

Strengthening the Nuclear Non-Proliferation Regime: Proposals and Problems

Masahiko Asada

Under the combined action of global warming and energy security requirements, the world is entering a nuclear renaissance. At the same time, there is growing concern that more and more countries will have access to sensitive nuclear technologies that could be used to develop nuclear weapons. Such concern is not unfounded. In fact, since around the turn of the century, the Nuclear Non-Proliferation Treaty (NPT) has suffered fundamental challenges from several quarters. Most notable are North Korea's non-compliance with its Safeguards agreement and its withdrawal from the NPT, as well as Iran's non-compliance with its Safeguards agreement and its suspected nuclear weapons development.

To these challenges, the Board of Governors of the International Atomic Energy Agency (IAEA) has responded by adopting resolutions deploring the developments and referring the issues to the UN Security Council. The Security Council, on its part, has adopted resolutions under Chapter VII of the UN Charter to demand that Iran suspend all enrichment-related and reprocessing activities, and to decide that North Korea abandon all nuclear weapons and existing nuclear programs and act strictly in accordance with the obligations applicable to parties under the NPT. These Council resolutions are indeed remarkable, particularly in the case of Iran, in that they call on a party to the NPT to suspend the exercise of part of its inalienable rights guaranteed under the NPT and impose staged economic and other sanctions on an extensive list of target persons and entities.

Yet, it is also essential to reinforce the existing nuclear non-proliferation regime so that another Iran or North Korea cannot emerge. To that end, a number of proposals have been put forward, including by US President George W. Bush and IAEA Director General Mohamed ElBaradei.

Masahiko Asada is Professor of International Law at the Graduate School of Law, Kyoto University.
Email: Asada@law.kyoto-u.ac.jp

This article is a revised version of a paper presented at the IAI Workshop on "Coordinating Global and Regional Efforts to Combat WMD Terrorism", held in Rome on 24 October 2008, and generously funded by the Italian Ministry of Foreign Affairs.

This article aims to examine those proposals from a legal perspective (that is, whether they are compatible with the existing legal frameworks), as well as from a political perspective (that is, whether they are really effective in reinforcing the non-proliferation regime and are acceptable to the international community). Specifically, the article will consider proposals to ban sensitive nuclear transfers; to place sensitive nuclear facilities under multilateral control through multilateral nuclear approaches; to interpret the safeguards requirement under the NPT so that it includes the conclusion of an Additional Protocol to the Safeguards agreement; to agree on that at an NPT Review Conference; and to make the conclusion of an Additional Protocol a condition for nuclear transfers.

Ban on sensitive nuclear transfers

On 11 February 2004, US President George W. Bush put forward a seven-point proposal in his address to the National Defense University. After pointing out that the NPT has a loophole, he proposed that the world's leading nuclear exporters should ensure that states have reliable access to fuel for civilian reactors "so long as those states renounce enrichment and reprocessing". He further proposed that the "Nuclear Suppliers Group [NSG] should refuse to sell enrichment and reprocessing equipment and technologies to any state that does not already possess full-scale, functioning enrichment and reprocessing plants".¹

The Plenary of the NSG held in May of the same year could not agree on the proposed measure. In fact, it met with stiff resistance. Several NSG members objected that barring future enrichment and reprocessing exports could lead other governments to complain that they were being denied their right under the NPT to develop nuclear technologies for peaceful purposes.²

In June of the same year, however, some progress was made in the G-8 framework. Members agreed at the Sea Island Summit meeting that: "for the intervening year [that is, until the next G-8 Summit], . . . it would be prudent not to inaugurate new initiatives involving transfer of enrichment and reprocessing equipment and technologies to additional states."³ This represented a partial realisation of the Bush proposal, although there were some differences in terms of timeframe and modalities of prohibition. Despite these minor differences, the Sea Island agreement was seen as an important interim measure in view of the NSG's eventual acceptance of the Bush proposal. Indeed, the G-8 moratorium was renewed every

¹G.W. Bush, "President Announces New Measures to Counter the Threat of WMD. Remarks by the President on "Weapons of Mass Destruction Proliferation", National Defense University, Washington DC, 11 February 2004.

²Boese, "Nuclear Suppliers Pass on US Proposals", 43; "US Nuclear Trade Restriction Initiatives Still on Hold", 19.

³"G-8 Action Plan on Nonproliferation", 9 June 2004.

year up until 2007. Thus, although not so salient, the G-8 has played an important role in redressing the NSG's inaction.

At the Heiligendamm Summit in June 2007, G-8 members showed some signs of wanting to change things. While agreeing to continue to undertake the previously agreed action (that is, the moratorium), they did so “on the understanding that should the NSG not reach consensus on appropriate criteria by 2008, [they] will seriously consider *alternative strategies* to reduce the proliferation risks associated with the transfer of enrichment and reprocessing goods and technologies” (emphasis added).⁴ It was not clear at that time what kind of “alternative strategies” they had in mind, but the phrase quoted above implied that the moratorium might terminate at the 2008 G-8 summit meeting.

In July 2008, at the Hokkaido Toyako Summit meeting, the G-8 members agreed as follows:

We welcome the significant progress made by the Nuclear Suppliers Group (NSG) in moving toward consensus on a *criteria based approach* to strengthen controls on transfers of enrichment and reprocessing equipment, facilities and technology. . . . Additionally, we agree that *transfers of enrichment equipment, facilities and technology to any additional state in the next year will be subject to conditions that, at a minimum, do not permit or enable replication of the facilities. . . .*⁵ (emphasis added)

The “criteria based approach” referred to above means that instead of totally banning the transfer of enrichment and reprocessing equipment and technologies as President Bush proposed in 2004, their transfer may be allowed if certain criteria (conditions) are met. Therefore, the language used in Hokkaido Toyako, which all G-8 members agreed upon, reflected the fact that the United States abandoned its insistence that new NSG guidelines had to include a total ban on the export of sensitive nuclear technologies, with the exception of those states already possessing them.

Assessment of any criteria-based approach depends on the criteria or conditions themselves. In the case of the G-8 agreement, the condition “that, at a minimum, [it does] not permit or enable replication of the facilities” means that a transfer of equipment, facilities and technology is allowed only if they are in a “black box” so that the technology cannot proliferate.

Thus, the Hokkaido Toyako Declaration has allowed new initiatives for sensitive nuclear transfers for virtually the first time in five years, albeit with conditions. It may or may not be a setback for nuclear non-proliferation efforts, but this depends mainly on whether the black box type transfer is sufficiently proliferation resistant.

⁴“Heiligendamm Statement on Non-Proliferation”, 8 June 2007, para. 13.

⁵“G-8 Hokkaido Toyako Summit Leaders Declaration”, 8 July 2008, para. 66.

Multilateral nuclear approaches

In October 2003, IAEA Director General Mohamed ElBaradei proposed that the processing of weapon-usable material (separated plutonium and high-enriched uranium) in civilian nuclear programs, as well as the production of new material through reprocessing and enrichment be limited exclusively to facilities under multinational control. At the same time, he mentioned that these limitations have to be accompanied by an assurance of fuel supply.⁶

This proposal has not fully materialised either so far, although there have been some developments in the IAEA framework. In June 2004, Director General ElBaradei appointed an international expert group to consider options for possible multilateral approaches to the front and back ends of the nuclear fuel cycle.⁷ In its report submitted to the Director General in February 2005, the group presented a set of five actions gradually introducing multilateral nuclear approaches (MNAs): (1) reinforcing existing commercial market mechanisms, (2) developing international supply guarantees with the IAEA's participation, (3) promoting voluntary conversion of existing facilities to MNAs, (4) creating multinational MNAs for new facilities, and (5) developing a nuclear fuel cycle with stronger multilateral arrangements.⁸

Since the NPT does not prohibit its parties from conducting enrichment or reprocessing activities *per se*, gradually introducing relevant measures seems to be the only possible approach to MNAs. First, such efforts have been made in the area of fuel supply guarantees as an incentive for those states that are in need of nuclear fuel to voluntarily abandon national enrichment and reprocessing activities. A Special Event on Assurances of Supply and Assurances of Non-Proliferation was held in September 2006 during the 50th regular session of the IAEA General Conference and attracted several ideas for establishing a nuclear fuel supply assurance system, including from Germany, Japan, Russia and the UK, as well as a six-nation proposal. It is not clear though whether MNAs can achieve their expected objectives, even if they are established in an ideal form.

First, it is hard to imagine that those states that are determined to develop nuclear weapons would join the MNAs by voluntarily giving up their right to conduct enrichment and reprocessing activities. More generally, it is unlikely that those states that should join the MNAs would actually join them. This prediction is based on Iran's reactions to the E3 + 3's repeated proposals to "suspend" its enrichment-related and reprocessing activities. Indeed, Iran has openly declared

⁶M. ElBaradei, "Towards a Safer World". *The Economist* 369, 18 Oct. 2003, 52.

⁷"Front end" of the nuclear fuel cycle includes the enrichment of uranium for nuclear fuel, while its "back end" encompasses the reprocessing and final disposal of spent nuclear fuel.

⁸IAEA, *Multilateral Approaches to the Nuclear Fuel Cycle*, 136.

that it does not seek nuclear fuel supply; rather, its goal is to establish nuclear technologies for peaceful purposes.⁹

This is not to say that MNAs are meaningless. They may contribute to preventing another Iran from emerging. Still, future participants in the MNAs would be able to withdraw from them if they were determined to develop nuclear weapons. Conversely, if the MNAs, to avoid that, were to prohibit withdrawal altogether, they would be faced with a lack of participation. It has been reported that many potential recipients either remain indifferent to the initiative or fear that a new “cartel” of fuel suppliers may be created.¹⁰ In any case, it is not easy to establish multilateral control of the nuclear fuel cycle that is both meaningful for non-proliferation purposes and attractive to its potential beneficiaries.

Additional Protocol as safeguards under the NPT

Several proposals involving the conclusion of an Additional Protocol have been put forward. The Additional Protocol, adopted in 1997 by the IAEA Board of Governors, is a separate agreement to be concluded by states that have a Safeguards agreement with the IAEA. The Protocol allows IAEA inspectors to have access to undeclared facilities and sites, including places where there is no nuclear material, that are off-limits to them under the Safeguards agreements.

The effectiveness of the Additional Protocol was most convincingly demonstrated when, on 17 August 2004, the Republic of Korea (South Korea) declared that it had conducted uranium enrichment activities in 2000 without reporting them to the IAEA. The announcement was based on a June 2004 report by the Korea Atomic Energy Research Institute (KAERI) that the latter had conducted the experiments in question. It was said that KAERI decided to report its experiments because it thought they would be revealed in any case when the IAEA started conducting environmental sampling in the country in the course of the complementary access provided by the Additional Protocol between South Korea and the IAEA which entered into force in February of that year.¹¹

Notwithstanding its obvious effectiveness or, in some cases, because of it, the current status of the Additional Protocol is less than satisfactory: only 84 out of 186 non-nuclear-weapon states party to the NPT have brought it into force.¹² In the successive Preparatory Committees for the 2010 NPT Review Conference, “the need for the Additional Protocol to be universalized” was reaffirmed in the Chairman’s Working Paper.¹³ Many participants in the Committees have argued

⁹*Yomiuri Shinbun*, 10 January 2005.

¹⁰Meier, “The Growing Nuclear Fuel-Cycle Debate”, 43.

¹¹Kang, Suzuki and Hayes, *South Korea’s Nuclear Mis-Adventures*.

¹²As of 9 October 2008.

¹³“Chairman’s Working Paper”, 2007, para. 30; “Chairman’s Working Paper”, 2008, para. 36.

that the strengthened safeguards system (that is, a Comprehensive Safeguards Agreement coupled with the Additional Protocol) constitutes the NPT's "verification standard".¹⁴ But can non-nuclear-weapon states party to the NPT be legally required to conclude an Additional Protocol?

The Article 3 obligation is fulfilled by concluding a Comprehensive Safeguards Agreement

The relevant NPT provision is Article 3.1, which requires each of the states parties to "accept safeguards, as set forth in an agreement to be negotiated and concluded with the International Atomic Energy Agency in accordance with the Statute of the International Atomic Energy Agency and the Agency's safeguards system". In light of this provision, a couple of counter-arguments could be made to the proposition that, under Article 3, non-nuclear-weapon states party to the NPT are required to conclude an Additional Protocol in addition to the Comprehensive Safeguards Agreement.

First, it is true that Article 3.1 of the NPT does not refer specifically to the Comprehensive Safeguards Agreement or its model agreement (INFCIRC/153), and leaves some leeway for an evolutive interpretation of the provision. However, those states party to the NPT that concluded a Comprehensive Safeguards Agreement before the adoption of the model Additional Protocol in 1997 must have considered that they already fulfilled their obligations under Article 3.1 of the Treaty by concluding the former Agreement. For instance, the Final Declaration of the Third NPT Review Conference held in 1985 stated that "[t]he Conference notes with satisfaction that the commitments in Articles I-III have been met and have greatly helped prevent the spread of nuclear explosives".¹⁵

A second counter-argument against the proposition in favour of mandatory conclusion of the Additional Protocol is that if conclusion of an Additional Protocol is an obligation under Article 3.1, it follows that quite a number of NPT states parties are in "violation" of that paragraph, given that only 84 out of 186 non-nuclear-weapon states party to the NPT have concluded an Additional Protocol. And yet, there is hardly any hint of states parties viewing the situation that way.

Procedural requirement under Article 3

It can also be pointed out that, if the obligation under Article 3.1 were taken to include the conclusion of an Additional Protocol, then Article 3.4 would lose nearly all its meaning. Paragraph 4 sets the deadlines for conclusion of an agreement with the IAEA to meet the requirements of Article 3. According to that paragraph, states party to the NPT must commence negotiation of such agreements

¹⁴"Chairman's Working Paper", 2007, para. 30; "Chairman's Working Paper", 2008, para. 38.

¹⁵"Organization and Work of the Conference", 1985, Annex I, 3, para. 3.

within 180 days of the entry into force of the Treaty (5 March 1970). Those adhering to the NPT after that 180-day period must commence negotiation no later than the date of adherence. In either case, the agreement must enter into force no later than 18 months after the initiation of negotiations.

These provisions are almost irrelevant for the Additional Protocol, which was adopted in 1997. They could only be relevant to the Additional Protocol for those very few states parties that have adhered to the Treaty since 1997. In other words, it is reasonable to assume that most NPT parties must have thought that “safeguards” as referred to in Article 3.1 were those contained in INFCIRC/153, and did not imagine that any new safeguards document would be developed afterwards in the context of said Article.

Additional Protocol as a product of the IAEA

Another counter-argument against the above proposition is related to the fact that the model Additional Protocol was adopted by the IAEA’s Board of Governors. It is true that there is a close link between the NPT and the IAEA as exemplified by the provision of Article 3.1. The IAEA was also described in a decision of the 1995 NPT Review and Extension Conference as “the competent authority” responsible for verifying compliance with its safeguards agreements with NPT states parties undertaken under said Article.¹⁶

However, strictly speaking, the IAEA is not the implementing organisation of the NPT. In fact, membership of the IAEA is different from that of the NPT: India, Israel and Pakistan, which are outside the NPT, are members of the IAEA and two of them (India and Pakistan) are usually Board members, whereas a number of NPT parties are not members of the IAEA.¹⁷ Therefore, those states party to the NPT that are not members of the IAEA could contend that they cannot accept something produced by a body that they have nothing to do with as non-members.

Admittedly, INFCIRC/153 is a product of the IAEA, and non-nuclear-weapon states party to the NPT are bound to conclude a Safeguards agreement based on that document. This is, however, what Article 3.1 dictates, and once they have concluded it, their obligation may be deemed to be discharged. Otherwise, it would follow that NPT parties would, in effect, continue to be bound automatically by documents that could be produced by a body with different members – something that NPT parties did not accept in signing and ratifying the Treaty.

¹⁶“Organization and Work of the Conference”, 1995, Annex, Decision 2, para. 9.

¹⁷The IAEA has 145 members, while the NPT has, according to the United Nations Office for Disarmament Affairs, 191 states parties, as of October 2008.

Possible interpretative agreement at an NPT Review Conference

Some states, such as Canada and Australia, have advocated that the NPT Review Conference should take a decision to the effect that “the AP [Additional Protocol] is mandatory under Article III of the Treaty”.¹⁸ To justify their proposal, they argue that “safeguards requirements have evolved over time and must continue to evolve to meet present and future challenges, and that the international community must remain vigilant, remembering that no non-proliferation tool is perfect”.¹⁹ They also contend that “safeguards”, as referred to in Article 3 of the NPT, is not a static concept but one that can evolve as the objective security environment changes, and that, since a model Additional Protocol was adopted by the IAEA in 1997 to respond to the newly revealed proliferation risks, it is natural for the NPT states parties to conclude an Additional Protocol. This is a very convincing argument, but whether and how viable it is is another question.

Powers and functions of NPT Review Conference

In order to examine the viability of the above argument, the powers and functions of NPT review conferences must be identified. According to Article 8.3 of the NPT, review conferences are convened “in order to *review the operation* of [the] Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized” (emphasis added). Although it would not follow from this that the Review Conferences have the power to give an authoritative interpretation of the Treaty, it is also true that the provisions of the treaty have to be interpreted in order to review its operation.

There are, in fact, examples of review conferences of disarmament treaties giving a (new) interpretation of their provisions. Thus, the Fourth Review Conference of the Biological Weapons Convention in 1996 agreed, regarding the interpretation of Article 1 of the Convention prohibiting development, production, stockpiling or other acquisition or retention of microbial or other biological agents or toxins, as follows: “the *use* by the States Parties, in any way and under any circumstances, of microbial or other biological agents or toxins . . . is effectively a violation of Article I of the Convention”²⁰ (emphasis added). This agreement was reflected in the Final Declaration of the Conference.

At the same time, it is an undeniable fact that the NPT, like other disarmament treaties, does not expressly stipulate that its Review Conferences have the power to give an authoritative interpretation of the Treaty, and thus the kind of

¹⁸Third Preparatory Committee for the 2005 NPT Review Conference, “Cluster II Issues: Statement by Mr. David Mason”, 1; Third Preparatory Committee for the 2005 NPT Review Conference, “Cluster II: Implementation of the Provisions of the Treaty”, 2.

¹⁹*Ibid.*

²⁰*United Nations Disarmament Yearbook*, 217.

interpretation that the Biological Weapons Convention's Review Conference gave might be challenged on the basis of this fact.

In the NPT context, states parties absent from the Review Conference at which a new interpretation of the term "safeguards" is agreed upon, could argue that they cannot accept the new interpretation as an authoritative interpretation of the Treaty. Even though they are expected to attend Review Conferences, their argument would not be unreasonable. If so, a possible agreement at a Review Conference on a new interpretation of Article 3.1 would provide no more than one of the elements for interpretation, albeit one carrying weight. How important that element is would depend on the way in which the agreement is phrased, formulated and adopted.

Interpretative agreement at a Review Conference as a "subsequent agreement"

Some rules on treaty interpretation envisage an agreement reached after the conclusion of a treaty. They are the rules on "subsequent agreement". The Vienna Convention on the Law of Treaties refers to "subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions" as an element to be taken into account together with the context in interpreting a treaty (Art. 31.3(a)). It is natural to consider that if states parties agree on an interpretation of a specific provision of a treaty, it becomes the authentic interpretation of it, since the power of authoritative interpretation of a treaty rests with its states parties, unless otherwise provided in the treaty. The Commentary of the UN International Law Commission (ILC) which drafted the Vienna Convention stated as follows: "an agreement as to the interpretation of a provision reached after the conclusion of the treaty represents an authentic interpretation by the parties which must be read into the treaty for the purpose of its interpretation".²¹

The question is what kind of agreement could constitute a "subsequent agreement" here, particularly in terms of the participation in the agreement. In this regard, it can be concluded that such an agreement would have to include all the states party to the treaty in light of a similar requirement for the "subsequent practice".²²

As a result, a possible agreement at a Review Conference on a new interpretation of Article 3.1 of the NPT would not qualify as "subsequent agreement" under Article 31.3(a) of the Vienna Convention, since it is next to impossible for a Review Conferences to be attended by all the parties to the NPT. Even the 1995

²¹*Yearbook of the International Law Commission*, 221.

²²*Ibid.*, 222. "Subsequent practice" is another rule on treaty interpretation, which takes into account the actions of the states parties taken under the treaty. Article 31.3(b) of the Vienna Convention refers to "subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation" as an element to be taken into account together with the context in interpreting a treaty.

Review and Extension Conference of the NPT, which decided on the future fate of the Treaty, was not attended by all the states parties at the time.²³

However, if the Conference agrees on a new interpretation by consensus, it could count as an agreement of a substantial number of states parties. Furthermore, the agreement could become an authentic interpretation of the article concerned through acquiescence, that is if those absent from the Conference do not raise any objection to it. Abstract possibility aside, however, this is unlikely in view of the fact that there are still several states party to the NPT that openly object or express reservations to the conclusion of an Additional Protocol.²⁴

Additional Protocol as a condition for nuclear cooperation

In light of the foregoing, it is difficult to presume that the conclusion of an Additional Protocol is a legal requirement under Article 3.1 of the NPT. If this is the case, the only way to achieve the universalisation of the Additional Protocol is by taking steps that involve incentives and disincentives to conclude it. One such step is to require the conclusion of an Additional Protocol as a condition for nuclear transfers in the framework of export controls, as was proposed by President Bush in 2004: “only states that have signed the Additional Protocol [should] be allowed to import equipment for their civilian nuclear programs”.²⁵

Nuclear Suppliers Group

Nuclear-related exports have been governed by the Guidelines of the Nuclear Suppliers Group (NSG) since 1977, when they were agreed upon in response to the Indian nuclear explosion conducted three years before. In 1992, spurred on by revelations of Iraq’s illegal nuclear weapons development, the NSG Guidelines for nuclear transfer were amended to include the entry into force of a Comprehensive Safeguards Agreement as a condition for nuclear supply.²⁶ This revision was supported by the NPT parties in 1995 when they adopted the “Principles and Objectives for Nuclear Non-Proliferation and Disarmament”²⁷ at the Review and Extension Conference, and in 2000 when they adopted the Final Document at the Sixth Review Conference.²⁸

The proposal put forward by President Bush in 2004 was designed to go one step further by making the signing of an Additional Protocol a condition for nuclear

²³175 of the 178 states parties at that time participated in the Conference.

²⁴Brazil, for instance, is one such state. See, for example, Huntington, “Brazilian Regulator Denies Uranium Claims”, 37.

²⁵Bush, “President Announces New Measures to Counter the Threat of WMD”.

²⁶“NSG Guidelines for Nuclear Transfers”, para. 4 (a).

²⁷“Organization and Work of the Conference”, 1995, Annex, Decision 2, para. 12.

²⁸“Review of the Operation of the Treaty”, 2000, 6, para. 36.

transfers. Such a proposal is desirable from a nuclear non-proliferation perspective, but whether it is legally tenable is another question.

Rights and obligations under the NPT

The NPT in Article 3.2 obligates the states parties not to provide “(a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material” to non-nuclear-weapon states, “unless the source material or special fissionable material shall be subject to the safeguards required by this Article”. This is an obligation of nuclear suppliers party to the NPT to require the recipient state to apply safeguards to the nuclear material relevant to the nuclear transfer (hereinafter referred to as “item-specific safeguards”). The question has to be examined from two different standpoints: one is that of suppliers, the other is that of recipients, in the context of their rights and obligations under the NPT.

From the supplier’s point of view, it would not run counter to the supplier state’s obligations under the NPT if it were to do more than what the Treaty obliges it to do by requiring the recipient state to apply a Comprehensive Safeguards Agreement or even an Additional Protocol, rather than simply requiring the application of item-specific safeguards. Indeed, such a step would be in conformity with and would even promote the nuclear non-proliferation objectives of the NPT.

From the recipient’s standpoint, on the other hand, legal questions may arise if the recipient is a party to the NPT with regard to its rights under the Treaty. Article 4.2 of the NPT provides for the “right” of all the parties to “participate in . . . the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy”. Thus, recipients party to the NPT are guaranteed their “right” to participate in the fullest possible exchange of nuclear equipment, etc., as long as they comply with their (basic) obligations under the Treaty.

Based on these general considerations, a distinction has to be made between requiring the acceptance of comprehensive safeguards as in the NSG Guidelines as amended in 1992, and requiring the conclusion of an Additional Protocol as in the Bush proposal of 2004. In the former case, the rights of the non-nuclear-weapon recipients party to the NPT would not be undermined by the new requirement because the NPT already obliges them to accept comprehensive safeguards (Art. 3.1). However, requiring the conclusion of an Additional Protocol, which exceeds what the non-nuclear-weapon states parties are obliged to do under the NPT, as a condition for nuclear cooperation as guaranteed under Article 4 of the Treaty, could pose a legal problem of infringement of their right.

That said, the right that could be considered infringed here is relatively moderate in nature. The obligation of the suppliers party to the NPT corresponding to that right is merely to “facilitate” the fullest possible exchange of nuclear

equipment, materials and information as well as to “co-operate in contributing” to the further development of the applications of nuclear energy for peaceful purposes (Art. 4.2). Strictly speaking, they are not really obliged under the Treaty to actually supply any nuclear equipment, materials or information to any party to the NPT demanding it. In other words, it could be said that requiring the conclusion of an Additional Protocol as a condition for a nuclear transfer is not necessarily barred by Article 4 of the NPT, and thus this line of action is worth pursuing.

Conclusions

In 2008, the NPT commemorated the 40th anniversary of its signature. However, its effectiveness has begun to be questioned from both inside and outside the Treaty. In addition, the recent decision by the NSG to exempt India from its rules and guidelines may well further undermine the already beleaguered nuclear non-proliferation regime by allowing the country to enjoy the benefit of nuclear cooperation without forswearing the nuclear weapons option.

Faced with all this, the international community has produced a number of proposals to reinforce the non-proliferation regime. Back in 2003–04, IAEA Director General ElBaradei and US President Bush proposed certain important measures to be taken to this end. However, there are doubts about their effectiveness as a non-proliferation tool, as well as difficulties in agreeing on them in the relevant forum.

The Multilateral Nuclear Approaches that Director General ElBaradei proposed are attractive in that they aim at reducing the possibility of more countries having access to sensitive nuclear technologies with proliferation potential. Because of their multilateral nature, however, there are doubts about their effectiveness in nuclear non-proliferation. It is particularly doubtful whether the countries that we would hope to see join the mechanism would do so and, even if they did, whether they would stay in it forever.

By contrast, there can be no doubt about the effectiveness of a ban on sensitive nuclear transfers and the universalisation of the Additional Protocol. The Bush proposal for banning sensitive nuclear transfers, which has not been agreed upon in the NSG, has been virtually realised as a moratorium within the G-8 framework. It would be advisable for the G-8 to do the same with regard to another important proposal (on the Additional Protocol) put forward by President Bush, which has not been agreed upon so far. Given that it is difficult to presume that the NPT obligates its states parties to conclude an Additional Protocol and unlikely that they will be able to introduce such an obligation at an NPT Review Conference, the G-8 may be able to play a supplementary role by agreeing to make the conclusion of Additional Protocol a condition for nuclear transfers.

References

- Boese, W. "U.S. Nuclear Trade Restriction Initiatives Still on Hold". *Arms Control Today* 34, no. 10 (2004).
- Boese, W. "Nuclear Suppliers Pass on U.S. Proposals". *Arms Control Today* 34, no. 6 (2004). http://www.armscontrol.org/act/2004_07-08/NSG
- G-8 Hokkaido Toyako Summit. "G-8 Hokkaido Toyako Summit Leaders Declaration", 8 July 2008.
- G-8 Heiligendamm Summit. "Heiligendamm Statement on Non-Proliferation", 8 June 2007.
- G-8 Sea Island Summit. "G-8 Action Plan on Nonproliferation", 9 June 2004.
- Huntington, W. "Brazilian Regulator Denies Uranium Claims". *Arms Control Today* 35, no. 9 (2005). http://www.armscontrol.org/act/2005_11/NOV-Brazil
- International Atomic Energy Agency. *Multilateral Approaches to the Nuclear Fuel Cycle*. Vienna: IAEA, 2005.
- International Law Commission. *Yearbook of the International Law Commission*. Vol. 2, New York: United Nations, 1966.
- Kang, J., T. Suzuki and P. Hayes. *South Korea's Nuclear Mis-Adventures*. Special Report. San Francisco: Nautilus Institute, 10 September 2004.
- Meier, O. "The Growing Nuclear Fuel-Cycle Debate". *Arms Control Today* 36, no. 9 (2006). http://www.armscontrol.org/act/2006_11/NAFuel
- Nuclear Non-Proliferation Treaty (NPT) Conference: Second Preparatory Committee for the 2010 NPT Review Conference. "Chairman's Working Paper", NPT/CONF.2010/PC.II/WP.43, Geneva, 9 May 2008.
- NPT Conference: First Preparatory Committee for the 2010 NPT Review Conference. "Chairman's Working Paper", NPT/CONF.2010/PC.I/WP.78. Vienna, 11 May 2007.
- NPT Conference: Third Preparatory Committee for the 2005 NPT Review Conference. "Cluster II: Implementation of the Provisions of the Treaty Relating to the Non-Proliferation of Nuclear Weapons, Safeguards and Nuclear Weapon Free Zones Issues Canada". New York, 26 April–7 May 2004.
- NPT Conference: Third Preparatory Committee for the 2005 NPT Review Conference. "Cluster II Issues: Statement by Mr. David Mason, Deputy Head of Mission, Australian Permanent Mission to the UN", Vienna, 29 April 2004.
- NPT Conference: 2000 NPT Review Conference. "Final Document: Review of the Operation of the Treaty, Taking into Account the Decisions and the Resolution Adopted by the 1995 Review and Extension Conference", NPT/CONF.2000/28(Parts I and II), New York, 2000.
- NPT Conference: 1995 NPT Review and Extension Conference. "Final Document: Organization and Work of the Conference", NPT/CONF.1995/32(Part I), New York, 1995.
- NPT Conference: Third NPT Review Conference. "Final Document: Organization and Work of the Conference", NPT/CONF.III/64/I, Geneva, 1985.
- Nuclear Suppliers Group. "Guidelines for Nuclear Transfers", INFCIRC/254/Rev.9/Part1, Vienna, 2007.
- United Nations. *United Nations Disarmament Yearbook*, Vol. 21. New York: United Nations, 1996.