trade.

In a second phase, scheduled to begin approximately five years after the signing of the agreement, North Korea will allow inspections of the two waste sites and will ship the 8,000 fuel rods abroad. Subsequent to the IAEA's reconstruction of North Korea's nuclear history, key nuclear components for the light-water reactors will be delivered. After the light-water reactors are completed, the DPRK will in a third phase dismantle its graphite-moderated reactors, its reprocessing plant and associated facilities.

## LESSONS OF THE CRISIS

If viewed in isolation, the agreed framework might be justifiable. However, the agreement contains many peculiar facets and at least one harmful aspect: The agreement puts the United States and the other members of the consortium in the politically disputable position of helping to stabilize a repressive and unacceptable regime.

The many peculiarities of the agreement include the following:

- The United States is leading the consortium and is setting the agenda, but others (especially Japan and South Korea) are carrying most of the financial burden.

- President Clinton has promised to step in if the consortium fails to deliver the promised goods, pending congressional approval. Spending American taxpayers' money on rewarding North Korea, however, will be politically difficult for Congress.<sup>37</sup>

- The DPRK is so politically unstable that planning the construction of nuclear reactors from scratch is likely to prove very difficult.

• The North Korean power grid is not suited for the transportation of the amounts of electricity produced by the light-water reactors.<sup>38</sup> Transmission lines need to be upgraded, probably at the expense of South Korea.

• The agreement will make North Korea's nuclear energy program dependent on the delivery of spare parts and enriched fuel from abroad, probably from its main adversary, the Republic of Korea. Therefore, the agreement directly contradicts the idea of self-sufficiency, the paramount dogma of North Korea's political philosophy.

These unsolved questions and curious aspects constitute some major question marks regarding the chances for successful implementation of the agreed framework. However, even if the agreement falls apart at a later stage, it will nevertheless have served an important function by buying time.

But, the verdict becomes bleaker if one takes into account the long-term repercussions for the nonproliferation regime. First, the agreement rewards blatant misconduct. North Korea has proven that a would-be proliferator can use its nuclear weapon option to blackmail the world community. Second, and more importantly, the crisis over North Korea's nuclear program must be seen as at best a mixed outcome from the first test case for the reformed nonproliferation regime.

The capability of the IAEA to uncover evidence for undeclared activities and to follow up on it has been vastly improved. From North Korea's perspective, it was the "first victim" of the reformed IAEA.

1. The inspectors from the IAEA viewed the declarations from the controlled state with the necessary

suspicion. Much to North Korea's dismay, the inspectors' behavior differed from that of earlier routines. The North Korean Atomic Ministry complained about this in a protest note in February 1993: "The inspectors...searched every nook and corner of the rooms [in the reprocessing plant] with instruments, like a policeman searching the house of a suspected criminal, not as guests who came at the invitation of the host."<sup>39</sup> The inspectors actively sought and found indications that hinted at undeclared fissionable materials.

2. Instruments that resemble the envisaged environmental monitoring techniques proved to be effective. They allowed the IAEA to confirm serious inconsistencies in the North Korean material balance and to determine a breach of the safeguards agreement.

3. For the first time, the instruments for special inspections were tested under real conditions, and, from a technical point of view, they proved to be effective. Initially, the success of the IAEA special inspections depends on the availability of information on undeclared material and facilities. After the IAEA examinations had yielded grounds for an initial suspicion, the United States transmitted additional intelligence information to the IAEA. This information enabled the IAEA authorities to name specific locations they wanted to visit in order to clear up inconsistencies between the North Korean declaration and their own findings. Significantly, the United States made this information available to the Board of Governors, a group with representatives from countries such as Libya and Syria. The information was so detailed that North Korea's objection that these

facilities were military installations was weakened.

The process of proposing special inspections proved to be suitable and flexible. First, Director General Blix, informally and in a nonconfrontational manner, had raised the possibility of additional inspections. He placed a formal petition that the Board of Governors immediately supported when North Korea rejected the informal one. There were only four days between the refusal of the informal proposal for an inspection from the Director General and the confirmation of the formal proposal by the Board of Governors.

4. The instrument of the special inspections was politically confirmed. The Council demonstrated its willingness to apply this instrument. The demand for special inspections was supported by an impressive majority. Only China and a small minority of states, who view the NPT with skepticism anyway, did not consent to applying the new instrument.

But much of this valuable precedent has been contradicted by the agreed framework. It is true that the insistence on special inspections was not renounced altogether and that major components of the light-water reactors will only be delivered after special inspections have been conducted. However, North Korea was allowed to renegotiate its treaty obligations, permitting it a considerable degree of freedom in choosing which provisions of the safeguards agreement it will accept. In other words, what Director General Blix has called "à la carte-ism" and what he has tried to prevent for over two years has finally been granted to the DPRK.<sup>40</sup>

The failure to enforce the IAEA's

demand for special inspections results from the inability of the Security Council and its permanent members to agree about the North Korean challenge. But, the lessons in regard to the enforceability of the nonproliferation norm are not completely bleak. The right of the Security Council to order the imposition of sanctions in such cases was implicitly confirmed. That alone marks progress. However, the permanent five members of the Council turned out not to be the disinterested neutral enforcers of the nonproliferation norm, as envisaged in the ideas of collective security. In this case, not all of the P-5 placed nonproliferation above their other foreign policy interests, and the Council remained ineffectual. China's refusal to let a sanctions resolution pass was probably motivated by its general skepticism about any infringement of the principle of national sovereignty. In addition, the desire to undermine American influence in the region may have played a role. If the Council was unable to react in this case, despite a clear breach, and North Korea's extreme political isolation, it can be surmised that in other cases the planned regime mechanism for the introduction of sanctions may fail again due to the political considerations of individual members.

The possible alternative of imposing sanctions outside the U.N. framework through a "coalition of the willing," which had been pondered by the United States at one time, proved equally difficult to implement. Not only were South Korea's and Japan's positions toward substantive sanctions ambivalent, but the United States itself was ultimately unwilling to bear the risks (and the possibly high costs) of con-

tinuing the sanctions course. Given these circumstances, the agreed framework was probably the best possible deal. Taking all factors into account, it is also a justifiable deal. First, the risk of war was great, and the consequences of a war for the neighboring states might have been dramatic. It would have been inappropriate for the Security Council and the permanent members not to consider, to the extent possible, this risk and the interests of the neighboring countries. Second, the time factor was critical for the evaluation of this issue. The agreed framework will freeze North Korea's nuclear activities while North Korea's political, economic, and military situations deteriorate. Third, North Korea is a special case that makes special treatment necessary. North Korea might have been rewarded lavishly. However, those rewards are offered in return for obligations that exceed those stipulated by the NPT. North Korea is giving up an entire reactor line and renouncing reprocessing. The agreed framework contains problematic aspects, especially the deferment of the special inspections. However, this outcome is clearly preferable to alternative strategies that contain the risk of war on the Korean peninsula.

<sup>1</sup> Ben Sanders, "IAEA Safeguards: A Short Historical Background," in David Fischer, Ben Sanders, Lawrence Scheinman, and George Bunn, *A Nuclear Triad: The Non-Proliferation of Nuclear Weapons, International Verification and the International Atomic Energy Agency* (Southampton: Programme for Promoting Nuclear Non-Proliferation, Study No. 3, 1992), p. 4.

<sup>2</sup> David Fischer and Paul Szasz, *Safeguarding the Atom* (London: Taylor & Francis 1985); Thomas W. Graham, "The International Atomic Energy Agency: Can it Effectively Halt the Proliferation of Nuclear Weapons," in Roger A. Coate, ed., *U.S. Policy and the Future of the United Nations* (New York: Twentieth Century Fund

Press, 1994), pp. 89-112.

<sup>3</sup> See Wolfgang Fischer and Gotthard Stein, "Stand und Perspektiven der Bemühungen um die Verschärfung der IAEA-Safeguards," in Joachim Krause, ed., *Kernwaffenverbreitung und internationaler Systemwandel. Neue Risiken und Gestaltungsmöglichkeiten* (Baden-Baden: Nomos 1994), p. 288f.

<sup>4</sup> Since special inspections are confrontational in nature, the IAEA has developed the idea of invitations from states to the agency to visit facilities anywhere and anytime. This instrument may be used by a state to prove to its neighbors that it is not engaging in clandestine nuclear activities. Such invitations have been offered by several states, among them Iran and South Africa.

<sup>5</sup> Lawrence Scheinman, *Assuring the Nuclear Non-Proliferation Safeguards System* (Washington: Atlantic Council Occasional Papers 1992).

<sup>6</sup> Resistance came from Algeria, Cuba, India, Iran, Mexico, North Korea, and Pakistan. Apprehensions about an undue limitation on national sovereignty rights were uttered from others as well.

<sup>7</sup> See Johannes Preisinger, *Deutschland und die nukleare Nichtverbreitung* (Bonn: Arbeitspapiere der Deutschen Gesellschaft für Auswärtige Politik, No. 76), pp. 54ff.

<sup>8</sup> See Eric Chauvistré, "The Future of Nuclear Inspections," *Arms Control* (August 1993).

<sup>9</sup> The objections of the Third World representatives to use of information from intelligence sources were based among other things on the fear that industrial nations exclusively would be in the position to provide this type of information. Thus, in their view, a manipulation of this data could not be excluded. It was therefore suggested that the IAEA should furnish itself with commercial satellites and independently gather the information. Wolfgang Fischer et al., "The Role of Satellites and Remote Data Transmission in a Future Safeguards Regime," in *International Nuclear Safeguards 1994*, proceedings of a symposium (Vienna: International Atomic Energy Agency 1994).

<sup>10</sup> The mandatory notification of nuclear trade should help the IAEA to recognize procurement patterns.

<sup>11</sup> Cf. Bruno Pellaud, "IAEA Safeguards: Status, Challenges and Opportunities," in *International Nuclear Safeguards, loc. cit.* See also Bruno Pellaud, *Safeguards in Transition: Status, Challenges, and Opportunities*, (Vienna: IAEA Bulletin, September 1994).

<sup>12</sup> Cf. Marvin Peterson, "A New Safeguards Synthesis," in *International Nuclear Safeguards, loc. cit.* The long term surveillance system, which is being installed in Iraq, will use these methods.

<sup>13</sup> Cf. G. Andrew, "Prospects for Environmental Monitoring" in *International Nuclear Safeguards, loc. cit.*

<sup>14</sup> Leonard S. Spector, *Nuclear Ambitions* (Boulder: Westview 1990), p. 121.

<sup>15</sup> Bruce Cumings, "Spring Thaw for Korea's Cold War?," in *Bulletin of the Atomic Scientists* (April 1992) and Mark Hibbs, "North Korea Obtained Reprocessing Technology Aired by Eurochemic,"



*Nuclear Fuel* (February 28, 1994), p. 6f.

<sup>16</sup> In 1989, satellites observed a cooling down of the reactor, from which it was concluded that it remained inactive approximately 75 to 100 days. This amount of time would have been enough to exchange the core. Other reports indicate weaponization activities. Allegedly, North Korea has converted plutonium nitrate to metal and has tested conventional explosive technology for igniting a plutonium bomb. According to a Chinese source, North Korea searched further in Peking for assistance in developing of krytrons. *PPNN Newsbrief*, No. 25 (January 1994), p. 1.

<sup>17</sup> North Korea twice allowed an 18-month period for signing the safeguards agreement to lapse, the first time because of a formal mistake by the IAEA. In 1989, the DPRK suddenly introduced additional reservations. Pyongyang demanded that the United States withdraw its nuclear weapons from the southern part of the peninsula before the safeguards agreement could be signed.

<sup>18</sup> See Harald Müller, Matthias Dembinski, and Annette Schaper, "Nordkorea betreibt die technischen Vorarbeiten für die Atombombe," (*Frankfurter Rundschau Dokumentation*, March 26, 1993).

<sup>19</sup> The drawing up of the opening balance in a newly acceded state, which prior to joining operated a nuclear program, is exceedingly problematic. It is likely that little hard evidence that would enable the IAEA to examine the state's information. See Leonard S. Spector, "Repentant Nuclear Proliferants," *Foreign Policy* (Fall 1992), pp. 21-37.

<sup>20</sup> During the first inspections, the inspectors had compared the plutonium samples provided by North Korea with reprocessing waste. As it was exposed that the isotopic composition of the plutonium did not correspond to the waste, the inspectors searched for tiny radioactive particles in the reprocessing plant with the help of gamma ray detectors. Despite the previous cleaning of the plant, particles had settled in. An analysis of PU241 particles and americium yielded that four reprocessing campaigns had taken place. See R. Jeffrey Smith, "North Korea and the Bomb: High-Tech Hide-and-Seek," *The Washington Post*, April 27, 1993, pp. A1, A11; Mark Hibbs, "Isotopics Show Three North Korean Reprocessing Campaigns since 1975," *Nuclear Fuel*, (January 1993), p. 8f.

<sup>21</sup> First, at issue is the basement of a building whose upper story had military purposes. North Korea tried to conceal the existence of the basement. The second building, a one story storage area, was also covered with dirt and camouflaged with plants. In order to distract the inspectors, a third storage area with non-violating waste was set up. See the *Report by the Director General of the IAEA on Behalf of the Board of Governors to the Security Council and to the General Assembly of the United Nations on the Non-Compliance of the Democratic People's Republic of Korea with the Agreement between the IAEA and the DPRK for the Application of Safeguards*, U.N. General Assembly document A/48/133; Security Council document S/25556, April 12, 1993.

<sup>22</sup> According to a commonly shared interpretation, the regime should single-handedly allow its members to mutually demonstrate their peaceful intentions but not enforce the observance of the norms. In case of a breach of the treaty, it would be the responsibility of the nation states to react appropriately. The regime would see to it that enough time is available in order to take precautions against the emerging threat. Preisinger, *op. cit.*, p. 69; Fischer and Szasz, *op. cit.*, p. 149.

<sup>23</sup> Article X, 1 provides for the right to withdrawal after a three-month notice period if the highest political security interests of the state are endangered. However, it requires the withdrawing state to inform the other members and the Security Council of its reasons for withdrawal. According to general legal interpretation, the Security Council is not in a position to comment on the reasons provided by the state or to forbid withdrawal.

<sup>24</sup> In contrast, a new analysis argues that the NPT also forbids substantial "weaponization" process activities. George Bunn and Roland M. Timerbaev, *Nuclear Verification under the NPT: What should it cover? How far may it go?* (Southampton: PPNN Study No. 5, 1994). However, even this study agrees that those technically necessary steps for building the bomb that could also have a civilian purpose are not prohibited.

<sup>25</sup> The declaration is published in *PPNN Newsbrief*, (Spring 1992), p. 15.

<sup>26</sup> Harald Müller, *Nukleare Nichtverbreitung. Ein umfassender Strategieentwurf* (Frankfurt: HSFK Report, 1993), p. 36f.

<sup>27</sup> This hierarchy is clearly established in the U.N. Charter. Article 33 demands that "parties to any dispute...shall first of all seek a solution by negotiations...or other peaceful means of their choice." Only after the negotiations and mediations described in Chapter VI have failed can the U.N. Security Council resort to the forceful measures described in Chapter VII.

<sup>28</sup> *International Herald Tribune*, December 3, 1993, p. 2.

<sup>29</sup> The American negotiator Robert Gallucci specified this condition as follows: North Korea will not process spent fuel; hence, it will not produce plutonium-rich material. The continuity of the safeguards will be guaranteed, and the country will remain a member of the NPT. Furthermore, the United States implicitly demanded that the reactor not be discharged without the presence of IAEA inspectors. North Korea appeared open to the matter. *Nucleonics Week*, February 24, 1994, p. 3.

<sup>30</sup> *International Herald Tribune*, November 16, 1993, pp. 1, 5 and December 6, 1993, pp. 1, 7.

<sup>31</sup> *Wall Street Journal Europe*, November 22, 1993, p. 2.

<sup>32</sup> The American and South Korean militaries had openly speculated on the possibility of war, their strategies in the case of war, and the reality of a total North Korean defeat. The stationing of Patriot missiles was prepared, and additional American troops and weapons were deployed. The readiness of the troops was increased as well.

*International Herald Tribune*, February 8, 1994, pp. 1, 5.

<sup>33</sup> Twenty-six countries voted for the resolution. Libya voted against it and Brazil, China, India, Indonesia, Lebanon, and France were undecided. France did not vote, because it did not consider the wording of the resolution to be sufficient. *Arms Control Today* (April 1994).

<sup>34</sup> *International Herald Tribune*, June 8, 1994, p. 1.

<sup>35</sup> *International Atomic Energy Agency Bulletin*, (Fall 1994), p. 58ff

<sup>36</sup> *International Herald Tribune*, June 11, 1994, p. 1.

<sup>37</sup> Republicans have already expressed resistance to the agreement. (*The New York Times*, November 27, 1994). So far, the Clinton administration has used \$5 million in discretionary Defense Department funds to finance the delivery of 50,000 tons of oil, thereby avoiding a clash with Congress over the financing of the deal.

<sup>38</sup> Gerald Segal, "The World Still Doesn't Have an Effective Nonproliferation System," *International Herald Tribune*, October 25, 1994, p. 4.

<sup>39</sup> North Korea's published statement from February 22, 1993, quoted from *The Washington Post*, April 27, 1993, pp. A1, A11.

<sup>40</sup> *The Washington Post*, October 20, 1994, p. A32.