Director's Series on Proliferation

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December 27, 1994

UCRL-LR-114070-7
Distribution Category: UC-700

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Should the NPT be Amended?

*Jan Prawitz**

The text of the Treaty on the Nonproliferation of Nuclear Weapons (NPT) is a compromise that resulted after years of elaborate multilateral negotiations. From time to time proposals have been made to amend the treaty to make it more perfect, "balanced," or up to date. Such proposals have been discussed between the parties, but were never accepted—sometimes because of the substance of the proposed amendment, but frequently also to prohibit reopening of controversial issues. Today, when the 1995 NPT Extension Conference looms closer, the question "Should the NPT be amended?" will probably be raised again by some. The answer is that there should be no change of the formal NPT text, but there should be a continuous modernization of the regime it defines.

Weaknesses of the Treaty

There are a number of issues that are either ignored or are inadequately addressed by the NPT. Some of them are:

- Article I prohibits providing assistance with nuclear weapon acquisition to non-nuclear-weapon states, but permits cooperation between nuclear-weapon states. During the drafting of the NPT, some states preferred a prohibition of all international cooperation regarding the acquisition of nuclear weapons, but they did not prevail because there was a political "requirement" not to infringe upon the special relationship between the United Kingdom and the United States.

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- According to Article IX:3, there are by definition only five nuclear weapon states in the world, i.e., those that "manufactured and exploded a nuclear weapon or other nuclear explosion device prior to January 1, 1967." This provision was designed to discourage a possible race to join the atomic club before the NPT's final entry into force. Today this definition may create uncertainties for the accession to the NPT of "threshold states" such as India.[1]
- Article III prescribes the application of the safeguards of the International Atomic Energy Agency (IAEA) on all nuclear material "in all peaceful nuclear activities" in non-nuclear-weapon states, but not in *all* their nuclear activities, leaving a loophole for nonexplosive military uses. The purpose was to avoid IAEA inspection of machinery for nuclear propulsion of submarines. At the time, some non-nuclear-weapon states hoped to import such submarines from nuclear weapon allies, but the latter were unwilling to expose the submarine reactors to international inspection. The drafters were thus willing to accept a general loophole exempting all nonexplosive military activities from verification.[2]
- Article III has turned out not to be explicit enough to adequately cover modern international cooperation and the import/export of fuel and equipment for the nuclear power industry. This problem, formal in nature and in most cases politically noncontroversial, has today been more or less solved by means of special agreements subsidiary or related to the NPT but outside the treaty itself, such

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[1]The Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco), Article 28:4 prescribes that after the entry into force of the treaty, "the rise of a new power possessing nuclear weapons" can under certain circumstances "suspend the execution" of parts of the treaty.

[2]These provisions are outlined in the NPT-related safeguard system contained in *The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons* (IAEA Document INFCIRC/153), para. 14, prescribing that a state wanting an exemption on safeguards on nuclear material for a permitted non-peaceful purpose shall inform the Agency of the activity, making it clear "that the use of the nuclear material in a non-proscribed military activity will not be in conflict with an undertaking the State may have given and in respect of which Agency safeguards apply," and "that during the period of non-application of safeguards the nuclear material will not be used for the production of nuclear weapons or other nuclear explosives." The state and the IAEA shall in addition make an arrangement so that only while nuclear material is used in such an activity will the safeguards prescribed not be applied. Safeguards shall apply again as soon as the nuclear material is re-introduced in a peaceful nuclear activity. The IAEA shall be kept informed of the total quantity and composition of such unsafeguarded nuclear material exported.

as the Zangger Committee[3] and Nuclear Suppliers Group (London Club)[4] trigger lists, national export/import control procedures, and physical protection measures.[5]

- Article VI prescribing that the parties would undertake "to pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament" was intentionally drafted in nonexplicit language. Some states preferred timetables for finalization of agreements on specific arms control and disarmament measures. This article for a long time was considered by many NPT parties to be poorly implemented. Proposals for prescribing time limits for the negotiation of specific measures, such as a comprehensive test ban, were therefore raised from time to time. After 1987, Article VI became a success story, however.

Some of these issues might be proposed as the subjects of amendments at the 1995 NPT Extension Conference.

Limitations on Amending the NPT

The complicated amendment procedure of the NPT is prescribed in the treaty's Article VIII:1-2. An amendment can be proposed by any party, but the consent of at least one-third of the parties is required to open negotiations on the proposal (Art. VIII:1). A sufficiently large group of states (e.g., the non-aligned group) would thus be able to request that a proposed amendment shall be subject to negotiations among all the parties.

A proposed amendment will be adopted if approved by a majority of the parties, including all the nuclear weapon states parties and "all the parties which, on the day the amendment is circulated, are members of the Board of Governors of the International Atomic Energy Agency" (Article VIII:2). Every one of the more than 25 states belonging to these groups would thus have the right to veto any proposed amendment.

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[3]For the trigger list, see IAEA Document INFCIRC/209 with additions and modifications. The committee is named after its first Chairman, Dr. Claude Zangger.

[4]For the trigger list, see IAEA Documents INFCIRC/254/Rev. 1/Parts 1 and 2; INFCIRC/254/Rev. 1/Part 1/Mod. 1.

[5]Physical protection measures are recommended in IAEA Document INFCIRC/225/Rev. 3. International measures are regulated in "The Convention on the Physical Protection of Nuclear Material," signed in Vienna on March 3, 1980, and entered into force on February 8, 1987 (IAEA Document INFCIRC/274/Rev. 1). The Convention had 51 parties as of May 16, 1994.

An adopted amendment will enter into force for each party upon its ratification of the amendment, but only after a majority of the parties have ratified, including those with the above-mentioned right of veto (Article VIII:2). Any party with a right of veto that agreed to an amendment during negotiations could thus delay its entry into force by holding up its own ratification. These complicated rules imply that negotiations on a proposed amendment would not necessarily lead to an amended treaty, even if approved by a large majority of the parties. And, even if a proposed amendment finally enters into force, some parties may still choose not to ratify, thus generating two classes of parties: those who have amended, and those who have not. After a couple of such amendment processes, the question of which parties are obligated to do what could be seriously confused. There can be only one conclusion regarding NPT amendment: solving formal or substantial problems is easier by separate political action than by attempts to amend the NPT. The following example from the time the NPT was still being negotiated—before any amendment clause was applicable—illustrates a formal difficulty and a solution without having to change the NPT text.

In the fall of 1967, the delegation of the United Arab Republic (UAR) to the Geneva Disarmament Conference discovered a perceived loophole in Article II of the draft of the NPT text negotiated at the time (identical to the final). The language of Article I stated that a nuclear weapon power party undertakes ..."not in any way to assist, encourage, or induce any non-nuclear-weapon state to manufacture or otherwise acquire nuclear weapons or other nuclear explosion devices, or control over such weapons or devices;" Article II did not have a matching provision. The absence of a matching sentence implies that a non-nuclear weapon state party to the treaty would be permitted to assist a non-nuclear weapon state non-party to the treaty to acquire nuclear weapons. The UAR delegation suggested that the draft Article II should be amended by inserting such a matching sentence saying that non-nuclear-weapon states parties "should not in any way assist, encourage, or induce any non-nuclear-weapon state to manufacture or otherwise acquire nuclear weapons or other nuclear explosion devices, or control over such weapons or devices."[6]

The loophole discovered by the UAR delegation was an omission by the drafters, but correcting the draft turned out to be daunting, as it required going back to the highest levels of government of the two superpowers.

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[6]Document ENDC/197, September 26, 1967.

Acceptance of the UAR proposal by the superpowers would have implied that a carefully negotiated compromise between the Soviet Union and the United States had been subject to new negotiations by a much larger group of states. To address this politically difficult situation, the sponsors of the draft explained that the loophole could be closed by interpretation.

The Soviet representative argued that such an insertion would be unnecessary because it was already covered by "the meaning of Article II and the Preamble of the treaty. If a non-nuclear-weapon state party to the treaty were to assist another non-nuclear-weapon state to manufacture and acquire nuclear weapons, such a case would be regarded as a violation of the treaty."[7]

The US representative, on the same occasion, argued that

> *it seems clear that a non-nuclear-weapon state which accepts the treaty's restrictions on itself would have no reason to assist another country not accepting the same restrictions to gain advantage from this fact in the field of nuclear weapon development. If a non-nuclear-weapon party did nevertheless attempt to provide such assistance in the territory of a non-party, the presumption would immediately arise that these acts had the purpose of developing nuclear weapons for itself, in violation of the treaty.*[8]

In retrospect, the NPT regime has existed with this loophole for more than 25 years and has functioned relatively well. The few violations that occurred (e.g., export of critical equipment to Iraq), probably would not have been prevented by the proposed UAR amendment. It is clear that the parallel restriction—the one in Article I applicable to nuclear weapons states—did not prevent transfers to Iraq by nuclear weapons states. The conclusion to be drawn from the Iraq case is not that an amendment to the NPT is required, but that stricter rules for export control should be introduced on the national level in several countries, measures formally outside the NPT itself.

The Nonproliferation Continuum

Although there are a fair number of problems and issues related to the implementation of the NPT, there are better ways of addressing them than amending the formal treaty text. The NPT should be viewed as one, and not the only, milestone in a nonproliferation process.

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[7]Document ENDC/PV. 370 para. 59, February 27, 1968.

[8]Document ENDC/PV. 370 para. 83, February 27, 1968.

The nonproliferation process began during World War II. One of the first measures, before the first nuclear explosion in July 1945, was the sabotage, beginning on February 27, 1943, of the heavy water production plant in Rjukan, Norway, that stopped shipments to the nuclear laboratories of Nazi Germany.

Immediately after World War II, the United States enjoyed a monopoly on nuclear secrets and did not share nuclear technology with anyone. Instead, a diplomatic attempt was made to internationalize the atomic bomb through the United Nations (UN), the Baruch Plan. The upcoming Cold War prevented an agreement in the UN, however, and the strict US policy of nonsharing continued. But that did not prohibit the Soviet Union and the United Kingdom from becoming nuclear weapon powers in 1949 and 1952, respectively.

It became apparent that the knowledge of nuclear physics and its military and peaceful applications would inevitably spread. In December 1953, US President Eisenhower announced the "Atoms for Peace" program to extend "assistance" in developing peaceful applications of nuclear power and technologies internationally. Such assistance was to be granted under the explicit condition that it would further no military purpose, and that it would be subject to the safeguards and inspections of the US Atomic Energy Commission.[9] The Atoms for Peace program was very successful from a nonproliferation point of view, in that most nuclear activities in non-communist states became subject to US safeguards and, thus, not available for bomb making. Only France was rich enough to pursue weapons independently.

In 1957, the International Atomic Energy Agency was set up to make peaceful uses of the atom a truly international rather than an American effort, and to make the system more attractive for the Eastern bloc states. That began a period of transfer of the US safeguards to international IAEA safeguards.

The next milestone was the codification of the political ideology behind all these assistance projects and safeguards, i.e., the agreement in 1968 on the NPT. This was a major breakthrough. Thereafter, a range of well-known political events and agreements took place constituting the nonproliferation regime, including negotiations between nuclear weapon powers on limitations, reductions, and elimination of nuclear weapons, and the establishment of two nuclear-weapon-free zones (in

[9]Statement by President Eisenhower at the 470th meeting of the UN General Assembly on December 8, 1953 (US Department of State publication 5314/1953).

Latin America and the South Pacific). It is this regime rather than the formal 1968 treaty text that, in reality, will be reviewed in 1995.

Against this background of history, the NPT could and should be considered an historical milestone, and this could be the basis for granting the NPT the status of customary law. This would mean that the NPT would apply to all states of the world, whether parties or not. But such a step would also make the elimination of individual deficiencies in the treaty text itself unnecessary. The NPT would then provide a set of political background principles, rather than being an operative legal instrument. It would be much like the 1925 Geneva Protocol that prohibits chemical warfare and is today considered customary law.

The Agenda Approaching 1995

When nonproliferation of nuclear weapons was being negotiated prior to 1968, attention was focused on three principal issues. The major and immediate issue was to what extent a superpower, at that time primarily the United States, would be permitted to delegate control of its nuclear weapons to allies in Europe. The NPT in 1968 solved that problem by prohibiting any control-sharing (Article I). As a result, the world was divided in two parts: the five recognized nuclear weapon powers and the many non-nuclear weapon states. This world order was rightly considered unequal, but provided the basis for subsequent negotiations on nuclear disarmament resulting in the 1972 Strategic Arms Limitation Treaty (SALT) and later agreements.

The second, not so immediate but similarly important issue was that of preventing independent acquisition of nuclear weapons by new states. The NPT agreement started to solve that problem both legally (Article II), and by means of a continuous effort including several subsidiary arrangements, e.g., the IAEA safeguard system, the Zangger Committee transfer restrictions, and physical protection measures. Because of the apparent success of Article I,[10] the implementation of Article II has become the prime preoccupation of most nonproliferation efforts since 1970, to such an extent that Article I issues were almost forgotten.

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[10]Both the first Review Conference of the Parties to the NPT in 1975 and the third such conference in 1985 acknowledged that Article I had faithfully been observed (for Final Declarations, see documents NPT/CONF/35/I and NPT/CONF. III/64/I, respectively). The second and fourth Review Conferences in 1980 and 1990 did not produce final declarations. This assessment formally refers only to the three nuclear-weapon powers that were parties to the NPT at the time, but is widely assumed to apply to all five such powers. China and France acceded to the NPT only in 1992.

The third issue was nuclear disarmament, to be negotiated "in good faith" (Article VI). In recent years, dramatic progress toward nuclear disarmament was agreed, i.e., the Intermediate-Range Nuclear Forces Treaty (1987), Strategic Arms Reduction Treaty I (START I) (1991), and START II (1993), together with the 1991 measures relating to non-strategic nuclear weapons unilaterally declared by the United States and the Soviet Union, and later by the United Kingdom and France.

The development of the nonproliferation regime up to 1990 is very much a success story in the sense that a majority of the states of the world, including all recognized nuclear weapon states, became parties to the treaty;[11] no additional state established itself as a new nuclear weapon power; and dramatic nuclear disarmament measures were finally agreed. A remaining problem is, however, that several states remain non-parties and that some states are suspected of having undertaken advanced preparations for acquiring nuclear weapons, so called "threshold states." Non-parties to the NPT recognized in this category are today Israel, Pakistan, India, and until lately, South Africa.[12] In addition, Iraq, which is a party to the NPT, was in 1991, following the Gulf War, found to have prepared for the production of nuclear weapons and to have violated the safeguards procedures stipulated by the NPT. As a result, Iraq became subject to special action by the United Nation's Security Council.[13] The Democratic People's Republic of Korea, another party to the NPT, has also been suspected of noncompliance.

But one year before the extension conference in 1995, the nonproliferation issue has again become complicated. That makes this point in time

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[11]As of October 1, 1994, there were 166 parties to the NPT.

[12]In March 1993, it was officially revealed that South Africa had fabricated six nuclear explosive devices of a simple gun-type based on domestically produced highly enriched uranium 235. These devices were dismantled, and South Africa is now a party to the NPT. For a description of the South African case, see Waldo Stumph, "South Africa's Nuclear Weapons Programme" in Kathleen C. Bailey (Ed.), *Weapons of Mass Destruction: Cost Versus Benefits*. (New Delhi: Manohar Press, 1994); and J. W. de Villiers, R. Jardine, M. Reiss, "Why South Africa Gave Up the Bomb," *Foreign Affairs*, Vol. 72 (No. 5, November/December 1993) pp. 98–109.

[13]UN document Res S 687 (1991) 3 April 1991. The resolution establishes a Special Commission (UNSCOM, Op. 9 (b)) to execute i.a. the disposal of Iraq's capabilities regarding weapons of mass destruction, including nuclear weapons and the setting up of a monitoring system to ensure that such weapons are not reintroduced in Iraq. The UNSCOM operations have substantially developed verification practices and accumulated experience of great importance for future arms control regimes. The work of UNSCOM is described in *The United Nations Disarmament Yearbook*, Vol. 16:1991 (UN Sales No. E.92.IX.1), 1991, pp. 32–54; and in *The United Nations Disarmament Yearbook*, Vol. 17:1992 (UN Sales No. E.93.IX.1), pp. 248–258.

a very crucial moment for the future of the nonproliferation regime, for the future of the treaty, and for the possibility of building a world order with a reduced or no role for nuclear weapons.

In 1991, the dissolution of the Soviet Union created a new major problem with regard to the future control over former Soviet nuclear weapons. This problem, involving about 33,000 nuclear weapons,[14] has emerged as a new Article I issue and the number-one proliferation issue of today. Solving this problem would include the enrollment of all the "Newly Independent States" (NIS)[15] in the nonproliferation regime and establishment within the NIS of safe management procedures both for remaining nuclear weapons and for nuclear materials from dismantled weapons.

Both the 1987 INF treaty and the 1991 unilaterally declared withdrawals of nonstrategic nuclear weapons have now been implemented. But the entry into force processes of START I and II have been delayed by the disorder in the former Soviet Union and are behind schedule.[16] Some physical implementation of the agreements has already begun, however.[17] Making sure that these processes catch up with the intended schedules before the extension conference convenes is the second most important issue.

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[14]T. B. Cochran, *Nuclear Warhead Destruction*, in *Security, Disarmament, and Confidence-Building in the CIS Context* Disarmament Topical Papers No. 19, United Nations, New York, 1994, pp. 101–109. The author estimates that "the Soviet nuclear warhead stockpile peaked in 1986 at about 45,000 warheads,"...Reductions since then have left "an estimated 33,000 warheads intact in Russia" in September 1993. He also reports that "the US stockpile peaked in 1967 at 32,000 warheads," and that the mid-1993 inventory has been reduced to the level of late 1958, i.e., 17,000 warheads.

[15]The concept of "Newly Independent States" (NIS) refers to all the republics of the former Soviet Union that became independent states at the end of 1991. At a meeting in Minsk on December 8, 1991, Belarus, Russia, and Ukraine agreed to establish the "Commonwealth of Independent States" (CIS) to replace the Soviet Union. All former republics of the Soviet Union except Georgia and the three Baltic states (recognized as independent by the Soviet Union September 6, 1991) signed the CIS agreement (of December 8, 1991) at the Alma Ata summit meeting (December 21, 1991).

[16]Overviews of these problems, including a chronology of events, are presented in UNIDIR Newsletter (November 22–23, 1993) *START and Nuclear Disarmament*, and in *Arms Control Today*, Vol. 24, No. 5 (June 1994), pp. 32–33.

[17]The CIS and US strategic nuclear warhead inventories are now gradually declining. As of April 1994, the US inventory of strategic nuclear warheads was 8380 warheads, and the CIS inventory was 9663; of the latter, 7005 were geographically in Russia, 1684 in Ukraine, 920 in Kazakhstan, and 54 in Belarus (*Arms Control Today*, Vol. 24, No. 4, May 1994, pp. 25–26).

It should be understood, however, that dismantling of a large number of nuclear weapons will create another problem, i.e., the management of huge amounts of leftover weapon-grade uranium and plutonium. The uranium would have an economic value as input fuel for the nuclear power industry and would most probably be consumed within a reasonable time. But the excess plutonium—about 50 or more metric tons on each side—has no such value at present and could become a real problem in the future. (This problem, however, should be kept in context. Excess quantities of reactor-grade plutonium produced by the power industry is by comparison a much larger problem.[18])

However impressive the nuclear reduction agreements are, thousands of nuclear weapons will remain in the arsenals of the nuclear weapon powers after the implementation of these agreements. The safe handling of those weapons will require that the nuclear weapon states maintain nuclear weapons competence. All states should require this, because they have an equal interest in the safe management of those arsenals. Weapons competence will also be necessary for assessing the status of the nonproliferation regime and the emergence of possible threshold states. Again, all states should have an interest in seeing that weapons competence—competence sufficient for such assessments—survives. This knowledge and competence would primarily reside within the nuclear weapon states, which should assure the availability of relevant information for independent assessment by all states.

Among the important arms control issues associated with NPT extension are the comprehensive test ban, the cut off of the production of fissionable material for weapons purposes, and negative nuclear security assurances. In addition, codification of the measures on theater and nonstrategic nuclear weapons, unilaterally declared by the United States and the Soviet Union in 1991,[19] would make these agreements legally binding and, thus, less vulnerable to possible future changes of policy. Such a formal treaty would also restrict the development of new generations of tactical nuclear weapons, and would provide a basis for inviting China, France, and the United Kingdom to adhere to the same regime.

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[18]For analysis of this problem, see *Management and Disposition of Excess Weapons Plutonium*, Report by the US National Academy of Sciences' Committee on International Security and Arms Control, National Academy Press, Washington DC, (January 1994). The report recommends the setting up of a reciprocal US–Russian plutonium regime.

[19]Unilateral declarations by Presidents Bush of the United States and Gorbachev of the Soviet Union, on September 27 and October 5, 1991, respectively. For the text of the Bush and Gorbachev statements, see e.g., J. Goldblat, *Arms Control. A Guide to Negotiations and Agreements*, PRIO, Sage Publications, London (1994), pp. 629–632 and 637–639, respectively.

Resolving one issue—convincing the "threshold states" to join the NPT—before 1995 now seems unrealistic. Another possibility might be to tailor a special solution for each case, i.e., to establish new nuclear-weapon-free zones in troubled regions. Among such zones, proposed in the past, which could be brought up for negotiation again, are the Middle East,[20] the Korean peninsula,[21] South Asia,[22] and Africa.[23]

Finally, another Article I issue that might be discussed concerns nuclear weapons in Europe. After 1996, the European Union will hold a governmental conference and may agree on a common defense policy and common defense forces.[24] If so, that might again raise the problem of the 1960s regarding the sharing of responsibility for nuclear weapons in Europe.

The immediate agenda for 1995 would thus be the reviewing and extending of the nuclear nonproliferation regime, rather than the NPT, and would include:

- Enrollment of all former Soviet republics in all applicable parts of the nonproliferation regime.
- Implementation of already agreed nuclear weapon reduction measures, including setting up of a regime for the management of highly enriched uranium and plutonium from dismantled weapons.

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[20]In 1990, the UN Secretary General submitted a report on possible steps facilitating the establishment of a nuclear-weapon-free zone in the Middle East adopted by the General Assembly the same year. *Towards a Nuclear-Weapon-Free Zone in the Middle East*, UN Document A/45/345 (Sales No. E.91.IX.3.).

[21]In January 1992, the Republic of Korea and the Democratic People's Republic of Korea signed a Joint Declaration on the Denuclearization of the Korean Peninsula.

[22]The establishment of a nuclear-weapon-free zone in South Asia has been on the United Nation's agenda since 1974. Although many problems have been solved, there is still not sufficient consensus on principal matters for agreement. The most recent resolution on the issue was adopted by the UN General Assembly in December 1993 (UN Document A/RES/48/72).

[23]The denuclearization of Africa has been an issue on the political agenda since 1964. For a long time, the uncertainty about South Africa's nuclear activities and its refusal to adhere to the NPT were the main obstacles to progress. Since South Africa has now dismantled its nuclear explosion devices and has become a party to the NPT (see footnote No. 12), preparations for establishing a nuclear-weapon-free Africa could be finalized in the near future. An almost-complete draft treaty, the so-called *Addis Ababa Draft Text of an African Nuclear-Weapon-Free Zone Treaty* (14 May 1994), is attached to the *Report of the Fourth and Fifth Meetings of the UN/OAU Group of Experts to Prepare a Draft Treaty on an African Nuclear-Weapon-Free Zone*. If nuclear-weapon-free zones are established both in Africa and in the Middle East, geographical overlap between the two would require legal harmonization of the respective agreements.

- Continuation of negotiations on nuclear-related arms control measures, including the codification of unilaterally declared measures.
- Exploring regional arrangements, such as nuclear-weapon-free zones.
- Keeping competence and knowledge on nuclear weapons for as long as nuclear weapons exist.
- Considering the issue of the role of nuclear weapons within the European Union.

These are the important nuclear nonproliferation issues of today that must now be addressed. Because of their character, they could obviously not be managed by formal amendment of the NPT. Instead, the treaty should be considered as a milestone in the nonproliferation process, and as a background framework for action on specified issues as they emerge.

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[24]The European Union was established by the "Treaty on European Union" (Treaty of Maastricht), which entered into force on November 1, 1993. The treaty's Article J establishes "a common foreign and security policy of the Union;" and its Article J.4(1) specifies that "the common foreign and security policy shall include all questions related to the security of the Union, including the eventual framing of a common defence policy, which might in time lead to a common defence." According to the NPT, Art. I, "each nuclear weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly." Therefore, the two nuclear weapon powers within the European Union, France and the UK, cannot "transfer" the control of their nuclear weapons to the European Union. Only if the European Union "succeeds" to either of the countries or to both may the Union become a nuclear weapon power. This legal question was analyzed during the ratification process of the NPT in the United States and the Federal Republic of Germany. The crucial issue is when a European Union can be considered to be unified enough to replace or succeed to its member states. The US Secretary of State Dean Rusk in a statement on the NPT to the Senate Foreign Relations Committee on July 10, 1968 (*Documents on Disarmament*, 1968, pp. 495–496) declared that a Federated Europe in order to be eligible to succeed to the nuclear weapon status of one of its former components "would have to control all of its external security functions including defence and all foreign policy matters relating to external security, but would not have to be so centralized as to assume all governmental functions." The transfer of nuclear-weapon-power status from the Soviet Union to the Russian Federation was agreed among the CIS states at a summit meeting in Moscow on July 6, 1992. The meeting decided specifically that the Russian Federation would "continue" the Soviet function as a nuclear weapon power and a depositary state under the NPT.

2

NPT Extension: Legal and Procedural Issues

*Caroline Millar**

The 1995 Conference on the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) will both review the treaty, as part of the cycle of five-yearly Review Conferences provided for under Article VIII.3, and decide how long to extend it, as required by Article X.2.

The importance of the 1995 Conference cannot be overstated. The NPT constitutes the norm for responsible international behavior in the nuclear field. The assurances provided by the treaty and the International Atomic Energy Agency (IAEA) safeguards system are essential for global and regional security and for the continuation of secure trade and cooperation in the peaceful uses of nuclear energy. Without these assurances, distrust of nuclear intentions would exacerbate regional security problems and international nuclear trade and cooperation would diminish. The NPT also provides the only explicit international legal disarmament obligation undertaken by all five nuclear weapon states.

In reviewing the NPT, the Conference provides a valuable opportunity for states parties to demonstrate their support for the treaty and to examine ways to strengthen its operations. In deciding on the extension of the treaty, the Conference will be undertaking a task of enormous responsibility and significance.

This paper examines legal and procedural questions relating to the extension of the NPT at the 1995 Conference.

The inherent complexities of the procedural issues and processes present an additional challenge to NPT parties in tackling the substantive

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work of the Conference. A successful Conference must be well run, so it is vital to make the right decisions on procedural issues during the preparatory process. Some of these issues have been addressed at the first three sessions of the preparatory committee (prepcom), but other key decisions remain. Most importantly, in providing for and deciding on the extension of the treaty in 1995, the parties will need to finalize changes to the Conference rules of procedure and address some intricate international legal questions. Decisions on these issues will require careful, detailed work in the remaining sessions of the preparatory committee, and will also require a commitment, on the part of all parties to achieve a good outcome. Without such efforts, the fourth prepcom could get bogged down in debate on procedural issues, leaving little time for the discussion of substantive issues before they are addressed at the Conference itself.

These procedural and legal decisions obviously are not taken in a political vacuum. The international political and security environment in 1995 will clearly exert a strong influence on the atmosphere in which the extension decision is taken. While it is too soon to forecast exactly what that environment will be like a year hence, the following factors are pertinent.

Over the past 18 months, there have been a number of heartening and positive developments relating to the NPT, which should bode well for a smooth and productive Conference next year. They include: the increasing number of new members of the NPT, notably countries with advanced nuclear programs such as Belarus, Kazakhstan, Ukraine, and soon, Algeria and Argentina; ongoing work in Vienna, since the Gulf War, to strengthen the effectiveness and efficiency of the International Atomic Energy Agency (IAEA) safeguards system; ongoing work among nuclear suppliers to implement their nonproliferation obligations by improving the effectiveness of nuclear and dual-use export licensing arrangements; the Conference on Disarmament (CD) decision in August 1993 to begin negotiations on a Comprehensive Test Ban Treaty (CTBT), the adoption by consensus, for the first time, and with a record cosponsorship, of the 1993 annual United Nations General Assembly (UNGA) resolution on a CTBT, and the progress that has been made in Geneva subsequently in advancing CTBT negotiations; also, following a similar UNGA resolution on a treaty to prohibit the production of fissionable material for weapons purposes (cut-off), the appointment of a special coordinator for cut-off in the CD, and the commencement of initial discussions on how to move the issue further forward.

At the same time, regional proliferation pressures, notably in the Middle East, South Asia, and North Korea could have an adverse impact on the atmosphere of the 1995 Conference. It remains to be seen, too, whether the expectations of many NPT parties for progress on other issues, specifically a CTBT, but also on a cut-off in production of fissionable materials for weapons and security assurances as well as on access to trade and cooperation in the peaceful uses of nuclear energy, will have been met sufficiently by 1995 to ensure the best possible outcome.

The Preparatory Process

We are over two-thirds of the way through the preparatory process for the 1995 NPT Conference, with three prepcoms having taken place and one more to come before the Conference itself. The first two prepcoms reached agreement on a number of important procedural issues for the prepcom process. These included: decisions on the number, timing, and dates of the further sessions of the prepcom; decisions on the chairmen for the second and third prepcoms; agreement that, given the importance of the Conference process, both states non-parties and non-government organizations (NGOs) could attend the prepcoms as *observers;* provision for a special NGO meeting to be held in the margins of the third prepcom; agreement that on decision-making at the prepcoms, every effort would be made to adopt decisions by consensus, but in the event that consensus could not be reached, decisions would be taken in accordance with the rules of procedure of the Fourth Review Conference.

The first two prepcoms also began work on issues for the Conference itself. Key outcomes were: a decision on the dates and venue for the 1995 Conference (April 17–May 12, 1995 in New York); unanimous endorsement of Jayantha Dhanapala of Sri Lanka as President of the 1995 Conference; the adoption of a paper setting out a framework for background documentation to be produced by the UN Secretariat for the third prepcom; preliminary discussion of the financing formula for the Conference; an initial discussion of substantive issues following an Australian proposal for IAEA briefings on NPT Articles III (safeguards) and IV (peaceful nuclear cooperation); and a fairly detailed initial discussion of the rules of procedure for the Conference, in both an informal session of the prepcom and in a working group.

The third prepcom made further progress on a draft text on the Rules of Procedure for taking the crucial extension decision at the 1995

Conference, a revised version of which will go forward to the fourth prepcom. There was also extension discussion of items to be included in the agenda for the Conference. The appointment of a Chairperson for the fourth prepcom was deferred pending further consultations. There was also a thorough discussion of background documents prepared by the UN and the IAEA Secretariat on each of the main articles of the NPT. The third prepcom also resulted in parties moving closer to agreement on the financing formula for sharing the costs of the Conference.

Key procedural issues facing the remaining prepcom will be to decide office holders at the Conference; to decide on the Conference structure to take account of the extension decision; to finalize the rules of procedure; and to settle the agenda for the Conference.

Rules of Procedure

Drafting appropriate rules of procedure for the Conference are essential for the smooth management of the Conference, notably for taking the extension decision. Discussion at the first three prepcoms has focused on a paper, circulated by the Secretariat on behalf of the NPT depositaries, based on the rules of procedure used at the 1990 NPT Review Conference, with amendments to take account of the extension decision. The second prepcom chairman, Hungary's Ambassador Erdos, has at the request of the prepcom compiled a Chairman's Paper on the rules of procedure that takes into account both the depositaries' paper and the suggestions made by other parties at the second prepcom. This paper formed the basis for further detailed discussion at the third prepcom, and a revised version was forwarded as a Conference paper to the fourth precom for finalization.

Discussion to date has focused mainly on the amendments to the quorum, voting, and decision-making rules proposed by the depositaries. At past NPT Review Conferences, decisions on matters of procedure and in elections were taken by a majority of representatives present and voting. But on matters of substance, if best efforts to achieve consensus failed, the President could call a vote if, after a 48-hour deferral, agreement was still not achieved. This vote would be taken by a two-thirds majority *of the states participating in the Conference.*

The existing rules on these issues, that is those used for the Fourth Review Conference, do not accord with the language of NPT Article X.2, which states:

Twenty-five years after the entry into force of the Treaty, a conference shall be convened to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods. This decision shall be taken by a majority of states parties to the Treaty.

Therefore, the extension decision has to be taken by a majority of parties to the treaty—not just a majority of those present and voting. So the relevant rules of procedure need to be modified accordingly. (There is no provision in the rules of procedure for postal or absentee votes, which points to the importance of as many NPT parties as possible attending the 1995 Conference.)

The draft paper on the rules of procedure, which includes proposed amendments to take account of the language of Article X.2, provided a useful basis for further discussion. A decision on the extension of the NPT taken by vote would clearly need to be made by the majority of parties to the treaty. But, if a consensus decision were taken, it is arguable that there would need to be some means (either through a quorum mechanism or possibly by taking a roll call) to ascertain whether a majority of parties to the treaty had participated in the consensus. This would ensure that a consensus decision was taken in accordance with Article X.2, and that the decision would not be open to later challenge.

The language of Article X.2 only provides for the continuation or the extension of the treaty. It does not provide for the termination of the NPT. This means the treaty continues in force until a decision is taken on how to extend it. In the event that the Conference could not reach a decision on the extension of the treaty, the depositaries have proposed a further amendment allowing the Conference to be recessed, reconvened at a later date, and not closed until the decision had been taken. While it is to be hoped that after years of preparation, four prepcoms and a four-week Conference, states parties can come to a decision, the recess mechanism would seem to be a useful safety net, and one that would ensure that the treaty continues in force, in keeping with the terms of Article X.2.

The only concern would be if parties abused this rule. For example, if the Conference were to be recessed for a long time (if agreement on its extension continued to prove elusive), the moral force of the NPT would be undermined. Equally, as has been raised by some, if parties tried to use the recess provision to hold the extension hostage to immediate progress on specific issues, notably a CTBT, there would be questions raised about the value attached to the treaty by its members. And there would be no guarantee that such tactics would have the desired effect.

A further proposal raised in the Chairman's Paper on the rules of procedure is for officer holders to be elected to ensure an equitable regional distribution of posts. In the past, NPT Review Conferences functioned through a mix of the five UN electoral groups (Western Europe and others, East Europe, Asia, Caribbean and Latin America, and Africa) for the Conference Vice-Presidencies; and on the Cold War configurations of East, West, Non-Aligned, and Neutral for both the prepcom and committee chairmanships—the occupants of the committee chairmanships were usually the same as those who had chaired the prepcoms. Given the changing nature of these configurations in the post-Cold War, this issue may need to be clarified for the 1995 Conference.

The Extension Decision and the Conference Structure

In deciding on modalities for taking the extension decision, there would seem to be strong arguments for keeping the extension decision separate from the review of the NPT, so that in the event that agreement on all aspects of the review cannot be reached—as was the case at the 1980 and 1990 Review Conferences—the extension decision would still be taken. Put simply, the extension of the treaty is too important to be held hostage to other issues.

Depending on how, when, and where the extension decision is taken at the Conference, the committee structure may need changing, with accompanying changes to the relevant rules of procedure. This issue was raised briefly in the working group on the rules of procedure at the second and third prepcoms.

Past NPT Review Conferences have formed a credentials committee, a drafting committee, and three main committees to review the NPT. At past Review Conferences, main committee-I dealt with disarmament issues, main committee-II with safeguards issues, and main committee-III with peaceful nuclear cooperation. Various working groups and subcommittees were also formed.

At the 1995 Review and Extension Conference, options for discussing and taking the extension decision could include:

- Discussion in one of the main committees at the Conference, or through a working group of one of the main committees, with the decision being taken in plenary session. Although this would avoid changes to the committee structure (and protracted debate on this subject in the remaining prepcoms), it could detract from the work of that committee in reviewing the treaty.

- Discussion in a separate committee with the decision taken in plenary session. This would require agreement on amendments to the relevant rules of procedure to allow for a fourth main committee. As the extension decision is fairly straightforward, such a committee might not need to meet throughout the Conference.
- Discussion and decision to be taken in plenary session following extensive consultations by the president. A friends of the president group, useful at past Conferences, may prove to be a useful mechanism in view of the flexibility it provides, and in view of the likely difficulties in changing the rules of procedure to accommodate other options. Conference President Dhanapala has expressed an interest in maintaining maximum flexibility through the use of a mechanism of this kind.

The Extension Decision

Article X.2 provides the following three options for extending the NPT. The first option is that the treaty continues in force indefinitely. Indefinite extension is preferred by many countries, including Australia. Only indefinite extension can *guarantee* the treaty's longer-term international and regional security benefits. Indefinite extension would provide a climate conducive to further reductions in nuclear arms and for continued progress in multilateral disarmament negotiations. It would provide the necessary assurances for long-term trade and cooperation in the peaceful uses of nuclear energy. Indefinite extension would also reinforce the normative effect of the treaty and assist in convincing the holdout states that the time has come to re-think their position on accession to the NPT. Less than indefinite extension, on the other hand, would risk sending the wrong signals to the nuclear "threshold" states and other countries of proliferation concern about the commitment of NPT parties to the provisions of the treaty.

The second option is extension for a fixed period. The likely adverse implications for international confidence are obvious. Following a decision to extend for a fixed period (except perhaps a period of extremely long duration), the treaty would effectively lose its persuasive force immediately—though technically it would still be in effect until the specified period expired.

The second option would be most attractive in the unlikely, theoretical situation in which a majority of parties wished to terminate the treaty. As there is no termination clause in the treaty, parties could end

the NPT by a majority decision to extend it for a very short period under Article X.2. (Another option for termination could be through a decision taken by all the parties in accordance with the Vienna Convention on the Law of Treaties.)

A decision to extend the NPT for a fixed period could have severe consequences for nuclear supply and for regional security. If the treaty were to lapse after, say, ten years, so too would the NPT-based safeguard agreements on which nuclear trade and cooperation are based. This would not provide suppliers with the necessary degree of confidence about the long-term use of the items supplied. For example, very long lead times are required for nuclear power projects, which themselves have substantial life spans requiring long-term assurances under safeguards. The implications for regional security are clear—the operation of unsafeguarded nuclear programs would undermine countries' confidence in the intentions of their neighbors.

One proposal that has been floated among NPT parties is for the extension to repeat what has gone before: that is, at the end of a 25-year fixed period (or some other specified period) of extension, a further conference would be convened under the same terms as the 1995 Conference. Doubts have been raised about the legality of this under Article X.2 (i.e., it might require an amendment to the treaty), because a further conference is not provided for under Article X.2. That said, neither does the treaty explicitly rule it out.

The third option is extension for fixed periods (plural). One interpretation of this option would be a decision to extend the treaty for a fixed number of fixed periods. This would, in effect, amount to extension for one fixed period. Another interpretation would be to extend the treaty automatically for long-term fixed periods. This would amount, in effect, to indefinite extension. A further proposal, which has been raised by the eminent former arms control negotiator George Bunn, would be for automatic renewal with a provision for some kind of mechanism (possibly a conference) to decide whether to continue or halt further automatic renewals at which point the treaty would, presumably, expire. All subsequent decisions about the extension of the treaty would need to be made by a majority of parties in keeping with the language of Article X.2.

The option of fixed periods has some attraction for those who have already made clear their interest in placing conditions on the extension of the NPT, i.e., the treaty should be extended for a fixed period with subsequent extension periods dependent on progress on other issues, such as disarmament. Indirect linkage could conceivably be made by (a

majority of) states parties simply refusing to agree to the extension or further extension of the treaty except in certain circumstances. But it is difficult to see how such a provision could be explicitly specified in the extension decision under the terms of Article X.2. That would seem to require an amendment to the treaty.

Although it is open to NPT parties to consider amending the treaty, either in this context or to propose other specific ideas, the provisions for amendment under Article VIII.2 suggest such attempts would prove very difficult. Article VIII.2 requires amendments to be ratified by a majority of parties, including all the nuclear weapon states and the current 35 members of the Board of Governors of the IAEA. And amendments would only bind the parties that ratified them.

Legal Issues Concerning the Extension Decision

The NPT is an unusual international treaty in that it precisely sets out a mechanism for a decision on its future duration. As far as the language of that decision is concerned, states parties should take their cue from the language of the treaty. The language of the decision should therefore be as close as possible to the language of Article X.2.

The extension decision would apply to the treaty in its entirety. Article X.2, however, would thereafter become redundant, as it refers to a Conference that would have previously taken place.

The extension decision, once taken in accordance with Article X.2, would immediately bind all parties, even those who did not support the decision. There is no requirement in Article X.2 for the decision to be ratified or approved by parties before it comes into force for them. The extension decision would therefore not constitute either an amendment to or a revision of the NPT.

The only way to revise the NPT would be by amendment or by the addition of a protocol or the conclusion of a later instrument. Neither option would meet the requirements of Article X.2. As noted above, an amendment, under the terms of Article VIII.2, would only bind those parties that ratified the amendment, and the requirements for treaty amendment are daunting. A protocol would not have to meet these difficult amendment provisions but, again, it would only bind those states that were parties to it.

The prevailing legal view is that the taking of the extension decision would fulfill a particular collective obligation imposed by Article X.2 of the NPT and agreed to by all parties. This means that the decision by a

majority of NPT states parties to extend the treaty, either indefinitely or for a fixed period or periods, would, of itself, have force by virtue of the terms of Article X.2. The most straightforward means of giving legal effect to the decision would be simply to note it in the Conference record, the Final Document (not to be confused with the final political declaration). This would indicate the nature of the extension decision approved at the Conference by a majority of states parties. It would confirm that the decision required by Article X.2 had been reached and would settle conclusively what that decision was.

In terms of the transparency of the decision, anyone considering the NPT before March 1995 would be alerted by the language of Article X.2 to the fact that a decision is to be taken on its future status. And after the 1995 Conference, status lists and reprints of the treaty would record the outcome of the 1995 decision.

Conclusion

In deciding on the extension of the NPT in 1995, states parties will necessarily want to weigh a range of considerations in making their judgments about the effectiveness of the treaty, about what more can be done to strengthen its operations as part of the review process, and about what form the extension decision should take. In so doing, they will need to examine carefully what the various extension options would mean for their national interests: for their regional and international security interests and for their ongoing interests in cooperation in the peaceful uses of nuclear energy. They need to decide which option would best lock in the tremendous achievements in disarmament that have been made since the obstacles posed by the Cold War have been removed and which option would secure the best prospects for further progress in the future. They need to think about what kind of extension decision would be most likely to advance the goal of universal adherence to the NPT and send the strongest signal to non-parties, particularly those with unsafeguarded nuclear programs in regions of proliferation concern, that the time had come to join the treaty. Finally, they need to consider which extension option would best secure the continuation and development of peaceful nuclear cooperation programs—programs that require long-term assurances from both suppliers and recipients.

Australia has given considerable thought to these questions in assessing the role of the NPT in serving its national interests. Australia has come to the hardheaded conclusion that anything less than the assured

continuation of this treaty into the future would pose very serious risks to Australia's vital interests as a major uranium exporter, as a country with a strong and active commitment to nonproliferation and disarmament, and as a country in the Asia Pacific region seeking both to promote peaceful nuclear cooperation in the region and to keep the region free of weapons of mass destruction.

3

An Indonesian View of NPT Review Conference Issues

*Oetarjo Diran**

In 1995, there will be a conference to review the Nuclear Non-Proliferation Treaty (NPT), in accordance with the terms of Article X.2 of the treaty, to "decide whether the treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods." Arms control is expected to dominate the 1995 deliberations, and three principal types of issues will be discussed—political, procedural, and substantive. Political issues are the imbalance of rights and obligations of states parties, the perception of the discriminatory nature of the treaty, and the less than complete compliance and implementation of the fundamental aims of nonproliferation as proclaimed in the preambular paragraphs 9 and 11, and Article VI of the treaty. Procedural issues will include the distinction between indefinite and fixed period or periods. Substantive issues are the banning of nuclear weapons testing, verification and safeguards, security guarantee assurances, and the peaceful uses of nuclear energy.

Characteristics of the Post Cold-War Era

The end of the Cold War eliminated the threat of a major confrontation, a prospect that dominated world politics since the end of World War II. However, the end of the Cold War also revived age-old ethnic and religious animosities in a number of regions all over the world, and they were more intense and lethal than expected. These global changes affect many less developed countries as they undertake efforts to

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develop and industrialize. Indonesia, together with other nations of the Association of Southeast Asian Nations (ASEAN), faces these regional security problems in particular, and the effects of other global instabilities in general.

The changing international environment raises a number of issues for the nonproliferation of nuclear and other weapons of mass destruction. With the end of the Cold War and the dissolution of the Warsaw Pact, the potential for regional conflicts has evolved. On the Korean Peninsula, North Korea is estimated to have enough plutonium for at least two nuclear warheads. In South Asia, principal security concerns include potential religious, ethnic, and minority conflicts. Existing nuclear capabilities in South Asia call for regional arrangements and confidence-building measures aimed at de-emphasizing nuclear armaments.

Central Asia also has become important in the nuclear security context. Ukraine continues to claim ownership of strategic nuclear weapons on its soil and refuses to join the NPT as a non-nuclear weapon state. In the Middle East, recent events in the peace process give hope for a lessening of tensions between states at odds with each other. The dangers posed by Israel's nuclear proliferation may now be reduced. Possible mechanisms for confidence building may have to be identified, such as a possible nuclear-weapon-free zone in the Middle East. States should be encouraged to become party to and adhere to the NPT, and accept International Atomic Energy Agency (IAEA) full-scope safeguard agreements on all nuclear activities.

In Southeast Asia, several factors—including withdrawal of the superpowers from the region, the emerging roles of Japan and China in Asian politics, and rapid growth of economies—have resulted in changes in the security framework. Also, internal and external controversies—both ethnic and religious—territorial claims, and border disputes have stimulated military modernization programs and extensive military procurements. These may be expected to introduce instability politically and economically.

Regional approaches to disarmament must be pursued simultaneously with global solutions. Balanced security at the lowest possible level of armaments and armed forces must be promoted, and destabilizing military capabilities must be eliminated. In this context, regional nuclear-weapon-free zones would be constructive. Confidence-building measures are needed in regions of high tensions, including enhanced economic, environmental, social, and cultural cooperation. These

measures must include the availability of nuclear materials equipment and technology for peaceful purposes on a nondiscriminatory, predictable, and long-term basis, as provided for by Article IV of the NPT. In turn, this will require halting the growing restraints being placed on access to technology by developed countries through the imposition of export control regimes under the pretext of nonproliferation.

Extension of the Nuclear Non-Proliferation Treaty?

In the context of the changed world political order and new regional security threats, the contributions made by the NPT to world security must be assessed. The NPT, with 166 states parties, is the most widely supported arms control treaty in existence. The treaty proved its usefulness during the Cold War, despite the fact that there has been less than complete fulfillment of obligations under the treaty by a number of states parties.

Some countries have doubts about indefinite extension of the NPT, primarily because they perceive limited adherence to the fundamental elements of the treaty—the cessation of the nuclear arms race, nuclear disarmament, and general and complete disarmament. Noncompliance with these principles is a betrayal of the NPT itself, and, if noncompliance is judged to be the case, there may be no grounds for extending the treaty beyond 1995. Although some states parties apparently view Article VI of the treaty as an end in itself, others see it as a means to achieve general and complete nuclear disarmament. The latter group of states, concerned about the continuing division of the world into the haves and the have-nots, suggested informally during the January 1994 Preparatory Committee meeting that if no agreement on extension can be achieved, then the Conference could be recessed until there is compliance with the obligations for disarmament.

The viability of the treaty and progress in nuclear disarmament are linked. The NPT is not only intended to halt nuclear proliferation, horizontal and vertical, but its fundamental objective is to eventually eliminate all nuclear arsenals. The five declared nuclear weapon states are unlikely to renounce nuclear tests for all time, or to permanently halt the production of material for nuclear warheads, or even to dismantle all of their nuclear arsenals to reverse vertical proliferation. Given this, the crucial issue is whether nuclear disarmament measures achieved so far and expected in the future are sufficient to warrant a decision to extend the treaty indefinitely. It is difficult to accept an indefinite extension if

there is not full adherence to the treaty. On the other hand, how much nuclear disarmament is needed to justify extension?

Some measure of disarmament was achieved in the past. Strategic Arms Limitation Treaty I (SALT I) (1972) and SALT II (1978) set limits on the numbers of nuclear warheads, but in the 1970s, a threefold increase from 5800 to 16,000 nuclear warheads occurred. The US–USSR Treaty on the Elimination of Intermediate-range and Shorter-range Missiles (1987) resulted in a very small decrease in arsenals. The Strategic Arms Reduction Treaty-I (START-I) (1991) stated further reduction goals, followed by the START-II two-phased reduction to further limit nuclear warheads, with an expected 70% reduction in strategic arsenals during this decade. But these measures still do not constitute general and complete disarmament; the number of warheads by the year 2003 will still be more than enough to destroy humanity. In 1990, the nuclear weapon states strategic arsenals reached a high of 23,000 warheads (US, 12,319; CIS/Russia, 10,800), while the global stock is estimated to be 50,000 warheads with a total yield of 16,000 megatons of TNT.

Even if total nuclear disarmament were agreed upon, there is a technical limit on the time needed to dismantle nuclear warheads. The United States estimates that it can safely dismantle about 2000 warheads per year with current technology and facilities. Thus, if disarmament were started now, it would take at least twenty years for the US arsenal to be destroyed. Estimates are not available on how long it would take other nuclear weapon states to achieve total disarmament.

Realistically, it can be expected that no nuclear weapon state will be willing to eliminate all of its arsenal for reasons of vital national security interests, and because such weapons are seen as a tool to force their will and to exercise political and military influence in an increasingly complex, dynamic, and uncertain world. It is this reality that may be questioned at the 1995 Conference. This reality will be taken as proof of the discriminatory character of the NPT.

Nuclear weapon states can show their good faith on the Article VI issue by agreeing to a legally binding agreement on a permanent and universal ban on nuclear weapon testing. This will be a key issue at the 1995 Review and Extension Conference.

A Comprehensive Test Ban Treaty

Many of the opponents of nuclear testing view a comprehensive test ban (CTB) as a litmus test of progress toward total nuclear disarmament.

There has been some progress on the CTB issue. Since October 1992, there has been a moratorium on nuclear testing by the United States, the United Kingdom, the Russian Federation, and France. China, however, has continued to test. Additionally, there are negotiations on a CTB at the Conference on Disarmament in Geneva.

Despite this progress, there might not be a lasting CTB. Some nuclear weapon states may view a CTB as detrimental to their security interests. They may perceive a need to maintain the credibility and reliability of their nuclear weapons and may view nuclear testing as the only way to assure that.

Non-nuclear weapon states deeply disagree with the notion that nuclear weapon states are free to continue nuclear testing and to maintain stockpiles of nuclear weapons while non-nuclear weapon states are not allowed to pursue military nuclear programs. This might imply that existing nuclear weapon states are the only responsible states in the world, whereas others are irresponsible and emotional.

Other Renewal Issues

Compliance with Article VI is not the only contentious issue that could hamper an NPT extension. There is the still the unsolved issue of nuclear weapons arsenals stationed in successor states of the former Soviet Union. The threat of proliferation is still imminent, as recent and current tensions in the Middle East and Northeast Asia remind us. Proliferation of nuclear weapon technology could be fostered by nuclear weapon experts from nuclear weapon states or from undeclared nuclear weapon states assisting other nations' programs. There are suspicions of military nuclear programs in some states parties as well as non-parties. In addition, a potentially dangerous blackmarket of uncontrolled nuclear warheads is reportedly emerging. A related danger is that huge amounts of fissionable material are said to have accumulated in several countries, both parties and non-parties to the treaty.

Effective international safeguards and verification, which are essential to the success of the NPT, will also be an issue in 1995. The effectiveness of safeguards and verification is particularly relevant in the new international political and security environment. Iraq and North Korea are examples of the failure of verification rules and mechanisms; they demonstrate the difficulty of verifying compliance if a state is determined to hide its nuclear programs.

Conclusion

In conclusion, there is a strong perception by many NPT parties that the fundamental objectives of the treaty have not been achieved. There is a shared perception that there is discrimination against non-nuclear weapon states, and there is a concern among developing countries that they are the primary target for nonproliferation controls, safeguards, and verification.

Considering the fact that the fundamental objectives of the treaty have yet to be achieved, it is important for all nuclear weapon states to honor their commitments in good faith. They must also maintain intensive negotiations to convert the temporary moratoria on nuclear testing into a permanent ban, and they must achieve nuclear disarmament at the earliest possible date. In Indonesia, there is a widely held belief that a legally binding agreement on banning nuclear testing will help ensure the fundamental aim of the treaty and, in the context of the 1995 Conference, will help the decision to extend the treaty beyond 1995. The success of the 1995 Conference depends to a great extent on the early completion of the negotiations on a CTB, the rapid implementation of START-I and -II treaties, and the readiness of the nuclear weapon states to adhere to those treaties.

It is Indonesia's hope that nuclear arms reductions, as well as limitations on future production, will be faithfully implemented. This will lead to the ultimate goal of the complete elimination of nuclear weapons stockpiles and arsenals within a specific time frame.

4

The Treaty of Tlatelolco and the Nuclear Non-Proliferation Treaty: Tools for Peace and Development

*Enrique Román-Morey**

The Treaty of Tlatelolco and the Nuclear Non-Proliferation Treaty (NPT) are both international instruments coetaneous in their conception and enforcement; however, they are separate, different, and autonomous international instruments.

The NPT prohibits the parties in possession of nuclear weapons from transferring them to other states not in such possession, and from helping the latter acquire weapons or other explosive nuclear devices. The Treaty of Tlatelolco is more comprehensive: it defines the nuclear weapons, prohibits its members from the possession, testing, use, fabrication, production, receipt, storage, installation, or deployment of any nuclear weapons. Both treaties share several common features, including support for the peaceful uses of nuclear energy, the objective of complete and general disarmament, and a commitment to carry out safeguard agreements with the International Atomic Energy Agency (IAEA).

There are also clear differences between the two treaties. The first concerns the matter of duration. The NPT requires that parties decide whether the treaty shall continue in force indefinitely, or shall be extended by an additional fixed period or periods. The Treaty of Tlatelolco "is of permanent nature and shall remain in force indefinitely." A second major difference is that the Treaty of Tlatelolco cannot

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be subject to reservations by its signatories, whereas the NPT does not specifically mention reservations.

There is a general perception, probably because of the large number of NPT signatory states, that the NPT is the international document that governs the nuclear nonproliferation system. However, from the standpoint of Latin America and the Caribbean, the Treaty of Tlatelolco is an international document just as capable as the NPT for the countries that ethically, politically, and legally announce their commitment to nuclear nonproliferation. In the nearly 28 years of its existence, there have been no violations of the treaty. Furthermore, countries that previously remained outside of any nonproliferation treaty have made decisions to join. In January 1994, Argentina and Chile joined Tlatelolco; in May, Brazil; and in November, Belize. These events are clear proof of the treaty's effectiveness.

The Treaty of Tlatelolco has legal equivalency to the NPT, but also has two advantages in its Additional Protocols:

- Additional Protocol I obligates signatory states to apply in the territories that are de jure or de facto under their international responsibility the statute of denuclearization for warlike purposes as defined by the treaty. This provision holds fully for the United States, France, the Netherlands, and the United Kingdom.
- Additional Protocol II, aimed at the recognized nuclear powers, obligates the signatories to fully respect the "statute of denuclearization for warlike purposes of Latin America, such as it has been defined, delimited and declared" by the treaty. Furthermore, the nuclear powers promise not to contribute to acts that violate the treaty and "not to employ nuclear weapons or threaten their use against the signatories of the Treaty of Tlatelolco." This Protocol is fully binding on the United States, France, the United Kingdom, the People's Republic of China, and the Russian Federation.
- These two additional documents, of indefinite duration, as is the Treaty of Tlatelolco, give the other signatories of the treaty and the full members of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL) a kind of special protection that is not mentioned in the NPT.

As can be seen by the following, most of the nations of Latin America and the Caribbean, as a group, have placed high value on both treaties.

- Of the 33 states that are part of this overall regional grouping, only two have not signed the Treaty of Tlatelolco; they are Cuba and Guyana.

- Of the 31 signatories, only two have not yet ratified it and, therefore, are not full members of OPANAL; they are Saint Kitts and Nevis, and Santa Lucia.
- Of the 33 states of the region, 30 are signatories of the NPT; Argentina, Brazil, Chile, and Cuba are the exceptions.
- Guyana is not party to Tlatelolco, but it is of the NPT.
- Saint Kitts and Nevis, and Santa Lucia, which have signed Tlatelolco but not yet ratified it, are full members of the NPT.

The Treaty of Tlatelolco and the NPT should be considered as being complementary in striving for universal peace and international security, and both make important contributions to the process designed to achieve complete and general disarmament.

5

Perspectives on Cut-Off, Weapons Dismantlement, and Security Assurances

*Archelaus R. Turrentine**

Many issues related to the peaceful uses of nuclear energy, arms control, and international security will influence the outcome of the 1995 Nuclear Non-Proliferation Treaty (NPT) Review and Extension Conference. At this point, the issue with the highest profile is clearly the conclusion of a comprehensive nuclear test ban treaty (CTBT). However, other issues, although less prominent, could either help or hurt the prospects for a successful NPT extension depending on their status at the time of the Conference, and how they are being handled. Several of these secondary, but still important issues, include the cut-off of the production of weapon-grade nuclear material, the dismantlement of nuclear weapons and safeguarding of recovered material, and negative and positive security assurances.

Cut-Off

The Clinton Administration has proposed multilateral negotiations on a cut-off of weapons grade material, both highly enriched uranium (HEU) and plutonium, that would prohibit further production of such material for weapons or nuclear explosive purposes, or outside of safeguards. Under such a cut-off, reworking existing material in a weapons program would be permitted and material currently outside the safeguards would not be captured.

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Working with Canada and other friendly delegations, the US position was reflected in a resolution (48/75L) adopted by consensus at the United Nation General Assembly (UNGA) last fall. Some people have argued that this UNGA resolution reflects a decision by the international community on what the scope of a cut-off convention, still to be negotiated, should be. However, that may not be an accurate interpretation. Although the cut-off issue has been on the international agenda for many years, there has been little serious debate on it for the past twenty-five years. The UN resolution may simply be a general agreement to activate the issue rather than reflect a carefully considered collective judgment on how to proceed. As the issue now comes to the fore, it would not be surprising to find out that other countries may have very different views from the US on what should be included in a cut-off convention.

Some countries or individuals may seek to expand the scope of a cut-off convention. They will argue that a cut-off should apply to all new HEU production and should require a cessation of all separation of plutonium from irradiated nuclear fuel, regardless of whether it might be used for nuclear explosive or peaceful purposes. This obviously goes against the interests of those countries that have developed and invested in civilian nuclear reprocessing capabilities and facilities.

Others may argue that a cut-off should not be limited to HEU and plutonium but should include a halt in tritium production for weapons purposes as well. While such a notion might attract some support as an arms control measure that would erode the current generation of weapons in the nuclear stockpile, it could also force changes in the design of existing nuclear weapons and generate new requirements for nuclear testing, which would work against the early conclusion of a CTBT.

There are others who might advocate including in a cut-off convention an obligation that would require nuclear weapon states to move all excess weapons grade material from defense programs to civil programs under safeguards, with no return to defense programs permitted. This could place a significant burden on the International Atomic Energy Agency's (IAEA) budget and would require the recruitment and training of many additional safeguard inspectors, especially if safeguard practices are followed as they currently exist. Any departure from safeguard practices would almost certainly be challenged and could be damaging to the ongoing efforts to strengthen safeguards.

With regard to a cut-off in the production of HEU, it may well be possible to restrict uranium enrichment to the lower levels needed for peaceful reactor fuel. The experience in the early 1980s with the hexapartite agreement on safeguard procedures among enrichment technology holders demonstrates that safeguards can determine the absence of HEU production without compromising the disclosure of sensitive information on enrichment technology.

Because the notion of a cut-off has been around for so long, many people assume, without any critical examination, that it must be a "good idea." However, it would appear, despite the UNGA resolution last fall, that there are many different views with regard to what a cut-off is intended to do, and many different motivations behind those who wish to pursue it actively now, those who wish to postpone negotiations for the present, and those who would like to see the concept die and wither on the vine.

It is difficult to carry out a serious analysis of the pros and cons of a cut-off without knowing what the real objectives are.

- Will it be a measure to support the NPT, or will it be a separate arms control undertaking?
- Will it be designed to deal only with the designated nuclear weapon states (NWS), all of which are now parties to the NPT, or will it include others that have important nuclear capabilities but are not NPT parties?
- If it is to be done in the NPT context as a supporting measure, applying only to the NWS, then wouldn't it make sense to have it negotiated among the five NWS?
- If it is *not* to be undertaken in the context of the NPT, then what approach should be used to protect the NPT from potential "fallout" from the negotiations during the critical 1995 Extension Conference?
- If the objective is to minimize international stocks of HEU and separated plutonium, will a cut-off promote or impede such an outcome?
- Will the prospects of a cut-off produce pressures for NWS to retain larger buffer stocks of HEU and plutonium in military programs than would otherwise be the case?
- One of the original objectives of the cut-off concept was to help cap the nuclear arms race and stem vertical proliferation. Have strategic arms reduction agreements, which focus on the specific systems that are most threatening, turned out to be a far more effective tool in accomplishing this objective?

- Since not all NWS are in the same position with regard to existing stocks, would a cut-off make it easier or more difficult to proceed with an additional round of cuts in strategic weapons, particularly if such cuts involved all five NWS?
- Is the purpose of a cut-off intended to be a serious nuclear disarmament measure, or is it merely a cosmetic disruption to existing nuclear weapon programs?

Currently there is a continuing need for HEU and plutonium, and, at the same time, both are a "glut on the market" because of massive reductions in nuclear weapon inventories. HEU is used in weapons, fuel for naval reactors, fuel for high-flux research reactors, fast breeder reactor fuel, and buffer stocks. Plutonium is used in weapons, mixed-oxide fuel for power reactors, isotopic power sources, and buffer stocks.

Depending on the scope of an effective cut-off convention, some of the benefits might be:

- Certain types of cut-off arrangements might be supportive of the NPT, and might provide backup, much as some nuclear-weapon-free-zones do.
- Certain cut-off arrangements could increase transparency and serve as a CBM to promote other types of arms control arrangements.
- A cut-off arrangement might be used to reduce the prospects of future nuclear stockpile buildup.
- A certain type of cut-off arrangement could provide another vehicle in which all NWS undertake an arms control obligation, and could set the stage for additional five-party arms control agreements.

Some of the potential down-sides to a cut-off convention might be:

- Could make further nuclear weapons reduction harder.
- Verification costs might exceed the arms control or security benefits.
- Would likely involve a number of substantial facilities that could place an excessive burden on the IAEA safeguards system.
- If the verification regime includes provisions for challenge inspections, sensitive facilities entirely unrelated to a cut-off could be put at risk.
- Negotiations could produce stress among the NWS and make it more difficult to work together during the NPT extension process.
- Could provide incentives for new nuclear weapons technologies in order to work with the cut-off constraints (e.g., using less material per warhead).

In considering the cut-off initiative in the context of the NPT, it has the potential to distract efforts to work on a CTBT, which is clearly the top priority of almost all NPT parties. If a cut-off convention is pursued in the Conference on Disarmament (CD) rather than only among NPT parties, it has the potential to create a regime with commitments that are less than those contained in the NPT. By taking the pressure off of the holdout states, this might be seen as making it more difficult to achieve universal adherence to the NPT. Limiting the cut-off to newly produced materials in a sense would legitimatize the materials already produced in unsafeguarded facilities in the threshold states. Additionally, if special verification procedures were adopted for a cut-off that are perceived to be less rigorous than NPT safeguards, the cut-off could produce a backlash among many of the NPT parties that are non-nuclear-weapon states (NNWS).

In sum, if the *primary* objective of the cut-off initiative is to be supportive of the NPT extension decision, it should be tailored for this purpose and bounded to reduce potential negative effects. If the *primary* objective is to cap the stocks of existing weapons grade material in states that are not NPT parties, it would be prudent to lower the profile of the initiative and to seek to manage it carefully to prevent it from having a negative impact on the NPT to the maximum extent possible.

Weapons Dismantlement

The issue of weapons dismantlement is closely related to cut-off. In many respects, it may be of far greater significance in the near term. With the massive reductions in the nuclear arsenals of the US and Russia, and with the return well underway of nuclear weapons from all areas of the former Soviet Union back to Russia, a great deal of attention is being focused on dismantling the warheads retired from service, and on moving the recovered material into secure storage and perhaps placing it under safeguards.

Although it is not covered by the US cut-off initiative, it is difficult to make a logical case for excluding the material recovered from nuclear weapons from cut-off verification requirements, and at the same time spending a great deal of effort on verifying the halt in production of new material that is identical to that recovered from weapons. It is likely that pressure will build to add material recovered from weapons dismantlement to any cut-off regime that might emerge. This prospect for a merger of the weapons dismantlement and cut-off issues presents a number of challenges.

- The cost of adding large quantities of nuclear materials recovered from US and Russian weapons into the cut-off verification regime will be considerable.
- The issue of what form the material should be in presents a problem in converting nuclear weapon components to another form, such as an oxide or metallic buttons for long-term storage. The cost for such conversion would be considerable. These costs have not been factored fully into a US defense budget that is already under stress, or into the Cooperative Threat Reduction Program with Russia. A requirement to change the form of large quantities of material could slow down the dismantlement program, or even bring it to a temporary halt.
- Safeguarding large quantities of weapon grade material would place a major burden on the IAEA, especially if NPT safeguard procedures were to be followed. Failure to apply NPT-type safeguards would create friction with NNWS and would detract from what should be perceived as a positive action.
- To date it appears that weapons dismantlement is being pursued essentially as a bilateral program between the US and Russia with little attention being given to the potential relationship to a serious cut-off negotiation or to the NPT extension decision. At the same time, as soon as multilateral arms control considerations begin to have an impact on nuclear weapon dismantlement, much of the flexibility in the bilateral program, or even in the unilateral US storage program, will be put at risk.

Security Assurances

Secondary, but nevertheless important set of nuclear issues are those dealing with security assurances. With respect to both negative and positive security assurances, it may be possible for the NWS to take concrete initiatives that would be well received by the NNWS at the 1995 NPT Extension Conference.

Negative security assurances (NSAs) are assurances given by a nuclear weapon state to other countries on when nuclear weapons will not be used. All five nuclear weapon states gave their own NSA in 1978 at the time of the First Special Session of the UN General Assembly Devoted to Disarmament (SSOD-I). *Positive security assurances* (PSAs) reflect a commitment from NWS in the form of a UN Security Council resolution (Security Council Resolution 255 of June 19, 1968) saying that the

Security Council, and above all its NWS permanent members, would have to act immediately in accordance with their obligations under the UN Charter in case of aggression with nuclear weapons or the threat of such aggression against a NNWS.

At the 1990 NPT Review Conference, considerable attention was given to both negative and positive security assurances. The Nigerian delegation pressed hard for its proposal to create a legally binding assurance that the NWS would offer to NNWS that are parties to the NPT. After a lengthy negotiation with the US delegation on language for the Review Conference's Final Document, agreement was reached among the three depositary states and Nigeria, as spokesman for the nonaligned group. The agreement provided for the depositary states to consult on the issue with a view to seeking to make "progress," including giving consideration to the Nigerian proposal. However, with the failure of the Review Conference to reach agreement on a Final Document, the agreement on the NSA issue was not recorded in any formal decision.

At the same time that the Nigerian delegation was pursuing its NSA initiative, the Egyptian delegation was undertaking a major effort to stimulate a commitment to further consideration of PSAs. Again, after extensive negotiations, agreed language was worked out that committed the three depositaries to consult on the issue, but not prejudging whether or not it would be raised in the Security Council. However, with no agreement on a Final Document, the agreement on the PSA issue was not recorded in any formal decision either. Subsequently, in an address to the UN, President Bush suggested that the Security Council consider updating its PSA resolution since all five permanent members had become parties to the NPT. This remains an unfinished item of business that still deserves to be addressed.

A great deal of emphasis has been put on developing an NSA regime that is "legally binding." By its very nature, a NSA is something that a NWS "gives" rather than something that a NNWS "claims." With the end of the Cold War it should be possible to harmonize the NSAs given by the US, UK, France, and Russia. However, the Chinese NSA is essentially a no-first-use assurance that does not lend itself to the format used by the other four. In the context of the 1995 NPT Extension Conference, it might be possible to produce a common NSA that all five NWS can agree to, and then pass it in the form of a UN Security Council Resolution that would give it a "legally binding" nature. Likewise, it should certainly be possible to develop a new PSA, that makes some modest improvements on the existing PSA, and to pass it in the form of a new

Security Council Resolution as well. Although these actions should be carefully coordinated with those NNWS NPT parties that have had a traditional interest in the issues, the primary responsibility for these actions must rest with the NWS. After all, the 1995 NPT Review and Extension Conference will be the first conference of treaty parties where all five of the designated NWS are present as full-fledged parties to the treaty.

NPT Extension Decision

In the final analysis, the NPT extension decision is likely to be a reflection of the collective judgment of the parties on how effective the NPT will be in the future rather than how well it has served the parties to date. Proliferation has occurred over the past twenty-five years in spite of the NPT. At present, several countries of greatest proliferation concern are actually parties to the treaty. This does not mean that the treaty has no value. It reflects a very broad agreement on international nonproliferation norms, and it helps to reinforce those norms. However, it only encourages and does not compel good behavior.

At this point, it is not yet clear what type of extension decision will be taken in 1995. What is clear is that not all of the critical issues of our time will be resolved by then. Given the serious security aspects of the issue and the work that remains to be done, it is not realistic to expect that a fully negotiated CTBT will be in place by mid-1995. While a CTBT is an important objective for many NPT parties, it is not, and should not be allowed to become, the central focus of the NPT itself. It is the status of proliferation and the danger of weapons of mass destruction being used that we should really be concerned about. The NPT is an important tool to be used in this battle, but its viability depends on its parties' commitment rather than on its life expectancy. It is important that we not define a satisfactory, but less than perfect outcome as a defeat for the treaty.

The process of nuclear weapons dismantlement that is underway in Russia and the United States should be viewed as a positive trend by the 1995 Extension Conference. It will be important to manage the cut-off issue in such a way that it does not detract from the major contribution that dismantlement is making to the NPT's core objectives. By the same token, it should be possible to complete a security assurance initiative covering both negative and positive assurances prior to the 1995 Conference. This effort deserves to be moved to the front burner, and accomplished in a way that will complement the value of being a NPT party in good standing as well as enhance the treaty itself.

6

Belarus and NPT Challenges

*Serguei Martynov**

International efforts to preserve and extend the Nuclear Non-Proliferation Treaty (NPT) regime have confronted a limited set of problems in the past. Two major ones have been the perceived inherent discriminatory nature of the NPT and the related problems of Article VI, and the so-called rogue countries, which are basically prone to making decisions that suit their interests, irrespective of international legal norms. In preparation for the crucial 1995 NPT Review and Extension Conference, the international community and the nuclear powers have labored to address both problems: to achieve and prove real disarmament, including a comprehensive nuclear test ban, and to bring order to the rogue states. No one expected that a new threat—a direct and major nuclear weapon proliferation threat—would emanate from an established nuclear power. But then one December night, in a forest retreat in Belarus, the Soviet Union was dissolved.

The appearance of four heirs to the awesome nuclear arsenal of the Soviet Union very nearly dealt a severe blow to the NPT. It created the prospect of immediately enlarging the nuclear club by three members, each with formidable modern nuclear weapons—both warheads and delivery systems. It might be argued that these three were not in a position to effectively use the arsenals right away, but that did not make the situation less dangerous.

In these dangerous circumstances, Belarus took the lead and, in a courageous move, ratified in February 1993 the Strategic Arms Reduction Treaty (START) and the Lisbon Protocol. At the same time, Belarus adopted a decision to accede to the NPT. Several months later, in July

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1993, the formal accession followed when Belarus Head of State Stanislav Shushkevich handed the instrument of accession to the NPT to President Clinton at the White House.

The step of Belarus was important on its own merits: a country possessing nuclear weapons was renouncing them. Moreover, Belarus set a precedent for heirs to the Soviet arsenal and provided a positive example. It is evidently one of the largest contributions to the strengthening of the NPT regime and to the success of the 1995 NPT Review Conference, comparable in its impact on the future of the NPT regime with the radical nuclear disarmament pursued by the United States and the Soviet Union/Russia. Belarus was the first country in the world to renounce readily available possession of nuclear weapons as well as modern, mobile, and invulnerable strategic missiles.

Belarus is already well into denuclearization. The removal of the Group of the Strategic Rocket Forces from Belarus to Russia is underway. The Group consisted of two divisions (eight rocket regiments) equipped with the mobile land-based missile complex "Poplar," known in the West as SS-25. There were 72 launchers. The two major sites were the areas of Lida and Mozyr.

The first rocket regiment (9 launchers) stationed in Postavy was removed to Russia in the summer of 1993. The next four regiments (36 launchers) will be removed in the course of 1994, and the rest of them will leave Belarus in 1995, according to the schedule coordinated by the Defense Ministries of Belarus and Russia. By the middle of 1996, the Mozyr and Lida rocket divisions will be totally disbanded in accordance with START-I.

The missile complex "Poplar" will form the basis of the strategic rocket forces of Russia. After the removal of missiles is completed, the former missile bases will be transferred to Belarusian control.

After sending away the "Poplars," Belarus will become the first former Soviet state that meets in deed its commitments to the world community, including those under the Lisbon Protocol. Belarus is doing so without any preconditions or reservations, unlike Russia and Ukraine, and is acceding to the NPT as a truly non-nuclear state.

There are three reasons for Belarus' actions. First, Belarus is a nation of extremely strong antiwar sentiments. Having lost a quarter of its population in World War II, Belarus has suffered ruin repeatedly. In every war, it has been devastated as the battle moves eastward, and then westward again. Second, the nuclear catastrophe at the Chernobyl power station in 1986, and the fact that 70% of the radioactive fallout landed on

Belarus, led to extreme antinuclear feelings by the populace. In the years thereafter, nothing nuclear was considered acceptable. Third, Belarus had a history of more than one attempt to accede to the NPT.

The Belarusian road to the NPT did not start with the dissolution of the Soviet Union. The question of Belarus accession to the NPT was first considered in the aftermath of the conclusion of the treaty. It was ruled out by the then-Politburo on the grounds that, in case of accession, Belarus would have to specify its nuclear or non-nuclear status. Either of these options created obvious problems.

The question was considered dead for a number of years. Then, in the 1980s, the Ministry of Foreign Affairs of Belarus made two other approaches to the authorities of the Soviet Union in Moscow. The first, to the best of my knowledge, was not even considered. The second was considered and examined, but the outcome was the same, and for the same reason as before plus an additional one: not to give "unnecessary examples" to other republics—above all, the Baltic republics.

The independence of Belarus at the end of 1991 created a totally new situation. On one hand, there was no longer a need for the consent of Moscow. On the other hand, a number of new challenges for the now-independent Belarus emerged, none of which had been of concern to Belarus under Soviet rule. How would the security of Belarus be assured when the nuclear umbrella was gone? How would Belarus get rid of nuclear weapons stationed on its soil? How would internal political differences on the issue be resolved? How would international recognition of the non-nuclear status of Belarus be assured? Should Belarus coordinate and synchronize its moves with Ukraine?

It is worth mentioning that many of these challenges were the subject of analysis in a ten-page memorandum prepared in the Ministry of Foreign Affairs of Belarus in August 1990, more than a year before the collapse of the Soviet Union. This memorandum was submitted to the leadership of Belarus, and later became the backbone of the position of Belarus on the nuclear issue, which finally led us to join the NPT. Several months later, almost exactly a year before the dissolution of the Soviet Union, there were unofficial discussions between Belarusian and Russian aides concerning what to do with the nuclear arsenal once the anticipated disintegration of the Soviet Union occurred.

Approximately at the same time in the fall of 1990, Belarus made an attempt to internationalize the problem of nuclear weapons in the Soviet Republics. Belarus submitted an initiative to the United Nations (UN) General Assembly to create a non-nuclear belt between the Baltic Sea

and the Black Sea, which would include the three Baltic states, Belarus, and Ukraine. Unfortunately, the international community did not seize that opportunity to promote nonproliferation.

The Western reaction to the initiative was skeptical because of the alleged unfeasibility of removing nuclear weapons from western parts of the Soviet Union, which were military and nuclear bastions. The reaction of the central Soviet authorities, especially the military, was ill-concealed irritation at the encroachment on their nuclear rights. Thus, both sides of the nuclear equation viewed the idea of denuclearizing Belarus and Ukraine as impossible. The international community at-large showed a lack of awareness and displayed remarkable short-sightedness.

Today a non-nuclear belt between the Baltic and the Black Sea appears feasible, and the denuclearization of Belarus and Ukraine are the coveted goals of both major nuclear powers. Had there been adequate and timely UN action on the Belarus initiative in 1990, the non-nuclear zone in that region could have already been determined. At a minimum, the UN would have been given a role in what has now become essentially a bilateral bargaining process.

This raises the subject of the challenges for the international community in the remaining short time before the 1995 NPT Review Conference and thereafter. The international community must be very mindful of the future and conscious of consequences. Yes, the deep, radical nuclear reductions between the United States and Russia substantially dull the edge of the perceived discriminatory nature of the NPT. Yes, the important, substantial progress on a comprehensive test ban will be an extremely important contribution to the goal of 1995. Yes, the proposed cut-off of fissionable materials is on track now. But there is still no place for complacency. These breakthroughs do not ensure the continuance or integrity of the NPT regime. The treaty can be weakened or lose its attractiveness if the international community does not tread the right path. Rogue countries are watching the situation closely, weighing the benefits and costs of going nuclear or staying non-nuclear, as well as a third option of vacillating in-between and reaping bargaining benefits.

To preserve and strengthen the nuclear nonproliferation regime, the international community at large as well as individual nations will have to adequately respond to the following challenges:

- Avoid employing double standards, as is the case in at least two regions of the world.
- Use positive incentives and examples. Countries that make right choices should be given substantial, long-term rewards to create a

strong, positive incentive for others. Those who make the right choices should be developed into showcases.

- Avoid giving the squeaky wheel the oil. To do so is dead wrong. What conclusion do rogue states draw from observing the appeasement of squeaky wheels? It could be argued that North Korea continuously upped the ante in the wake of observing the squeaky wheel example.
- Remain wary. First, it is not only rogue countries, but also rogue political forces, who are watching the squeaky wheel concept very closely. As proved by a number of recent elections, a political landscape can change very rapidly, especially in countries undergoing deep transformation and economic displacement. Second, when a squeaky wheel is rewarded, it tends to spread pronuclear views from the politically extreme factions to mainstream groups.
- Look beyond 1995. The sought extension of the treaty, even indefinite extension, is not an end in itself and does not automatically grant strength and validity to the NPT regime for years to come.
- Build a strong connection between the NPT regime and ballistic-missile nonproliferation. If the international community fails to establish a truly effective missile-nonproliferation regime, then the NPT might be badly damaged or ruined. By the end of this century, Belarus will be within the range of ballistic missiles, possibly equipped with nuclear warheads, from a number of locations. Chemical or biological agents in warheads do not make them more acceptable. If a country finds itself in a number of overlapping circles on its worst-case scenario maps, then the security pressures are too high. The country is then likely to consider, or reconsider, its own nuclear option.

Without a comprehensive non-proliferation regime including ballistic missiles and technologies, there will never be a reliable NPT. The international community has to move swiftly toward a Comprehensive Nonproliferation Treaty, or Comprehensive Nonproliferation Regime, consisting of a number of individual nonproliferation regimes.

7

A Perspective on the Chemical Weapons Convention: "Lessons Learned" from the Preparatory Commission

*Raymond R. McGuire**

Suggestions have been made that future arms control agreements should be modeled after the Chemical Weapons Convention (CWC) with its emphasis on the verification of compliance by intrusive inspections. If serving as a model is taken to mean learning from the process (i.e., to include the mistakes and false perceptions as well as the positive aspects), then the CWC may serve as a useful model for future agreements. Experience gained in the preparation for implementation of the CWC can provide valuable insights into issues that may arise relative to verification regimes associated with other treaties and agreements currently under negotiation. Some of the major issues can be listed as follows:

- Degree of verification
- Routine vs challenge inspections
- Verification vs confidentiality
- Environmental sampling
- Visual inspection
- Records inspection
- National agendas
- Haves vs have-nots

This paper highlights some of the lessons learned during active participation in the implementation negotiations at the CWC Preparatory Commission (prepcom). It is hoped that some of these observations will be useful to US delegates negotiating prospective arms control treaties.

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Degree of Verification

As a statement of public policy, most nations want treaties to be absolutely verifiable. To declare otherwise might be to intimate that one intended to cheat or at least that cheating was not a concern. The CWC was to be a great step toward absolute verifiability. To accomplish this ideal, an extensive annex was written establishing an international body, the Organization for the Prohibition of Chemical Weapons (OPCW), to implement very intrusive on-site inspections. The CWC, as it will be finally implemented, will be a long way from being either highly intrusive or absolutely verifiable.

Awareness has grown among precom members negotiating the implementation of the CWC that absolute verifiability is neither technically nor politically practical with the current "state of the art" in technology and politics. Absolute verifiability, because it would require continuous access to all parts of a country either by inspectors in person or by remote monitoring equipment, would involve enormous financial cost and the essential loss of sovereignty of states party to the convention.

Recognizing that absolute verifiability is not practical, the question then becomes: what lesser degree of verifiability is practical, and how much is a nation willing to pay for it? Evidence from the CWC precom suggests that the answers given by most states are: a moderate amount and not very much, in that order.

One of the verification problems under the CWC that the United States recognized early in the trial inspection process was the total inability to verify the production, or lack thereof, of small quantities of agent. Even the allowed Single Small Scale Facility (SSSF), where each state party is allowed to produce up to one tonne of agent per year, is a verification problem. The size of the declared vessels can certainly be measured; however, the treaty-allowed capacity of those vessels would enable such a facility to produce between 1 and 2 orders of magnitude more agent than the allowed one tonne. Examples of other similarly unverifiable treaty limitations could be cited. Inspections pertaining to such aspects of the CWC should be viewed more as "confidence building" rather than verification of compliance.

In future international agreements, either greater care must be taken in selecting verifiable treaty limitations, or it must be accepted that monitoring compliance will not be strictly possible in many cases. However, the value of confidence-building measures should not be considered too lightly. They can promote greater understanding, make noncompliance more difficult and, in the best case, generate a will to comply.

Confidence-building measures should not be taken too seriously either; i.e., they should not be considered as providing proof of compliance.

Routine vs Challenge Inspections

The CWC provides for two classes of inspections: routine and challenge. Routine inspections, roughly analogous to International Atomic Energy Agency (IAEA) safeguard inspections, are periodic, announced inspections of facilities, items, and activities declared to the OPCW by a state party. Declarations are required on facilities and items that have at one time been involved with activities proscribed by the convention, or are currently being used for activities controlled and monitored by the convention.

Examples of proscribed activities are the production, stockpiling, and use of chemical weapons. The production and acquisition of chemicals that could be used in the chemical weapon production process, including allowed small-scale agent production, are controlled. The destruction of CW stocks and production facilities are monitored.

The focus of routine inspections will be on the verification of declared activities. Even though the CWC calls for the verification of the absence of undeclared activities, it is practically impossible to do so. Verifying such absence is especially impractical since only declared facilities can be inspected, and they can be rather narrowly defined in facility agreements that govern the inspections. Even though material and environmental samples may be collected and analyzed, the collection and analysis of such samples will be defined by negotiated facility agreements so that a potential cheater would have to be particularly cavalier or sloppy to allow sampling in an area where evidence of a prohibited activity could be detected. Likewise, the routine examination of facility records is not likely to detect noncompliance.

Given the de facto nature of routine inspections as limited to the verification of declared activities, "challenge inspections" become the primary mechanism for detecting possible noncompliance. The probability of actually gathering evidence of undeclared activities will depend on the nature and scale of the activity, and on the effectiveness of intelligence activities, including national technical means (NTM), both before and after the challenge is made known to the inspected state party and, of course, the effort a "cheater" puts forth to hide the clandestine activity. The probability of determining noncompliance at a small production facility using batch reactors is practically zero. However, finding a large

undeclared production or storage facility could be achievable, especially if, for example, a suspicious activity were observed through NTM during perimeter negotiations, and the information were fed to the inspectors at the site.

In the parlance of this paper, therefore, routine inspections become primarily confidence-building exercises, with challenge inspections as the principal method of verification.

Verification vs Confidentiality

The intrusive nature of the inspections required to assure compliance will pose a serious threat with regard to the disclosure of sensitive information that is not relevant to the treaty. As indicated above, absolute verifiability essentially precludes absolute confidentiality and vice versa. This does not mean that some degree of verifiability cannot be obtained with adequate protection of confidentiality. In other words, some "trade-off" must be made. This concept of the trade-off is embodied in the CWC as "managed access" for challenge inspections, and facility agreements for routine inspections. (Facility agreements are in essence a form of managed access. Both are negotiated agreements to limit the *real access* of inspectors to the site.)

The nature of trade-offs to be made for a given activity should be tied both to the risk factor (the potential of a compromise of confidential information plus the consequence thereof) and to the verification potential (the probability of detecting noncompliance) of the activity. A prime example of such a trade-off relates to the collection and analysis of samples during a routine inspection at an industrial facility.

It is generally accepted that the probability of finding an undeclared activity at a declared facility is very small. (One possible exception would be that trace analysis of a sample from a waste tank that collects inflows from parts of the facility that have not been declared.) This low verification potentiality is primarily because the clandestine production would not likely be performed in a declared facility that would be routinely inspected. However, the risk to confidential information, such as a proprietary catalyst or a non-CWC-relevant material that might have been produced in multipurpose equipment, would be quite high if samples were to be collected from traps, filters, around fill tubes, sumps, waste tanks, and other locations where residues are likely to accumulate. This high probability of compromise is increased even more if trace analysis is performed.

If you accept this line of reasoning, the locations where samples are to be collected might be restricted. A politically more acceptable approach is for the chemical analysis to be limited to detecting only specified compounds. In this case, it must be assured that samples do not leave the view of the host, and that restrictions on the recording and disposition of analytical data are strictly adhered to.

A more difficult trade-off must be made for sample collection and analysis as a part of challenge inspections. This type of inspection poses the greatest threat to confidential information because intelligence activities will play a major role in the selection of the challenged site. Yet, for the same reason, challenge inspections have the highest verification potential. Under the CWC, the risk can be controlled, to a substantial degree, through managed access whereby sampling locations must be negotiated. The question then becomes, "How restricted can the analytical process be without seriously degrading the verification potential?"

Environmental Sampling

The US, in particular, has expended a great deal of effort to determine the capability, applicability, and liability (risk to sensitive information) of the collection and analysis of environmental samples. (The term "environmental samples" as used here is meant to include essentially all samples, except samples of bulk material.) This technology has both considerable strengths and serious weaknesses.

Through a rather extensive series of field experiments, we have developed techniques to perform efficiently detailed analysis of environmental samples for many organic anolytes at the inspection site using portable laboratory equipment. By analyzing soil, waste water, and wipe samples, we have demonstrated the ability to detect previous activities, even after cleanup, but not to be able to date such activity. This experience would seem to indicate that the analysis of environmental samples has both a high verification potential and a high risk factor. However, both of these aspects are limited by the inherent characteristics and difficulties of the analysis.

The analysis of environmental samples frequently involves complicated and time-consuming sample preparation. These procedures in themselves will raise the limit of detectability for most target anolytes to the extent that the practical detectability of an organic anolyte in an environmental sample is on the order of 1 part per million (plus or minus a factor of 10). This limit of detectability is essentially independent

of whether the sample is analyzed at the inspection site or in an off-site laboratory. If a very specific anolyte is targeted so that the sample preparation procedure can be optimized, a highly capable analyst can gain an additional factor of 10 in sensitivity.

By limiting the analysis of environmental samples to the inspection site, the analysis can be limited to relevant materials. For example, it is impractical to perform a detailed inorganic analysis, unwarranted under the CWC, using portable equipment. A beneficial trade-off can thus be made between verification and confidentiality for a treaty, such as the CWC, where the treaty-limited chemicals lend themselves to on-site analysis.

The same approach will not be applicable for an inspection regime in which, for example, the detection and identification of isotopic ratios of heavy metals is important. (This type of analysis requires complex and bulky instrumentation but can be performed to significantly lower limits of detection.) In this case, a possible solution would be for the samples to be analyzed by an independent, international laboratory (e.g., the IAEA laboratory at Seibersdorf, Austria). Another, intriguing solution would be to have the samples analyzed in a sophisticated national laboratory of a neutral country, such as Switzerland or Finland.

Visual Inspection

Although most of the energy at the CWC precom has been spent on defining inspection equipment and the protocols affecting its use, visual inspection will remain an important aspect of all on-site inspections. The verification potential of visual inspection varies significantly with the nature of the treaty-limited items. In the case of the CWC, this potential is limited by the dual-purpose nature of chemical processing equipment. Even more serious limitations would be encountered in relation to a Biological and Toxin Weapon Convention (BTWC). However, for inspection items that have distinctly identifiable characteristics, such as nuclear processing "hot cells" or strategic missiles, visual inspection can have a high verification potential. Even for the CWC, there is some potential derived from inspection of the ancillary health and safety equipment needed to protect the work force.

The presence of distinctive process characteristics that are not treaty-relevant can pose a significant risk to confidentiality. There are certain visual aspects of nuclear weapons that remain highly classified and, therefore, must be protected from visual inspection. Similarly, a knowledgeable chemical engineer could detect the small but significant

process variable or control unit that is the key to an industrial firm's profit margin.

It is quite likely that certain items simply cannot be made visually accessible to inspectors without a probable compromise of confidentiality. Employing managed access measures, such as shrouding, can mitigate but not eliminate the risk factor. In an extreme situation, when faced with a conflict between treaty obligation and the necessity to protect sensitive information, the inspected state party may have to deny access and accept the resulting political consequence. In any case, these situations should be identified in advance so that decisions to deny access can be taken at the national level if alternative solutions cannot be identified.

Records Inspection

The inspection of records, such as production, process, shipping, and inventory, is an approach to verification with a high risk factor and a low verification potential. Such records are rarely accurate enough to perform a precise material balance in any case. Records on chemical production are routinely on the order of ±1%, which on a production level of a million pounds per year would leave 10,000 pounds of material unaccounted for. In addition, the "selective modification" of records for inspection purposes would be most difficult, if not impossible, to detect.

On the other hand, records of this type will almost always contain confidential information (e.g., customer names, catalyst identifications, classified shipments, and sensitive storage locations). Even when records do not, individually, contain sensitive information, accumulated records frequently do. Records should only be opened to inspectors after considerable thought and close review by the "home team."

National Agendas

A country usually enters into a treaty commitment with the idea that it has more to gain than to lose. Recent experience at the CWC precom has shown that there can be a long way between the signature and the ratification of a treaty as complicated as the CWC, especially when there must be a trade-off between protecting national assets and showing treaty compliance to someone else's satisfaction. This gap between signature and ratification can arise because there is frequently a broader political participation in the ratification process representing quite disparate ideas of the "national interest." You go from a team of diplomats

during treaty negotiation to a group of industrialists, technocrats, and citizens of all sorts during the ratification process. (The US record on treaty ratification is a good case in point.) The result of the surfacing of these broader agendas during the implementation phase could result in certain nations declining to ratify, or in the treaty being essentially altered. For example, verification measures could be so weakened, to protect confidentiality, that any real prospect of verifiability would be lost.

Haves vs Have-Nots

One of the major difficulties with the CWC is the fact that it can enter into force without having been ratified by any country having either chemical weapons or significant chemical industries. The ratifying countries would have no means of supporting the OPCW, or any reason to, for that matter.

Summary

This paper presents some of the observations made during active participation in the work of the CWC Preparatory Commission. It is suggested that treaty activities be viewed in light of the trade-offs between their "verification potential" and their "risk factor" to confidential information not relevant to the treaty. Examples of some of these trade-offs are given. It is suggested that routine inspections be viewed primarily as confidence-building activities, with emphasis on challenge inspections for verification. Finally, the shifting positions between signature and ratification that are becoming evident in the precom discussions are highlighted. It is hoped that these observations will be useful to others involved in arms control activities.