Online Study Materials on NUCLEAR NON-PROLIFERATION AND WORLD PEACE

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NON-PROLIFERATION OF NUCLEAR WEAPONS

The earliest efforts in the United Nations to draft a treaty, which would ensure that the newly discovered atomic energy would be used exclusively for peaceful purposes. The dissemination of knowledge of nuclear technology, as distinct from its use for military purposes, was accelerated in the 1950's, when the United States and the Soviet Union undertook to render extensive technical assistance in the field of peaceful uses of atomic energy. In addition, the policies of the major powers and their defence requirements led to the building up of military alliances and other collective defence arrangements, including in some cases the stationing of armed forces with nuclear weapons on the territory of countries which themselves did not possess nuclear weapons.

The first proposal dealing directly with the spread of nuclear weapons was advanced by the Soviet Union and the United States in the Sub-Committee of the Disarmament Commission in 1956-1957. Because of its concern about the possible stationing of nuclear weapons in the Federal Republic of Germany, the Soviet Union proposed, in 1956, a zone of limitation and inspection of armaments in Central Europe and, in particular, a ban on the stationing of atomic military formations and the location of atomic and hydrogen weapons of any kind in that zone.¹

The following year, the United States submitted a package of partial disarmament proposals² whereby, from the date of the cessation of production of fissionable material for weapons purposes, each party would undertake not to transfer out of its control any nuclear weapons or to accept transfer to it of such weapons except where, their use would be restricted to the eventuality of an armed attack placing the parties in the situation of individual or collective self-defence.

There, thus, developed two different approaches to the problem of preventing the spread of nuclear weapons, namely, the creation of nuclear free zones from which all nuclear weapons would be prohibited, and, secondly, agreement on a treaty which would specifically ban the dissemination of nuclear weapons by the nuclear powers and the acquisition of nuclear weapons by States not possessing them, which is covered in this chapter. It was, of course, recognised that other steps, such as a ban on nuclear weapon tests, would also help to prevent the proliferation of nuclear weapons.

Irish Proposal

The Assembly's concern about the possible spread of nuclear weapons through dissemination and acquisition took concrete shape during the thirteenth session, in 1958, when Ireland submitted a draft resolution³ on the subject which, though not pressed to a vote, prepared the way for future United Nations decisions.

The following year, Ireland requested that the question of prevention of the wider dissemination of nuclear weapons be included in the agenda of the fourteenth session of the General Assembly⁴ and, on 28 October 1959, submitted a draft resolution,'⁵ which, in its revised form, would have the Assembly recognise the danger of dissemination of nuclear weapons, and suggest that the Ten-Nation Disarmament Committee should consider appropriate means of averting the danger, including the possibility of an international agreement, subject to inspection and control, whereby the powers producing nuclear weapons would refrain from handing over the control of such weapons to any nations not possessing them, and the powers not possessing such weapons would refrain from manufacturing them.

Ireland stressed the importance of preventing the spread of nuclear weapons. Even if a universal agreement on test cessation could be reached, it would still do little to check the actual dissemination, as distinct from the testing of the weapons. Though inspection and control would not eliminate all dangers of a secret transfer of nuclear weapons, nuclear powers should, in their own enlightened self-interest, assume the responsibility of maintaining control over their nuclear weapons and seeing to it that they were not spread throughout the world. Control over the nuclear production of powers not possessing nuclear weapons was considered practicable.

The Soviet Union, though concerned about the problem of the wider dissemination of nuclear weapons, did not support the Irish draft resolution because it did not deal with cases where nuclear weapons were transferred by a nuclear power to the territory of an ally so long as the control of these weapons remained in the hands of the nuclear power. The real danger was not the secret transfer of an atomic installation but the overt transfer to allied territories of nuclear weapons and bases.

France abstained in the vote on the draft resolution on the ground that the transfer of fissionable materials and nuclear weapons alike was difficult, if not impossible, to control. France further believed that the genuine and only problems were: discontinuance and control of the manufacture of fissionable materials for weapons purposes; discontinuance of the production of nuclear weapons; reconvers on of stockpiles for peaceful uses; and control of the manufacture of nuclear delivery vehicles.

The United States supported the draft because it permitted serious study of the important questions raised by Ireland within the context of the disarmament problem as a whole."

The Irish draft was adopted by the General Assembly on 20 November 1959, by 68 votes to none, with 12 abstentions, as resolution 1380 (XIV).⁷ It reads as follows:

The General Assembly

Recognising that the danger now exists that an increase in the number of States possessing nuclear weapons may occur, aggravating international tension and the difficulty of maintaining world peace, and, thus, rendering more difficult the attainment of general disarmament agreement,

Convinced therefore that consideration of this danger is appropriate within the framework of deliberations on disarmament,

Noting the resolution of the United Nations Disarmament Commission of 10 September 1959,

Desiring to bring to the attention of the ten-nation disarmament committee its conviction that consideration should be given to this problem,

1. *Suggests* that the ten-nation disarmament committee, in the course of its deliberations, should consider appropriate means whereby this danger may be averted, including the feasibility of an international agreement, subject to inspection and control, whereby the powers producing nuclear weapons would refrain from handing over the control of such weapons to any nation

not possessing them and whereby the powers not possessing such weapons would refrain from manufacturing them;

2. *Invites* the committee to include the results of its deliberations on these matters in its report to the Disarmament Commission.

In 1960, France became the world's fourth nuclear power, conducting experimental explosions in February and March.

The problem of proliferation, though not considered at the Geneva Conference of the Ten-Nation Disarmament Committee as requested by resolution 1380 (XIV), was again placed on the Assembly's agenda of the fifteenth session by Ireland.⁸

An Irish draft resolution,⁹ as subsequently revised and co-sponsored by Ghana, Japan, Mexico and Morocco: (a) called upon all Governments to make every effort to achieve permanent agreement on the prevention of the wider dissemination of nuclear weapons; (b) called upon powers producing such weapons, as a temporary and voluntary measure pending the negotiation of such a permanent agreement, to refrain from relinquishing control of such weapons to any nation not possessing them, and from transmitting to it the information necessary for their manufacture; and (c) called upon powers not possessing such weapons, on a similar temporary and voluntary basis, to refrain from manufacturing these weapons and from otherwise attempting to acquire them.

Ireland stated that the new draft resolution went further than previous ones in that it called upon both the nuclear and non nuclear States, pending the negotiation and signing of permanent agreements, to declare at once, as a temporary measure, their intention to refrain from acts which would lead to the spread of nuclear weapons. In the absence of a general agreement between the non-nuclear powers not to produce or acquire nuclear weapons, it was a practical certainty that one or the other of them, finding itself in a particularly dangerous position, would sooner or later be driven to make those weapons. Ireland hoped that an agreement would be made by non-nuclear States whereby they would accept United Nations inspection to ensure that none of them was proceeding to make the bomb.

The Soviet Union supported the draft, stressing in particular the dangers that would ensue from giving nuclear weapons to West Germany.

The United States abstained in the vote on the draft resolution. It objected to the failure of the draft to recognise the central responsibility of the nuclear powers since they could not expect other nations indefinitely to deny nuclear weapons to themselves if the nuclear powers themselves refused to accept the responsibility of halting the stockpiling of nuclear weapons. The United States declared that its official policy was hot to favour the proliferation of national nuclear weapons production, capabilities and ownership. This policy was reflected in its public laws forbidding the transfer of nuclear weapons or information concerning their production to any country not already having a substantial nuclear capability. A second feature of the draft resolution to which the United States took exception was that it called for an unverified commitment of indefinite duration.

The draft resolution was adopted by the Assembly on 20 December 1960, by 68 votes to none, with 26 abstentions, as resolution 1576 (XV).¹⁰ It reads as follows:

The General Assembly,

Recalling its resolution 1380 (XIV) of 20 November 1959,

Recognising the urgent danger that now exists that an increase in the number of States possessing nuclear weapons may occur, aggravating international tension and the difficulty of maintaining world peace, and thus rendering more difficult the attainment of general disarmament agreement,

Noting with regret that the Ten-Nation Committee on Disarmament did not find it possible to consider this problem, which was referred to it by General Assembly resolution 1380 (XIV),

Believing in the necessity of an international agreement, subject to inspection and control, whereby the powers producing nuclear weapons would refrain from relinquishing control of such weapons to any nation not possessing them and whereby powers not possessing such weapons would refrain from manufacturing them,

Believing further that, pending the conclusion of such an international agreement, it is desirable that temporary and voluntary measures be taken to avoid the aggravation of this danger,

- 1. *Calls upon* all Governments to make every effort to achieve permanent agreement on the prevention of the wider dissemination of nuclear weapons;
- 2. *Calls upon* powers producing such weapons, as a temporary and voluntary measure pending the negotiation of such a permanent agreement, to refrain from relinquishing control of

such weapons to any nation not possessing them and from transmitting to it the information necessary for their manufacture;

3. *Calls upon* powers not possessing such weapons, on a similar temporary and voluntary basis, to refrain from manufacturing these weapons and from otherwise attempting to acquire them.

Unanimous Support for Irish Resolution

In 1961, the General Assembly redoubled its efforts to deal Support with the possible spread of nuclear weapons. As in previous for Irish years, a separate item was placed on the agenda at the sixteenth session by Ireland,¹¹ and Sweden proposed an inquiry to determine the conditions under which countries not possessing nuclear weapons might refrain from acquiring them in the future.

On 17 November 1961, Ireland submitted a draft resolution which would have the Assembly call upon all States, particularly the States possessing nuclear weapons, to use their best endeavours to secure the conclusion of an international agreement containing: (a) provisions under which the nuclear States would undertake to refrain from relinquishing control of nuclear weapons and from transmitting the information necessary for their manufacture to States not possessing them, and (b) provisions under which States not possessing nuclear weapons would undertake not to manufacture or otherwise acquire control of them.

Ireland expressed the conviction that nuclear war was inevitable if the non-nuclear States became, one by one, the possessors of nuclear weapons. The proposal was aimed at preventing the danger of a nuclear war from becoming greater during the period of time it must take to evolve and strengthen a generally accepted system of world security based on international law and law enforcement. One way of approaching the matter of preventing the wider dissemination of nuclear weapons, Ireland said, was for the nuclear powers to set up a small committee of experts who would work out in private the necessary agreement for submission to their Governments in the first instance; when the agreement had been signed by the nuclear powers, it should be submitted for the approval of the United Nations and the accession of the non-nuclear powers.

Although there was universal support for the Irish proposal, some States regretted that it did not prohibit the physical transfer of nuclear weapons and that, consequently, it did not foresee the contingency in which a nuclear power could transfer nuclear weapons while at the same time retaining control over their use. On 4 December 1961, the draft was unanimously adopted by the Assembly as resolution 1665 (XVI).¹³ It reads as follows:

The General Assembly,

Recalling its resolutions 1380 (XIV) of 20 November 1959 and 1576 (XV) of 20 December 1960,

Convinced that an increase in the number of States possessing nuclear weapons is growing more imminent and threatens to extend and intensify the arms race and to increase the difficulties of avoiding war and of establishing international peace and security based on the rule of law,

Believing in the necessity of an international agreement, subject to inspection and control, whereby the States producing nuclear weapons would refrain from relinquishing control of such weapons to any nation not possessing them and whereby States not possessing such weapons would refrain from manufacturing them,

- 1. *Calls upon* all States, and in particular upon the States at present possessing nuclear weapons, to use their best endeavours to secure the conclusion of an international agreement containing provisions under which the nuclear States would undertake to refrain from relinquishing control of nuclear weapons and from transmitting the information necessary for their manufacture to States not possessing such weapons, and provisions under which States not possessing nuclear weapons would undertake not to manufacture or otherwise acquire control of such weapons;
- 2. Urges all States to co-operate to those ends.

The Swedish Proposal

At the Assembly's sixteenth session, there was also a new proposal by Sweden. On 17 November 1961, Sweden submitted a draft resolution¹⁴ co-sponsored by Austria, Cambodia, Ceylon, Ethiopia, Liberia, the Sudan and Tunisia, which requested the Secretary-General to make an inquiry as to the conditions under which countries not possessing nuclear weapons might be willing to enter into specific undertakings to refrain from manufacturing or otherwise acquiring such weapons and to refuse to receive in the future nuclear weapons on their territories on behalf of any other country.

Sweden stated that it proposed the application on a universal basis of the principles underlying the "Rapacki plan" on the creation of an atom-free zone in Central Europe, and said that there was a correlation between measures to prevent further nuclear tests and the basic idea of that plan (*see page* 328). As there could be different degrees of denuclearisation, it might be desirable to establish different rules for atom-free zones in different parts of the world. If the results of the inquiry were favourable, a conference should be convened in order to work out some arrangement which would meet with the approval of all countries, nuclear and non-nuclear alike.

The Soviet Union regarded the text of the resolution as weak and not sufficiently categorical, and objected to the words "in the future" which appeared in the sentence "to refuse to receive in the future nuclear weapons on their territories on behalf of any other country". It nevertheless supported the draft resolution, feeling that the general intention of the draft was to contribute to the reduction of the dangers of a nuclear war.

The United States opposed the draft resolution on the ground that the proposal sought to shift the emphasis entirely to non-nuclear powers receiving nuclear weapons on their territory on behalf of any other country, and thus to prejudice existing defensive arrangements. The conditions which created the need for defensive arrangements would have to be removed before those arrangements could be terminated. The draft resolution seemed, the United States said, to question the right of free nations to join together in collective self-defence, including the right to self-defence with nuclear weapons if need be. The United States had to continue to give its allies the military support which they requested and which they considered necessary for collective self-defence.

Those in favour of the draft resolution argued that: it would facilitate agreement among the nuclear powers to prevent any increase in the number of nuclear powers; it might make it easier for the nuclear powers to reach an agreement on the suspension of tests and on general and complete disarmament; it would contribute to the creation of denuclearized zones; It would tend to seal off the non-nuclear countries from nuclear weapons; it would reflect the responsibilities and moral obligations of small and medium-sized non-nuclear countries and would facilitate the co-ordination of their efforts to refrain from taking part in nuclear armament; and the proposed inquiry would supply valuable material for the use of the Disarmament Commission.

Those critical of the draft resolution argued that the proposed solution was an isolated one which would give an advantage to one side; it could restrict the ability of States to protect themselves; and it would prejudice existing defensive arrangements by questioning the right of nations to join together in collective self-defence, including the right of self-defence with nuclear weapons. They further maintained that the proposed undertaking should form part of and not precede a comprehensive agreement, since the real solution could be found only in the context of world-wide controlled disarmament.

On 4 December 1961, the Swedish draft resolution was adopted by the General Assembly by 58 votes to 10, with 23 abstentions, as resolutions 1664 (XVI).¹⁵ The resolution reads as follows:

The General Assembly,

Convinced that all measures should be taken that could halt further nuclear weapons tests and prevent the further spread of nuclear weapons,

Recognising that the countries not possessing nuclear weapons have a grave interest, and an important part to fulfil, in the preparation and implementation of such measures,

Believing that action taken by those countries will facilitate agreement by the nuclear powers to discontinue all nuclear tests and to prevent any increase in the number of nuclear powers,

Taking note of the suggestion that an inquiry be made into the conditions under which countries not possessing nuclear weapons might be willing to enter into specific undertakings to refrain from manufacturing or otherwise acquiring such weapons and to refuse to receive, in the future, nuclear weapons in their territories on behalf of any other country,

- 1. *Requests* the Secretary-General to make such an inquiry as soon as possible and to submit a report on its results to the Disarmament Commission not later than 1 April 1962;
- 2. *Requests* the Disarmament Commission to take such further measures as appear to be warranted in the light of that report;
- 3. *Calls upon* the nuclear powers to extend their fullest co-operation and assistance with regard to the implementation of the present resolution.

Secretary General's Inquiry

On 2 January 1962, the Secretary-General requested Member Governments to state their views with regard to the conditions under which countries not possessing nuclear weapons might be willing to enter into specific undertakings to refrain from manufacturing or otherwise acquiring such weapons and to refuse to receive, in the future, nuclear weapons in their territories on behalf of any other country. Replies to the Secretary-General's inquiry were received from sixtytwo Member Governments.* The Secretary-General's report to the Disarmament Commission containing the texts of the replies was circulated to the members of the General Assembly for their information.¹⁶

As to the conditions for adherence to the treaty mentioned by the responding Governments, that of reciprocity was most frequent. Some singled out specific States or all States within specified areas whose reciprocal adherence was required; others demanded universal adherence, including, especially non-members of the United Nations. Some countries also called for the implementation of measures affecting the nuclear powers, and others viewed the objective in the context of general and complete disarmament, believing that until it was achieved, national and collective security interests were likely to determine defence policy.

The three Western nuclear powers indicated that the best solution was general and complete disarmament under effective international control and including nuclear weapons; the USSR supported the idea of nuclear free zones, which, it felt, would contribute towards building confidence between States and reduce the threat of an outbreak of military conflicts.

Eighteen-Nation Committee on Disarmament

The draft treaties for general and complete disarmament introduced by the Soviet Union and the United States in the ENDC in 1962 contained provisions, among the measures of the first stage, to prevent the dissemination or acquisition of nuclear weapons. Both countries also agreed to have this issue discussed as a separate or collateral measure.

^{*} Afghanistan, Albania, Australia, Austria, Belgium, Bulgaria, Burma, the Byelorussian SSR, Cambodia, Canada, Ceylon, Chile, China, the Congo (Leopoldville), Cyprus, Czechoslovakia, Denmark, the Dominican Republic, Ecuador, Finland, France, Greece, Guatemala, Hungary, Iceland, India, Indonesia, Iraq, Ireland, Israel, Italy, Japan, Lebanon, Luxembourg, Madagascar, Mexico, Mongolia, Nepal, the Netherlands, New Zealand, Nigeria, Norway, Panama, Paraguay, Peru, the Philip pines, Poland, Romania, Sierra Leone, Sweden, the Sudan, Tanganyika, Thailand, Tunisia, Turkey, the Ukrainian SSR, the USSR, the United Arab Republic, the United Kingdom, the United States, Venezuela and Yugoslavia. In addition, a communication was received from a country not included in the Secretary-General's inquiry, the German Democratic Republic.

The USSR draft treaty provided' among the first-stage measures the following article:

The States parties to the Treaty which possess nuclear weapons undertake to refrain from transferring control over nuclear weapons and from transmitting information necessary for their production to States not possessing them.

The States parties to the Treaty not possessing nuclear weapons undertake to refrain from producing or otherwise obtaining nuclear weapons and shall refuse to admit the nuclear weapons of any other States into their territories.

The United States plan for general and complete disarmament provided among the first-stage measures the following:

The parties to the Treaty would agree to seek to prevent the creation of further national forces, and to this end, the parties would agree that:.

- (a) any party to the Treaty which had manufactured or which at any time manufactures a nuclear weapon would:
 - not transfer control over any nuclear weapons to a State which had not manufactured a nuclear weapon before an agreed date;
 - 2. not assist any such State in manufacturing any nuclear weapons.
- (b) any party to the Treaty which had not manufactured a nuclear weapon before the agreed date would:
 - 1. not acquire, or attempt to acquire control over any nuclear weapon; not manufacture, or attempt to manufacture, any nuclear weapons.

Consideration by the General Assembly 1962-1963

During the seventeenth session of the General Assembly, in 1962, there was considerable support for the idea that the prevention of the spread of nuclear weapons should be given priority after an agreement had been worked out on the cessation of nuclear weapon tests.

Ireland urged a formal agreement between the nuclear powers whereby they would agree not to give nuclear weapons or information on their production to non-nuclear powers; the latter, in turn, should reciprocate with an agreement not to acquire or to manufacture the weapons and should also agree to accept international controls for this purpose. Ireland Suggested that the problem of preventing the spread of nuclear weapons be separated from other problems and that the nuclear powers should act without waiting for the outcome of protracted negotiations in the ENDC. Sweden, recalling its proposal at the Assembly's sixteenth session, favoured an approach whereby the non-nuclear powers would take the initiative in freezing the present nuclear armaments situation following a test ban agreement.

Measures to prevent the proliferation of nuclear weapons were not specifically mentioned in any resolution adopted at the seventeenth session.

At the eighteenth session, the Soviet Union, among others, drew attention to the Western plan for establishing a NATO multilateral nuclear force (MLF), a plan it deemed contrary to the principle of nondissemination. Burma maintained that, however laudable the hopes and intentions of its sponsors might be, the ultimate result of the plan would be control over nuclear weapons by those who did not possess them. The United States maintained that the projected establishment of the MLF was not in violation of the principle of non-dissemination of nuclear weapons as it did not envisage a transfer of control of nuclear weapons.

In part II of resolution 1908 (XVIII) on general and complete disarmament, which was adopted by acclamation on 2? November 1963, the Assembly called upon the ENDC "to seek agreement on measures which could serve to reduce international tension, lessen the possibility of war and facilitate agreement on general and complete disarmament". However, an attempt in the First Committee to specify, in this connexion, measures to prevent the proliferation of nuclear weapons did not succeed.

Eighteen-Nation Committee on Disarmament and the General Assembly 1964

In the course of the meetings of the ENDC during 1964, measures to prevent the spread of nuclear weapons were again discussed, in particular the possibility of reaching an international agreement on the basis of General Assembly resolution 1665 (XVI) of 4 December 1961. However, mutually exclusive positions among the nuclear powers, especially with respect to the compatibility of the proposed NATO nuclear force with the principle of non-dissemination, remained an obstacle to progress. The United Arab Republic drew attention to a declaration adopted by the Assembly of Heads of State and Government of the Organisation of African Unity held in Cairo in July 1964, in which they declared their readiness to undertake, in an international treaty to be concluded under United Rations auspices, not to manufacture or acquire control of atomic weapons, and which called upon all peace-loving nations to adhere to the same undertaking.

This declaration was also placed before the nineteenth session of the General Assembly¹⁷ with the request that the necessary steps be taken to convene an international conference for the purpose of concluding an agreement on non-proliferation.

Another agenda item was submitted by India entitled "Nonproliferation of nuclear weapons".¹⁸ During the general debate, a number of Member States stressed the importance of non-proliferation. Owing to the special circumstances prevailing at the General Assembly's nineteenth session over the possible application of Article 19 of the Charter, no action was taken on the question.

Disarmament Commission 1965

The first thorough discussion of non-proliferation during this period took place in the Disarmament Commission, which convened at the request of the Soviet Union and met for seven weeks from April to June 1965.

As in the general debate at the General Assembly's nineteenth session, the main difference between the United States and the United Kingdom, on the one hand, and the Soviet Union, on the other, was the question of access to nuclear weapons through military alliances. The United States declared that it would take no action contrary to resolution 1665 (XVI) and called upon the Soviet Union for similar assurances. The Soviet Union in turn stressed that an agreement must preclude any direct or indirect access to nuclear weapons by any non-nuclear powers.

One of the new developments in the Disarmament Commission's debate was the suggestion by India and Sweden¹⁹ that a more equitable and practical basis of agreement would consist of a package or integrated approach consisting of a non-proliferation agreement and some other measures affecting directly the nuclear weapons capability of the nuclear powers. Other questions that arose were the possibility of stipulating a time-limit for an undertaking by non-nuclear powers not to acquire

nuclear weapons as an inducement to the achievement of disarmament on the part of the nuclear powers. There were also suggestions for guarantees to be offered countries which forego nuclear weapons under the agreement.

In a resolution adopted on 15 June 1965,²⁰ by 83 votes to 1, with 18 abstentions, the Disarmament Commission called upon the ENDC to reconvene as soon as possible and to "accord special priority to the consideration of the question of a treaty or convention to prevent the proliferation of nuclear weapons, giving close attention to the various suggestions that agreement could be facilitated by adopting a programme of certain related measures".

Eighteen-Nation Committee on Disarmament 1965

When the ENDC reconvened on 27 July 1965, the problem of nonproliferation became a dominant issue of the Conference. The United States stressed the urgent need to prevent the further spread of nuclear weapons and urged the Committee to seek agreement on a number of measures aimed at this objective, in particular to conclude a nonproliferation agreement based on Assembly resolution 1665 (XVI), of 4 December 1961, and to aim at universal application of the safeguards system of the International Atomic Energy Agency 1 (IAEA) to nuclear activities for peaceful purposes. Italy declared that in the case of delay in agreement on a non-proliferation treaty, it was ready to appeal to non-nuclear powers to renounce unilaterally the acquisition of nuclear weapons for a specific period of time, after which non-nuclear States would have freedom of action if a non-proliferation treaty had not been concluded.

United States Draft Treaty on Non-Proliferation

On 17 August 1965, the United States submitted to the Conference of the Eighteen-Nation Committee on Disarmament (ENDC) a draft treaty to prevent the spread of nuclear weapons. The draft treaty would: (1) prohibit nuclear powers from transferring nuclear weapons into the national control of any non-nuclear state, either directly, or indirectly through a military alliance; (2) prohibit nuclear powers from taking any other action which would cause an increase in the total number of states and other organisations having independent power to use nuclear weapons; and (3) prohibit nuclear powers from assisting any nonnuclear State in the manufacture of nuclear weapons. Under the draft, non-nuclear States would undertake corresponding obligations not to manufacture nuclear weapons and not to seek, receive or give assistance in the manufacture of these weapons; not to seek or to receive the transfer of such weapons into their national control, either directly, or indirectly through a military alliance; and not to take any other action resulting in an increase of the total number of States and other organisations having independent power to use nuclear weapons.

Explaining its draft treaty, the United States said that since the draft prohibited direct and indirect forms of transfer into national control, no additional nuclear power could emerge, whether national or international. The United States believed that a non-proliferation treaty should remain in force for a long time, possibly indefinitely and that therefore, it should neither preclude possible political developments, especially in Western Europe, which could result in the establishment of a new political and defence entity, nor preclude such an entity from possessing and controlling nuclear weapons. Such a new organisation having independent nuclear power could come into existence, however, only if a present nuclear nation should voluntarily turn over its entire stockpile of nuclear weapons to such a collective entity, and also should renounce its right of veto over the collective force. Even if a new defence entity were established, no non-nuclear member of it could acquire an independent power to use nuclear weapons.

When asked by the Soviet Union whether the draft treaty precluded a multilateral nuclear force (MLF) with the participation of the Federal Republic of Germany, the United States said that was a matter of nuclear strategic arrangements within NATO and as such was not a subject within the Committee's competence. The United States said that proposed NATO nuclear arrangements were not disseminatory and that the United States and its allies would see to it that all future NATO nuclear decisions would comply with the provisions of the nonproliferation treaty.

The United Kingdom stated that, while supporting the United States draft, it would prefer to see the inclusion in a final draft of a specific right of veto by the nuclear powers, whereas articles 1 and 2 of the United States draft left open a theoretical possibility that an association of States might be able to use nuclear weapons by a majority decision.* The United Kingdom appealed to the ENDC to proceed with negotiations on the basis of the United States draft, although it was ready to discuss any amendments and ideas which would improve the final text.

Canada also supported the United States draft, but attached importance to the inclusion of more specific undertakings to apply the

^{*} In April 1966, the United States submitted amendments (ENDC/ 174) to its draft treaty covering this point.

IAEA safeguards to peaceful nuclear activities. Canada hoped that the Soviet Union would co-operate in the preparation of a treaty despite its misapprehensions regarding the proposed NATO nuclear arrangements.

Italy advocated the early conclusion of a non-proliferation treaty based on the United States draft, and suggested the establishment of an informal working group within the Committee to discuss, with the help of legal advisers, provisions of and amendments to a draft treaty. At the same time, Italy stressed that the treaty should not remain an isolated disarmament step but should be accompanied by a freeze on production of nuclear weapons and by actual reduction of nuclear stockpiles.

On 14 September, Italy submitted in the ENDC a draft unilateral declaration of non-acquisition of nuclear weapons,²¹ whereby States would unilaterally undertake for an agreed period of time: (1) not to manufacture or acquire national control over nuclear weapons; (2) not to seek or receive assistance from other States in manufacturing these weapons; and (3) to accept application of the IAEA or equivalent international safeguards on nuclear activities. The undertakings would be subject to similar declarations issued by an agreed number of States within six months from the signature of the declaration deposited with the United Nations or signed according to other procedures. These obligations could be prolonged, depending on progress on international disarmament agreements, such as a non-proliferation treaty, halting of the arms race and reduction of nuclear arsenals. Parties would reserve all freedom of action if any State acquired national control of nuclear weapons. Italy said that its draft was only a tentative one aimed at establishing a basis for future negotiations. In particular, the question of the period of validity of the proposed non-acquisition declaration and the timing of accession by various States were open for discussion.

The Soviet Union and the East European members of the ENDC restated their objections to any draft non-proliferation treaty which would not ban all direct and indirect forms of access to nuclear weapons. The Soviet Union emphasized that nuclear arrangements discussed within NATO were being devised for sharing control over nuclear weapons with the Federal Republic of Germany and, thus, were incompatible with the principle of non-proliferation. The Soviet Union said that the Western powers were only manoeuvering in declaring their readiness to sign a nuclear non-proliferation agreement with the Soviet Union, while at the some time trying to preserve the possibility of the admission of the Federal Republic of Germany to the nuclear club. It declared that a NATO nuclear-sharing arrangement was incompatible with a non-proliferation treaty.

Poland said that a non-proliferation treaty must introduce an absolute and comprehensive ban on all forms of nuclear proliferation and, more specifically, should freeze the present status of all States with respect to physical access to nuclear weapons, their ownership, disposition, operation and control, as well as training in their use and nuclear planning.

A number of proposals and ideas were advanced by the non-aligned members of the Committee towards the solution of the problem of non-proliferation. There were some elements of common approach: (1) a non-proliferation treaty should not become an end in itself; it should either become part of a wider disarmament programme, or be followed by an early halt to the production of nuclear weapons and a reduction in existing arms stockpiles of nuclear powers; (2) a comprehensive test ban treaty was either preferable to, or was as important or effective a measure as, a non-proliferation treaty; (3) irrespective of their suggestions as to the form and scope of a nonproliferation treaty, all non-aligned countries of the ENDC declared their determination not to acquire nuclear weapons; (4) they welcomed the Italian proposal and, in varying degrees, supported the idea as a possible temporary solution, although India said that the Italian proposal must also include corresponding obligations by the nuclear powers; (5) they welcomed the United States draft treaty, although India stated that the draft must include a programme of related disarmament measures by the nuclear powers.

India proposed the conclusion of a two-stage non-proliferation agreement. The first stage (or a partial non-proliferation agreement) would apply only to nuclear powers who would undertake, under a formula acceptable to the two power blocs: (1) not to pass on weapons or technology to other States; (2) to cease all production of nuclear weapons and delivery vehicles, and to agree on the beginning of a programme of reduction of their stocks; and (3) to agree also to incorporate other measures. After this treaty had come into force and steps had been taken by the nuclear powers to stop all production and to embark on reduction of stocks, the second stage of the treaty (or the comprehensive treaty) would begin, which would provide for an undertaking by non-nuclear powers not to acquire or manufacture nuclear weapons. The transition between the first stage and the second stage of the treaty, or between the partial treaty and the comprehensive non-proliferation treaty, might be regulated by the Italian proposal. Towards the end of the session, India declared that its position with regard to an international agreement on non-proliferation was flexible. It would not press for beginning the reduction of nuclear stocks before a non-proliferation treaty was signed. However, the renunciation by non-nuclear powers of the production, acquisition and control of and access to nuclear weapons must be simultaneous with the renunciation by nuclear powers of further production of these weapons and with agreement on reduction of existing nuclear stockpiles.

Sweden suggested that an agreement on a comprehensive test ban would be the most practical measure to prevent an increase in the number of nuclear powers, since it was improbable that a nuclear power could emerge without an extensive programme of nuclear testing. Sweden restated its preference for a solution of the non-proliferation problem within the package of measures, including a comprehensive test ban and a cut-off of production of weapon-grade fissile materials. It supported the Italian proposal as a temporary solution and suggested that, in order to make acceptance by some non-nuclear States easier, the time-limit for a moratorium envisaged by the Italian formula should be relatively short.

The United Arab Republic said that a non-proliferation treaty should take into account the decisions of the Cairo Conference. Brazil expressed the hope that a treaty would provide for effective security of nonnuclear powers and would take into account social and economic needs of under-developed countries.

Nigeria said that success in preventing a number of new countries from acquiring nuclear weapons depended on the following principles: (a) responsible political actions by the major powers and, in particular, refraining from nuclear blackmail of smaller States or threatening their sovereignty with conventional weapons; (b) sufficient development of the United Nations to safeguard and guarantee the territorial integrity of States; (c) banning of nuclear weapons and/or renouncing their first use; and (d) freezing of the production of nuclear weapons and nuclear delivery vehicles. Nigeria did not, however, suggest any formal link between a non-proliferation treaty and other measures, and was willing to proceed with the negotiation of a non-proliferation agreement as a separate limited step.²²

Ethiopia thought that, as a minimum requirement, a non-proliferation ban should be accompanied by a comprehensive test ban and, perhaps, such measures as denuclearisation of certain regions of the world and the signing of a convention on the prohibition of the use of nuclear weapons. However, Ethiopia, as well as Burma and Mexico, supported the proposal for signing a limited non-proliferation agreement, without linking it to other measures.

On 15 September, the eight non-aligned members of the ENDC submitted a joint memorandum on non-proliferation of nuclear weapons²³ which expressed regret that it had not yet been possible to reconcile the various approaches to an adequate treaty. They believed that a treaty on non-proliferation was not an end in itself, but only a means to an end, namely, the achievement of general and complete disarmament and, more particularly, nuclear disarmament. They were "convinced that measurer; to prohibit the spread of nuclear weapons should, therefore, be coupled with or followed by tangible steps to halt the nuclear arms race and to limit, reduce and eliminate the stocks of nuclear weapons and the means of their delivery".

Soviet Draft Treaty on Non-Proliferation

The question of the non-proliferation of nuclear weapons was included in the agenda of the Assembly's twentieth session at the request of the Soviet Union.²⁴ The First Committee had before it two draft treaties on the subject, that of the United States, submitted to the ENDC in August 1965 (*see page* 270), and that of the Soviet Union, submitted in September 1965 to the General Assembly.

The Soviet draft treaty would: (1) prohibit nuclear powers from transferring nuclear weapons directly or indirectly through groupings of States, into the ownership or disposal of States or groups of States not possessing nuclear weapons or from granting the aforesaid States or groups of States "the right to participate in the ownership, control or use of nuclear weapons"; (2) prohibit such powers from giving nuclear weapons and control over them and over their location and use to units of the armed forces or to individual members of the armed forces of States not possessing nuclear weapons; and (3) require powers not possessing nuclear weapons to undertake not to create, manufacture or prepare to manufacture nuclear weapons either independently or jointly with other States, and to refuse to be associated with nuclear weapons in any form whatsoever—directly or indirectly, through third States or groupings of States.

In explanation of its draft treaty, the Soviet Union stated that the growing capacity of a number of States to manufacture nuclear and thermo-nuclear weapons made it increasingly important to take measures to prevent such proliferation. It stressed that the greatest danger of proliferation was presented by the plans for the creation of a NATO multilateral or Atlantic nuclear force, within the framework of which it was intended to give access to nuclear weapons to the Federal Republic of Germany.

Consideration by the General Assembly 1965

During the 'deliberations in the First Committee, three draft resolutions were submitted. By the United States draft²⁵ the General Assembly would urge the ENDC to accord special priority to agreement on a treaty to prevent the proliferation of nuclear weapons. The USSR draft²⁶ called on the General Assembly to transmit the Soviet draft treaty on the non-proliferation of nuclear weapons to the ENDC for detailed study, and to suggest that the ENDC should come to an early agreement on non-proliferation on the basis of the main principles which were stated in detail in the draft. The draft submitted by Brazil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden and the United Arab Republic²⁷ contained a list of five "main principles" which should serve as a basis for negotiations in the ENDC on a treaty on nonproliferation.

One of the issues considered by the First Committee was that of defining what would constitute direct or indirect proliferation and consequently what a treaty void of any loopholes would prohibit. The Soviet position was that a treaty must exclude "any possible spread of nuclear weapons through any channels, apparent or secret; through the direct transfer of such weapons to non-nuclear States; through giving access to such weapons; or through collective controls over such weapons in the framework of a military alliance; or through any other means".

The United States explained that under its draft treaty, no nonnuclear country could acquire nuclear weapons, national control over nuclear weapons, the power itself to fire nuclear weapons, or information on how to manufacture nuclear weapons; it barred an increase in the number of entities having independent power to use nuclear weapons, and hence contained no loop-holes. The United Kingdom stated that the Western powers were not prepared to negotiate on internal arrangements of NATO, but were determined that those arrangements should be consistent with non-proliferation. It suggested that the essential articles of the United States draft could be improved by being 'even more tightly drafted... to prevent an admittedly remote and hypothetical possibility from being left open".

The United Arab Republic wanted a strict agreement to prevent the spread of nuclear weapons "either directly to non-nuclear States, or under the guise of any other form of organisation, military or otherwise". Ireland, on the other hand, stated that the essential factor was to ensure that the nuclear powers which participate in mixed military alliances commit themselves firmly to the obligation not to give to any non-nuclear State whatsoever control over its nuclear weapons or the means of acquiring such weapons.

The United States and the Soviet Union were in agreement in opposing the linking of other measures to a non-proliferation agreement. This was a response to views expressed by some members in explicit support of the eight-power joint memorandum, submitted in the ENDC on 15 September 1965, which stated that a non-proliferation treaty should be "coupled with or followed by" other measures. India contended that some of these tangible steps must be coupled with measures to prohibit the spread of nuclear weapons, while others could follow. Sweden interpreted the memorandum to mean not that several measures should be bound up within the confines of one and the same treaty, but that they should be simultaneously encompassed by negotiations.

Some countries touched on the guarantee or assurances that nonnuclear countries might require to anticipate a possible threat of nuclear attack or blackmail. The United States, recalling previous assurances of support for non-nuclear countries, suggested that action by the General Assembly would be a useful part of a guarantee. Ireland considered that guarantees of the security of non-nuclear countries were essential. India, however, was among those countries which questioned the approach to guarantees, observing that security of non-nuclear States lay not in guarantees but in meaningful disarmament. Others, including the United Kingdom, stated that the question of guarantees raised many specific problems which required study, especially by the nonnuclear powers.

Nigeria proposed as an indispensable element of any treaty a firm guarantee by nuclear powers not to use or threaten to use nuclear weapons against non-nuclear countries under any circumstances whatsoever. A number of countries favoured a strong provision in the treaty requiring parties to co-operate in facilitating the application of IAEA or equivalent safeguards to their peaceful nuclear activities. Italy recalled its draft declaration submitted in the ENDC whereby non-nuclear countries would, through unilateral declarations, renounce for a given period, and under international control, the national acquisition of nuclear weapons. A, number of countries expressed interest in the Italian approach and supported its further consideration by the ENDC, but others stressed that it should be considered only as a last resort. Among the issues raised in connexion with the Italian proposal were: the question of corresponding obligations of the nuclear powers; the duration of the moratorium— Sweden, for example, suggested two years; and whether the Italian draft declaration did not raise the same problems of access through NATO as did the United States draft treaty.

Many countries regarded a ban on underground tests as the collateral measure most directly connected with the objective of non-proliferation, and many favoured the establishment of nuclear free zones as an approach to non-proliferation.

The United States and the Soviet Union announced that they would not press for a vote on their respective texts. On 23 November 1965, the eight-power draft resolution was adopted by the General Assembly, by 93 votes to none, with 5 abstentions, as resolution 2028 (XX).²⁸ It reads as follows:

The General Assembly,

Conscious of its responsibility under the Charter of the United Nations for disarmament and the consolidation of peace,

Mindful of its responsibility in accordance with Article 11, paragraph 1, of the Charter, which stipulates that the General Assembly may consider the general principles of co-operation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments, and may make recommendations with regard to such principles to the Members or to the Security Council or to both,

Recalling its resolutions 1665 (XVI) of 4 December 1961 and 1908 (XVIII) of 27 November 1963,

Recognising the urgency and great importance of the question of preventing the proliferation of nuclear weapons,

Noting with satisfaction the efforts of Brazil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden and the United Arab Republic to achieve the solution of the problem of non-proliferation of nuclear weapons, as contained in their joint memorandum of 15 September 1965,

Convinced that the proliferation of nuclear weapons would endanger the security of all States and make more difficult the achievement of general and complete disarmament under effective international control,

Noting the declaration adopted, by the Assembly of Heads of State and Government of the Organisation of African Unity, at its first regular session, held at Cairo in July 1964, and the Declaration entitled "Programme for Peace and International Co-operation" adopted by the Second Conference of Heads of State or Government of Non-Aligned Countries, held at Cairo in October 1964,

Noting also the draft treaties to prevent the proliferation of nuclear weapons submitted by the United States of America and the Union of Soviet Socialist Republics, respectively,

Noting further that a draft unilateral non-acquisition declaration has been submitted by Italy,

Convinced that General Assembly resolutions 1652 (XVI) of 24 November 1961 and 1911 (XVIII) of 27 November 1963 aim at preventing the proliferation of nuclear weapons.

Believing that it is imperative to exert further efforts to conclude a treaty to prevent the proliferation of nuclear weapons,

- 1. *Urges* all States to take all steps necessary for the early conclusion of a treaty to prevent the proliferation of nuclear weapons;
- 2. *Calls upon* the Conference of the Eighteen-Nation Committee on Disarmament to give urgent consideration to the question of non-proliferation of nuclear weapons and, to that end, to reconvene as early as possible with a view to negotiating an international treaty to prevent the proliferation of nuclear weapons, based on the following main principles:
 - (a) The treaty should be void of any loop-holes which might permit nuclear or non-nuclear powers to proliferate, directly or indirectly, nuclear weapons in any form;
 - (b) The treaty should embody an acceptable balance of mutual responsibilities and obligations of the nuclear and nonnuclear powers;
 - (c) The treaty should be a step towards the achievement of general and complete disarmament and, more particularly, nuclear disarmament;
 - (d) There should be acceptable and workable provisions to ensure the effectiveness of the treaty;

- 3. *Transmits* the records of the First Committee relating to the discussion of the item entitled "Non-proliferation of nuclear weapons", together with all other relevant documents, to the Eighteen-Nation Committee for its consideration;
- 4. *Requests* the Eighteen-Nation Committee to submit to the General Assembly at an early date a report on the results of its work on a treaty to prevent the proliferation of nuclear weapons.

Eighteen-Nation Committee on Disarmament 1966

respective territories;

When the ENDC reconvened on 27 January 1966, its discussions centred mostly on the draft treaties to prevent the spread of nuclear weapons, which had been submitted by the United States in the ENDC on 17 August 1965 and by the Soviet Union in the General Assembly on 24 September 1965.

The USSR and the United States continued to differ in their interpretation of the word "proliferation", particularly in relation to the question of nuclear defence arrangements within military alliances. The USSR held that the United States draft treaty failed to close all avenues of possible proliferation and contained "loopholes" which would enable the use of nuclear weapons by the NATO allies of the United States, including the Federal Republic of Germany, which thus could gain access to nuclear weapons indirectly. The United States, on the other hand, held that the language of the Soviet Union's draft treaty was so sweeping that it would bar existing practices for the deployment of United States nuclear weapons, under United States control, on the territory of its NATO allies and even preclude consultations on nuclear strategy between NATO allies.

On 21 March 1966, the United States submitted amendments'" to its draft treaty of 17 August 1965 by which, inter *alia*, (1) it defined "control" in the context of non-proliferation as the "right or ability to fire nuclear weapons without the concurrent decision of an existing nuclear weapon State"; (2) it made clear that each of the nuclear weapon States party to the treaty would undertake not to transfer nuclear weapons, not only into the national control of any non-nuclear weapon States; (3) stipulated that the obligation not to assist any non-nuclear weapon State in the manufacture of nuclear weapons extended to "preparation for such manufacture" as well as "the testing of nuclear weapons", and encouragement or inducement to manufacture or otherwise; acquire its own nuclear weapons". None of the actions prohibited by the treaty could be taken either directly, or indirectly through third States or associations of States, or through units of the armed forces or military personnel of any State, even if such units or personnel were under the command of a military alliance.

The United States said that the amendments were intended to remove the main obstacles between the two sides on the question of control of nuclear weapons within the framework of military alliances. It stressed, however, that it favoured the right of military allies to consult each other on the nuclear defence of the alliance and implied that the issue was not negotiable. The USSR and its allies restated their position, indicating that they would not sign a non-proliferation treaty which did not rule out all forms of participation by the Federal Republic of Germany and the other NATO non-nuclear powers in the control of a NATO nuclear deterrent.

The non-aligned countries in the ENDC put primary emphasis on the necessity for an acceptable balance of mutual responsibilities and obligations of nuclear and non-nuclear weapon States in accordance with the terms of General Assembly resolution 2028 (XX). On 19 August 1966, they submitted a joint memorandum³⁰ which stated, inter alia, that the question of nuclear defence arrangements within military alliances was the concern mainly of the major nuclear powers and their allies, whereas for the non-nuclear, non-aligned countries, the question of balance of mutual responsibilities and obligations between the nuclear and the non-nuclear powers was of particular importance. A non-proliferation treaty, the memorandum said, should impose an obligation on the non-nuclear powers to refrain from the acquisition of nuclear weapons; and, in order to assure the desired balance of mutual obligations and responsibilities, the nuclear powers should undertake a number of tangible steps to halt the arms race and to limit, reduce or eliminate stocks of nuclear weapons and their means of delivery. A comprehensive nuclear test ban, a complete cessation of the production of fissionable material for weapon purposes, a freeze on, and a gradual reduction of, nuclear weapon stocks and means of delivery, a ban on the use of nuclear weapons, and security assurances to the non-nuclear States were among the measures proposed in the memorandum, for possible incorporation in a treaty or as a declaration of intent.

The USSR, the United Kingdom and the United States held that it would be harmful to the cause of non-proliferation if the non-aligned members of the Committee were to insist on making the non proliferation treaty dependent on the implementation of other disarmament measures.

On the question of security assurances to the non-nuclear weapon powers, the United States stated that nations which did not seek to acquire nuclear weapons would receive its strong support against "threats of nuclear blackmail".³¹ The USSR declared that it was willing to include in the draft treaty a clause prohibiting the use of nuclear weapons against non-nuclear States which were party to the treaty and which had no nuclear weapons on their territory.³²

The non-aligned members of the ENDC, on the whole, favoured a multilateral approach to the question of guarantees and opposed formulae that implied a degree of alignment on their part. Most of them favoured an undertaking by the nuclear powers never to use or threaten to use nuclear weapons against non-nuclear countries.

With regard to the question of nuclear explosions for peaceful purposes, which was raised by several non-aligned members of the ENDC, the United States stressed that the restrictions of a nonproliferation treaty should apply equally to nuclear weapons and to nuclear explosives for peaceful purposes, because the technology of the latter was essentially indistinguishable from that of nuclear weapons. It suggested, however, that nuclear weapon States should make available services to other States for nuclear explosions for peaceful applications to be performed under appropriate international observation, if and when such applications proved technically and economically feasible. Under such arrangements, the nuclear device would remain in the custody and under the control of the State performing the service on behalf of the non-nuclear.

Reviewing the efforts in the ENDC to prevent the spread of nuclear weapons, the Secretary-General stated the following, in the introduction to his annual report on the work of the Organisation for 1965-1966:³³

The dangers of nuclear proliferation are very real and very grave, more so than may be generally recognised. The use of nuclear reactors produces plutonium which, when processed in a separation plant, can be used to make nuclear weapons by techniques that are no longer secret. According to some estimates, by 1980 nuclear power reactors throughout the world will produce more than 100 kilogrammes of plutonium every day. It is always possible that cheaper and simpler methods of producing fissionable material may be discovered and that their availability for warlike purposes will increase astronomically. The risks that now exist of the further spread of nuclear weapons hold such peril for humanity that international safeguards should be established not only over nuclear power reactors but also over other nuclear plants which produce, use or process significant quantities of fissionable materials.

Consideration by the General Assembly 1966

At its twenty-first session, the General Assembly dealt with the question of the non-proliferation of nuclear weapons under two separate agenda items entitled, respectively, "Renunciation by States of actions hampering the conclusion of an agreement on the non-proliferation of nuclear weapons" and "Non-proliferation of nuclear weapons: report of the Conference of the Eighteen-Nation Committee on Disarmament".

Under the first item, included in the agenda at the request of the Soviet Union, a draft resolution was submitted by the Soviet Union³⁴ which was subsequently co-sponsored by twenty countries including the United States and the United Kingdom. A revised text of this draft was co-sponsored by forty-five Members.

On 4 November 1966, the forty-five-power draft resolution was adopted by the General Assembly by 110 votes to 1, with 1 abstention, as resolution 2149 (XXI). It reads as follows:

The General Assembly,

Reaffirming its resolution 2028 (XX) of 19 November 1965,

Convinced that the proliferation of nuclear weapons would endanger the security of all States and hamper the achievement of general and complete disarmament,

Considering that international negotiations are now under way with a view to the preparation of a treaty on the non-proliferation of nuclear weapons, and wishing to create an atmosphere conducive to the successful conclusion of those negotiations,

Urgently appeals to all States, pending the conclusion of such a treaty:

- (a) To take all the necessary steps to facilitate and achieve at the earliest possible time the conclusion of a treaty on the non-proliferation of nuclear weapons in accordance with the principles laid down in General Assembly resolution 2028 (XX);
- (b) To refrain from any actions conducive to the proliferation of nuclear weapons or which might hamper the conclusion of an agreement on the non-proliferation of nuclear weapons.

Under the second item, "Non-proliferation of nuclear weapons: report of the Conference of the Eighteen-Nation Committee on Disarmament", the General Assembly had before it a draft resolution sponsored by forty-seven powers.³⁵ The United States emphasized that remaining differences on a non-proliferation treaty "could and must be resolved on a basis of mutual compromise", and the USSR stressed that no country "could lose or be deprived of something by concluding a treaty on the non-proliferation of nuclear weapons", adding that it was willing to continue to seek solutions. As in the ENDC, much attention was given to the question of a balance of mutual obligations and responsibilities of the nuclear and non-nuclear weapon parties to the treaty, the question of security guarantees and nuclear arrangements within military alliances. Concerning the question of a "balance", both the USSR and the United States stressed that they did not view a nonproliferation treaty as a means of imposing unequal obligations on the non-nuclear powers, or as a means of perpetuating the so-called "nuclear monopoly".

The question of nuclear explosions for peaceful purposes was widely discussed in connexion with the proposed treaty. The United States reiterated the position it had expressed in the ENDC earlier that year. India interpreted the United States position to mean that, in practice, there should not only be non-proliferation of nuclear weapons but also non-dissemination of science and technology, which was unacceptable. Canada and several other Members considered that an international body such as the IAEA should establish machinery to examine the feasibility of proposed projects involving peaceful nuclear explosion, to establish the appropriate price for the service, to act as an intermediary between the user country and the nuclear country providing the nuclear device, and to supervise the project to ensure that it served peaceful purposes only.

On 17 December 1966, the forty-seven-power draft resolution was adopted by the General Assembly as resolution 2153 A (XXI) by 97 votes to 2, with 3 abstentions. It reads as follows:

The General Assembly,

Having discussed the report of the Conference of the Eighteen-Nation Committee on Disarmament on the non-proliferation of nuclear weapons,

Noting that it has not yet been possible to reach agreement on an international treaty to prevent the proliferation of nuclear weapons,

Viewing with apprehension the possibility that such a situation may lead not only to an increase of nuclear arsenals and to a spread of nuclear weapons over the world but also to an increase in the number of nuclear weapon powers,

Believing that if such a situation persists it may lead to the aggravation of tensions between States and the risk of a nuclear war,

Believing further that the remaining differences between all concerned should be resolved quickly so as to prevent any further delay in the conclusion of an international treaty on the non-proliferation of nuclear weapons,

Convinced, therefore, that it is imperative to make further efforts to bring to a conclusion a treaty which reflects the mandate given by the General Assembly in its resolution 2028 (XX) of 19 November 1965 and which is acceptable to all concerned and satisfactory to the international community,

- 1. *Reaffirms* its resolution 2028 (XX);
- 2. *Urges* all States to take all the necessary steps conducive to the earliest conclusion of a treaty on the non-proliferation of nuclear weapons;
- 3. Calls *upon* all nuclear weapon powers to refrain from the use, or the threat of use, of nuclear weapons against States which may conclude treaties of the nature defined in paragraph 2 (*e*) of General Assembly resolution 2028 (XX);
- 4. Requests the Conference of the Eighteen-Nation Committee on Disarmament to consider urgently the proposal that the nuclear weapon powers should give an assurance that they will not use, or threaten to use, nuclear weapons against non-nuclear weapon States without nuclear weapons on their territories, and any other proposals that have been or may be made for the solution of this problem;
- 5. *Culls upon* all States to adhere strictly to the principles laid down in its resolution 2028 (XX) for the negotiation of the above mentioned treaty;
- 6. *Calls upon* the Conference of the Eighteen-Nation Committee on Disarmament to give high priority to the question of the non-proliferation of nuclear weapons in accordance with the mandate contained in General Assembly resolution 2028 (XX);

- Transmits the records of the First Committee relating to the discussion of the item entitled "Non-proliferation of nuclear weapons", together with all other relevant documents, to the Conference of the Eighteen-Nation Committee on Disarmament;
- 8. *Requests* the Conference of the Eighteen-Nation Committee on Disarmament to submit to the General Assembly at an early date a report on the results of its work on the question of the non-proliferation of nuclear weapons.

Eighteen-Nation Committee on Disarmament

In the course of 1967, the ENDC made slow but steady progress towards achieving agreement on a draft treaty on the non-proliferation of nuclear weapons.

Soviet and United States Identical Treaty Drafts

On 24 August 1967, identical but separate and still incomplete drafts of a non-proliferation treaty were submitted by the United States and the Soviet Union,³⁶ superseding the earlier separate and different Soviet and United States drafts.

By the preamble of the new identical drafts, the parties to the treaty would, among other things, affirm the principle that potential benefits from any peaceful applications of nuclear technology, including nuclear explosive devices, would be available to non-nuclear weapon States on a non-discriminatory basis. They would further declare their intention to achieve at the earliest possible date the cessation of the nuclear arms race, and also express their desire to facilitate the cessation of production of nuclear weapons and delivery vehicles, pursuant to a treaty on general and complete disarmament under strict and effective international control.

By article I, the treaty would: (1) prohibit nuclear powers from transferring to any recipient nuclear weapons or other nuclear explosive devices or control over such weapons or devices, directly or indirectly; (2) prohibit nuclear powers from assisting, encouraging or inducing, in any way, any non-nuclear State to manufacture or otherwise acquire nuclear weapons or nuclear explosive devices or control over such weapons or devices.

By article II, the non-nuclear States would undertake corresponding obligations: (1) not to receive the transfer of nuclear weapons or nuclear explosive devices, or of control, over such weapons or devices, directly or indirectly; and (2) not to manufacture or otherwise acquire nuclear weapons or nuclear explosive devices.

On the other hand, in the absence of agreement between the Soviet Union and the United States, the new identical text included no provisions on an international safeguards system (article III) to verify compliance with the treaty obligations. It did, however, provide for: the peaceful uses of nuclear energy in the context of non-proliferation (article IV); amendments and review of treaty operation (article V); entry into force and accession (article VI); duration and withdrawal (article VII) and deposit (article VIII).

Several members of the ENDC submitted amendments or additions to the draft treaty.³⁷

Mexico suggested, among other things, that the declarations of intention of the nuclear powers, regarding (1) the free access of the non-nuclear signatories of the treaty to the benefits of peaceful uses of nuclear energy and peaceful nuclear explosions; (2) continuing negotiations of specific disarmament measures; and (3) the right of establishment of nuclear weapon free zones, be transferred from the preamble to the operative part of the treaty. It proposed specific language to be written into the body of the treaty.

The United Arab Republic proposed, among other things, that the language of articles I and II of the draft treaty be strengthened to preclude transfers of nuclear weapons in any form whatsoever, including gifts and partial ownership. It also called on the nuclear powers to offer security guarantees to the non-nuclear signatories.

Sweden proposed a formula for article III, relating to an international control system, which envisaged the adoption of the IAEA safeguards system and its application, not only to the non-nuclear weapon States but also, gradually, to the peaceful nuclear activities of the nuclear powers. In this connexion, the United States announced on 2 December 1967 that, under the non-proliferation treaty, it would permit the IAEA to apply its safeguards to all nuclear activities in the United States, excluding only those connected with national security. On 4 December, the United Kingdom made a similar commitment.

Among the suggestions put forward by Romania was one to the effect that the nuclear powers commit themselves, in a separate article, to adopt specific measures with a view to halting the manufacture of nuclear weapons, the reduction of stocks and the final destruction of nuclear weapons and delivery vehicles. Romania also proposed security guarantees in the form of a commitment by the nuclear powers never to use or threaten to use nuclear weapons against signatory States undertaking never to acquire such weapons.

Nigeria submitted proposals on the sharing of scientific and technological information pertaining to peaceful nuclear explosions, on security guarantees and on other matters.

Brazil proposed, among other things, that the treaty recognise the right of all parties to develop nuclear explosive devices for peaceful purposes and that it include a firm undertaking of the nuclear powers to halt the nuclear arms race. Burma and Ethiopia also had suggestions concerning nuclear disarmament.

The United Kingdom suggested that the objective of a review conference, five years after entry into force of the treaty, should be to assure that the purposes espoused in the preamble and the provisions of the treaty were being realized.

Italy submitted a proposal providing that the treaty would have a definite duration (the exact duration was left open) and would be renewed automatically for any party not giving notice of withdrawal six months before the expiry date of the treaty.

India continued to express the over-all objection that the treaty must not only prevent "horizontal proliferation", i.e., the acquisition of nuclear weapons by non-nuclear weapon States, but also "vertical proliferation", i.e., the further expansion of existing stocks and the development of new nuclear weapons. It also advanced specific requests about the security assurances for non-nuclear weapon States, and supported Brazil's espousal of the right of non-nuclear weapon States to develop their own peaceful nuclear explosive devices.

On 1 August 1967, the Foreign Minister of Italy, Mr. A. Fanfani, addressing the ENDC, proposed³⁸ an agreement by which the nuclear weapon powers would transfer to the non-nuclear weapon parties to the treaty an agreed quantity of the fissionable materials they produced, buggesting that this would indirectly restrict production of nuclear weapons. The non-nuclear nations would buy the materials below market price; part of the payment would go to the supplying countries and part would be paid into a United Nations fund for developing countries. This arrangement could either be incorporated in the non-proliferation treaty or be made independently.

In an interim report to the General Assembly, on 7 December 1967, the ENDC stated that "the Committee has undertaken intensive consideration of a draft treaty on the non-proliferation of nuclear weapons" and that it "has already made substantial progress, although a final draft has not yet been achieved".³⁹

Consideration by the General Assembly 1967

In the introduction to his annual report on the work of the Organisation for 1966-67, the Secretary-General stated:⁴⁰

... If the spread of nuclear weapons is to be prevented, this can only be done by treaty. No other way can be effective for any length of time. I regard the successful conclusion of a treaty for the non-proliferation of nuclear weapons as an Indispensable first step towards further progress in disarmament. In fact, it is difficult to conceive of any agreement in the foreseeable future on any other measure of disarmament if it is not possible to reach agreement on a treaty to prevent the spread of nuclear weapons.

In the General Assembly, the debate on this item was brief and centred around a draft resolution⁴¹ submitted by seventeen Members, including the USSR, the United Kingdom and the United States. By this seventeen-power draft resolution, the General Assembly would request the ENDC to submit a full report to the Assembly on or before 15 March 1968, on the negotiations on a draft treaty on the non-proliferation of nuclear weapons and recommend that appropriate consultations be initiated for the resumption of the General Assembly to consider the ENDC report.

On 19 December 1967, the seventeen-power draft resolution was adopted by the General Assembly by 112 votes to 1, with 4 abstentions, as resolution 2346 A (XXII). It reads as follows:

The General Assembly,

Having received the interim report of the Conference of the Eighteen-Nation Committee on Disarmament,

Noting the progress that the Conference of the Eighteen-Nation Committee on Disarmament has made towards preparing a draft international treaty to prevent the proliferation of nuclear weapons,

Noting further that it has not been possible to complete the text of an international treaty to prevent the proliferation of nuclear weapons, *Reaffirming* that it is imperative to make further efforts to conclude such a treaty at the earliest possible date,

Expressing the hope that the remaining differences between all the States concerned can be quickly resolved,

Taking into account the fact that the Conference of the Eighteen-Nation Committee on Disarmament is continuing its work with a view to negotiating a draft treaty on the non-proliferation of nuclear weapons and intends to submit a full report for the consideration of General Assembly as soon as possible,

- 1. *Reaffirms* its resolutions 2028 (XX) of 19 November 1965, 8149 (XXI) of 4 November 1966 and 2153 A (XXI) of 17 November 1966;
- 2. *Calls upon* the Conference of the Eighteen-Nation Committee in Disarmament urgently to continue its work, giving all due consideration to all proposals submitted to the Committee and to the views expressed by Member States during the twentysecond session of the General Assembly;
- 3. *Requests* the Conference of the Eighteen-Nation Committee on Disarmament to submit to the General Assembly, on or before 15 March 1968, a full report on the negotiations regarding a draft treaty on the non-proliferation of nuclear weapons, together with the pertinent documents and records;
- 4. Recommends that upon the receipt of that report appropriate consultations should be initiated, in accordance with the rules of procedure of the General Assembly, on the setting of an early date after 15 March 1968 for the resumption of the twenty-seconds on of the General Assembly to consider agenda item 28 (a) entitled "Non-proliferation of nuclear weapons: report of the Conference of the Eighteen-Nation Committee on Disarmament".

Eighteen-Nation Committee on Disarmament 1968 Revised Soviet and United States Identical Treaty Drafts

The ENDC reconvened in Geneva on 18 January 1968, and remained in session until 14 March. It devoted the whole session to the urgent consideration of a treaty on the non-proliferation of nuclear weapons. At the opening meeting, on 18 January, the United States and the USSR submitted identical revised treaty drafts,⁴² which also included an agreed safe-guards provision (article III). The principal additional changes in the revised text included the insertion in the operative part of the treaty of three new articles which concerned (1) the availability of potential benefits of peaceful nuclear explosions to all parties (article V); (2) an undertaking to pursue negotiations in good faith on disarmament and to end the nuclear arms race (article VI); and (3) the right of groups of States to conclude agreements on nuclear weapon free zones (article VII). By the terms of the new article HI, non-nuclear weapon States parties to the treaty were to negotiate with the IAEA for the application of its safeguards system for the exclusive purpose of verifying the fulfilment of the treaty obligations, without affecting the economic and technological development of the non-nuclear signatories or international co-operation in the field of peaceful nuclear activities. The safeguards would be applicable to all source and special fissionable material used in peaceful nuclear activities of non-nuclear weapon States, and the provision of such materials or equipment to any non-nuclear weapon State for peaceful purposes was prohibited, unless subject to treaty safeguards.

The USSR and the United States stressed that the revised draft treaty took account, to a large extent, of the positions supported by a majority of the members of the Committee.

While the revised draft treaty was generally considered an improvement on the previous text, many Committee members urged further changes.⁴⁵

Brazil re-stated its previous objections and proposed amendments which, *inter alia*, "would permit non-nuclear weapon Sates to possess nuclear explosive devices for peaceful purpose-under safeguards; specify the further measures of disarmament to be negotiated under article VI of the treaty; Provide for the channelling of resources freed by nuclear disarmament to developing countries; recognise the obligations as the rights of parties to nuclear weapon free zone treaties; specify circumstances which might provide grounds : withdrawal; and remove, under certain circumstances, the requirement for notification of withdrawal to the Security Council.

Italy proposed, *inter alia*, amendments which would guarantee supplies of nuclear materials to the non-nuclear weapon signatories; provide for an automatic review conference every five years; and limit to twenty-five years the duration of the treaty, which would be renewed automatically for further periods of twenty-five years, for parties not giving notice of withdrawal. Nigeria put forward amendments which would provide for security assurances; impose an obligation to facilitate the exchange of information for the peaceful uses of nuclear energy; provide that the decisions of the review conference would be made by a majority vote; and include events likely to jeopardize national interests among the grounds for withdrawal.

Romania submitted amendments relating to article III (safe-guards), article VI (measures of disarmament), as well as to security assurances and the provisions on treaty operation and withdrawal. The amendments, *inter alia*, would use more stringent language in the safeguards provisions; establish controls through the Security Council to ensure that non-nuclear parties having nuclear weapons on their territory would not acquire control over them; impose stricter nuclear disarmament obligations on the nuclear powers; and include an undertaking by nuclear powers not to use nuclear weapons against nonnuclear parties to the treaty.

Sweden submitted an amendment which, *inter alia*, would include a preambular reference to the determination, expressed in the preamble of the Partial Test Ban Treaty of 1963, to achieve the discontinuance of all test explosions of nuclear weapons and to continue negotiations to that effect; and strengthen the language of article VI, on further measures of disarmament. Sweden also sought to remove the provisions for bilateral arrangements for peaceful nuclear explosions in article V.

The United Arab Republic proposed, *inter alia*, the inclusion in the preamble of a special reference to General Assembly resolution 2028 (XX); it also restated the amendments to articles I and II submitted at the previous session; and, like Sweden, asked for the deletion in article V of the provision concerning bilateral arrangements for peaceful nuclear explosions.

The United Kingdom introduced an amendment by which the review conference would consider the implementation of the preamble as well as the provisions of the treaty.

Burma called for definite obligations by the nuclear powers to take tangible steps towards nuclear disarmament. Ethiopia urged that safeguards should apply to both nuclear and non-nuclear weapon States; expressed concern about the financial aspects of peaceful nuclear explosions and, in general, urged more specific commitments on peaceful uses of nuclear energy. India deplored the omission of specific measures of disarmament from the draft treaty. It stressed that the treaty, by banning proliferation of nuclear weapons, while permitting further development and deployment of these weapons by all nuclear powers, including the People's Republic of China, had failed to conform to General Assembly resolution 2028 (XX). It also criticized article III for not imposing safeguards on the peaceful nuclear activities of the nuclear powers; opposed the prohibition of the possession of peaceful nuclear explosive devices by non-nuclear weapon powers; and stressed that the twenty-five-year period of initial duration of the treaty removed any hope of general and complete disarmament.

Draft of Security Council Resolution on Security Assurances

With regard to the question of security assurances, the USSR,, the United States and the United Kingdom stated that they viewed the matter in the context of action relating to the United Nations, outside the treaty itself but in close, conjunction with it.

On 7 March, the three nuclear powers introduced in ENDC a draft resolution on security assurances,⁴⁴ which undertook to submit in the Security Council in connexion with the non-proliferation treaty. By the draft resolution, the Security Council would recognise that aggression with nuclear weapons, or threat thereof, against a non-nuclear weapon State would call for immediate action by the Security Council, and above all by its nuclear weapon State permanent members, in accordance with their obligation under the Charter. It would also welcome the intention of certain States to provide immediately such assistance and reaffirm the Inherent right, under Article 51 of the Charter, of individual and collective self-defence if an armed attack occurred. In this connexion, the United States and the USSR informed the ENDC of statements they intended to make at the time the draft resolution was considered by the Security Council, provided it was supported by other nuclear powers, permanent members of the Security Council, who intended to sign the non-proliferation treaty and who would make similar declarations. The United Kingdom also announced that in the context of the draft resolution, it was prepared to make a declaration of its intention similar to those described by the representatives of the United States and the Soviet Union.

Joint Soviet and United States Draft Treaty

On 11 March 1968, the USSR and the United States presented a joint revised draft treaty⁴⁵ which incorporated some of the further suggestions made in the course of the ENDC session by the non-nuclear weapon States. This draft treaty was submitted to the General Assembly as part of the Committee report, on 14 March 1968.

Consideration by General Assembly in Resumed Session 1968

At the resumed twenty-second session of the General Assembly, there was a detailed debate on the relative merits and shortcomings of the joint draft treaty. The USSR, the United States and the United Kingdom led the supporters of the treaty in stressing that it would increase the security of both nuclear and non-nuclear weapon States, would enable all nations, particularly the developing nations, to share in the benefits of peaceful applications of nuclear energy, and would facilitate the cessation of the nuclear arms race. The benefits that would derived by the non-nuclear weapon States would outweigh, they said, whatever disadvantage could result from their fore-taring nuclear weapons. While the proposed treaty received broad general support, several Members expressed reserves and some rejected it altogether.

France held that the only solution to the threat resulting the existence of nuclear weapons was the cessation of their manufacture and the complete destruction of their stockpiles. It stated, however, that while it would not sign the treaty, France would behave in the future exactly as the States adhering to the treaty.

In addition to the question of examination of each treaty provision, the problem of the balance of obligations and responsibilities between nuclear and non-nuclear weapon States once again attracted much attention, now largely in the context of each specific provision.

As a result of the extensive General Assembly debate, the USSR and the United States agreed, on 31 May 1968, to certain revisions" of the text of the draft treaty concerning mainly the preamble and articles IV and V. The main preambular change consisted in the addition of a paragraph recalling that, in accordance with the Charter, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State, and that international peace and security are to be maintained and promoted with the least diversion to armaments of the world's resources.

The changes in article IV, relating to peaceful uses of nuclear energy, involved addition of language whereby the parties to the treaty would not only have the right to participate in the fullest possible exchange for the peaceful uses of nuclear energy, but also to "undertake to facilitate" such an exchange, which, moreover, would include not only scientific and technological information but also "equipment" and "materials". All this would be done "with due consideration for the needs of the developing areas of the world". In article V, concerning nuclear explosions for peaceful purposes, certain deletions were made and new language was inserted. By these changes, each party would undertake to "take appropriate measures to ensure that, in accordance with the treaty, under appropriate international observation and through appropriate international procedures", potential benefits from any peaceful applications of nuclear explosions would be made available to non-nuclear weapon States. The new language also stipulated that "Non-nuclear weapon States Party to the treaty shall be able to obtain such benefits, pursuant to a special international agreement or agreements, through an appropriate international body with adequate representation of non-nuclear weapon States. Negotiations on this subject shall commence as soon as possible after the treaty enters into force. Non-nuclear weapon States Party to the treaty also obtain such benefits pursuant to bilateral agreements".

Articles I and II: Basic Prohibitions

The USSR and the United States stressed that the prohibitions set forth in articles I and II of the treaty fulfilled the basic criteria of resolution 2028 (XX) and effectively closed all possible loopholes for proliferation of nuclear weapons, directly or indirectly, in any form whatsoever. In this connexion, France asserted that no nuclear weapon State "will ever envisage sharing" nuclear weapons with anyone. A large number of Members expressed the view that nuclear explosives of any kind were synonymous with nuclear weapons and hence were rightly prohibited under the treaty. Others, including Brazil and India, disagreed with this view. Japan suggested that if and when the distinction between military and peaceful nuclear explosive devices became possible, the restrictions of the treaty should no longer apply to nuclear explosive devices for peaceful purposes.

Article III: Safeguards

Some countries were concerned whether implementation of the safeguards provisions under article III would not hinder their peaceful nuclear programmes. The United Kingdom felt that such fears were ill-founded and cited its own and the 'United States' acceptance of safeguards on their peaceful nuclear activities. The USSR stated that the control to be exercised by the IAEA would be for the exclusive purpose of verification of non-proliferation and that automatic means of control could be eventually developed, if possible, to avoid interference in the peaceful nuclear programmes of States and in their internal

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affairs. In this context, some Members believed that nuclear weapon States should also accept IAEA safeguards on their peaceful nuclear activities, since control provisions based on less than universal application might undermine the purposes of the non-proliferation treaty.

Other Members, including Japan and Pakistan, held that the agreements to be negotiated between the non-nuclear signatories of the treaty and the IAEA should provide for international safeguards of identical standards, applicable to all non-nuclear weapon signatories. Some States notably some members of EURATOM, disagreed with this view.

Article IV: Peaceful Uses of Nuclear Energy

Article IV concerning peaceful uses of nuclear energy, as well as its interpretation by the nuclear weapon powers, was welcomed by many States. The revisions, which included not only formal points of improvement but also substantive questions relating to the problem of assistance to non-nuclear weapon States, made it possible for a number of States, among them Italy, Mexico and Sweden, to forego their reservations and support the draft treaty. Italy was gratified at the change in wording to stress the right of parties to unhampered access to supply markets of nuclear fuels and equipment for nuclear plants. Canada believed that this article constituted a "charter of rights" of non-nuclear weapon States, particularly the developing countries, in the sphere of nuclear science and technology. Some Members, among them India, thought, however, that article IV did not provide any binding juridical obligation on the part of the nuclear weapon States to grant assistance, the undertaking being only "to co-operate". They, therefore, held that the treaty created a juridical discrimination between States and that by making a greater part of the world wholly dependent on a few nuclear weapon States for knowledge and the application of nuclear technology, it tended to widen the technological gap that already existed.

Article V: Peaceful Nuclear Explosions

It was overwhelmingly recognised that, until science provided a differentiation between a peaceful nuclear explosive and a nuclear weapon, there was no alternative to prohibiting all nuclear explosive devices, whatever their purpose. Both the USSR and the United States asserted that the denial of specialized technology involved in peaceful nuclear explosions would in no case retard progress in the application of these explosions. The United States stressed that it would continue research and development in this field and that all benefits would be made available, under the treaty's provisions, to non-nuclear weapon States without delay. The USSR suggested that non-nuclear weapon States could avail themselves of benefits of peaceful nuclear explosions, to be carried out by nuclear powers, on a bilateral basis or through an appropriate international body. Preparatory work on a multilateral international agreement in this regard could start even before the treaty actually came into effect. In this connexion, Sweden suggested that an international body administering peaceful nuclear explosions should make feasibility studies of proposed projects observe and control their execution and help finance them in under-developed countries. It believed that while the IAEA would be suitable for the first two tasks the third one should be entrusted to the United Nations Development Programme or the International Bank for Reconstruction and Development. Brazil and India urged that peaceful nuclear explosions should be exempt from treaty prohibitions. Brazil stated that it interpreted article 18 of the Treaty for the Prohibition of Nuclear Weapons in Latin America as specifically permitting the signatories to carry out nuclear explosions for peaceful purposes under international inspection, either with their own resources or in co-operation with third parties.

Article VI: Further Measures of Disarmament

The language of Article VI, by clearly committing parties to the treaty to negotiations "in good faith" to end the nuclear arms race "at an early date and on "nuclear" disarmament, met some of the suggestions of a number of States, among them Mexico, Sweden and the United Kingdom. However, several non-nuclear weapon States considered these changes insufficient. India felt that, without sanctions or specific time-limits, these commitments were far from perfect. Other Members thought that the article could be improved by establishing specified priorities.

The measures most frequently suggested for top priority, following the non-proliferation treaty, were a comprehensive test ban, a cut-off of production of fissionable materials, a convention on the prohibition of use of nuclear weapons, cessation of the manufacture of nuclear weapons, and elimination of their stockpiles.

Article VII: Nuclear Weapon Free Zones

Many States welcomed article VII, which had been urged by Mexico and which recognised the right of States to establish nuclear weapon free zones in various regions of the world, considering it to be a desirable supplement to the disarmament commitment which the nuclear powers undertook in article VI. Poland, for example, believed that the effectiveness of the non-proliferation treaty could be enhanced through regional denuclearisation, which offered non-nuclear States possibilities of negotiating other measures of regional disarmament, particularly in Europe. Most Latin American countries referred to the nuclear weapon free zone established in their region.

Procedural Provisions

Most Members attached considerable importance to various aspects of the draft treaty's procedural provisions, in particular to the provisions of article VIII concerning amendment procedure and review conference. A review conference would be called five years after the entry into force of the treaty and its objective would be to examine whether the purposes of treaty were being realized.

The provisions of article IX, concerning signature, ratification, entry into force and depositary Governments, were welcomed by a majority of Members. However, some States questioned the wisdom of providing that ratification by only forty States signatory to the treaty, in addition to the ratification by all nuclear weapon parties, would be sufficient for the treaty to enter into force.

Article X, dealing with withdrawal and treaty duration, was considered satisfactory to most Members, as the original "unlimited duration" had been changed, in subsequent drafts, to a twenty-fiveyear period, at the end of which a special conference would decide whether the treaty should continue indefinitely or be extended for additional fixed periods.

General Assembly Resolution 2373 (XXII)

The First Committee, in addition to the ENDC report and the treaty draft annexed to it, had before it a draft resolution" submitted on 1 May 1968 by twenty powers, including the USSR and the United States and subsequently revised and co-sponsored by nine other powers, whereby the General Assembly would "endorse" the treaty and express the hope for the widest adherence to it by non-nuclear weapon States. On 28 May 1968, this draft resolution was further revised.⁴⁸ By the latter text, the General Assembly would, *inter alia*, "commend" the treaty on the non-proliferation of nuclear weapons and express the hope for the widest possible adherence to the treaty by both "nuclear and non-nuclear weapon States".

Following the agreement, on 31 May, by the Soviet Union and the United States to the additional revisions of the text of the draft treaty outlined above, the draft resolution with its annexed draft treaty then gained nineteen more co-sponsors and was adopted by the First Committee.

On 12 June 1968, the General Assembly adopted the forty-eightpower draft resolution as resolution 2373 (XXII), by 95 votes to 4, with 21 abstentions. It reads as follows:

The General Assembly,

Recalling its resolutions 2346 A (XXII) of 19 December 1967, 2153 A (XXI) of 17 November 1966, 2149 (XXI) of 4 November 1966, 2028 (XX) of 19 November 1965 and 1665 (XVI) of 4 December 1961,

Convinced of the urgency and great importance of preventing the spread of nuclear weapons and of intensifying international co-operation in the development of peaceful applications of atomic energy,

Having considered the report of the Conference of the Eighteen-Nation Committee on Disarmament, dated 14 March 1968, and appreciative of the work of the Committee on the elaboration of the draft non-proliferation treaty, which is attached to that report,

Convinced that, pursuant to the provisions of the treaty, all signatories have the right to engage in research, production and use of nuclear energy for peaceful purposes and will be able to acquire source and special fissionable materials, as well as equipment for the processing, use and production of nuclear material for peaceful purposes,

Convinced further that an agreement to prevent the further proliferation of nuclear weapons must be followed as soon as possible by effective measures on the cessation of the nuclear arms race and on nuclear disarmament, and that the non-proliferation treaty will contribute to this aim,

Affirming that in the interest of international peace and security both nuclear weapon and non-nuclear weapon States carry the responsibility of acting in accordance with the principles of the Charter of the United Nations that the sovereign equality of all States shall be respected, that the threat or use of force in international relations shall be refrained from and that international disputes shall be settled by peaceful means,

1. *Commands* the Treaty on the Non-Proliferation of Nuclear Weapons, the text of which is annexed to the present resolution;*

^{*} The text of the Treaty on the Non-Proliferation of Nuclear Weapons is reproduced in this volume as appendix IX.

- 2. *Requests* the Depositary Governments to open the Treaty for signature and ratification at the earliest possible date;
- 3. *Expresses the hope* for the widest possible adherence to the Treaty by both nuclear weapon and non-nuclear weapon States;
- 4. *Requests* the Conference of the Eighteen-Nation Committee on Disarmament and the nuclear weapon States urgently to pursue negotiations on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control;
- 5. *Requests* the Conference of the Eighteen-Nation Committee on Disarmament to report on the progress of its work to the General Assembly at its twenty-third session.

Security Council Resolution on Security Assurances

In the course of its discussion on the draft treaty, the General Assembly also debated issues involved in the draft resolution on security assurances which the USSR, the United States and the United Kingdom had submitted in the ENDC on 7 March 1968. The draft resolution was generally recognised as a significant political development. Some Members, however, expressed misgivings as to the effectiveness of the assurances in light of the possibility of use of the veto by the permanent members of the Security Council. Other Members stated their preference for "negative assurances" whereby nuclear powers would commit themselves never to use nuclear weapons against non-nuclear weapon States. It was also pointed out that the resolution created no new commitment on the part of the nuclear powers beyond that already contained in the United Nations Charter. In this connexion, it was maintained that the nuclear powers, in keeping with their obligations under the Charter, were committed to defend any non-nuclear State and not only the signatories of the non-proliferation treaty.

The United States considered the proposed draft Security Council resolution to be the most appropriate and effective solution to the problem of assurances within the context of the United Nations Charter. The USSR stressed that the proposed resolution would serve as a deterrent to a potential aggressor. The United Kingdom maintained that it was of vital self-interest to the nuclear powers themselves that the credibility of their guarantees be sustained.

Following the approval of resolution 2373 (XXII) by the General Assembly, the nuclear powers submitted their draft resolution in the

Security Council.⁴⁹ In the course of Security Council consideration of the draft resolution,⁵⁰ the three nuclear powers made identical formal declarations in which they stated (1) that aggression with nuclear weapons, or the threat of such aggression, against a non-nuclear weapon State would create a qualitatively new situation in which they, as permanent members of the Security Council, would have to act immediately through the Security Council to take the measures necessary to counter such aggression, or to remove the threat of aggression in accordance with the Charter, and (2) that any State which committed aggression with nuclear weapons or which threatened such aggression would be countered effectively by measures taken in accordance with the Charter to suppress the aggression or remove the threat of aggression.

France declared that, while its position on the draft resolution was identical with that taken on resolution 2373 (XXII), whereby the General Assembly commanded the Non-Proliferation Treaty, it could not join the sponsors of the draft resolution or make the declaration in the Security, Council because believed that the only solution to the nuclear menace lay in the cessation of the production and the destruction of the stockpiles of nuclear arms.

Canada, Denmark, Paraguay, Senegal, China and Ethiopia supported the tripartite draft resolution on the grounds that the guarantee formula contained therein seemed the best solution obtainable in the prevailing international situation, and was preferable to no guarantee at all. Ethiopia stated, however, that in its view, the best means to ensure collective security for all nations was a convention prohibiting the use of nuclear and thermonuclear weapons and, pending that, a clear undertaking by the nuclear powers not to use nuclear weapons against non-nuclear States.

On the other hand, the draft resolution was criticized by Algeria, Brazil, Pakistan and India which considered, *inter alia*, that the only real hope of security for non-nuclear weapon States lay in nuclear disarmament. They also held that the proposed guarantees were discriminatory as they were applicable only to parties to the Treaty and fell short of assuring guarantees against all kinds of aggression already contemplated in the Charter.

On 19 June 1968, the tripartite draft resolution was adopted the Security Council, by 10 votes to none, with 5 abstentions, as resolution 255 (1968). It reads as follows:

The Security Council

Noting with appreciation the desire of a large number of States to subscribe to the Treaty on the Non-Proliferation of Nuclear Weapons, and thereby to undertake not to receive the transfer from any transferor whatsoever of nuclear weapons or other, nuclear explosive devices or of control over such weapons or explosive devices directly or indirectly, not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and not to seek or receive any assistance in the manufacture of nuclear Weapons or other nuclear explosive devices,

Taking into consideration the concern of certain of these States that, in conjunction with their adherence to the Treaty on the Non-Proliferation of Nuclear Weapons, appropriate measures be under-taken to safeguard their security,

Bearing in mind that any aggression accompanied by the use of nuclear weapons would endanger the peace and security of all States,

- 1. *Recognises* that aggression with nuclear weapons or the threat of such aggression against a non-nuclear weapon State would create a situation in which the Security Council, and above all its nuclear weapon State permanent members, would have to act immediately in accordance with their obligations under the United Nations Charter;
- 2. *Welcomes* the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act or an object of a threat of aggression in which nuclear weapon are used;
- 3. *Reaffirms* in particular the inherent right, recognised under Article 51 of the Charter, of individual and collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.

Entry Into Force of the Treaty

Following the opening of the Non-Proliferation Treaty for signature, on 1 July 1968, the Treaty received further attention in the ENDC and the General Assembly, as well as at the Conference of Non-Nuclear weapon States.

On the eve of the twenty-third session of the General Assembly, the Secretary-General, in the introduction to his annual report on the work of the organisation for 1967-1968, stated the following:⁵¹

The Treaty, which has been acclaimed as "the most important international agreement in the field of disarmament since the nuclear age began" and as "a major success for the cause of peace", is important on several accounts. First, the purpose of the Treaty is to prevent the further spread of nuclear weapons among countries which do not possess them and establishes a safeguards system for the purpose of verifying the fulfilment of the obligations assumed under the Treaty. If this international agreement is duly implemented it will help to limit and contain the threat of nuclear war.

Secondly, the Treaty not only reaffirms the inalienable right of non-nuclear weapon States to develop research and the production and use of nuclear energy for peaceful purposes without discrimination; it also provides that all parties to the Treaty are to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. In particular, the Treaty provides that, under appropriate international observation through appropriate international procedures, potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear weapon States parties to the Treaty on a non-discriminatory basis, and that the charge to such parties for the explosive devices used will be as low as possible and will exclude any charge for research and development.

Thirdly, since the Treaty is not an end in itself but a step towards disarmament, each of the parties to the Treaty undertakes 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, and also on a treaty on general and complete disarmament under strict and effective international control.

Agreement on these provisions, let us not forget, was reached only after several years of long and patient negotiations and even a longer period of preparatory work extending as far back as 1958, when the first draft resolution on preventing the spread of nuclear weapons was introduced in the General Assembly. Many adjustments and mutual concessions had to be made along the way by the parties concerned, both nuclear and non-nuclear. As a result, the final outcome necessarily represents a compromise solution. Yet, I am confident that, if this Treaty is accepted by the great majority of States and is faithfully implemented, it will play an essential role in the continuing pursuit of security, disarmament and peace.

Indeed, the question of the non-proliferation of nuclear weapons has provided additional evidence of how closely security and the regulation of armaments are linked together. It is enough to mention, in this connexion, the debate in the Security Council, following the conclusion of the Treaty, which led, first, to declarations of intentions by the USSR, the United Kingdom and the United States that they would provide or support immediate assistance, in accordance with the Charter, to any non-nuclear weapon State party to the Treaty that was a victim of an act or an object of a threat of aggression in which nuclear weapons were used, and, secondly, to the adoption of Security Council resolution 255 (1968) on the question of the security of nonnuclear weapon States.

At the twenty-third session of the General Assembly, both the United States and the USSR renewed their appeals for general adherence to the Treaty. As the first nuclear power to do so, the United Kingdom announced its ratification of the Treaty. Since some non-nuclear weapon States were still not satisfied with various aspects of the Treaty, they in particular stressed the necessity of early implementation of the commitment in the Treaty to further measures of nuclear disarmament (article VI) as a counter balance to the obligations which the nonnuclear countries were required to assume.

At the 1969 session of the ENDC, several members deplored the slow rate of accession and ratification of the Treaty, and called on all States, especially those with advanced nuclear technology, to adhere to the Treaty without further delay. The USSR stressed that implementation of the Treaty was essential for the success of further negotiations on nuclear disarmament.

At the twenty-fourth session of the General Assembly, attention was again focused on the question of entry into force of the Treaty and its implications for the prospects of progress in other fields of disarmament. Before the session came to a close, the USSR and the United States announced that they had ratified the Treaty.

The USSR and the United States deposited their instruments of ratification on 5 March 1970, thus completing the process of ratification by the three nuclear weapon parties to the Treaty. On the same day, instruments of ratification were deposited by a sufficient number of other States to bring the number to more than the required forty. The Treaty thus entered into force on 5 March 1970. By that day, almost one hundred countries had already signed the Treaty.

Expressing satisfaction at the entry into force of the Treaty, Mr. A. Kosygin, Chairman of the Council of Ministers of the USSR, stated that "... with the entry into force of the Treaty, the obligation to refrain from spreading nuclear weapons becomes one of the most important norms of international law, a norm which even those States that are not parties to the Treaty will be unable to ignore". He was hopeful that the Treaty would help to limit the nuclear arms race and to achieve progress towards general and complete disarmament.

President Nixon of the United States considered the entry into force of the Treaty "an historic occasion" and described the Treaty as "one of the first and major steps in that process in which the nations of the world moved from a period of confrontation to a period of negotiation and a period of lasting peace".

Prime Minister Wilson of the United Kingdom called the entry into force of the Treaty "a momentous step" and referred to the Treaty itself as "the most important measure of arms control and disarmament on which agreement had yet been reached".

Secretary-General U Thant stressed that the Treaty was not an end in itself but a step towards disarmament and appealed to all countries to adhere to it. "It is my firm belief, he said, "that it is in the best interests of the world community that the Non-Proliferation Treaty should command universal support".

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- 36. Official Records of the Disarmament Commission, Supplement for 1967 and 1968, document DC/230 and Add.l, annex IV, ENDC/192 and ENDC/193.
- 37. *Ibid.,* annexes HI and IV.

- 38. Ibid., annex IV, ENDC/205.
- 39. Official Records of the General Assembly, Twenty-second Session, Annexes, agenda item 28, document A/6951.
- 40. Official Records of the General Assembly, Twenty-second Session, Supplement 1A (A/6701/Add.l).
- 41. Official Records of the General Assembly, Twenty-second Session, Annexes, agenda item 28, document A/7016, para. 4.
- 42. Official Records of the Disarmament Commission, Supplement for 3967 and 1968, document DC/230 and Add.l, annex IV, ENDC/ 192/Rev.l and ENDC/193/ Rev.l.
- 43. *Ibid.*, annexes III and IV.
- 44. Ibid., annex II, ENDC/222.
- 45. Ibid., annex I.
- 46. Official Records of *the General Assembly, Twenty-second Session, Annexes,* agenda item 28, document A/7016/Add.l, para. 7.
- 47. Ibid., para. 4.
- 48. Ibid., para. 6.
- 49. Official Records of the Security Council, 1968, Twenty-third Year, resolution 255 (1968) of 19 June 1968.
- 50. Documents S/PV.1430, 1431 and 1433.
- 51. Official Records of the General Assembly, Twenty-third Session, Supplement No. 1A (A/7201/Add. 1).

97 THE CONFERENCE OF NON-NUCLEAR WEAPON STATES

General Assembly Decision 1966

As the concept of an agreement on the non-proliferation of nuclear weapons began to take concrete shape during 1965-1966, in the form of various treaty drafts, the countries which did not possess nuclear weapons felt that it would be useful to exchange and co-ordinate their views on the subject. At the twenty-first session of the General Assembly in 1966, Pakistan introduced a draft resolution, co-sponsored by Jamaica. Libya, Saudi Arabia and Somalia,¹ by which the Assembly would decide to convene a conference of non-nuclear weapon States not later than June 1967 to consider the following, and other related questions: (1) how the security of the non-nuclear weapon States could best be assured; (2) how non-nuclear weapon States might co-operate among themselves in preventing the proliferation of nuclear weapons; and (3) how nuclear devices might be used for exclusively peaceful purposes. By the draft resolution, the Assembly would also request its President to set up a Preparatory Committee, to make appropriate arrangements for convening the conference. The sponsors of the draft resolution subsequently accepted amendments by which the conference would be convened not later than July 1968 and the proposed Preparatory Committee would be asked to consider and report to the General Assembly's twenty-second session on the question of association of nuclear States with the work of the conference.

Pakistan stressed that the arm of the proposed conference would be to evolve a common standpoint of non-nuclear weapon countries, which would enable them to enter into a fruitful dialogue with the nuclear weapon powers. The USSR stated that, while favouring a solution of the problem of guarantees, as well as of the other problems envisaged in the draft resolution, it could not support the proposal, because those problems could not be solved without the active participation of the nuclear weapon States. The United States made no statement during the discussion, but abstained in the vote on the draft resolution. The United Kingdom voted in favour but stated that no cleavage should be created between the nuclear and non-nuclear powers, or between the members of military alliances and the non-aligned powers.

On 17 November 1966, the draft resolution, as amended, was adopted by the General Assembly, by a vote of 48 to 1 (India), with 59 abstentions, as resolution 2153 B (XXI). It reads as follows:

The General Assembly,

Recalling previous resolutions on the non-proliferation of nuclear weapons,

Considering that the further spread of nuclear weapons would endanger the peace and security of all States,

Convinced that the emergence of additional nuclear weapon powers would provoke an uncontrollable nuclear arms race,

Reiterating that the prevention of further proliferation of nuclear weapons is a matter of the highest priority demanding the unceasing attention of both nuclear weapon and non-nuclear weapon powers,

Believing that a conference of non-nuclear weapon powers would contribute to the conclusion of arrangements designed to safeguard the security of those States,

- 1. *Decides* to convene a conference of non-nuclear weapon States to meet not later than July 1968 to consider the following and other related questions:
 - "(*a*) How can the security of the non-nuclear States best be assured?
 - *"(b)* How may non-nuclear powers co-operate among themselves in preventing the proliferation of nuclear weapons?
 - (c) How can nuclear devices be used for exclusively peaceful purposes?"
- 2. *Requests* the President of the General Assembly immediately to set up a preparatory committee, widely representative of the non-nuclear weapon States, to make appropriate arrangements

for convening the conference and to consider the question of the association of nuclear States with the work of the conference and report thereon to the General Assembly at its twentysecond session.

Preparatory Committee 1967

The Preparatory Committee for the conference, composed of the representatives of Chile, Dahomey, Kenya, Kuwait, Malaysia, Malta, Nigeria, Pakistan, Peru, Spain and the United Republic of Tanzania, held a series of meetings between February and September 1967. On 15 September 1967, the Committee adopted its report to the General Assembly³ and recommended appropriate arrangements for convening the conference from 11 March to 10 April 1968. On the question of associating nuclear weapon States with the work of the conference, the Committee recommended that nuclear weapon States should be invited to participate in the conference with all rights, except the right to vote.

Consideration by the General Assembly 1967

At its twenty-second session, the General Assembly considered the report of the Preparatory Committee. On 15 December, a draft resolution was submitted by twenty-one non-nuclear weapon States and, as later revised, was co-sponsored also by Italy. By this draft resolution, the General Assembly would, *inter alia*, approve the recommendations of the Preparatory Committee, subject to a change in the proposed date for the conference, from March-April to August-September 1968.

In support of the draft resolution, Pakistan made the following points, among others. The draft non-proliferation treaty would have to be supplemented by the provisions of security guarantees for the non-nuclear weapon States. These States would also have to consider the approach of the nuclear powers-in the ENDC, which was based on the concept of assurances through existing United Nations machinery. It was necessary to have a forum where the non-nuclear weapon States could reconcile their views and, at the same time, exchange views with the nuclear powers with regard to assurances that the latter might be prepared to offer outside the context of alliances. Agreement on a suitable formula for the guarantee to be provided by the nuclear powers would be facilitated by the conference.

On 19 December, the General Assembly adopted the draft resolution by a vote of 110 votes to none, with 8 abstentions, as resolution 2346 B (XXII). It reads as follows:

The General Assembly,

Recalling its resolution 2153 B (XXI) of 17 November 1966, by which it decided that a conference of non-nuclear weapon States should be convened not later than July 1968,

Having considered with appreciation the report of the Preparatory Committee for the Conference of Non-Nuclear Weapon States,

- 1. *Approves* the recommendations of the Preparatory Committee for the Conference of Non-Nuclear Weapon States, subject to paragraph 2 below;
- 2. *Decides* to convene the Conference of Non-Nuclear Weapon States at Geneva from 29 August to 28 September 1968;
- 3. *Decides* to invite to the Conference non-nuclear weapon States Members of the United Nations and members of the specialized agencies and of the International Atomic Energy Agency;
- 4. *Requests* the Secretary-General to make appropriate arrangements for convening the Conference in accordance with the recommendations of the Preparatory Committee.

Conference Convened in 1968

The Conference of Non-Nuclear Weapon States was convened in Geneva on 29 August 1968, after the Genera] Assembly had approved the Treaty on the Non-Proliferation of Nuclear Weapons. It held a series of meetings between 29 August and 28 September. Ninety-six countries, including four nuclear powers, France, the USSR, the United Kingdom and the United States, attended the Conference. The four nuclear powers, however, did not speak.

The Conference adopted an agenda which included the following points: (a) measures to assure the security of non-nuclear weapon States; (b) establishment of nuclear weapon free zones; (c) effective measures for the prevention of the proliferation of nuclear weapons, the cessation of the nuclear arms race at an early date and nuclear disarmament; (d) programmes for co-operation in the field of peaceful uses of nuclear energy. Two Committees were established—one to deal with points (a), (b) and (c), and the other with point (d) above.

The Conference adopted fourteen resolutions and a Declaration, all of which are incorporated into a "Final Document of the Conference of Non-Nuclear Weapon States".⁴ This document, by decision of the Conference, was transmitted to the Secretary-General of the United Nations.

Conference Resolutions

Resolutions were adopted by the Conference on all of the agenda items. In resolution A, related to measures to assure the security of non-nuclear weapon States, the Conference reaffirmed (a) the principle of the non-use of force and the prohibition of the threat of force in relations between States by employing nuclear or non-nuclear weapons; (b) the right of every State to equality, sovereignty, territorial integrity, nonintervention in internal affairs and self-determination; and (c) the inherent right, recognised under Article 51 of the United Nations Charter, of individual or collective self-defence. The resolution also requested the nuclear weapon States to reaffirm these principles on their own behalf.

In resolution B, related to the establishment of nuclear weapon free zones, the Conference recommended that the non-nuclear weapon States not comprised in the Latin American nuclear weapon free zone established by the Treaty for the Prohibition of Nuclear Weapons in Latin America (*see page* 334), study the possibility and desirability of establishing military denuclearisation of their respective zones. The Conference also regretted that not all nuclear weapon states had yet signed Additional Protocol II to the Treaty for the Prohibition of Nuclear Weapons in Latin America and urged those that had not signed to do so, in accordance with resolution 2286 (XXII) of the General Assembly of the United Nations (*see page* 341).

The Conference adopted four resolutions in the general area of effective measures for the prevention of further proliferation of nuclear weapons, the cessation of the nuclear arms race at an early date and nuclear disarmament. In resolution C, the Conference requested the General Assembly to recommend that negotiations be undertaken by the ENDC for (a) the prevention of the further development and improvement of nuclear weapons and their delivery vehicles; (b) the conclusion of a comprehensive test-ban treaty; (c) the immediate cessation of the production of fissile materials for weapons purposes and the stoppage of the manufacture of nuclear weapons; (d) the reduction and subsequent elimination of all stockpiles of nuclear weapons and their delivery systems. In resolution D, the Conference urged the Governments of the Soviet Union and the United States to enter into discussions on the limitation of offensive strategic nuclear weapon delivery systems and systems of defence against ballistic missiles. Resolution E recommended that all non-nuclear weapon States accept the system of safeguards of the International Atomic Energy Agency

(IAEA), which would provide against all diversion of source or fissionable material from peaceful to military purposes. Resolution F, also pertaining to the question of safeguards, recommended the establishment, within the IAEA, of institutional machinery on safeguards, with the participation of countries

Supplying nuclear materials, as well as other member countries, whether possessing nuclear facilities or not. It further recommended that the IAEA safeguards procedures be simplified with a view to restricting their operations to the necessary minimum and to laying down rules against industrial risks, including industrial espionage. In addition, the resolution urged the nuclear weapon powers to conclude safeguards agreements with the IAEA and stressed the need for drawing up rule to avoid duplication of safeguards procedures and consequent commercial discrimination.

Seven resolutions, some of them containing detailed provisions, were adopted on the subject of co-operation in the field of peaceful uses of nuclear energy. Resolution G requested the Secretary-General of the United Nations to appoint a group of experts to prepare a full report on all possible contributions of nuclear technology to the economic and scientific advancement of the developing countries. The report was to draw on the experience of the IAEA and be considered at the twenty-fourth session of the General Assembly.

By resolution H, the Conference called for improvements in the Agency's system for compilation and dissemination of information concerning peaceful uses of nuclear energy, and invited the nuclear weapon States to assist the Agency by declassifying relevant scientific and technical information. The resolution also (a) recommended increases in the funds available for technical assistance by the Agency; (b) urged the nuclear weapon States to facilitate the availability of fissionable materials; and (*c*) requested the IAEA to study the most effective means of ensuring access to special fissionable materials on a commercial basis and to initiate studies of the question of nuclear explosions for peaceful purposes. Finally, in the light of new responsibilities, it was recommended that the Agency examine its procedures and arrangements, including the question of the composition of the Board of Governors.

In resolution I, the IAEA was asked to study the possibility of establishing a "Special Nuclear Fund", internationally financed, which would make available grants and low-interest-bearing loans for financing nuclear projects in non-nuclear weapon States and particularly in the developing areas of the world.

Resolution J requested the General Assembly to consider the establishment of a nuclear technology research and development programme within the United Nations Development Programme (UNDP) and with the co-operation of the IAEA. The International Bank for Reconstruction and Development (IBRD) was requested to consider the establishment of a programme for the use of nuclear energy in economic development projects, the main financing responsibility to rest with the nuclear weapon States. In addition, the General Conference of IAEA as asked to consider the establishment of a fund of special fissionable materials for the. benefit of non-nuclear weapon States and, in particular, of developing countries. In this connexion, the aid of the nuclear weapon States was invited, in order to provide the fund with an adequate supply of materials. Finally, this resolution recommended that a substantial share of financial resources and special fissionable materials, released as a result of nuclear disarmament, should be channelled into the proposed programmes and fund.

In resolution K, the Conference recommended that the Board of Governors of the IAEA be broadened, so as to reflect equitable geographical distribution and the views of a broad spectrum of the developing countries.

Resolution L expressed the opinion that the question of nuclear explosions for peaceful purposes was closely linked with a comprehensive test ban, underlining the urgency of a comprehensive solution of the problem of nuclear explosions for peaceful purposes compatible with a comprehensive test ban treaty.

Resolution M requested that access be provided for students and scientists to scientific institutions and nuclear establishments engaged in research and development of the peaceful uses of nuclear energy.

In the final resolution of the Conference, resolution N, the General Assembly of the United Nations was invited to consider the ways and means for the implementation of the decisions taken by the Conference, as well as the question of the convening of a second conference of non-nuclear weapon States.

Conference Declaration

The Declaration of the Conference embodied the principal conclusions of the non-nuclear weapon States regarding the problems debated at the Conference. The text reads in part as follows:

...Guided by the conviction that peace and security, like development in the world, are indivisible, and recognising the universal responsibilities and obligations in this regard, the Conference addressed itself to the problems of universal peace and, in particular, the security of nonnuclear weapon States, cessation of the nuclear arms race, general and complete disarmament and harnessing of nuclear energy exclusively for peaceful purposes, and has agreed on the following:

1. The participants of the Conference noted that there was a general acceptance of the fact that the future of mankind cannot be secure without the complete elimination of the use or threat of use of for in the spirit of the United Nations Charter. The Conference agreed that peace and progress could not be safeguarded for any nation unless the security of all nations is assured. The Conference stresses the necessity of further steps for an early solution of the question of security assurances in the nuclear era.

2. The participants consider as their sacred duty to appeal to all countries of the world to observe the United Nations Charter and the generally accepted norms of international law governing relations among States.

3. The Conference considers that an immediate cessation of the arms race and the acceleration of the process of nuclear disarmament and general and complete disarmament under effective international control are indispensable for the safeguarding of world peace and security, independence and economic progress of all countries.

The Conference recommends that, pending the achievement of general and complete disarmament under effective international control, steps be undertaken urgently with a view to reaching agreements on various collateral measures.

4. In this context, the Conference has noted the Treaty on the Non-Proliferation of Nuclear Weapons, which was commanded by United Nations General Assembly resolution 2373 (XXII). The Conference considers that the Treaty should be followed up by measures of disarmament, in particular nuclear disarmament.

5. The Conference considers that nuclear weapon free zones, established under appropriate conditions, constitute an effective contribution to the prevention of the proliferation of nuclear weapons and to the promotion of disarmament. It notes with satisfaction the progress already achieved with regard to nuclear weapon free zones established by the Treaty for the Prohibition of Nuclear Weapons in Latin America.

6. The Conference further considers that possibilities for the peaceful use of nuclear energy have increased, which is of particular importance for the economic development of non-nuclear weapon countries and for an accelerated development of the developing countries. It is imperative to ensure conditions which would promote the peaceful uses of nuclear energy, encourage international co-operation in this area, ensure unhampered flow of nuclear materials under appropriate and effective international safeguards, as well as information, scientific knowledge and advanced nuclear technology exclusively for peaceful purposes on a non-discriminatory basis. The Conference stresses the importance of the potential use of nuclear explosive devices for peaceful purposes within appropriate and effective international safeguards which should be prepared as soon as possible and under strict international control.

The Conference reiterates the need for appropriate international assistance, including financing, for the purposes of greater application of the peaceful uses of nuclear energy. In this respect the Conference underlines the necessity of an active co-operation and co-ordination of the programmes of all international organisations and agencies concerned with the development of developing countries. At the same time it recognises the important role of the International Atomic Energy Agency, whose resources should be increased but which should adapt itself adequately for its further responsibilities.

The Conference is therefore of the view that all nations and particularly nuclear weapon powers should accordingly be urged to facilitate international co-operation in the use of nuclear energy for peaceful purposes. At the same time, every assistance should be given to develop the indigenous facilities for research and application of scientific knowledge for peaceful purposes to meet the challenge of modernisation and progress which conforms the developing nations.

7. The Conference notes with satisfaction the spirit of cooperation which prevailed among participants in the Conference and expresses the hope that this co-operation would be further developed among the non-nuclear weapon States and between them and the nuclear weapon States in the interests of world peace and, progress.

8. Bearing in mind the complexity of the problems mentioned above and the need for their further consideration, the Conference recommends to the General Assembly of the United Nations the continuation of the efforts to deal with these problems, considering the best ways and means for the implementation of the decisions taken by the Conference, including the consideration of the question of convening another conference at an appropriate time.

9. The participants of the Conference wish to reaffirm, on this occasion also, their full adherence to the principles of the United Nations Charter and to the obligations assumed on the basis thereof. They confirm their determination to contribute through concrete efforts to the constant strengthening of the Organisation of the United Nations and to the acceptance of its principles, as well as to the implementation of its noble objectives.

Consideration by the General Assembly 1968

The discussion on the question of the Conference of Non-Nuclear Weapon States at the twenty-third session of the General Assembly covered most of the varied aspects of the nuclear problem and resulted in a number of draft resolutions. One of the principal subjects of debate was the question of establishing an *ad hoc* committee of the General Assembly with the task of overseeing the implementation of the resolutions of the Conference. The creation of such a committee was urged by several Members, including Brazil, Italy and Pakistan, but was not supported by a number of countries, including the USSR and the United States, which held that there was no need to set up a special body for that purpose. As an alternative to this idea, an effort was made to have the General Assembly request the convening of the Disarmament Commission in 1969 to consider the resolutions and the Declaration of the Conference.

Ultimately, a compromise solution was embodied in a draft resolution, by which, *inter alia*, the General Assembly would call on the Secretary-General to transmit the resolutions and Declaration of the Conference to the Governments of States, Members of the United Nations, members of the specialized agencies and of the IAEA, and to the international bodies concerned, for "careful consideration". It would also invite the specialized agencies, the IAEA and other international bodies concerned to report to the Secretary-General on action taken by them concerning the recommendations contained in the respective resolutions and, in particular, would invite the IBRS, the UNDP and the IAEA to continue the study of the recommendations contained in resolution J of the Conference. The Secretary-General would be requested to submit a progress report, on the basis of the information supplied by those concerned, for consideration by the General Assembly at its twenty-fourth session. In addition, a request would be addressed to the Secretary-General to place on the provisional agenda of the twentyfourth session of the General Assembly the question of implementation of the results of the Conference of Non-Nuclear Weapon States, including: (a) the question of CONvening early in 1970 a meeting of the Disarmament Commission to consider disarmament and the related question of the security of nations; and (b) the question of further international cooperation in the peaceful uses of nuclear energy, particular regard to the special needs and interests of developing countries.

Finally, the Secretary-General would be quested (in accordance with resolution G of the Conference of Non-Nuclear Weapon States) to appoint a group of experts, chosen on a personal basis, to prepare a full report on all possible contributions of nuclear technology to the economic and scientific advancement of the developing countries. This draft resolution was adopted by the General Assembly, on 20 December 1968, by a vote of 103 to 7, with 5 abstentions, as resolution 2456 A (XXIII). The USSR voted against, while the other nuclear powers voted in favour.

Three additional resolutions were adopted by the General Assembly under this item at the twenty-third session: (1) resolution 2456B, adopted by a vote of 98 to none, with 16 abstentions (the United Kingdom and the United States voted in favour, while France and the USSR abstained), which embodied the recommendations of resolution B of the Conference of Non-Nuclear Weapon States on the establishment of nuclear weapon free zones; (2) resolution 2456 C, adopted by a 1 vote of 75 to 9, with 30 abstentions (France and the United States abstained, while the USSR and the United Kingdom voted against), which, drawing from ideas expressed at the Conference of Non-Nuclear Weapon States, requested the Secretary-General to prepare a report on the. establishment, within the framework of the IAEA, of an international service for nuclear explosions for peaceful purposes, under appropriate international control; (3) resolution 2456 D, adopted by a vote of 108 to none, with 7 abstentions (France abstained, while the other nuclear powers voted in favour), which repeated the appeal contained in resolution D of the Conference of Non-Nuclear Weapon States that the USSR and the United States enter at an early date into bilateral discussions on the limitation of offensive strategic nuclear weapon delivery systems and systems of defence against ballistic missiles. The four resolutions (2456 A to D) read as follows:

The General Assembly,

Noting that pursuant to its resolution 2346 B (XXII) of 19 December 1967 the Conference of Non-Nuclear Weapon States was Mat Geneva from 29 August to 28 September 1968 and attended by ninety-two non-nuclear weapon States and four nuclear weapon States: France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland and the United States of America,

Having examined the Final Document of the Conference of Non-Nuclear Weapon States,

Appreciating the importance of the consideration given by the participants in the Conference to the problems of achieving a universal peace and, in particular, the security of non-nuclear weapon States, the cessation of the nuclear arms race, general and complete disarmament and the harnessing of nuclear energy exclusively for peaceful purposes,

Noting that the Conference has adopted the Declaration of the Conference of Non-Nuclear Weapon States and fourteen resolutions containing various recommendations,

Welcoming the constructive proposals adopted by the Conference,

Considering that in order to fulfil the aims of the Conference it is necessary to ensure the implementation of these proposals, which will require appropriate action by the international bodies and Governments concerned,

Noting in particular the decision of the Conference inviting the General Assembly at its twenty-third session to consider the best ways and means of implementing its decision and continuing the work that has been undertaken,

- 1. Endorses the Declaration of the Conference of Non-Nuclear Weapon States;
- 2. *Takes note* of the resolutions adopted by the Conference;
- 3. *Requests* the Secretary-General to transmit the resolutions and the Declaration to the Governments of States Members of the United Nations and members of the specialized agencies and of the International Atomic Energy Agency, and to the international bodies concerned, for their careful consideration;
- 4. *Invites* the specialized agencies, the International Atomic Energy Agency and other international bodies concerned to report to

A

the Secretary-General on the action taken by them in connexion with the recommendations contained in the respective resolutions of the Conference;

- 5. *Invites* the International Bank for Reconstruction and Development, the United Nations Development Programme and the International Atomic Energy Agency to continue, in consultation with their member Stales, the study of the recommendations of concern to those organisations, contained in resolution of the Conference;
- 6. *Requests* the Secretary-General to submit a comprehensive report based on the information supplied by those concerned on the progress achieved in the implementation of the present resolution for consideration by the General Assembly at its twentyfourth session;
- 7. *Further requests* the Secretary-General to place on the provisional agenda of the twenty-fourth session of the General Assembly the question of the implementation, taking into account the reports of the Conference of the Eighteen-Nation Committee on Disarmament and the International Atomic Energy Agency, of the results of the Conference of Non-Nuclear Weapon States, including:
 - (*a*) The question of convening early in 1970 a meeting of the United Nations Disarmament Commission to consider disarmament and the related question of the security of nations;
 - (*b*) The question of further international co-operation in the peaceful uses of nuclear energy with particular regard to the special needs and interests of developing countries;
- 8. *Further requests* the Secretary-General, in accordance with resolution G of the Conference, to appoint a group of experts, chosen on a personal basis, to prepare a full report on all possible contributions of nuclear technology to the economic and scientific advancement of the developing countries;
- 9. *Endorses* the recommendation that the Secretary-General should draw the attention of the group of experts to the desirability of taking advantage of the experience of the International Atomic Energy Agency in preparing the report;
- 10. *Requests* the Secretary-General to transmit the report to the Governments of States Members of the United Nations and

members of the specialized agencies and of the International Atomic Energy Agency in time to permit its consideration by the General Assembly at its twenty-fourth session.

B

The General Assembly,

Having examined the Final Document of the Conference of Non-Nuclear Weapon States,

Considering that the establishment of zones free from nuclear weapons, on the initiative of the States situated within each zone concerned, is one of the measures which can contribute most effectively to halting the proliferation of those instruments of mass destruction and to promoting progress towards nuclear disarmament,

Observing that the Treaty for the Prohibition of Nuclear Weapons in Latin America, opened for signature on 14 February 1967, has already established a nuclear weapon free zone comprising territories densely populated by man,

Reiterates the recommendation contained in resolution B of the Conference of Non-Nuclear Weapon States, concerning the establishment of nuclear weapon free zones, and especially the urgent appeal for full compliance by the nuclear weapon powers with paragraph 4 of General Assembly resolution 2286 (XXII) of 5 December 1967, in which the Assembly invited powers possessing nuclear weapons to sign and ratify as soon as possible Additional Protocol II of the Treaty for the Prohibition of Nuclear Weapons in Latin America.

C

The General Assembly

Having considered the Final Document of the Conference of Non-Nuclear Weapon States,

Observing that the use of explosive nuclear devices for peaceful purposes will have an extraordinary importance in the light of the technical documents prepared for the Conference at the request of the Secretary-General of the United Nations,

Recalling the statements made at the 1577th meeting of the First Committee by the representatives of the Co-Chairmen of the Conference of the Eighteen-Nation Committee on Disarmament to the effect that it will be convenient to initiate promptly the preparatory work for the determination of what appropriate principles and international procedures could be adopted in order that the potential benefits of any peaceful application of nuclear explosions might be made available, with due consideration for the needs of the developing areas of the world,

- 1. *Requests* the Secretary-General to prepare, in consultation with the States Members of the United Nations and members of the specialized agencies and of the International Atomic Energy Agency, and with the co-operation of the latter and of those specialized agencies that he may consider pertinent, a report on the establishment, within the framework of the International Atomic Energy Agency, of an international service for nuclear explosions for peaceful purposes, under appropriate international control;
- 2. *Further requests* the Secretary-General to transmit the report to the Governments of the States mentioned in paragraph I above in time to permit its consideration by the General Assembly at its twenty-fourth session.

D

The General Assembly,

Noting the recommendation contained in resolution D of the Conference of Non-Nuclear Weapon States,

Considering that, pursuant to the agreement reached in July 1968 by the Governments of the Union of Soviet Socialist Republics and the United States of America to enter into bilateral discussions on the limitation of both offensive strategic nuclear weapon delivery systems and systems of defence against ballistic missiles, such discussions could lead to the cessation of the nuclear arms race and to the achievement of nuclear disarmament and relaxation of tensions,

Urges the Governments of the Union of Soviet Socialist Republics and the United States of America to enter at an early date into bilateral discussions on the limitation of offensive strategic nuclear weapon delivery systems and systems of defence against ballistic missiles.

Consideration by the General Assembly 1969

At the twenty-fourth session of the General Assembly, the Secretary-General submitted three reports, as called for by resolutions 2456 A and 2456 C (XXIII): (a) a comprehensive report on implementation of

the results of the Conference of Non-Nuclear Weapon States;⁵ (*b*) a report on the establishment, within the framework of the International Atomic Energy Agency, of an international service for nuclear explosions for peaceful purposes, under appropriate international control;⁶ (c) an expert report on contributions of nuclear technology to the economic and scientific advancement of the developing countries.⁷

In the course of the debate on the item, two draft resolutions were submitted concerning further consideration of the question of the Non-Nuclear Weapon States Conference at the twenty-fifth session of the General Assembly. By the first draft resolution, submitted by Argentina, Australia, Austria, Brazil, Denmark, Finland, Italy, Japan, Mexico, the Netherlands and Pakistan, and subsequently co-sponsored by Madagascar, the General Assembly would, *inter alia*, request the Secretary-General to submit a new report on the progress achieved in the implementation of the resolutions of the Conference on Non-Nuclear Weapon States and to place on the provisional agenda of the twentyfifth session the "Question of the implementation of the results of the Conference of Non-Nuclear Weapon States".

This draft resolution was adopted by the General Assembly on 16 December by a vote of 10 to none, with 10 abstentions, as resolution 2605 A (XXIV). It was taken to include the possibility of holding a meeting of the Disarmament Commission in 1971. It reads as follows:

The General Assembly,

Recalling its resolution 2456 A (XXIII) of 20 December 1968, in which it invited the specialized agencies, the International Atomic Energy Agency and other international bodies concerned to report to the Secretary-General on the action taken by them in connexion with the recommendations contained in the respective resolutions of the Conference of Non-Nuclear Weapon States,

Recalling also that in the same resolution it requested the Secretary-General to appoint a group of experts to prepare a full report on all possible contributions of nuclear technology to the economic and scientific advancement of the developing countries,

Appreciating the importance of ensuring the Implementation of the proposals of the Conference through appropriate action by the international bodies and Governments concerned, in order to promote better international co-operation in the peaceful uses of nuclear energy in the interest of a more harmonized development of relations among the nuclear weapon and the non-nuclear weapon States,

Having reviewed the comprehensive report submitted by the Secretary-General on the basis of the reports of the International Atomic Energy Agency and of the specialized agencies concerned on the steps they have taken to implement the results of the Conference,

Noting with appreciation that:

- (*a*) The International Atomic Energy Agency has had under way or has initiated several activities that are directly responsive to several resolutions adopted by the Conference,
- (*b*) The General Conference of the International Atomic Energy Agency, at its thirteenth regular session, commanded the intention of the Agency's Board of Governors to continue the study of article VI of the Agency's Statute as an urgent matter and requested the Board to make every effort to present a draft amendment in sufficient time to permit its consideration by the General Conference of the Agency at its fourteenth session,
- (c) The question of a fund of special fissionable materials was considered by the General Conference at its thirteenth regular session and that some member States of the Agency that produce special fissionable materials indicated their willingness, in principle, to consider making further contributions to the already existing fund when it was necessary,

Noting also the comments received from the International Atomic Energy Agency and the International Bank for Reconstruction and Development, which deal with the question of current arrangements for financing nuclear projects,

Having studied the report of the Secretary-General on the contributions of nuclear technology to the economic and scientific advancement of the developing countries,

Aware of the potential contribution that atomic energy will make in fostering technical and economic progress throughout the world.

Observing that at its thirteenth regular session the General Conference of the International Atomic Energy Agency adopted resolution GC (XIII)/RES/256 on 29 September 1969 in which it requested the Director-General of the Agency to make a comprehensive study of the likely capital and foreign exchange requirements for nuclear projects in developing countries during the next decade, and of ways and means to secure financing for such projects from international and other sources on favourable terms, particularly in the form of grants or long-term loans at low interest, and to make suggestions concerning a constructive role which the Agency could play in this regard,

Mindful of the fact that a meaningful evaluation of projects in this field of atomic energy will depend not only on an assessment of their individual economic merit, but also on the long-term contribution such projects will make in a country's technological and economic development,

- 1. *Invites* the International Atomic Energy Agency, the United Nations Development Programme, the International Bank for Reconstruction and Development and the interested specialized agencies to take further appropriate action on the recommendations of the Conference of Non-Nuclear Weapon States in planning and carrying out their activities;
- 2. *Commands with appreciation* the Secretary-General's report on the contributions of nuclear technology to the economic and scientific advancement of the developing countries;
- 3. *Draws the attention* of the international sources of finance to the recommendation contained in the aforementioned report which expressed the hope that they would review the positions taken on the prospects, criteria and conditions for financing major nuclear installations, bearing in mind not only the immediate benefits from initial projects but also the long-term contributions that such projects could make to developing countries;
- 4. *Recommends* to the International Atomic Energy Agency, the various international and regional financing institutions, including the United Nations Development Programme and the International Bank for Reconstruction and Development, to co-operate in finding ways and means of financing meritorious nuclear projects, bearing in mind not only the short-range but also the long-range contribution such projects may make to economic and technical development;
- 5. *Draws the attention* of the member States of the International Atomic Energy Agency to the appeals which have been made by the Director-General of the Agency to increase the funds available to the Agency for multilateral assistance in the nuclear field;
- 6. *Notes with satisfaction* the action taken so far by the International Atomic Energy Agency regarding the fund of special fissionable materials and requests the Agency to continue its efforts to

ensure the supply to member States, when required, and on a regular and long-term basis, of such materials, including materials for power reactors;

- 7. *Invites* the specialized agencies, the International Atomic Energy Agency and other international bodies concerned to report to the Secretary-General on further action taken by them concerning the recommendations contained in the resolutions of the Conference of Non-Nuclear Weapon States which were transmitted to them by the Secretary-General in pursuance of General Assembly resolution 2456 A (XXIII);
- 8. *Requests* the Secretary-General to submit a progress report, based on the information supplied by those concerned, on the progress achieved in the implementation of the said resolutions for consideration by the General Assembly at its twenty-fifth session;
- 9. *Further requests* the Secretary-General to place on the provisional agenda of the twenty-fifth session of the General Assembly the question of the implementation of the results of the Conference of Non-Nuclear Weapon States.

The other draft resolution was submitted by Austria, Canada, Denmark, Japan, Mexico, the Netherlands and the United States of America. By it, the General Assembly would, *inter alia*, invite the IAEA to submit a special report on its studies and activities in the field of peaceful nuclear explosions/and request the Secretary-General to include in the agenda of the General Assembly at its twenty-fifth session an item entitled "Establishment within the framework of the International Atomic Energy Agency of an international service for nuclear explosions for peaceful purposes under appropriate international control". On 16 December, the General Assembly approved this draft by 80 votes to 1, with 37 abstentions, as resolution 2605 B (XXIV). It reads as follows:

The General Assembly,

Recalling that by its resolution 2456 C (XXIII) of 20 December 1968 it requested the Secretary-General to prepare in consultation with the States Members of the United Nations and members of the specialized agencies and of the International Atomic Energy Agency, and with the co-operation of the latter and of those specialized agencies that he might consider pertinent, a report on the establishment, within the framework of the International Atomic Energy Agency, of an international service for nuclear explosions for peaceful purposes under appropriate international control, *Having reviewed* the report of the Secretary-General on the establishment, within the framework of the International Atomic Energy Agency, of an international service for nuclear explosions for peaceful purposes under appropriate international control, prepared in compliance with the aforementioned resolution,

Noting that over the past year the International Atomic Energy Agency has been studying, with the active participation of many member States, the role that the Agency may play in this field, and that the report of the Board of Governors of the Agency, reproduced in the Secretary-General's report, was endorsed without objection by the General Conference of the International Atomic Energy Agency at its thirteenth regular session,

Noting further that the conclusions of the report of the Board of Governors of the Agency state, *inter alia*, that the Agency's prospective responsibilities in the field of peaceful nuclear explosions fall within its statutory objectives and functions to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world,

Aware that the Agency's prospective responsibilities in this field will have to be defined on an evolutionary basis, taking into account the still experimental state of the technology,

Recognising that the International Atomic Energy Agency has certain programmes under way, such as the convening of expert groups, designed to assure a wider appreciation of the status of this technology, and that certain nuclear weapon States have furnished the Agency with useful information on the status of their experimental programmes in this field,

- 1. *Expresses its appreciation* of the studies recently made by the Secretary-General and the International Atomic Energy Agency on this subject;
- 2. *Urges* all States Members of the United Nations to communicate any further views they may have on this subject to the International Atomic Energy Agency so that the Agency may take these comments into account in its further studies;
- 3. *Invites* the nuclear weapon States to continue to make available to the International Atomic Energy Agency full and current information concerning the technology of applying nuclear explosions to peaceful uses for the benefit of all its members;

- 4. *Invites* the International Atomic Energy Agency to keep the development of this technology under continuing review and in particular to take steps to assure the widest exchange of information concerning developments in this field, including the benefits that may be derived from nuclear explosions for peaceful purposes;
- 5. *Suggests* that the International Atomic Energy Agency continue to give particular attention over the next year to the convening of further technical meetings to discuss the scientific and technical aspects of this technology and that the Agency initiate studies on the character of the international observation in which it might engage pursuant to article V of the Treaty on the Non-Proliferation of Nuclear Weapons, signed on 1 July 1968;
- 6. *Invites* the International Atomic Energy Agency to submit to the Secretary-General, not later than 1 October 1970, a special report on the progress of its further studies and activities in this field to be considered by the General Assembly at its twentyfifth session;
- 7. Notes that the nature and contents of the special international agreement or agreements to be concluded pursuant to the provisions of article V of the Treaty on the Non-Proliferation of Nuclear Weapons, will remain open for appropriate consideration and will be the subject of further consultations;
- 8. *Requests* the Secretary-General to include in the provisional agenda of the twenty-fifth session of the General Assembly an item entitled "Establishment within the framework of the International Atomic Energy Agency of an international service for nuclear explosions for peaceful purposes under appropriate international control".

REFERENCES

- 1. Official Records of the General Assembly, Twenty-first Session, Annexes, agenda item 26, document A/6509, para, 5.
- 2. Ibid., para. 11.
- 3. Document A/6817 and Corr.l.
- 4. Official Records of the General Assembly, Twenty-third Session, agenda item 96, document A/7277.
- 5. Document A/7677.
- 6. Document A/7678.
- 7. Document A/7568.

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THE THIRD REVIEW CONFERENCE OF THE PARTIES TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS (MARCH 1985)

"I particularly wish to stress again on this occasion that unless the nuclear arms race between the major powers is halted and the further spread of military nuclear capability deterred, the terrible possibility of wholesale destruction will increase yet further and the fear of a final catastrophe will shadow our daily existence,

The Treaty on the Non-Proliferation of Nuclear Weapons was agreed as an important means of reducing the likelihood of this eventuality. It has already been a central element in the efforts to restrain the horizontal spread of nuclear weapons. Many States now have the technical capability to undertake military nuclear programmes of their own but consciously adopt a policy of restraint in this regard. The existence of the non-proliferation Treaty permits them to do so more readily because of the confidence engendered by the safeguards applied under the Treaty.

But, the Treaty is not a one-way street. In signing it, the nuclear weapon States parties agreed to pursue in good faith negotiations on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament. In this respect, the implementation of the Treaty has been largely one-sided, to the understandable concern and profound dissatisfaction of its non-nuclear weapon parties. There must be recognition of the fact that restraint on one side cannot reasonably be demanded in the face of unlimited expansion on the other."

From the message of Mr. Javier Perez de Cuellar, Secretary-General of the United Nations, to the Review Conference.

The Third Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons was held in Geneva from 27 August to 21 September 1985, with a view to assuring that the purposes and provisions of the Treaty were being realized. The Conference ended with the adoption by consensus of a Final Declaration, by which the States parties, among other things, solemnly declared their conviction that the Treaty was essential to international peace and security and expressed their support for its objectives.

This Fact Sheet provides information on the preparations for the Conference, developments at the Conference and the main features of the Final Declaration. The text of the Treaty is reproduced in Disarmament Fact Sheet No. 33, and its historical background is contained in Fact Sheet No. 41.

PREPARATIONS FOR THE CONFERENCE

Preparation of the Third Review Conference was undertaken on the basis of resolution 38/74 of 15 December 1983, by which the United Nations General Assembly, noting that a third review conference had been proposed for 1985 and a preparatory committee arranged, requested the Secretary-General of the United Nations to provide the necessary assistance to the Preparatory Committee for the Third Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons and such services as might be required for the Conference itself.

The Preparatory Committee, with 71 States participating, met three times: from 2 to 6 April 1984, from 1 to 11 October 1984 and from 22 April to 1 Nay 1985. The first session was chaired by Ambassador R. Imai of Japan; the second, by Ambassador M. Vejvoda of Czechoslovakia; and the third, by Ambassador J. Dhanapala of Sri Lanka.

The Committee, in the course of its work, recommended the establishment by the Conference of three Main Committees: one to consider primarily the implementation of articles I and II (which prohibit, respectively, the transfer of nuclear weapons to, and their manufacture by, non-nuclear weapon States) and VI (which obliges parties to negotiate in good faith on the early cessation of the nuclear arms race and on nuclear disarmament); a second to concentrate on article III (dealing essentially with safeguards) and article VII (covering nuclear weapon free zones); and a third to consider especially articles IV and V (concerning, respectively, the use of nuclear energy for peaceful purposes and the peaceful application of nuclear explosions). The Preparatory

Committee drew up a detailed proposal for such an allocation of the major substantive items to the Main Committees.

At the second session of the Preparatory Committee, the group of non-aligned and neutral States endorsed the candidature of Ambassador Mohamed Shaker of Egypt as President of the Review Conference and other delegations indicated support of that candidature.

As preparations proceeded, intergovernmental contacts intensified. In Geneva, the Bureau, composed of the three Chairmen of the preparatory sessions, met several times to discuss progress and was in regular contact with the provisional Secretary-General of the Conference, Mr. Ben Sanders of the United Nations Department for Disarmament Affairs, particularly with regard to organisational matters. Meanwhile, several States, especially the depositaries, were very active in drawing the attention of States parties to the forthcoming Review Conference. Partly as a result of such efforts, by the time the Review Conference convened, the Treaty had 131 States parties, which was 17 more than at the start of the Second Review Conference

THE THIRD REVIEW CONFERENCE: WHAT WAS AT ISSUE, WHAT WAS SAID, WHAT WAS ACHIEVED

Eighty-six States parties to the Treaty took part in the Conference, 11 more than in the Second Review Conference, in 1980.

In addition, 3 States signatories participated without taking part in decision-making and another 10 States attended as Observers, all under the rules of procedure. Furthermore, through an amendment by the Conference itself to the rules of procedure, the Palestine-Liberation Organisation was able to attend as an Observer organisation on the principle that it was already an organisation entitled by the General Assembly of the United Nations to participate as an Observer in that body. Representatives of the United Nations and the International Atomic Energy Agency (IAEA) also participated, and representatives of the Agency for the Prohibition of Nuclear Weapons in Latin America (OPANAL), the League of Arab States, the Organisation of African Unity (OAU) and the Organisation of American States (OAS) attended as Observer agencies.

Representatives of 43 non-governmental organisations also attended open meetings of the Conference. Several among them made available printed material of their organisations concerning matters under discussion at the Conference and related topics. In addition to attending plenary and Main Committee meetings, they had access to documents and participated informally in discussions with both delegates and officers of the Conference.

In addition to the message of the Secretary-General, messages from the General Secretary of the Central Committee of the Communist Party of the Soviet Union, Hikhail S. Gorbachev, and from the President of the United States, Ronald Reagan, were also delivered. In his message, General Secretary Gorbachev observed that not a single new nuclear weapon State had emerged since the conclusion of the Treaty. The USSR, for its part, favoured the expansion and deepening of co-operation in the peaceful use of the atom, as fostered by the Treaty. It was also doing all in its power to halt and reverse the nuclear arms race. It had unilaterally pledged not to be the first to use nuclear weapons and had recently declared and initiated a moratorium on all nuclear explosions. The President of the United States conveyed in his message to the Conference his conviction that the Treaty was a critical cornerstone in preventing the further spread of nuclear weapons, providing the benefits of the peaceful atom, and contributing to the security and safety of all nations. His aim was to reduce substantially and ultimately to eliminate nuclear weapons. The President also felt that verifiable limitations on nuclear testing could play a useful, though more modest, role towards those ends.

In a detailed address, Hans Blix, the Director General of IAEA, reviewed the role of the Agency and its degree of success in fulfilling that role, particularly stressing the effect of its safeguards system in creating confidence that only peaceful use was being made of nuclear programmes and of its technological assistance programme in fostering peaceful nuclear development. He noted that during the existence of the safeguards system, IAEA had never detected any diversion of fissionable material or any other misuse of safeguarded items.

In the general debate, which took place from 28 August to 4 September, 61 States parties addressed the Conference. While the great majority presented views on the implementation of the whole range of substantive articles of the Treaty, a large number focused on specific issues, most notably in the context of articles III, IV and VI.

As for the nuclear weapon States, the Soviet Union observed that the Treaty was the most representative multilateral arms limitation agreement. It emphasized its strict adherence to all its Treaty obligations and favoured the further strengthening of the non-proliferation regime, especially through the accession of all nuclear and all threshold States, such as Israel, Pakistan and South Africa. It also stood for the further enhancement of the role of IAEA and supported the peaceful uses of nuclear energy. It felt that, in principle, IAEA safeguards, should be made applicable to all non-nuclear weapon States, whether or not Treaty parties. The United States referred to the role which the Treaty, contrary to earlier predictions, had played in stopping the spread of nuclear weapons. For its part, it had urged all nuclear suppliers to require comprehensive or full-scope safeguards, similar to those accepted by parties to the Treaty, on all recipient non-nuclear States' peaceful activities.

While the results of negotiations referred to in article VI had been disappointing, that was not a reason to disparage the Treaty, in that the goal of substantial arms control also existed independently. In fact, in its view, the most urgent task was to make significant reductions in existing nuclear arsenals. The United Kingdom, for its part, noted that since 1970 only one additional State, India, a non-party, had demonstrated the capacity to detonate a nuclear explosive device, while the number of parties to the Treaty had reached four-fifths of the United Nations membership. It saw the Treaty as having three objectives: to prevent the further spread of nuclear weapons, to promote measures in the direction of nuclear disarmament, and to ensure the right of parties to use nuclear energy for peaceful purposes. It supported a comprehensive ban on all nuclear test explosions, but held that verification issues continued to be an obstacle.

A large number of non-nuclear parties also characterized the Treaty as having three main objectives: prevention of nuclear proliferation; promotion of peaceful uses of nuclear energy; and promotion of nuclear disarmament. The majority of speakers, especially those representing developed countries, felt that the first two objectives had been fully met and were highly commendatory of the Treaty, stressing its importance and success in those areas. Australia, Czechoslovakia, the Federal Republic of Germany and Japan were among the countries strongly holding such a position. At the same time, they and many others, constituting the overwhelming majority in the debate, regretted that there had been no concrete progress on the third objective, with some of them for example, Bhutan, Indonesia, Mexico, Nigeria, Peru and Sweden — generally contending that while the non-nuclear parties had meticulously adhered to their side of the bargain, the nuclear weapon States had not thus far fully lived up to their commitment under the Treaty. Many of them, expressing disappointment or concern about the application of article VI, pointed to a comprehensive nucleartest ban as the acknowledged first requirement. Australia, Bulgaria, Mexico, Sweden and Yugoslavia commented particularly strongly on that question, with Mexico making a detailed rebuttal of the Western nuclear weapon States' arguments about the questionable adequacy of existing means of verification.

Some countries, especially African and Middle Eastern, were less than certain that full success had been achieved in the implementation of the first objective—preventing horizontal proliferation—and referred to the unsafeguarded nuclear facilities of Israel and South Africa in particular; they also noted the nuclear capability of those countries, the widely held view that they could, or possibly had, manufactured nuclear explosive devices, and the technical assistance they received from certain, mainly Western, powers. On the matter of safeguards as such, many parties from all regions—Australia, Bhutan, Finland, Ireland, Peru, Poland and Sweden among them—advocated full-scope safeguards on all nuclear facilities in non-nuclear weapon States, some of them explicitly holding that acceptance of such safeguards should be a condition for the supply of nuclear materials.

On the question of technological assistance in the peaceful uses of nuclear energy, developed supplier countries generally highlighted their contributions in the area, while some recipient States felt that such assistance had been inadequate and cited the relatively small number of nuclear installations in developing countries. There was general agreement, however, that international co-operation in the peaceful uses of nuclear energy under article IV should be further improved.

In the general debate, many participants expressed support for the concept of nuclear weapon free zones both in general and in specific regions. A number of speakers praised the 14 member States of the South Pacific Forum for having adopted the South Pacific Nuclear Free Zone Treaty, which had been signed by 8 of those countries at Rarotonga, Cook Islands, on 6 August. A related question which received attention was that of the adequacy of security assurances to non-nuclear weapon States. A further related issue was the matter of armed attacks against nuclear facilities, which derived from the 1981 Israeli attack on the Iraqi nuclear installations and reports of Iraqi attacks on Iranian reactor sites in 1984 and early 1985 in the ongoing armed conflict between those two countries, which the latter had earlier submitted to the United Nations.

WORK OF THE MAIN COMMITTEES

Immediately following the general debate, the three Main Committees began their substantive review of the operation of the Treaty. While considering the articles of the Treaty in their relationship to one another and to the preamble as proposed by the Preparatory Committee and approved by the Conference, each Committee concentrated on the articles specifically mandated to it.

The Conference had agreed at the start that the Drafting Committee would convene on a given date and be furnished with all the relevant texts and proposals formulated in the Main Committees, regardless of whether those Committees had achieved complete agreement on all aspects of their reports. It would then deal with the resolution of outstanding points.

Due to early identification of differences on key substantive matters, which were few in number but very important, the work of the Main Committees progressed close to schedule. The resolution of differences, however, was accomplished only through the diligent application of various devices on the part of all three Chairmen. Main Committee I utilized three working groups; Main Committee II held open-ended informal meetings aimed at finding mutually acceptable formulations and encouraged the informal circulation of proposed texts; and Main Committee III followed a detailed programme of work outlining, or at least entitling, virtually all aspects of the issues coming under its mandate, including the question of the protection of nuclear facilities against attack.

As agreed formulations were reached, the Chairmen compiled proposed drafts of the substantive parts of their reports to the Conference. This enabled all Committees to see at the earliest possible moment the steady decrease in the number of outstanding items to be dealt with and the progressive narrowing of differences on them.

Notwithstanding all these efforts as well as extra meetings, none of the three Committees was able to reach total agreement on all of the paragraphs of its report in the limited time available. Consequently, and as envisaged, the unanimously adopted reports on each Committee's review of its assigned articles were prepared for the Conference still showing a few areas on which agreement had not been reached. The most important of those areas were: the question of a comprehensive test-ban treaty in the context of article VI (Main Committee I), one sentence of a paragraph on IAEA safeguards under article III (Main Committee II) and the formulation of one paragraph regarding the protection of safeguarded nuclear facilities against attack and of another regarding nuclear co-operation with South Africa and Israel (Main Committee III).

PREPARATION FOR POSSIBLE USE OF THE VOTING PROCEDURE

As full agreement was not reached at the Main Committee stage, especially on all aspects of the crucial matter of nuclear disarmament in the context of article VI, the possibility arose of putting draft resolutions to the vote, as provided for in the rules of procedure, to resolve outstanding points.

Accordingly, a plenary meeting was held on 18 September, timed to allow for a 48-hour interval between the introduction of and action on draft resolutions, as required by the rules. At that meeting, Mexico, on behalf of the non-aligned and neutral States, introduced three draft resolutions that had been submitted as such a few days earlier. The draft resolutions dealt, respectively, with a comprehensive nucleartest ban, a moratorium on nuclear tests, and a nuclear arms freeze. The decision to present them for consideration had been made because agreement had not yet been reached on incorporating into the final declaration a recommendation to the depositary States on those questions.

Mexico stated that the non-aligned and neutral countries would continue to work towards a consensus on the matters concerned, but, failing that, would request a vote. Iraq introduced a draft resolution on the question of the 1981 Israeli military attack, against its nuclear installations, stating that it also hoped that a prior overall consensus could be reached and its views incorporated into a text instead of being voted upon. The Islamic Republic of Iran proposed an amendment to the Iraqi draft resolution, so as to make it pertain more generally.

Senegal, as co-ordinator of the non-aligned and neutral States, expressed that group's support for the draft resolutions, which dealt with problems of concern to the international community. It also made clear that those States favoured further endeavours to seek compromise in the same spirit of mutual understanding that had so far been shown. If a decision should become necessary, they hoped for consensus adoption of the resolutions. Following the plenary meeting, numerous informal consultations continued, including at the Main Committee level (although the work of those Committees was officially over) between the President and delegations, and in the Drafting Committee, whose Chairman also prompted delegations to continue informal consultations relevant to its work.

WORK OF THE DRAFTING COMMITTEE

When the Drafting Committee held its first substantive meeting, on 18 September, it had before it as the basis for its report a draft technical paper which described the organisation of the Conference, and a draft final declaration to which was annexed an extensive compilation, derived from reports of the three Main Committees, amalgamated and arranged to constitute an overall article-by-article review of the Treaty.

Thus, it had, in effect, an almost complete draft final document. The Drafting Committee, between 18 and 20 September, was able to execute the twin tasks of refining that draft Conference documentation and of incorporating into or adding to it further agreed texts, however achieved. This further narrowed the areas in which consensus had not been reached, and on which consultations were still under way.

FINAL PHASE OF THE CONFERENCE

The crucial, final plenary meeting of the Conference, scheduled for 20 September, did not convene until the early hours of 21 September because of the continuation of the informal negotiations.

At that meeting, the various Committee Chairmen and the President were able to confirm that agreement had by then been reached in every area with the single exception of that regarding attacks against peaceful nuclear facilities.

The outstanding questions under article VI, for instance, had been resolved through intensive negotiations which led eventually to a fivepart paragraph focusing particularly on a comprehensive test-ban treaty, which was acceptable both to the parties mainly concerned and to the Conference as a whole. As a part of the compromise, it was agreed that a declaration by the group of non-aligned and neutral States on their three draft resolutions would be included in the final document of the Conference and that the draft resolutions on the two aspects of the question not covered in the five-part paragraph, a moratorium and a freeze, would not be put to the vote, but would also be included.

With regard to the Iraqi draft resolution on the question of attacks against peaceful nuclear facilities, the amendment proposed by the Islamic Republic of Iran would make the text refer to assistance to any State whose nuclear facilities were subject to attack rather than to the attack against Iraq alone. In that area of the Drafting Committee's report, the Conference at its final plenary meeting was faced with four proposed sentences, by one of which it would note Iran's stated concern. While Iraq felt that it could not accept that sentence, Iran equally felt that it could not allow it to be dropped.

In the circumstances, the President explained various options open to the Conference under its relevant rules of procedure, whereupon Belgium suggested a suspension of the meeting, also provided for in the rules. The Belgian motion was carried, and, during a final intensive early morning round of informal consultations, a satisfactory compromise was reached, whereby the whole paragraph in question would be eliminated and, instead, relevant statements made by the representative of the Islamic Republic of Iran and that of Iraq would be reproduced in full in the final document after the final declaration. That compromise was agreed to by consensus, and formalized by the President with the adoption of the Final Document incorporating all of the agreed adjustments.

Thus, the Conference successfully achieved what it had hoped for and diligently sought all along: a consensus Final Document, which included a Final Declaration, comprising a solemn preambular statement and a detailed article-by-article review of the operation of the Treaty clearly supporting it and yet containing purposeful criticism and meaningful recommendations. Most importantly, in the consensus text, the parties solemnly declared "their conviction that the Treaty is essential to international peace and security", and "their firm commitment to the purposes of the Preamble and the provisions of the Treaty".

Excerpts from the Final Declaration of the Review Conference.*

^{*} The considerable length of the Final Declaration precludes its reproduction in extensa. Many paragraphs and statements, some of which might also be considered to warrant inclusion, regrettably had to be omitted. The full Final Declaration may be referred to in the official Final Document of the Conference, NPT/CONF.III/64/I.

ANNEX I

FINAL DECLARATION

THE STATES PARTY TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS WHICH MET IN GENEVA FROM 27 AUGUST TO 21 SEPTEMBER 1985 TO REVIEW THE OPERATION OF THE TREATY SOLEMNLY DECLARE:

- their conviction that the Treaty is essential to international peace and security,
- their continued support for the objectives of the Treaty which are:
 - the prevention of proliferation of nuclear weapons or other nuclear explosive devices;
 - the cessation of the nuclear arms race, nuclear disarmament and a Treaty on general and complete disarmament;
 - the promotion of co-operation between States Parties in the field of the peaceful uses of nuclear energy,
 - the reaffirmation of their firm commitment to the purposes of the Preamble and the provisions of the Treaty,
 - their determination to enhance the implementation of the Treaty and to further strengthen its authority.

REVIEW OF THE OPERATION OF THE TREATY AND RECOMMENDATIONS

Articles I and II and Preambular Paragraphs 1-3

The States Party to the Treaty remain resolved in their belief in the need to avoid the devastation that a nuclear war would bring. The Conference remains convinced that any proliferation of nuclear weapons would seriously increase the danger of a nuclear war.

The Conference acknowledged the declarations by nuclear weapons States Party to the Treaty that they had fulfilled their obligations under Article I. The Conference further acknowledged the declarations that non-nuclear weapons States Party to the Treaty had fulfilled their obligations under Article II. The Conference was of the view therefore that one of the primary objectives of the Treaty had been achieved in the period under review.

The Conference also expressed deep concern that the national nuclear programmes of some States non-Party to the Treaty may lead them to obtain a nuclear weapon capability. States Party to the Treaty stated that any further detonation of a nuclear explosive device by any nonnuclear weapon State would constitute a most serious breach of the non-proliferation objective.

The Conference noted the great and serious concerns expressed about the nuclear capability of South Africa and Israel. The Conference further noted the calls on all States for the total and complete prohibition of the transfer of all nuclear facilities, resources or devices to South Africa and Israel and to stop all exploitation of Namibian uranium, natural or enriched, until the attainment of Namibian independence.

Article III and Preambular Paragraphs 4 and 5

The Conference affirms its determination to strengthen further the barriers against the proliferation of nuclear weapons and other nuclear explosive devices to additional States. The spread of nuclear explosive capabilities would add immeasurably to regional and international tensions and suspicions. It would increase the risk of nuclear war and lessen the security of all States. The Parties remain convinced that universal adherence to the Non-Proliferation Treaty is the best way to strengthen the barriers against proliferation and they urge all States not party to the Treaty to accede to it. The Treaty and the regime of non-proliferation it supports play a central role in promoting regional and international peace and security, *inter alia*, by helping to prevent the spread of nuclear explosives. The non-proliferation and safeguards commitments in the Treaty are essential also for peaceful nuclear commerce and co-operation.

The Conference expresses the conviction that IAEA safeguards provide assurance that States are complying with their undertakings and assist States in demonstrating this compliance. They thereby promote further confidence among States and, being a fundamental element of the Treaty, help to strengthen their collective security....

Conference expresses its satisfaction that four of the five nuclear weapon States have voluntarily concluded safeguards agreements with the IAEA, covering all or part of their peaceful nuclear activities. The Conference regards those agreements as further strengthening the nonproliferation regime and increasing the authority of IAEA and the effectiveness of its safeguards system.*

^{*} It should be noted that subsequently, on 24 September 1985, China announced that it had "decided to voluntarily offer to place some of its civilian nuclear installations under IAEA safeguards".

The Conference notes with satisfaction the adherence of further Parties to the Treaty and the conclusion of further safeguards agreements in compliance with the undertaking of the Treaty....

The Conference notes with satisfaction that IAEA in carrying out its safeguards activities has not detected any diversion of a significant amount of safeguarded material to the production of nuclear weapons, other nuclear explosive devices or to purposes unknown.

The Conference notes with satisfaction the improvement of IAEA safeguards which has enabled it to continue to apply safeguards effectively during a period of rapid growth in the number of safeguarded facilities. It also notes that IAEA safeguards approaches are capable of adequately dealing with facilities under safeguards....

Article IV and Preambular Paragraphs 6 and 7

The Conference affirms that the NPT fosters the world-wide peaceful use of nuclear energy and reaffirms that nothing in the Treaty shall be interpreted as affecting the inalienable right of any Party to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II.

The Conference reaffirms the undertaking of the Parties to the Treaty in a position to do so to co-operate in contributing, alone or together with other States or international organisations, to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of the non-nuclear weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world. In this context the Conference recognises the particular needs of the least developed countries.

The Conference confirms that each country's choices and decisions in the field of peaceful uses of nuclear energy should be respected without jeopardizing their respective fuel cycle policies. International co-operation in this area, including international transfer and subsequent operations, should be governed by effective assurances of nonproliferation and predictable long-term supply assurances....

The Conference recognises that an armed attack on a safeguarded nuclear facility, or threat of attack, would create a situation in which the Security Council would have to act immediately in accordance with provisions of the United Nations Charter.... The Conference considers that such attacks could involve grave dangers due to the release of radioactivity and that such attacks or threats of attack jeopardize the development of the peaceful uses of nuclear energy....

Article V

The Conference reaffirms the obligation of Parties to the Treaty to take appropriate measures to ensure that potential benefits from any peaceful applications of nuclear explosions are made available to nonnuclear weapon States Party to the Treaty....

Article VI and Preambular Paragraphs 8-12

The Conference examined developments relating to the cessation of the nuclear arms race in the period under review and noted in particular that the destructive potentials of the nuclear arsenals of nuclear weapon States parties were undergoing continuing development, including a growing research and development component in military spending, continued nuclear testing, development of new delivery systems and their deployment.

The Conference noted the concerns expressed regarding developments with far-reaching implications and the potential of a new environment, space, being drawn into the arms race. In that regard the Conference also noted the fact that the United States of America and the Union of Soviet Socialist Republics are pursuing bilateral negotiations on a broad complex of questions concerning space and nuclear arms, with a view to achieving effective agreements aimed at preventing an arms race in space and terminating it on Earth.

The Conference noted with regret that the development and deployment of nuclear weapon systems had continued during the period of review.

The Conference noted the lack of progress on relevant items of the agenda of the Conference on Disarmament, in particular those relating to the cessation of the nuclear arms race and nuclear disarmament, the prevention of nuclear war including all related matters and effective international arrangements to assure non-nuclear weapon States against the use or threat of use of nuclear weapons.

The Conference concluded that, since no agreements had been reached in the period under review on effective measures relating to the cessation of an arms race at an early date, on nuclear disarmament and on a Treaty on general and complete disarmament under strict and effective international control, the aspirations contained in preambular paragraphs 8 to 12 had still not been met, and the objectives under Article VI had not yet been achieved.

The Conference reiterated that the implementation of Article VI is essential to the maintenance and strengthening of the Treaty, reaffirmed the commitment of all States Parties to the implementation of this Article and called upon the States Parties to intensify their efforts to achieve fully the objectives of the Article. The Conference addressed a call to the nuclear weapon States Parties in particular to demonstrate this commitment.

The Conference welcomes the fact that the United States of America and the Union of Soviet Socialist Republics are conducting bilateral negotiations on a complex of questions concerning space and nuclear arms—both strategic and intermediate-range—with all these questions considered and resolved in their inter-relationship. It hopes that these negotiations will lead to earl; and effective agreements aimed at preventing an arms race in space and terminating it on Earth, at limiting and reducing nuclear arms, and at strengthening strategic stability.

The Conference also recalls that in the Final Document of the First Review Conference, the Parties expressed the view that the conclusion of a Treaty banning all nuclear weapons tests was one of the most important measures to halt the nuclear arms race. The Conference stresses the important contribution that such a treaty would make toward strengthening and extending the international barriers against the proliferation of nuclear weapons; it further stresses that adherence to such a treaty by all States would contribute substantially to the full achievement of the non-proliferation objective.

The Conference also took note of the appeals contained in five United Nations General Assembly resolutions since 1982 for a freeze on all nuclear weapons in quantitative and qualitative terms, which should be taken by all nuclear weapon States or, in the first instance and simultaneously, by the Union of Soviet Socialist Republics and the United States of America on the understanding that the other nuclear weapon States would follow their example, and of similar calls made at this Conference.

The Conference reiterated its conviction that the objectives of Article VI remained unfulfilled and concluded that the nuclear weapon States should make greater efforts to ensure effective measures for the cessation of the nuclear arms race at an early date, for nuclear disarmament and

for a Treaty on general and complete disarmament under strict and effective international control. The conference expressed the hope for rapid progress in the United States-USSR bilateral negotiations.

The Conference except for certain States whose views are reflected in the following sub-paragraph deeply regretted that a comprehensive multilateral Nuclear Test Ban Treaty banning all nuclear tests by all States in all environments for all time had not been concluded so far and, therefore, called on the nuclear weapon States Party to the Treaty to resume trilateral negotiations in 1985 and called on all the nuclear weapon States to participate in the urgent negotiation and conclusion of such a Treaty as a matter of the highest priority in the Conference on Disarmament.

At the same time, the Conference noted that certain States Party to the Treaty, while committed to the goal of an effectively verifiable comprehensive Nuclear Test Ban Treaty, considered deep and verifiable reductions in existing arsenals of nuclear weapons as the highest priority in the process of pursuing the objectives of Article VI.

The Conference also noted the statement of the USSR, as one of the nuclear weapon States Party to the Treaty, recalling its repeatedly expressed readiness to proceed forthwith to negotiations, trilateral and multilateral, with the aim of concluding a comprehensive Nuclear Test Ban Treaty and the submission by it of a draft Treaty proposal to this end.

Article VII and the Security of Non-Nuclear Weapon States

The Conference considers that the establishment of nucelar-weapon free zones on the basis of arrangements freely arrived at among the States of the region concerned constitutes an important disarmament measure and therefore the process of establishing such zones in different parts of the world should be encouraged with the ultimate objective of achieving a world entirely free of nuclear weapons. In the process of establishing such zones, the characteristics of each region should be taken into account.

The Conference notes the endorsement of the South Pacific Nuclear Free Zone Treaty by the South-Pacific Forum on 6 August 1985 at Rarotonga and welcomes this achievement as consistent with Article VII of the Non-Proliferation Treaty. The Conference also takes note of the draft Protocols to the South Pacific Nuclear Free Zone Treaty and further notes the agreement at the South Pacific Forum that consultations on the Protocols should be held between members of the Forum and the nuclear weapon States eligible to sign them.

The Conference underlines again the importance of adherence to the Treaty by non-nuclear weapon States as the best means of reassuring one another of their renunciation of nuclear weapons and as one of the effective means of strengthening their mutual security.

The Conference takes note of the continued determination of the Depositary States to honour their statements, which were welcomed by the United Nations Security Council in resolution 255 (1968), that, to ensure the security of the non-nuclear weapon States Parties to the Treaty, they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear weapon State Party to the Treaty which is a victim of an act or an object of a threat of aggression in which nuclear weapons are used.

The Conference reiterates its conviction that, in the interest of promoting the objectives of the Treaty, including the strengthening of the security of non-nuclear weapon States Parties, all States, both nuclear weapon and non-nuclear weapon States, should refrain, in accordance with the Charter of the United Nations, from the threat or the use of force in relations between States, involving either nuclear or non-nuclear weapons.

Article VIII

The States Party to the Treaty participating in the Conference propose to the Depositary Governments that a fourth Conference to review the operation of the Treaty be convened in 1990.

Article IX

The Conference, having expressed great satisfaction that the overwhelming majority of States have acceded to the Treaty on the Non-Proliferation of Nuclear Weapons and having recognised the urgent need for further ensuring the universality of the Treaty, appeals to all States, particularly the nuclear weapon States and other States advanced in nuclear technology, which have not yet done so, to adhere to the Treaty at the earliest possible date.

List of States Parties*

As of 31 December 1985, the following 132 countries were parties to the Treaty:

^{*} The 86 States represented at the Third Review Conference are underlined.

Afghanistan. Antigua and Barbuda, Australia. Austria. Bahamas, Bangladesh. Barbados, Belize, Belgium. Benin, Bhutan. Bolivia. Botswana, Brunei Darussalam. Bulgaria. Burkina Faso, Burundi. Cameroon. Canada. Cape Verde, Central African Republic, Chad, Congo, Costa Rica, Cote d'Ivoire. Cyprus. Czechoslovakia. Democratic Kampuchea, Democratic People's Republic of Korea, Democratic Yemen. Denmark. Dominica, Dominican Republic, Ecuador. Egypt. El Salvador, Equatorial Guinea, Ethiopia. Fiji, Finland. Gabon, Gambia, German Democratic Republic. Germany. Federal Republic of. Ghana. Greece. Grenada, Guatemala. Guinea, Guinea-Bissau, Haiti, Holy See. Honduras. Hungary. Iceland. Indonesia. Iran (Islamic Republic of). Iraq. Ireland. Italy. Jamaica, Japan. Jordan. Kenya. Kiribati, Lao People's Democratic Republic, Lebanon. Lesotho, Liberia, Libyan Arab Jamahiriya. Liechtenstein. Luxembourg. Madagascar, Malaysia. Maldives. Mali, Malta. Mauritius. Mexico. Mongolia. Morocco. Nauru. Nepal. Netherlands. New Zealand. Nicaragua. Nigeria. Norway. Panama. Papua New Guinea. Paraguay, Peru. Philippines. Poland. Portugal. Republic of Korea, Romania. Rwanda. Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino. Sao Tome and Principe, Senegal. Seychelles. Sierra Leone, Singapore, Solomon Islands. Somalia. Sri Lanka. Sudan. Suriname, Swaziland, Sweden. Switzerland. Syrian Arab Republic. Thailand. Togo, Tonga, Tunisia. Turkey. Tuvalu, Uganda. Union of Soviet Socialist Republics. United Kingdom of Great Britain and Northern Ireland. United States of America. Uruguay. Venezuela. Viet Nam. Yugoslavia and Zaire.

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THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS: FIFTEEN YEARS AFTER ENTRY INTO FORCE (JULY, 1985)

The need to halt a wider spread of nuclear weapons grew out of the realisation that the increase in the number of countries possessing such weapons would increase the threat to world security. As the Treaty on the Non-Proliferation of Nuclear Weapons clearly states in its preamble, the proliferation of nuclear weapons would seriously enhance the danger of nuclear war.

The Treaty — also known as the non-proliferation Treaty — was concluded in 1968, at a time when there were already five nuclear weapon powers: the United States, the Soviet Union, the United Kingdom, France and China. The principle underlying the provisions of the Treaty is that the solution of the problem of ensuring security cannot be found in an increase in the number of States possessing nuclear weapons or, indeed, in a continuation of the nuclear arms race by the nuclear weapon powers. Non-nuclear weapon States should, therefore, commit themselves not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and the nuclear weapon powers should stop and reverse the nuclear arms race and pursue in good faith nuclear disarmament.

The Third Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons will be held at Geneva for a period of up to four weeks beginning on 27 August 1985, with a view to assuring that the purposes and provisions of the Treaty are being realized. This fact sheet is intended to provide background material on the Treaty, including the events that led to its conclusion, an overview of its provisions and the developments at the two previously held Review Conferences.

THE ROLE OF THE UNITED NATIONS IN LAYING THE FOUNDATIONS OF THE TREATY

Soon after the United Nations was founded, the General Assembly, in its very first resolution—resolution 1 (I) of 24 January 1946—made recommendations on how to deal with the fundamental questions deriving from the discovery of atomic energy. The Assembly set as a goal the establishment of international systems of control of atomic energy to the extent necessary to ensure its use solely for peaceful purposes, as well as the elimination from national armaments of atomic weapons and all other major weapons adaptable to mass destruction. Subsequently, when it became evident that, in the absence of a concrete implementation of those recommendations, there was an increasing danger of nuclear proliferation, the question of preventing the further spread of nuclear weapons became a major focus of attention at the United Nations.

The first resolution of the General Assembly on the prevention of the further dissemination of nuclear weapons (resolution 1380 (XIV)) was adopted in 1959, at a time when there were still only three nuclear weapon powers, the United States, the Soviet Union and the United Kingdom. By that resolution, the General Assembly, recognising that "danger now exists that an increase in the number of States possessing nuclear weapons may occur, aggravating international tension and the difficulty of maintaining world peace, and thus rendering more difficult the attainment of general disarmament agreement", considered appropriate means whereby that danger might be averted, including an international agreement, subject to inspection and control, by which the nuclear weapon powers would refrain from handing over the control of nuclear weapons to any nation not possessing them and by which the powers not possessing nuclear weapons would refrain from manufacturing them. It was the first concrete step towards the negotiation of a treaty on the non-proliferation of nuclear weapons.

Many other resolutions followed. For example, in 1961, the General Assembly adopted resolution 1665 (XVI) by which it called upon all States, and in particular upon the States then possessing nuclear weapons, "to secure the conclusion of an international agreement containing provisions under which the nuclear States would undertake to refrain from relinquishing control of nuclear weapons and from transmitting the information necessary for their manufacture to States not possessing nuclear weapons would undertake not to manufacture or otherwise acquire control of such weapons".

Another key resolution was adopted in 1965 (resolution 2028 (XX)), at a time when multilateral negotiations on a non-proliferation treaty had begun in earnest and the number of nuclear weapon powers had increased to five. By that resolution the General Assembly called upon the multilateral negotiating body—the Conference of the Eighteen-Nation Committee on Disarmament—to negotiate an international treaty to prevent the proliferation of nuclear weapons based on a number of principles, in particular the following: (a) the treaty should not have any loopholes which might permit the proliferation of nuclear weapons in any form, directly or indirectly; (b) the treaty should embody an acceptable balance of mutual responsibilities and obligations of the nuclear weapon and non-nuclear weapon States; (c) the treaty should be a step towards the achievement of general and complete disarmament, particularly nuclear disarmament. The resolution provided the conceptual basis for the prevention of not only "horizontal" proliferation (the spread of nuclear weapons to countries not possessing them) but also "vertical" proliferation (the continued accumulation of weapons and the development of new nuclear weapon systems by the existing nuclear weapon powers).

Initially, it was the concern about the further spread of nuclear weapons that generated support for the idea of a non-proliferation treaty, but, as the negotiations proceeded, the principle of an acceptable balance of mutual responsibilities and obligations of the nuclear weapon and non- nuclear weapon States came to play an increasing role in the negotiations. On that basis, the non-proliferation Treaty was successfully negotiated in the Eighteen-Nation Committee on Disarmament, under the co-chairmanship of the Soviet Union and the United States, with the General Assembly continuing to provide general guidance for the negotiations. The Treaty on the Non-Proliferation of Nuclear Weapons was concluded in 1968.

On 12 June 1968, by resolution 2373 (XXII), the General Assembly commanded the Treaty and requested the depositary Governments the Soviet Union, the United Kingdom and the United States—to open it for signature and ratification. The Assembly expressed the hope for the widest possible adherence to it by both nuclear weapon and nonnuclear weapon States, and requested the Eighteen-Nation Committee and the nuclear weapon States urgently "to pursue negotiations on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control". Paragraph 4 of the preamble states that the Treaty was achieved "in conformity with resolutions of the United Nations General Assembly calling for the conclusion of an agreement on the prevention of wider dissemination of nuclear weapons".

THE MAIN PROVISIONS OF THE TREATY

The non-proliferation Treaty is based on a well-defined distinction between nuclear weapon States and non-nuclear weapon States, with the main obligations of the former different from those of the latter. The Treaty, in article IX, defines a nuclear weapon State as "one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967".

Articles I to III of the Treaty deal with the specific question of the prevention of the further spread of nuclear weapons. Each nuclear weapon State party 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; and not in any way to assist, encourage, or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices" (article I). Each non-nuclear weapon State party to the Treaty undertakes (a) not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices or control over them (article II); and (b) to accept safeguards, as set forth in agreements to be negotiated with the International Atomic Energy Agency (IAEA), to be applied on all source or special fissionable material in all peaceful nuclear activities within its territory, under its jurisdiction or carried out under its control anywhere (article III).

In other words, the safeguards agreements are to be negotiated in accordance with the IAEA Statute for the exclusive purpose of verification of the fulfilment of the obligations assumed under the Treaty. The purpose of the IAEA's safeguards system is to provide confidence that the facilities are not being used for the manufacture of nuclear weapons or other nuclear explosive devices.

All the parties to the Treaty undertake, on the other hand, to facilitate the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy. Parties to the Treaty in a position to do so are to co-operate in contributing to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear weapon States party to the Treaty, with due consideration for the needs of the developing areas of the world (article IV). The Treaty does not prohibit such assistance to countries which are not parties to it.

Article V deals with the question of nuclear explosions for peaceful purposes and affirms the principle that potential benefits from such explosions should be made available to non-nuclear weapon States on a non-discriminatory basis.

Under article VI, each of the parties "undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament and on a treaty on general and complete disarmament under strict and effective international control". The intention of the parties to achieve, at the earliest possible date, the cessation of the nuclear arms race and to move towards nuclear disarmament is also affirmed in preambular paragraphs 8 and 11. The preamble, in paragraph 10, also recalls the determination expressed by the parties in another treaty—the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water, of 1963—to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to that end.

Article VII stipulates that nothing in the Treaty affects the right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

Article VIII lays down a procedure for amending the Treaty. In particular, any amendment must be approved by a majority of the votes of all the parties to the Treaty, including the votes of all nuclear weapon States party to the Treaty and all other parties which, on the date the amendment is circulated, are members of the Board of Governors of IAEA.

Each party has the right to withdraw from the Treaty "if it decides that extraordinary events, related to the subject-matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests" (article X, paragraph 1).

There is no provision in the Treaty concerning the question of security guarantees to non-nuclear weapon States party to the Treaty. However, immediately after the General Assembly commanded the Treaty and requested that it be opened for signature and ratification, the Security Council, on 19 June 1968, adopted a resolution on the subject of security guarantees, sponsored by the three depositaries—the Soviet Union, the United Kingdom and the United States. By resolution 255 (1968), the Security Council recognised that aggression with nuclear weapons, or the threat thereof, against non-nuclear weapon States would call for immediate action by the Council, above all by its nuclear weapon States permanent members. The Council also welcomed the intention expressed by the Treaty depositaries in the Council, on the same occasion, to assist any non-nuclear weapon State party to the Treaty that was a victim of an act or threat of nuclear aggression, and it reaffirmed the right of collective self-defence under Article 51 of the Charter of the United Nations.

The effectiveness of the security guarantees envisaged in the resolution was questioned, however, by a number of non-nuclear weapon States. Some expressed misgivings because of the possibility of use of the veto in the Security Council, others because the guarantees involved "positive" rather than "negative assurances". Under a "negative assurance", a nuclear weapon power would commit itself not to use or threaten to use nuclear weapons against non-nuclear weapon States. This is in contrast to a "positive assurance", whereby nuclear weapon States would commit themselves, under specific circumstances, to the defence of non-nuclear weapon States. It was also felt that the commitment to render assistance was already inherent in the Charter of the United Nations. Subsequently, the five nuclear weapon States individually made declarations, in most cases with qualifications, providing "negative assurances" to the non-nuclear weapon States against the use or threat of use of nuclear weapons.

Concerning the duration of the Treaty, 25 years after its entry into force, that is, in 1995, 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 (article X, paragraph 2).

THE GOAL OF UNIVERSALITY

The non-proliferation Treaty entered into force on 5 March 1970, upon its ratification by the three depositary Governments and 40 nonnuclear weapon States, in accordance with its article IX, paragraph 3. Since then the number of parties to the Treaty has grown, and as of 31 May 1985 a total of 130 States had become parties to the Treaty. Indeed, there is no multilateral arms limitation and disarmament agreement that has a greater number of adherents. Several non-nuclear weapon States with significant peaceful nuclear programmes have, however, not become parties. Generally, those States objected to the Treaty as being discriminatory. What they regarded as discriminatory was the differentiation of States into two categories, nuclear weapon and non-nuclear weapon States, and the asymmetrical distribution of obligations and privileges under the Treaty.

Since the entry into force of the Treaty, the General Assembly has repeatedly called for universal adherence to it. Of the five nuclear weapon States, three are parties to the Treaty. The two nuclear weapon States not parties, China and France, have stated their positions in various forums. In 1968, upon the adoption of resolution 2373 (XXII) referred to above, France stated that, while it would not sign the nonproliferation Treaty, it would behave in the same way as the States adhering to the Treaty. Subsequently, France has made clear that it would not promote the proliferation of nuclear weapons, and would follow a policy of strengthening appropriate arrangements and safeguards relating to equipment, materials and technology. In 1973, China stated that it had been compelled to develop a few nuclear weapons for the purpose of self-defence and to break the nuclear monopoly of the Super-Powers. It added that it was firmly against using the non-proliferation Treaty to deprive non-nuclear weapon countries or countries with a few nuclear weapons of their sovereignty and to damage the interests of the people of various countries. In 1984, in the Conference on Disarmament, China specifically declared that it did not advocate or encourage nuclear proliferation, nor did it help other States develop nuclear weapons.

THE FIRST REVIEW CONFERENCE, 1975

The Treaty provides, in article VIII, for a conference of its parties to be held at Geneva five years after its entry into force, to review its operation with a view to assuring that the purposes of the preamble and the provisions of the Treaty are being realized. It also foresees that at intervals of five years thereafter review conferences shall be held if a majority of the parties so wish. Accordingly, the First Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons met at Geneva in May 1975. The Conference adopted by consensus a Final Declaration in which it reaffirmed the strong common interest of the parties in averting the future proliferation of nuclear weapons and reviewed the operation of the Treaty article by article. At the First Review Conference, much of the debate revolved around three matters that already had been discussed extensively in the course of negotiations leading to the conclusion of the Treaty, namely, nuclear disarmament, security of the non-nuclear weapon States against the use or threat of use of nuclear weapons and peaceful uses of atomic energy. The main difficulties at the Review Conference arose in connection with article VI of the Treaty, concerning the obligations of the nuclear weapon States parties on nuclear disarmament.

The debate indicated that the gap in perceptions and expectations that had been discernible upon the Treaty's entry into force had not been bridged by the experiences of the first five years of the operation of the Treaty. The parties that tended to regard the Treaty as an arms limitation agreement primarily designed to constrain the further spread of nuclear weapons to countries not possessing them felt, on the whole, that the Treaty had fulfilled its purpose. By contrast, those countries that viewed the Treaty primarily as an effort to strike a balance between the mutual obligations and responsibilities of the nuclear weapon and non-nuclear weapon States felt that, in the implementation of the Treaty, the emphasis had been placed heavily on the obligations of the nonnuclear weapon States, while scant attention had been paid to their rights or to the obligations of the nuclear weapon States. Those different assessments were also reflected in the views expressed concerning the objectives of the Conference, the implementation of the provisions of the Treaty and the measures that should be taken to strengthen it.

The Soviet Union, the United Kingdom and the United States and most other Eastern and Western countries felt that the principal purpose of the Conference was to strengthen the Treaty by encouraging wider adherence to it and by taking measures towards a more effective safeguards system. On the other hand, the non-aligned and neutral States held that the main objective of the Conference was to make a thorough, critical examination of the Treaty's operation in order to determine whether all its provisions were being realized and to adopt measures required to fill gaps and remedy inadequacies that might become apparent during such an examination.

Most of these countries believed that, while it was vital that the Treaty should be strengthened and that all States should accede to it, that goal could best be achieved on the basis of an acceptable balance of mutual responsibilities and obligations of the nuclear weapon and non-nuclear weapon States parties to the Treaty. In the detailed discussion on the various provisions of the Treaty, all participants agreed that articles I and II had been faithfully observed by the parties. However, with respect to the provisions of the Treaty on peaceful uses of nuclear energy and nuclear disarmament, and on the related question of security guarantees to non-nuclear weapon States, considerable dissatisfaction was expressed, and was reflected in various proposals submitted in the course of the Review Conference as well as in the Final Declaration of the Review Conference.

THE SECOND REVIEW CONFERENCE, 1980

The Second Review Conference provided another opportunity for the parties to agree on ways to fulfil the various provisions of the Treaty and further strengthen the non-proliferation regime. Notwithstanding many positive developments, however, only a limited measure of agreement was achieved by the parties.

Virtually all speakers noted with satisfaction that the number of States parties to the Treaty had increased since the previous Review Conference. The United States pointed out that, together with France—which had made it clear that it would act as if it were a party to the Treaty—the countries that had adhered to a non-proliferation regime represented an aggregate population of over two billion people and an aggregate gross national product of 7.7 trillion dollars; 98 per cent of the world's installed nuclear capacity and 95 per cent of the nuclear power reactors; and all major exporters of key nuclear materials and equipment. Several parties to the Treaty maintained, nevertheless, that the lack of universal adherence to the Treaty influenced negatively the process of its implementation. They also stressed that the nuclear capabilities of the countries which had not adhered to the Treaty were significant.

Of the various provisions of the non-proliferation Treaty, the most intense debate was on the implementation of article VI, concerning nuclear disarmament. Most participants held that the nuclear weapon States had not adequately fulfilled their obligations to negotiate effective measures to halt the nuclear arms race and achieve nuclear disarmament. Accordingly, the major nuclear powers were broadly urged to intensify their efforts in that direction. In reply to that viewpoint, the three depositary Governments drew attention to the efforts they had made to reach agreement on a number of issues, including a comprehensive nuclear test ban, and to provide security guarantees to non-nuclear weapon States.

The development and promotion of the peaceful uses of nuclear energy was also a major focus of attention in the general debate. A number of parties felt that it was necessary, however, to emphasise that the primary purpose of the Treaty had always been and remained the prevention of the spread of nuclear weapons. The Conference participants generally expressed satisfaction with the IAEA safeguards procedures for existing facilities. However, they emphasized that those procedures would need continued improvement to deal with the increasing amounts of nuclear material and increasingly complex nuclearfuel-cycle facilities. It was recognised that, in order to cope with its growing tasks, IAEA would need adequate human and financial resources for research and development of safeguards techniques. The participants were agreed that non-nuclear weapon States not parties to the Treaty should submit all their nuclear activities to IAEA safeguards, but there were fundamental differences over whether the suppliers were under an obligation to require such comprehensive safeguards of their customers.

A number of developing countries expressed dissatisfaction with what they considered to be restrictive export policies of suppliers of nuclear equipment and technology for peaceful purposes towards developing countries parties to the non-proliferation Treaty. Regret was also expressed by some participants that suppliers which were parties to the Treaty had continued to engage in nuclear trade and cooperation with non-parties, often permitting less stringent safeguards than those applied to parties in accordance with the provisions of the Treaty. The view was also put forward that non-parties to the Treaty, including some relatively advanced countries, had benefited more from the transfer of nuclear technology and equipment than had needy countries which had adhered to the Treaty.

The question of security guarantees to non-nuclear weapon States was also widely discussed. In general, there was wide support among the participants for stronger assurances to the non-nuclear weapon States, and at the same time, it was recognised that some progress had been achieved on the question of assurances since the First Review Conference.

By the end of the Conference, fundamental differences remained, primarily on article VI of the Treaty, and because of those differences the Conference was unable to adopt an agreed final declaration. It simply recommended that a third conference to review the operation of the Treaty be convened in 1985. Many participants expressed regret that the Conference had not been able, despite the agreement reached in a number of important areas, to produce by consensus a substantive final declaration on the operation and implementation of the Treaty since 1975 and measures to be taken in the future. On the other hand, delegations from all regions of the world affirmed their continued support for the Treaty and urged that work on the outstanding issues be continued.

In his closing statement, the President of the Review Conference, Mr. Ismat Kittani, sharing the disappointment of the Conference that it had not been able to reach a consensus on a substantive final document, said that the undertaking should be seen in all its complexity, which meant finding a common denominator among the positions of the States concerned on a matter influenced both by their individual views and by the international climate. He noted that the prevention of the further spread of nuclear weapons had been the subject of very little controversy. While the question of the peaceful uses of nuclear energy had given rise to marked differences of opinion with regard to proposals on the relevant articles, it had been possible to obtain near unanimity in that area. The President noted that the differences at the Conference were mainly on the question of nuclear disarmament. It had to be admitted, the President stated, that the manner in which the obligations contracted under the terms of article VI were being honoured was disappointing. The arms race continued to intensify both qualitatively and quantitatively, and the prospects for a halt were far from bright. In that respect, he stressed that the warning given by a number of delegations was real and should be taken seriously.

THE THIRD REVIEW CONFERENCE

After many months of preparation, the Third Review Conference will be held at Geneva for a period of up to four weeks, beginning on 27 August 1985, to assess once again how the purposes and provisions of the Treaty are being realized. Several complex and difficult issues will have to be addressed. A number of States parties have expressed concern at the way in which the Treaty is being implemented. Many non-nuclear States parties feel strongly that article VI of the Treaty, which contains the provision that negotiations should be pursued in good faith on effective measures of nuclear disarmament, has not been adequately implemented. Yet, the convergence of the interests of the nuclear weapon and non-nuclear weapon States to check the further spread of nuclear weapons still exists. Indeed, many States have expressed the view that any further proliferation of nuclear weapons would make the attainment of nuclear disarmament a more remote goal and that it is therefore important to avoid the erosion of the Treaty's strength and credibility.

LIST OF STATE PARTIES

As of 30 June 1985, the following 130 countries have become parties to the Treaty: Afghanistan, Antigua and Barbuda, Australia, Austria, Bahamas, Bangladesh, Barbados, Belgium, Benin, Bhutan, Bolivia, Botswana, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Canada, Cape Verde, Central African-Republic, Chad, Congo, Costa Rica, Cyprus, Czechoslovakia, Democratic Kampuchea, Democratic Yemen, Denmark, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Ethiopia, Fiji, Finland, Gabon, Gambia, German Democratic Republic, Germany, Federal Republic of, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Haiti, Holy See, Honduras, Hungary, Iceland, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Ivory Coast, Jamaica, Japan, Jordan, Kenya, Kiribati, Lao People's Democratic Republic, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya, Liechtenstein, Luxembourg, Madagascar, Malaysia, Maldives, Mali, Malta, Mauritius, Mexico, Mongolia, Morocco, Nauru, Nepal, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Republic of Korea, Romania, Rwanda, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, San Marino, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Singapore, Solomon Islands, Somalia, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syrian Arab Republic, Thailand, Togo, Tonga, Tunisia, Turkey, Tuvalu, Uganda, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United Republic of Cameroon, United States of America, Uruguay, Venezuela, Viet Nam, Yugoslavia and Zaire.

100 Some regional aspects of the NUCLEAR NON-PROLIFERATION REGIME

Converging Positions of Argentina and Brazil on the Use of Nuclear Energy

The traditional rivalry between Argentina and Brazil is being superseded by a gradually growing understanding between them on the use of nuclear energy for peaceful purposes. When we look at the process initiated in the nuclear energy field in 1980 by two military Governments and subsequently continued and maintained by democratic Governments, there is no longer any need to feel apprehensive because earlier bilateral efforts failed. The most recent meeting between the heads of State of Argentina and Brazil (April 1988) shows how far their nuclear co-operation has come— so far that, according to some news reports, an isotope enrichment facility was opened at Ipero which, at some future point, will be used to supply fuel for nuclear submarine reactors.

This is not the place to describe in detail the scope and implications of Argentina's and Brazil's harmonious and partially shared nuclear development. What is important, beyond the political impact expected on their bilateral relations, is the foreseeable impact on the whole of Latin America and, more particularly, on the more cohesive South American region.

The solemn, politically and legally binding declarations repeatedly made by Argentina and Brazil either jointly or separately concerning the use of nuclear energy for exclusively peaceful purposes will, in theory, have major positive repercussions. The only two Latin American countries to have reached an advanced stage in this area of their development are guided by the same deep-seated concerns that prompted the vast majority of countries of the region to sign the Treaty of Tlatelolco. Moreover, although they, like Chile, are not full parties to that Treaty, their reaffirmation of the need to use nuclear energy peacefully obviously contributes to ensuring nuclear peace not only in South America, but also elsewhere in Latin America.

The reasons Argentina and Brazil, followed by Chile, are still not full parties to the Treaty will be taken up in greater detail later on in this article. However, it is useful to bear in mind at this point that in adopting their common position on the nuclear non-proliferation regime, Argentina and Brazil are not just exercising their unquestionable sovereign right to refuse, for the time being, to recognise the applicability of the Tlatelolco regional system and to oppose categorically the global system of the non-proliferation Treaty. Unlike the cases of India and Pakistan and of Israel and South Africa, Argentina and Brazil have absolutely no reason to incorporate nuclear weapons into their national defence systems. Given this characteristic of the relations between the States of the region—by contrast with the situation in other regions and with the endemic global confrontation between the major nuclear powers, Argentina and Brazil appear to have opted for a policy of affirmation and prestige, with a view to gaining sufficient bargaining power for any future developments in the non-proliferation regime and in the peaceful use of nuclear energy.

Argentina and Brazil are regional powers which wield influence beyond their own borders in their immediate geopolitical area. In 1982, that area, the South Atlantic, was the scene of a conflict which, in the opinion of those two countries, might have involved the transport and deployment of nuclear weapons. It was this that prompted the adoption, by the United Nations General Assembly, of a resolution declaring the South Atlantic a zone of peace and co-operation.

In the particular case of Argentina, there are internal reasons which make it difficult to ratify the Treaty of Tlatelolco, at least for the time being. However, in theory that does not mean that Argentina's position is more radical or that it is more opposed to the Treaty than are Brazil and Chile, which, while they have ratified it, have yet to avail themselves of the waiver that would enable them to become full parties thereto. In any event, Argentina's current position *vis-a-vis* the Treaty of Tlatelolco has been defined very clearly by Professor Hector Gros Espiell, who maintains that, while Argentina is not a party to the Treaty, it has expressly agreed that, as a signatory State, it cannot engage in acts contrary to the essential purpose and goals of the Treaty. Having said this, the important thing is to establish on what possible negotiating terms Argentina might ratify the Treaty and, together with Brazil and Chile, exercise the waiver referred to above.

There can be no question that if Argentina were to ratify the Treaty, it, together with Brazil and Chile, would be in a very special situation with regard to the entry into force of the Treaty, since its applicability would only be limited formally by the requirements of article 28; in other words, their compliance with the spirit and certain basic norms of the Treaty would in no way be limited.

Lastly, it is important to emphasise that the position taken by Argentina and Brazil and, secondarily, Chile, on the entry into force of the Treaty of Tlatelolco differs in nature and significance from that taken in the parallel case of Cuba, which involves issues of greatpower strategy beyond the highly controversial question of the Guantanamo base.

Relationship between the Non-Proliferation Treaty and the Treaty of Tlatelolco

In order to define the relationship between the non-proliferation Treaty and the Treaty of Tlatelolco, we must, as Ambassador Julio C. Carasales has said, make a full study of article VII of the non-proliferation Treaty, which to some extent reflects resolution 2028 (XX) of the United Nations General Assembly. The actual text of article VII should leave no doubt as to the legitimacy of regional treaties.

However, Ambassador Carasales rightly fears that the article has been and continues to be misinterpreted as subordinating the Treaty of Tlatelolco to the non-proliferation Treaty, in much the same way as Article 52 of the United Nations Charter subordinates regional arrangements to the Charter itself. He goes on to add that the two Treaties, while similar in aim, are based on different criteria and principles. For example, article 18 of the Treaty of Tlatelolco expressly authorises contracting parties to conduct nuclear explosions for peaceful purposes. This approach is fundamentally different from that of the non-proliferation Treaty, which subjects explosions of nuclear weapons and other nuclear explosive devices to one and the same regime.

Furthermore, and notwithstanding the provisions of article V of the non-proliferation Treaty concerning nuclear explosions for peaceful purposes, it is worth mentioning that article V refers to the potential benefits from any peaceful applications of nuclear explosions, which can be carried out only by nuclear weapon States. It seems unnecessary to point out that the meaning of article 18 of the Treaty of Tlatelolco is different and more significant, in that it concerns an area where there are no nuclear weapon powers.

A forced interpretation of the provisions of the non-proliferation Treaty and the Treaty of Tlatelolco has thus been placed at the service of certain national interests, as in the case of the interpretative declarations by the United States and the United Kingdom regarding the Protocols to the Treaty of Tlatelolco. Those declarations state that the articles of the Treaty do not permit explosions for peaceful purposes unless and until advances in technology have made possible the development of devices for such explosions which are not capable of being used for weapons purposes.

With regard to safeguards and, more specifically, those applied in the context of IAEA, it is quite true that countries which are full parties to the Treaty of Tlatelolco and also parties to the non-proliferation Treaty have no problem whatsoever with the model safeguards agreement drawn up by IAEA. What is open to question is whether certain countries which are signatories to the Treaty of Tlatelolco and members of IAEA must act, in the matter of safeguards, as if they were also parties to the non-proliferation Treaty.

In this connection, Carasales has recalled regional and other special situations which have arisen within IAEA, such as the decision by the EURATOM (European Atomic Energy Community) countries and Japan to conclude safeguards agreements with IAEA before ratifying the non-proliferation Treaty.

That inherently complex and controversial situation prompted the General Secretary of OPANAL to say, at the thirtieth session of the OPANAL General Conference, that Argentina's desire for a safeguards agreement designed according to the letter and spirit of the Treaty of Tlatelolco was valid and would of course mark a new stage in the history of IAEA safeguards. OPANAL was sure that IAEA would cooperate in bringing about such an agreement.

Argentina's is not an isolated case. In the matter of safeguards, Brazil's position coincides fully with the one described above. Moreover, the two countries have, through their gradual *rapprochement*, demonstrated their willingness to adopt a system of reciprocal verification which is obviously at the core of any safeguards system. In other words, this would be a bilateral system of safeguards—which could presumably be extended to other countries in the area—different from those of IAEA and in keeping with the spirit and purposes of the Treaty of Tlatelolco. At this point, two important issues must be clarified. First, there is the option, on which Argentina has yet to take a decision, of ratifying the Treaty of Tlatelolco and then, subsequently, along with Brazil and Chile, of exercising the waiver that would enable it to apply the Treaty fully. The second option is to clarify the pending application of certain provisions of the Treaty of Tlatelolco concerning safeguards.

With regard to this second issue, it must be recalled that article 13 of the Treaty of Tlatelolco, which ensures a safeguards regime different from that of the non-proliferation Treaty, requires more precisely stipulated rules of application in keeping, in particular, with articles 16 and 18, inasmuch as they refer to reports of unauthorized explosions and to explosions for peaceful purposes. In any event, it may still be too early to make a statement as categorical as that of the General Secretary of OPANAL, quoted above.

We conclude from the foregoing that there are no grounds for arguing *a priori* that the substance of the Treaty of Tlatelolco is subordinate to and limited by the non-proliferation Treaty. What is more, if we are to be pragmatic and bear in mind the need to promote the full incorporation of Argentina and Brazil into the regional system, it is pertinent to quote Ambassador Carasales's view that the policy of converting the Treaty of Tlatelolco into a regional version of the nonproliferation Treaty would not be conducive to ensuring full adherence to the former Treaty.

In short, while the Treaty of Tlatelolco is not an end in itself, given the global nature of nuclear problems, and while its future is therefore inconceivable without an adequate operating relationship with the nonproliferation Treaty, it must also be constantly borne in mind that, for all its limitations, the Treaty of Tlatelolco is the best practical example of nuclear non-proliferation, both because of the length of time it has been in effect and because of the peaceable nature of its area of application. The future of the non-proliferation Treaty, however, given the asymmetry of its provisions on the obligations and duties of nuclearand non-nuclear weapon States parties and the failure to implement those provisions properly, will largely depend on the review conference process, at the end of which, in 1995, the Treaty will either continue in force or else lapse—an alternative fraught with risks for the future of mankind.

To sum up, it would be advisable to proceed with caution in the search for possible ways of establishing a harmonious relationship between these two important instruments. The persistence of diametrically opposed arguments in favour of, on the one hand, total autonomy for the Treaty of Tlatelolco and, on the other hand, its a *priori* subordination to the non-proliferation Treaty is not conducive to lucid, practical deliberations which would facilitate the incorporation of Argentina and Brazil into the regional system and increase the latter Treaty's validity. This is an issue which the 1990 Review Conference will have to take up, on the understanding that it will have to consider all issues pending at both the global and the regional level.

Similarities and Differences between the Tlatelolco and Rarotonga Treaties *vis-a-vis* the Provisions of the Non-Proliferation Treaty

There is no need to dwell at length on one aspect of the relationship between the Treaties of Tlatelolco and of Rarotonga—one that has been very clear ever since the latter of the two instruments entered into force: the importance of the establishment of a denuclearized zone in the South Pacific which is essentially similar to the regime established by the Treaty of Tlatelolco. Both zones have a large population and are geographically contiguous. They form part of a process of military denuclearisation that began over 20 years ago with Tlatelolco and has been adjusted to keep abreast of global developments in the intervening period and to allow for certain differences between the South Pacific, on the one hand, and Latin America and its surrounding maritime areas, on the other.

One feature specific to the Rarotonga Treaty is the understandable influence of global multilateral instruments signed after the Treaty of Tlatelolco, such as the non-proliferation Treaty, the sea-bed Treaty and the United Nations Convention on the Law of the Sea, which, while it has yet to enter into force, has had an obvious positive impact on the development of the international law of treaties.

Two features which definitely distinguish the Treaty of Rarotonga from the Treaty of Tlatelolco are its provisions on the dumping of nuclear wastes and an additional protocol on nuclear tests, open to the nuclear powers, which makes no distinction between explosions of nuclear weapons and other explosions for peaceful purposes. While the first of these innovations is self-explanatory, the second requires some comment.

On first analysis, the Treaty of Rarotonga would appear to represent significant progress over the Treaty of Tlatelolco in that it prohibits all kinds of nuclear explosions, thereby adhering implicitly to the spirit and the letter of the non-proliferation Treaty, whose safeguards system it adopts. In fact, it goes even further than the non-proliferation Treaty, article V of which refers to the potential benefits of any peaceful applications of nuclear explosions (those which the Treaty obviously considers valid) conducted exclusively by the three nuclear weapon States parties to that instrument.

Such an assessment would be somewhat simplistic if we did not contrast it with other features of the Treaty of Rarotonga. For instance, there can be no question that Protocols 1 and 2 of the Treaty of Rarotonga impose less stringent obligations on the major nuclear powers than those imposed by the two Additional Protocols of the Treaty of Tlatelolco. This may be because of the demands which the ANZUS (Australia-New Zealand-United States) Treaty places on its parties in the South Pacific, which are greater than those imposed by the Inter-American Treaty of Reciprocal Assistance in the Latin American region. It is also very important to differentiate Latin America, a land mass with essentially complementary maritime areas, from the southwest Pacific region, whose land mass, Australia included, is far smaller than the vast maritime area affected by the Treaty of Rarotonga. What we have here, then, are strategic factors and legal factors, the latter linked to the above-mentioned Convention on the Law of the Sea.

The attitude of the nuclear powers towards Protocol 3 to the Treaty of Rarotonga is very significant. France's position has already been stated. While the Soviet Union and China have signed that Protocol and the other two, the United States and the United Kingdom appear reluctant to do so, reflecting an attitude different from the one they took towards the two Additional Protocols to the Treaty of Tlatelolco.

We should consider the reluctance of these two Western nuclear powers in the light of the position they took on the occasion of the Third Review Conference of the non-proliferation Treaty, held in 1985. On that occasion, the two powers had no difficulty in subscribing to the unanimous view that the objectives of article VI of the Treaty, concerning the nuclear-arms race, remained unfulfilled.

However, when it came to the question of banning all nuclear tests in all environments for all time, the reservations of the United States and United Kingdom became clear, and it proved impossible to include in the Final Document a text similar to the one on nuclear tests adopted at the First Review Conference. After arduous negotiations in the closing stages of the Third Review Conference, a compromise was reached, thanks in large part to the conciliatory spirit of the group of nonaligned and neutral States, which agreed not to put to the vote two resolutions reflecting their views fully in order to prevent the Review Conference from suffering the unhappy fate of its predecessor. The formulation agreed to was as follows:

"The Conference except for certain States whose views are reflected in the following sub-paragraph deeply regretted that a comprehensive multilateral Nuclear Test Ban Treaty banning all nuclear tests by all States in all environments for all time had not been concluded so far and, therefore, called on the nuclear weapon States Party to the Treaty to resume trilateral negotiations in 1985 and called on all the nuclear weapon States to participate in the urgent negotiation and conclusion of such a Treaty as a matter of the highest priority in the Conference on Disarmament.

"At the same time, the Conference noted that certain States Party to the Treaty, while committed to the goal of an effectively verifiable comprehensive Nuclear Test Ban Treaty, considered deep and verifiable reductions in existing arsenals of nuclear weapons as the highest priority in the process of pursuing the objectives of Article VI.

The Conference also noted the statement of the USSR, as one of the nuclear weapon States Party to the Treaty, recalling its repeatedly expressed readiness to proceed forthwith to negotiations, trilateral and multilateral, with the aim of concluding a comprehensive Nuclear Test Ban Treaty and the submission by it of a draft Treaty proposal to this end."

In this situation, and with the 1990 Review Conference, the last of its kind, imminent, it seems neither realistic nor practical to engage in a primarily legal debate on how, as David Fischer has rightly pointed out, the provisions of article VI of the non-proliferation Treaty fail to reflect adequately the corresponding purposes and principles set forth in the preamble to the Treaty. The latter coincide with those expressly stated in relation to nuclear tests in the 1963 partial test-ban Treaty.

This reluctance on the part of two nuclear powers has extended, ever since 1985, to the only multilateral negotiating body in the disarmament field, the Conference on Disarmament. At its opening session last year, it was unable even to establish the long-awaited *Ad Hoc* Committee on nuclear weapon tests, in spite of the fact that it was precisely that year that these two powers might have been expected to take a step forward in the Conference on Disarmament. If indeed, in the spirit implicit in the second of the three paragraphs cited above, the highest priority was to be given to reductions in existing arsenals of nuclear weapons in the process of complying with article VI of the non-proliferation Treaty, there was reason to believe that just such a process had already begun with the agreement between the USSR and the United States on eliminating their intermediate-range missiles.

To sum up, and returning to the difficulties that will face the next Review Conference, we might ask whether the United States and the United Kingdom will show the same reluctance and express the same reservations then, since the process of controlling and reducing nuclear arsenals, which has already begun, appears likely to continue. In any case, we cannot predict whether the group of non-aligned and neutral countries will react in the same way as they did in 1985, when their conciliatory attitude made it possible to adopt the Final Document.

Areas covered by the Tlatelolco, Rarotonga and Antarctic Treaties and their Relationship to the Zone of Peace and Co-operation of the South Atlantic

The deliberate attempt by the Treaty of Rarotonga to make its area of application contiguous with that of the Treaty of Tlatelolco and also to make these two areas converge on the 60th parallel, marking the northern limits of the zone covered by the Antarctic Treaty, has created what Ambassador Carasales calls a "composite of contiguous areas". While it is true that the applicability of the Treaty of Rarotonga to maritime areas is subject to the limitations mentioned above and that the area of application of the Treaty of Tlatelolco, as provided for therein, has yet to come into force, the most important thing here is the political reality of a convergence of sovereign wills in a large area of the world which has so far been the one least affected by global and regional conflicts.

The declaration of a zone of peace and co-operation of the South Atlantic by the United Nations General Assembly in October 1986 was an extremely important development. While its impact is not comparable with that of the Treaties of Tlatelolco and Rarotonga, it shares the same basic purposes and, like them, takes certain steps towards the maintenance of peace in the southern hemisphere.

The similarities mentioned are implicit in the position taken by Hector Gros Espiell, who maintains that while the concept of a zone of peace has not been formulated in treaty terms or confirmed by legal doctrine, there can be no question that, in so far as nuclear weapons are concerned, it involves the non-introduction and non-use of such weapons in the zone in question. Despite this word of warning on the evolving legal status of zones of peace, we should bear in mind paragraph 64 of the 1978 Final Document of the Tenth Special Session of the General Assembly, which states that such zones must be clearly defined and determined freely by the States concerned in the zone, taking into account the characteristics of the zone and the principles of the Charter of the United Nations.

It would be pointless to ignore the fact that the zone of peace and co-operation of the South Atlantic was promoted by Brazil, for understandable geopolitical reasons, and firmly supported by Argentina, motivated by concern at the repercussions of the 1982 Malvinas war.

Argentina's allegation that nuclear weapons might have been used and deployed during the Malvinas conflict and, above all, its accusation that nuclear-powered vessels were used (specifically, in the sinking of the *Belgrano*), are well known. Although Argentina has not ratified the Treaty of Tlatelolco, it invoked its provisions in the above connection. At its eighth session, the OPANAL General Conference adopted resolution 170, by which, "noting with concern" the complaint by Argentina and expressing concern at the use of nuclear submarines in the area of application of the Treaty, it also noted the United Kingdom's assertion that it had fulfilled its obligations under the Protocols to the Treaty of Tlatelolco.

The reaction of the OPANAL General Conference may have been something of a political disappointment for many countries of the region, but the fact is that the existence of a nuclear submarine is quite a separate issue from the nuclear weapons it may carry. Both the Treaty of Tlatelolco and the Treaty of Rarotonga make this distinction.

As for the "concern" expressed at the presence of nuclear submarines, the author of this paper had this to say in a recent article:

"The United Kingdom claimed not to have deployed nuclear weapons in areas in which the Treaty of Tla-telolco was in force. While it is true that the area of application of the Treaty is still not fully in force, this claim clearly contradicts the spirit of the Treaty of Tlatelolco, for the United Kingdom never denied categorically that, during the Malvinas war, nuclear weapons might have been not only carried but also, and more seriously, deployed... ".

In this connection, it is useful to bear in mind some conclusions of the report on the naval arms race prepared by the Secretary-General of the United Nations. It mentions, among other types of geographical restraint, limitations on naval deployments in certain oceans or seas or reductions in the level of military presence in appropriate regions distant from the home territory of the State in question. It also mentions possible limitations on the duration or size of naval manoeuvres in certain areas and the reduction of existing, and the prohibition of new, foreign naval bases.

A DIALOGUE BETWEEN THE PARTIES AND NON-PARTIES TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) has been in existence for twenty years. During this period it has won respect and has been recognised and adhered to by 142 States. It stands out as the centre-piece of the multifaceted nuclear non-proliferation regime. In 1995 a conference will be held to determine its duration and prospects for the future. No withdrawals from the NPT have taken place to date although some dramatic events relating to the subjectmatter of the Treaty might have led to such a possibility. This indicates that those parties involved in or affected by such events realise that their continued affiliation with the NPT is important for their security and for the peaceful development of their nuclear-energy resources. In other words, the NPT has proved its strength and has had an impact on those committed to it and to its objectives in spite of all the grievances and disappointments experienced with regard to the implementation of some of its provisions.

In these twenty years three review conferences of the Treaty have been held, and although the Second Review Conference, held in 1980, failed to produce a final declaration, the review conferences have helped consolidate the NPT and the non-proliferation regime itself.

The non-proliferation Treaty is universal in character: it is open to all States. However, a number of non-nuclear weapon States known to be well advanced in nuclear technology have refused so far to adhere to it—for a number of complex and diverse reasons involving principles, economics and security. With regard to principles, these States consider the Treaty discriminatory in that it imposes different obligations on nuclear weapon States and on non-nuclear weapon States. Some have also wished to be able, by their own means, to manufacture and use nuclear explosive devices for peaceful purposes. Others have considered that the Treaty is not sufficient to achieve disarmament, more particularly nuclear disarmament, and that it lacks credible guarantees assuring the non-nuclear weapon States against attacks or threats of attack from the nuclear weapon States. The absence of these States from the NPT regime certainly weakens it, especially since these States are very well advanced in nuclear technology and they are not immune from real or potential conflicts in their areas. In the last few years and in the literature dealing with the non-proliferation of nuclear weapons these States have been identified: they are Argentina, Brazil, India, Israel, Pakistan and South Africa, the so-called threshold States. There are also others that have not found it necessary or advantageous to adhere to the NPT. While adherence of all would certainly be welcomed, it is the case of the six States mentioned that has been the focus of attention since the NPT entered into force in 1970.

The initial vehemence of some non-parties in regard to the Treaty itself, whether in the course of the negotiations on it or in the early stages of its implementation, has waned to some extent in the last few years. Some have indicated that they might in the future accommodate themselves to the NPT if certain circumstances or conditions prevailed. One State has even suggested that it might come up with a new text of its own on non-proliferation.

At the last Review Conference of the NPT, held in Geneva in 1985, a significant number of non-parties participated as observers and followed its procedures and debates closely. They had a chance to contact a number of parties to inquire about certain aspects of the Conference and about the implementation of the NPT. In my capacity as President of the Conference I did not detect any attempt on their part to disrupt the review process at the Conference. They did not even try to exploit certain weaknesses of the Treaty or delays in its implementation to complicate the process. In general they had not tried, behind the scenes, to influence the course of events at a conference which had gone through very difficult periods in the formulation of its Final Declaration. I believe that these countries came out of the Conference impressed by its achievements and by the determination of the parties to the NPT to have a successful review of the Treaty, and with a sense of commitment to the Treaty and its objectives. In the five years that followed the 1985 Review Conference the rhetoric against the Treaty by those States that were refraining from adhering to it has weakened and their representatives in different forums, whether in Geneva, New York or Vienna, have never shied away from discussing with representatives of the parties to the Treaty different aspects of it or of its implementation. They have done so in a constructive and objective manner.

It is apparently against this background that at the first session of the Preparatory Committee of the Fourth Review Conference of the NPT, which met in New York between 1 and 5 May 1989, that the delegation of Egypt, in a statement to the Committee, broached the question of the importance of universal adherence to the Treaty. It suggested that the parties to the NPT should consult among themselves on the best means of furthering the non-proliferation and co-operation elements of the Treaty for the benefit of the parties to the Treaty, and in a manner that could attract non-parties to adhere to it. It suggested that non-parties might be invited to participate in these consultations at an appropriate stage. The statement went on to say that all States, parties and non-parties, should see the opportunity provided by the review process to inject new life and momentum into the nuclear disarmament process and that at this auspicious juncture in the life of the NPT, parties and non-parties alike should engage in a constructive action-oriented dialogue directed towards really making the NPT the corner-stone of a universally acceptable non-proliferation regime. The statement advanced the view that, at a very early stage, the review process should attempt to develop modalities and parameters that would provide for a constructive dialogue between parties and non-parties to the Treaty towards this objective.

Turning its attention more specifically to the case of certain threshold States, the Egyptian statement had the following to say:

"The Parties to the Treaty would be remiss in their duties if they were to ignore the threat posed to the non-proliferation efforts and to international peace and security by the nuclear programmes of some non-parties. The Parties to the NPT, particularly the depositaries, should consider how to consult with non-parties that have internationally recognised nuclear military programmes constituting a threat to regional and international peace and security, to verify that they have not acquired nuclear weapons, and persuade them to apply International Atomic Energy Agency safeguards to their nuclear facilities. The Parties cannot continue to lend a blind eye to this threat. Absence of serious undertakings in this regard can only be weighed against the seriousness and sincerity of the commitment of the Parties to the non-proliferation of nuclear weapons and the ultimate goal of nuclear disarmament."

The Egyptian intervention at the first session of the Preparatory Committee of the forthcoming Review Conference of the NPT has aroused great interest among the parties to the Treaty and has generated very useful exchanges of views. In general, the initial reactions have been positive and encouraging. There has been no outright rejection of such an approach although some prefer not to institutionalise such a dialogue and some have even expressed the view that such a dialogue should in no way be a prelude to, or a vehicle for, modification or alteration of the Treaty and that the objective of the dialogue should be to encourage and convince the hesitant non-parties to accept the virtues and benefits of the NPT.

More specifically, the idea of a dialogue between parties to the NPT and non-parties to it would involve a number of issues, including the objective of the dialogue, the parties to it, the forum or forums, or the set-up of such a dialogue, and the main issues to be dealt with in the dialogue.

The objective of such a dialogue is mainly to induce and attract non-parties to the NPT to adhere to it or at least, in the case of certain threshold States, to guard against the possibility of crossing the threshold. This should certainly be carried out in an atmosphere conducive to considering with an open mind the views of the non-parties. Some parties to the NPT might initially warn that such a dialogue could affect the Treaty and its foundations if the non-parties remained unwavering in their positions. They might fear that the impact or influence of non-parties on those already converted to the NPT could be disruptive.

In my view, such a dialogue could have the opposite result. It could lead non-parties to seriously reconsider their attitudes towards the NPT. They are the much smaller group and they have a multitude of interests to protect and develop. The dialogue should be such that both participants in it might come out of it better informed about the Treaty itself and about how to make it a more effective instrument, not only for prohibiting the proliferation of nuclear weapons but for promoting peaceful co-operation in the field of nuclear energy.

Some might raise the possibility that such a dialogue would lead to an amendment of the Treaty, which should in no way be tampered with in the present circumstances. What is important in embarking on such a dialogue is that it be done with an open mind and with a willingness to exchange views without prejudices and that it be carried out in a very frank atmosphere. Amending the Treaty is a complicated process and should not be done lightly. In the review conferences that have taken place, the main concern of the parties was not the amendment of the Treaty but its full implementation, as well as the expansion of the non-proliferation regime by other measures in the field of disarmament, security, peaceful nuclear co-operation, and regional arrangements.

One might argue that even if the dialogue did not lead to increased adherence to the NPT in the foreseeable future it would definitely help in reassessing certain aspects of the Treaty and their implementation and would lead to a better understanding, on the part of the nonparties, of the reasons why the Treaty should remain the centre-piece of the non-proliferation regime. The dialogue should be motivated by a keen interest in bolstering the NPT and in enhancing its viability. Fear of some far-fetched possibilities of drastic changes or alterations in the Treaty should not dissuade the parties from embarking on such a much-needed exercise.

The dialogue should in principle be open to all those interested in such an exercise, whether parties or non-parties to the NPT. With regard to the latter, certainly the six countries mentioned above should be the main interlocutors, without prejudice to the interest of others to join as well.

As to the forum or forums for such a dialogue, it should be emphasized that, in order to be effective, the dialogue should be carried on informally. It should not be a dialogue in the form of a meeting of delegations or representatives round a negotiating table. The dialogue should not necessarily be carried out with the participation of potential parties to it all meeting in one place. It should be remembered that each non-party to the NPT continues to have its own special reasons for not adhering to it. The cases are different, and each of them needs to be addressed individually.

One informal gathering—that of "the friends of the NPT" in Vienna is in my view an ideal setting for a dialogue with the non-parties. This group, which met in Vienna recently, has been meeting regularly to review the operation of the Treaty and its implementation and various aspects of it. "The friends of the NPT" can easily invite a representative of a non-party to the Treaty to join in their periodic meetings and discuss informally issues of interest to that particular non-party. Furthermore, and for the sake of informality, it is not necessary for all the present "friends" to meet with a particular non-party. Perhaps only those directly concerned with the non-party could meet with its representative or representatives. The "friends" could also meet with more than one non-party, with their consent, if their cases are similar or closely interrelated. An important element is that informality should inspire a varied combination of parties to the dialogue according to circumstances and requirements. A division of labour among "the friends of the NPT" would be useful for the follow-up of the results of their dialogue with the non-parties.

As Vienna is the site of IAEA and as the interest of "the friends of the NPT" would therefore tend to focus on issues of peaceful nuclear co-operation and the application of safeguards, it would be desirable if other groups of the same nature, not too large and not too small, could also take shape in places such as Geneva and New York, where the interest is generally focused on issues of disarmament and security. The "friends" in the three cities could exchange among themselves the results of their contacts and relevant information through their respective chairmen.

As we approach the year 1995, when the conference on the question of extending the NPT is almost sure to take place, the three groups in Geneva, New York and Vienna could prove to be very useful in the period between the Fourth Review Conference in September 1990 and the crucial extension conference in securing the future of the NPT regime and enlarging its membership.

As to the subjects to be discussed in the dialogue, it is important that the dialogue should be open-ended in this respect. There should not necessarily be a set agenda, although some structure would of course be needed in the consultations. The specific issues to be tackled in the dialogue should include peaceful nuclear co-operation, disarmament and, more particularly, nuclear disarmament, regional arrangements for ensuring the absence of nuclear weapons in certain parts of the world, security assurances and international safeguards. Certainly one of the most difficult topics that could come up in the dialogue is that of the conceptual framework of the NPT, which is based mainly on the distinction between two categories of States, nuclear weapon States and non-nuclear weapon States, with all the consequences that follow in the Treaty.

In the dialogue it would be of crucial importance for the parties to the NPT to demonstrate to their interlocutors, the non-parties to the NPT, that the Treaty is doing well in the aforementioned domains and particularly in the field of disarmament. Progress in disarmament will be the real test for the NPT in 1990, and more particularly in 1995 when the initial period of the Treaty comes to an end. Moreover, the dialogue will be most fruitful if it also, as mentioned earlier, deals attentively with the special circumstances of each participant non-party to the Treaty. A better understanding of those circumstances could be the key to wider adherence to the NPT or could result in avoiding complicating factors detrimental to the NPT regime.

The proposed dialogue should be approached with openness and without prejudices or preconceived notions. The East-West dialogue flourished in 1989 and is expected to continue to do so in 1990, and in the new spirit that prevails in the world today parties and non-parties to the NPT should do their utmost to encourage, and participate in, a dialogue relating to an instrument considered to be one of the most important treaties signed in the era following the Second World War.

101 TOWARDS THE 1990 NON-PROLIFERATION TREATY REVIEW CONFERENCE

Changing Scenario

Since the Third Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1985 there has been a transformation in East-West relations. The danger of a nuclear holocaust that has haunted the world since 1945 has receded and the nations of the two alliances are increasingly committed to a welcome disarmament race instead of the arms race of the early 1980s.

As nuclear technology spreads throughout the world the risk of proliferation has largely become a function of the political relations between hostile, rival or insecure States that have the technical ability to make nuclear weapons and have not renounced them. Most attention is, therefore, focused on the six so-called "threshold States", Argentina and Brazil, Israel and South Africa, India and Pakistan, which have neither acceded to the NPT nor brought into force a regional treaty banning nuclear weapons and which operate unsafe-guarded plants that can make nuclear weapon material.

The policies of these States may not be immediately affected by cut-backs in North Atlantic Treaty Organisation (NATO) and Warsaw Pact forces. None the less, the changing political atmosphere in the North and improving prospects for nuclear disarmament are, in time, likely to have far-reaching repercussions and will, one may hope, help further to marginalise nuclear weapons as the means of assuring national security.

Article VI of the NPT addresses not only nuclear but also general disarmament and implies an obligation on the part of all parties to negotiate reductions of conventional arms. More attention should be given to the vast expenditures on conventional armaments, especially by those States that can least afford such a waste of resources.

Regional Developments

Latin America

In recent years, the risk of nuclear proliferation has declined sharply in Latin America. The main formal step taken since the last Review Conference was Argentina's ratification of the partial test ban Treaty in 1986. It was, however, the return or advent of democracy in both Argentina and Brazil that transformed their relations in the nuclear as well as in other fields. Nuclear co-operation has replaced the rivalry of the 1960s and 1970s. Presidents Sarney and Alfonsin undertook numerous and effective confidence-building measures and President Menem has made it clear that he will support them.

As parties to the Vienna Convention on the Law of Treaties and as signatories of the Treaty of Tlatelolco, both countries consider themselves bound not to take any action contrary to the aims of the Treaty of Tlatelolco. This would rule out the development of nuclear weapons (which is also explicitly prohibited by a clause in the Constitution of Brazil).

It is unlikely that either Argentina or Brazil would formally renounce what they perceive to be their right to carry out nuclear explosions for peaceful purposes, but such explosions are not technically, politically or economically attractive today. The financial position of both countries is also likely to impose constraints on such activities and on the resumption of nuclear competition which they would precipitate.

While the improved relations between the two countries are welcome on many counts, they do not seem to have improved the prospect that either of them will become a full party to the Treaty of Tlatelolco (let alone the NPT) in the near future. This is a pity; unless the nuclear detente is formalized, it will remain reversible.

Southern Africa

The De Klerk Government in South Africa "considers its current commitment to IAEA and the possibility of accession to the NPT in a serious manner". The prospect that South Africa might accede to the Treaty prompted the General Conference of IAEA, in September 1989, to postpone for a third time the question of suspending South Africa's rights and privileges of membership in the Agency. It remains to be seen what use the South African Government will make of this reprieve. It has been reported that President De Klerk has set up a committee, with himself as Chairman, to consider accession to the NPT and to take an early decision. It has also been reported that the small enrichment plant at Valindaba (the plant long suspected of having given South Africa the material needed to make nuclear weapons) is being closed down and that the larger commercial enrichment plant will be placed under IAEA safeguards.

Whatever the South African Government decides about the NPT, the Angolan/Namibian settlement, Pretoria's apparent reconciliation with Maputo, and the opening of dialogue with the African National Congress of South Africa (ANC) should demolish such arguments as may once have been made that, on grounds of security, the nuclear option should be kept open.

South Asia

Even in South Asia recent improvements in the political climate may have reduced the immediate danger of a nuclear arms race, although the situation will remain grave until India and Pakistan enter into formal agreements to eliminate it. A wide variety of such formal measures are available, ranging from bilateral safeguards to accession to the NPT.

There have been a number of encouraging developments during the past year. They include India's gesture of seconding Pakistan's reentry into the Commonwealth which it had previously opposed and the signature by Benazir Bhutto and Rajiv Gandhi in January 1989 of the previously negotiated agreement not to attack the other State's nuclear plants and to provide precise information about the location of each plant. The Prime Minister of Pakistan also gave categorical assurances during her visit to Washington in June 1989 that "... we do not possess, nor do we intend to make a nuclear device...". The radical Hindu party (the Bharatiya Janata party), which supports the new Prime Minister, Vishwanath Pratap Singh, is said to be in favour of a nuclear arms programme but according to a recent report Mrs. Bhutto has called upon both countries to avoid a nuclear arms race and Indian officials have welcomed her call.

In a wider context there have been several moves, some tentative and as yet unsuccessful, towards greater peace and stability in Asia: the end of the Gulf War, the Soviet withdrawal from Afghanistan, the Vietnamese withdrawal from Cambodia and the attempts to reach a peace settlement there, the improvement in Sino-Indian relations, and signs of an improvement in Sino-Soviet relations.

The Far East

On the other hand, a new risk of proliferation may have arisen in the Far East. The Democratic People's Republic of Korea acceded to the NPT on 12 December 1985. Under article III, paragraph 4, of the Treaty, the Democratic People's Republic of Korea was required to complete a standard safeguards agreement covering all nuclear material in the country within 18 months of the date of its accession to the Treaty (such agreements are already in force with more than 70 States). There have been a number of inconclusive meetings at which, it is understood, the representatives of the Democratic People's Republic proposed certain far-reaching and politically oriented modifications of the standard text.

Four and a half years have now passed without the conclusion of the required agreement. Concern about this lengthy delay has been aggravated by reports that the Democratic People's Republic of Korea is building a large plutonium production reactor and a reprocessing plant, in other words, plants capable of making nuclear weapon material.

The Middle East

Although there has been no conclusive evidence of Israel's nuclear weapon production, it is generally assumed that Israel now possesses a significant nuclear arsenal. Ambassador Gerard Smith has stated that the tolerance other States have shown for this long, steady and well-publicized process of nuclear proliferation shows a disturbing reluctance, particularly in the United States, to give effective and impartial support to the non-proliferation regime.

Israel's neighbours appear to be considering non-nuclear means (missile and chemical-weapon capabilities) to counter the threat they perceive. This in itself may be destabilising and not only in the Middle East. In December 1989 there was also a report that Iraq was endeavouring to acquire from a firm in the Federal Republic of Germany the equipment and personnel to build and operate a gas-centrifuge enrichment plant, in other words, a plant that could produce nuclear weapon material, but this has since been denied by the Ministry of Foreign Affairs in Bonn.

Technical Capabilities

The technical ability of India, Pakistan, South Africa, Israel, and of Argentina and Brazil—to develop, manufacture and deliver nuclear

weapons has steadily grown as new unsafeguarded sensitive nuclear plants have come into operation, as stocks of unsafeguarded fissile material have mounted, and as the nations concerned have acquired or themselves made short- and medium-range ballistic missiles.

On balance, however, and with the important exceptions noted, the political risks of proliferation in the regions concerned have diminished since the last Review Conference, and the political factor is paramount.

The Political Scenario

There have been other encouraging developments since the Third Review Conference in 1985.

Nine States have acceded to the NPT. Besides the Democratic People's Republic of Korea, mentioned above, they are Spain, Saudi Arabia, Yemen, Bahrain, Kuwait, Qatar, Trinidad and Tobago, Colombia and Malawi. The accession of Spain brought all members of the Organisation for Economic Co-operation and Development (OECD) except France into the Treaty, and the accession of the four Arab States leaves only two non-NPT States in the Middle East, Israel and Oman.

The members of the European Communities are now more effectively co-ordinating their non-proliferation policies. The statement by France in support of the Treaty, on behalf of the European Community, at the IAEA Conference General in September 1989 marked a turning-point.

The Federal Republic of Germany has decided not to proceed with large-scale reprocessing of spent reactor fuel, in other words, with the production of separated plutonium. This probably means that only one non-nuclear weapon State party to the NPT (Japan) will engage in large-scale commercial reprocessing. This should reduce the pressure on the IAEA safeguards and may make it easier for IAEA to develop the means of applying effective safeguards in a large reprocessing plant.

Western European controls on illegal nuclear exports have also been tightened (especially in the Federal Republic of Germany and Switzerland) but there is still room for improvement.

Early in 1989, Canada decided not to go ahead with earlier plans to acquire a fleet of nuclear-powered submarines. However, the lease of Soviet nuclear submarines to India points to the need for an agreed policy in this regard. Such projects involve the transfer or lease of large quantities of enriched uranium, in some cases enriched to weapon level, which IAEA does not have the authority to safeguard. One may question, in particular, the propriety of making such transfers to States not party to the non-proliferation Treaty.

The Review Conference

Setting the Stage for 1995

Of the present 142 parties to the NPT, 110 are developing countries. Their collective views on the way in which the NPT will serve their interests after 1995 are thus likely to determine whether and how long the NPT will be extended by the 1995 Conference. The Fourth Review Conference will influence their perceptions (as well as those of other crucial States). It is even more necessary than it was in 1985 that the 1990 review should strengthen the Treaty and lay the ground for a successful conference in 1995.

INF, the prospect of START, progress at the CFE negotiations and the numerous steps that the United States and USSR have taken to reduce the danger of accidental war and to help remove the sources of regional conflict may now enable them to contend more persuasively that they are meeting their commitments under article VI of the NPT. None the less actions already under way make it likely that the issue of nuclear testing and the negotiation of a comprehensive test ban treaty (CTBT) will dominate this year's Conference even more than they did its predecessor in 1985.

At the request of the required number of the parties to the partial test-ban Treaty (PTBT) a conference is being convened with a view to converting that Treaty into a comprehensive test-ban treaty. A disagreement on the timing of the Conference has now been resolved, with a first Meeting of the Parties to take place in May-June and the Conference itself scheduled for January 1991, both in New York at United Nations Headquarters. As a result, a nuclear test ban is likely to be "back at the top of the agenda".

As the United States and the United Kingdom have the right under the PTBT to veto any amendment to the Treaty and as there is no prospect that they will agree to its conversion into a comprehensive treaty as long as nuclear deterrence still remains central to NATO's policy, the outlook is that there will be an impasse. It is to be hoped that a formula can be found this year, as it was in 1985, that both sides can accept without, for the time being, modifying their fundamental positions. The Middle East may again provide its share of divisive issues. American objections to proposals condemning Israel's 1981 attack on the Iraqi Tammuz reactor threatened the consensus that was eventually reached at the 1985 Review Conference. Co-operation between United States and Israeli scientists in defence research could raise contentious issues this year, particularly if there were allegations that such cooperation extended to the nuclear field. Resolving such issues may not have been made easier by media reports in November 1989 of cooperation between Israel and South Africa in the development and testing of intermediate-range missiles and of South African nuclear supplies to Israel.

Other Middle Eastern issues that may arise are the place to be accorded to Palestine and the extent to which a ban on chemical weapons should be linked to progress in establishing a Middle East nuclear weapon free zone.

If South Africa does accede to the NPT before August 1990, its place in the Conference may also be a subject of discussion. Concern about the nuclear programme of the Democratic People's Republic of Korea is another possible issue if the safeguards agreement with IAEA has not been concluded by the time the Conference opens.

Some delegations will raise the question of "negative" security guarantees, namely undertakings by the nuclear weapon States that they will not launch or threaten nuclear attack against States that do not have nuclear weapons. The "guarantees" given in the past by several of the nuclear weapon States were subject to far-reaching reservations and are exceedingly ambiguous.

In this connection, in March 1990, the Foreign Minister of Nigeria formally informed the Conference on Disarmament of Nigeria's proposal for an agreement on the prohibition of the use or threat of use of nuclear weapons against non-nuclear weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons (document CD/ 967). According to Nigeria, the proposal was complementary in nature to the NPT and did not in any way represent an amendment to the Treaty. It was underlined that the proposal was without prejudice to the work of the Conference on Disarmament on Negative Security Assurances. Nigeria expressed the hope that all parties to the NPT represented in the Conference on Disarmament would lend their valuable support to this initiative when it came up for consideration both at the third session of the Preparatory Committee for the Fourth Review Conference of the Parties to the NPT and at the Review Conference itself. As in 1985 the Conference is likely to reaffirm the importance and contribution of IAEA safeguards. It may also address the the question whether suppliers should require comprehensive safeguards ("full-scope safeguards") as a condition of supplies to any non-nuclear weapon State, and the proposal that IAEA safeguards should be extended to cover all civilian activities in nuclear weapon States so as to prepare the ground for a cut-off in the production of fissile material for weapon purposes. Other safeguards issues might be the severe problems IAEA is beginning to experience in meeting its steadily increasing safeguards responsibilities with a "zero-growth" budget, possible adaptations of the IAEA system to enable it better to cope with this situation (and to take advantage of recent progress in verification approaches and techniques) and whether fissile material that may be withdrawn from nuclear missiles should be placed in IAEA custody.

It does not seem likely that article IV of the NPT (the right of access to peaceful nuclear technology and its transfer to the developing countries) will attract as much attention as at earlier review conferences. Only three of the developing countries parties to the NPT (Mexico, the Republic of Korea and Yugoslavia) are operating or building nuclear power plants today. Since the last Review Conference only three developing countries (the Republic of Korea and non-NPT India and Pakistan) have placed orders for nuclear power plants.

Until such time as developing countries again develop an interest in nuclear power they are likely to focus their attention on the nonpower uses of nuclear energy and on the technical co-operation programme of IAEA, which is their chief means of benefiting from these applications.

Finally, one should be ready for the unexpected; it was the unforeseen eruption of the Gulf War that at the last moment nearly wrecked the Third NPT Review Conference. There are, thus, a considerably larger number of specific issues to cast shadows over the prospects for the 1990 review than there were in 1985. Nevertheless, 1990 will open under far more promising auspices than did the Third Review Conference in 1985. Then the prospect of a transformation of East-West relations was no more than a glimmer on the horizon: now it is a reality.

IAEA SAFEGUARDS- WHAT THEY ARE AND WHAT THEY DO

The safeguards system of the International Atomic Energy Agency (IAEA), in operation since the 1960s, is the central component of the world's commitment to control the spread of nuclear weapons.

Verification is what IAEA safeguards are all about. This verification function is intended only to show that nuclear materials in peaceful nuclear activities are not diverted to the production of nuclear explosive devices or other non-peaceful purposes. IAEA safeguards are not intended to prevent diversions but only to verify *ex post facto* that diversions have not occurred.

More explicitly, IAEA safeguards have a twofold objective: first, to verify in an independent, technically correct and comprehensive manner that States are complying with their safeguards undertakings, and thereby to provide meaningful evidence from which all States can draw conclusions regarding the assurance of non-diversion; and secondly, to assist individual States or groups of States to provide valid evidence, on a continuing basis, that they are complying with their safeguards undertakings. The safeguards obligations which States undertake are stipulated in formal agreements entered into with the IAEA. These agreements are based upon documents approved by the Agency's Board of Governors in accordance with its Statute.

Before explaining what IAEA safeguards are and what they do, it is appropriate to note that IAEA is not a regulatory organisation. IAEA safeguards inspectors do not perform a policing role: their task, as indicated in their twofold objective, is rather one of verification.

The Safeguards Implementation Process

Determination of Technical Requirements

In an operational sense, the safeguards implementation process begins when a State submits design, operating and accounting information to the Agency concerning its nuclear facilities and its inventories of nuclear material. This information is studied and verified with a view to developing a set of inspection, accounting and reporting requirements for each nuclear facility. Inspection procedures are incorporated into what are called "subsidiary arrangements" and "facility attachments".

"Subsidiary arrangements" are documents which specify the general technical and administrative procedures to be followed by the State and the Agency in applying safeguards. "Facility attachments" specify the more detailed technical requirements which apply to a particular facility, including accountancy, containment and surveillance measures, the records and reports to be prepared, and the procedures to be followed in conducting regular inspections. The negotiation of subsidiary arrangements and facility attachments is a very important process because its end result is an agreed statement of the technical requirements to be fulfilled by the State and the Agency in implementing the provisions of the safeguards agreement. Unlike safeguards agreements, which are public documents, subsidiary arrangements and facility attachments are confidential since they contain information that may be of a proprietary nature or that may be otherwise commercially sensitive.

Inspections

The conduct of on-site inspections is central to the implementation of safeguards. An initial inspection is performed to verify that the information provided by the State or group of States accurately and adequately reflects the status of nuclear material and facilities. Thereafter, inspections follow a regular pattern although other inspections at short notice or of differing scope are also performed.

The first task of an inspector is to verify that the operating and accounting records at the facility are consistent with the information provided to the Agency by State authorities on a monthly basis in the form of official reports. The scope of any inspection could also include one or more of the following:

- Making independent measurements of nuclear material by means of non-destructive analysis (NDA) equipment;
- Taking samples of nuclear material for later analysis at the Agency's Seibersdorf Analytical Laboratory (or at one of the 18 "Network of Analytical Laboratories" established by member States);
- Installing or servicing containment and surveillance (C/S) devices such as seals or film cameras;
- Reviewing with State and nuclear facility representatives the results of past and current inspections with a view to resolving any questions which may have arisen.

Physical Inventory Verifications

In addition to the regular inspections described above, very important comprehensive physical inventories are carried out. During these physical inventory verifications (PIVs) the actual amounts of nuclear material in a facility or in use or storage at some other location are physically verified to confirm the correctness and completeness of the information provided to the Agency by the State. In negotiating facility attachments the Agency and the State specify the procedures to be followed by the facility's operator in conducting his 'own physical inventories.

A physical inventory verification by the Agency must satisfy a number of criteria including:

- 1. Completion of the operator's physical inventory taken in accordance with agreed procedures;
- 2. Independent confirmation by Agency inspectors of the completeness and correctness of the operator's listing of inventory items by a combination of accountancy verification methods (e.g. item identification, weighing, volume determination, sampling and analysis, seal verification and statistical analysis);
- 3. Resolution of any discrepancies or anomalies;
- 4. Determination that any inventory differences are duly explained.

If significant differences cannot be explained even after exhaustive consultations the matter may be referred to the Board of Governors.

The IAEA Inspection Logsheet, Computerized Inspection Report and Inspection Documentation Package

Information obtained by inspectors during the conduct of routine or special inspections and physical inventory verifications is systematically recorded in a multi-page "inspection logsheet". This logsheet is the inspector's basic working document for recording the results of inspections, for use in pursuing follow-up actions upon the inspector's return to headquarters (e.g. for debriefing by supervisory personnel, and initiating actions to resolve any discrepancy or anomaly not already settled during the course of the inspection) and for use in transferring all relevant information into the Agency's mainframe computer for production of the computerized inspection report (CIR). These documents and all of the documents prepared during preinspection activities, together with any additional documents obtained during the actual inspection, are assembled into what is known as the inspection documentation package (IDP). These packages may number only a dozen or so pages or may extend to a few hundred pages.

Evaluation of Safeguards Implementation Activities

Safeguards inspectors are supported by a number of specialists in the Agency's headquarters responsible for the computer processing of the mass of accounting data submitted by member States as well as of the data obtained during inspections. These specialists provide assistance in evaluating the quality and trends of data obtained, in correlating and analysing data obtained from different sources, and in evaluating the results of all safeguards activities in accordance with established performance criteria.

The evaluation of the effectiveness of safeguards begins with the identification of the ways and means by which nuclear material could theoretically be diverted from peaceful uses. These ways and means, or "diversion strategies" as they are called, are the basic input into the development of the safeguards procedures, equipment and instruments needed for each facility. The safeguards approach for each facility thus addresses the various "diversion strategies" which could be used, the detection and inspection goals to be applied, and the evaluation process to be followed.

Most of the design, accountancy and inspection data used in the evaluation process are obtained directly from the computerized inspection reports (CIRs). The CIRs are structured in such a way that information relevant to a particular inspection activity, such as the examination and comparison of data in accounting records and reports or inventory verifications, is contained in individual sections or modules. Additional information of both a general and a specific nature is also incorporated into the Agency's computer for use in the evaluation process. Quality control checks are made by the computer to confirm the consistency, correctness and rationality of the data being evaluated.

The results of the evaluation are reported to the member States of the Agency in a document known as the safeguards implementation report (SIR) which is prepared annually and submitted to the Board of Governors at its regular meeting in June. The Board of Governors decided on the occasion of the presentation of the first SIR in June 1977 that the document should be restricted in distribution to the authorized representatives of member States.

Detection Goals and Inspection Goals

To permit adequate planning of inspections and meaningful evaluation of their results a number of performance criteria have been developed. These criteria and the numerical parameters from which they are derived are the technical basis for assessing the effectiveness of IAEA safeguards. In more common terms, they are the standards by which the reliability or credibility of IAEA safeguards can be judged. The primary standards are called "detection goals" and these are specified in terms of: (*a*) the quantities of nuclear material of various types which are considered to be significant in the context of safeguards; (*b*) the timeliness of safeguards verification activities (i.e. the time interval required to complete the necessary inspection and other actions); and (*c*) the confidence with which conclusions can be reached about the results of inspections and other activities.

These primary standards are called: "significant quantities"; "detection times"; and "detection probabilities".

In applying the primary standards of safeguards performance to the planning of inspections for the many different types of facilities wherein safeguarded nuclear materials exist, the overall safeguards approach for each facility is developed in such a way as to include the specification of inspection goals. These inspection goals reflect the reality of the actual design and operating characteristics of each facility, the availability and capability of measurement equipment and systems, and the extent to which safeguards containment and surveillance equipment and systems have been installed in the facility.

The "inspection goals" provide the inspector with a clear understanding of the expected results of verification activities and thus the basis for the evaluation of the results of inspections. Typically, the "quantitative inspection goal" is to be able to confirm that the accountancy records at a facility are correct to within one "significant quantity" or less of nuclear material. Similarly, the "timeliness inspection goals" enable the inspector to determine the frequency with which seals should be verified or replaced, the frequency of physical inventory verifications, and the intervals within which surveillance equipment should be checked.

In addition, the requirements arising from the use of statistical methods applied in the analysis of accountancy data, measurement uncertainties and the correlation of information regarding domestic and international transfers of nuclear material are developed in parallel with the inspection goals.

Co-operation with States

The foregoing sections of this article are a summarized account of what the Agency does to implement the first of the two objectives indicated in the introduction. It is clear that the Agency could not achieve this objective without the sustained co-operation and good will of the States. This is of course a two-way process, as is made clear by the second objective, which is to assist States in demonstrating that they are complying with their agreement obligations.

To render this assistance is not always an easy task. It may involve, for instance, the application of complex safeguards approaches and the use of sophisticated instruments and equipment. The Agency is neither staffed nor financed to such an extent that it can undertake the often considerable effort required to carry out the research and development (R&D) which is often needed.

This gap has for many years been obviated to a significant extent by co-operation between the Agency and some of its member States. A number of States, whether through formal agreements or less formally, have agreed to assist the Agency in the research and development work which the Agency must carry out but which it cannot undertake alone. Thus, the States are helping the Agency to help the States.

The guiding principles underlying the member State support programmes are:

- IAEA control in establishing its R&D programme and prioritisation of support programme tasks;
- Focus on the product—what the Department of Safeguards needs, what the support programmes are expected to provide, and how the product will be utilized;
- Full consideration of the special capabilities, facilities and interests of different member State support programmes in the allocation of tasks;
- Separation of support programme administration from technical aspects;
- Technical involvement of the Department "end-users", essentially the safeguards inspectors, while centralising and increasing the use of modern communication methods;
- Utilisation of task results in the Department of Safeguards and feedback of experience to member States; and
- Interaction between support programmes.

It is certain that without past and continuing assistance from some of its member States the Agency would not be able to discharge its twofold function effectively.

Conclusion

As of 31 December 1989, there were 172 safeguards agreements in force between IAEA and 102 sovereign States. These numbers provide

a clear indication of the breadth of IAEA safeguards coverage and therefore the importance of IAEA safeguards to the world community.

The extent of IAEA safeguards coverage is further indicated in the following table, which shows the different types and the number of nuclear facilities in which IAEA safeguards apply to the nuclear material being processed, used, produced, reprocessed or stored.

	Installation category	Number
A.	Power reactors	188
B.	Research reactors and critical assemblies	172
C.	Conversion plants	7
D.	Fuel fabrication plants	41
E.	Reprocessing plants	6
F.	Enrichment plants	7
G.	Separate storage facilities	41
H.	Other facilities	49
I.	Other locations	407
J.	Non-nuclear installations	2
	Total	920

Nuclear installations to which IAEA safeguards apply

In 1989, more than 2,100 individual safeguards inspections were carried out, during which approximately 9,500 man-days of inspection were expended. Almost 1,200 samples of uranium and plutonium were taken in the course of these inspections and more than 3,000 individual analyses were performed to determine the weight and the chemical and nuclear composition of the materials. In addition, almost 16,000 seals were applied to containers of nuclear material and to safeguards surveillance instruments and equipment.

102 THE FOURTH REVIEW CONFERENCE OF THE NON-PROLIFERATION TREATY

Between 20 August and 14 September the parties to the Treaty on the Non-Proliferation of Nuclear Weapons met in Geneva to "review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realised". The Review Conference was the fourth quinquennial gathering of the parties since the Treaty came into force in 1970, and was considered particularly important in view of the fact that it was the last such conference before 1995, when the parties are to meet "to decide whether the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods".

Although not specifically required by the Treaty, efforts at all Review Conferences have sought to achieve a consensus final declaration in which the parties would agree on reaffirming their support for the Treaty and on the efficacy of its implementation, as well as on measures to improve implementation further.

The parties have in the past had mixed results in agreeing to such a consensus final declaration. In 1980 agreement was not achieved, while in 1975 and 1985 strenuous negotiations and 11th-hour compromises were successful in producing the desired consensus. The Fourth Review Conference, in spite of similar efforts that took the negotiations well into the small hours of the morning after the Conference was to have ended, did not succeed and no final declaration was achieved. Although some 90 per cent of the text of the draft final declaration had been provisionally agreed, consensus on the few remaining contentious paragraphs proved elusive, and despite the efforts of the President of the Conference, the Chairman of the Drafting Committee and other officials of the Conference, the divergent views proved too wide to bridge. As a result there was no formal reaffirmation of the important role of the non-proliferation Treaty in preventing the spread of nuclear weapons.

The deadlock centred on the issue of a comprehensive test ban. This question had been debated throughout the Conference, with a number of non-aligned States insisting on a commitment by the nuclear weapon States parties to the Treaty to conclude an early comprehensive ban on nuclear testing. These countries were of the view that the lack of commitment to negotiate a test-ban treaty represented a failure to live up to the undertaking "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament...", as stipulated in article VI of the Treaty. A number of other States, however, were equally convinced that the conclusion and implementation of the United States-USSR Treaty on intermediate nuclear forces (INF Treaty) of 1987, progress in talks to reduce strategic arsenals and advances in conventional force reductions in Europe, along with a series of confidence—and securitybuilding measures adopted, were evidence of the fulfilment of the commitments under article VI. These States also cited the bilateral step-by-step negotiations under way between the Soviet Union and the United States to limit nuclear testing with the ultimate objective of a complete cessation as part of an effective disarmament process.

In essence, the three nuclear weapon States parties, the Soviet Union, the United Kingdom and the United States, which are the depositary States of the Treaty, and their allies, declared that they were in compliance with the purposes of article VI to negotiate to halt and reverse the nuclear-arms race, while a number of the non-aligned States parties insisted that without a comprehensive test ban there could be no cessation of the nuclear-arms race at an early date and no full compliance with article VI.

Although the inability of the Conference to achieve a consensus final declaration was in some sense regarded as a failure, most observers nevertheless expressed the view that the Conference was in many ways very successful. The parties, it was noted, had conducted a thorough review of the Treaty's operation and had also agreed on a number of ways to strengthen its implementation. These included: (*a*) a new commitment by nuclear supplier States that they would require purchasers of nuclear materials to make a legally binding commitment to accept full-scope safeguards of the International Atomic Energy Agency (IAEA) at all nuclear installations as a pre-condition of purchase; (*b*) a new interest by the non-aligned parties in strengthening fullscope safeguards; (c) tentative agreement to activate the IAEA's right to conduct "special inspections" of undeclared nuclear facilities; (d) decisions by the nuclear weapon States to renew their unilateral negative security guarantees to non-nuclear weapon States and some progress towards the consideration of more comprehensive positive and negative security assurances; and (e) proposals for further international cooperation in the peaceful uses of nuclear energy, in particular by providing IAEA with the resources to improve the effectiveness of its safeguards and its assistance to developing countries.

Conference Arrangements

The Preparatory Committee for the Review Conference was composed of States parties to the Treaty serving on the Board of Governors of IAEA or represented in the Conference on Disarmament as well as those parties which expressed an interest in participating in the three sessions. They met in New York from 1 to 5 May 1989, in Geneva from 11 to 15 September 1989, and finally in Geneva from 23 April to 2 May 1990. At the first session the group of non-aligned States endorsed Ambassador Oswaldo de Rivero of Peru as candidate for the presidency of the Fourth Review Conference. The candidacy received the unanimous endorsement of the Committee, and the Conference later elected him by acclamation as President.

The Preparatory Committee also proposed draft rules of procedure and the allocation of items to the three Main Committees of the Conference and the establishment of a Drafting Committee:

Main Committee I: to consider articles I and II (which prohibit the transfer of nuclear weapons by nuclear weapon States party and their receipt or manufacture by non-nuclear weapon States party) and pre-ambular paragraphs 1 to 3; article VI (which obliges parties to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control") and preambular paragraphs 8 to 12; and security assurances;

Main Committee II: to concentrate on articles III and VII (which deal with safeguards and nuclear weapon free zones);

Main Committee III: to consider articles IV and V (regarding the use of nuclear energy and nuclear explosions for peaceful purposes).

It was made clear that all articles, preambular paragraphs and agenda items were to be reviewed in relation to each other in the Main Committees and in the Drafting Committee. Of the 140 parties to the Treaty, 84 participated in the Conference. In addition, China and France, the two declared nuclear weapon States not parties to the Treaty, attended as observers for the first time, along with 13 other non-party States and Palestine. The Conference unanimously elected the following individuals to chair the committees: Main Committee I—Ambassador Bariyu A. Ad-eyemi (Nigeria); Main Committee II—Ambassador Tadeusz Strulak (Poland); Main Committee III—Ambassador Chusei Yamada (Japan); Drafting Committee— Ambassador Carl-Magnus Hyltenius (Sweden), Credentials Committee— Ambassador Jan Henrik Groop (Finland).

Conference General Debate

Delegations speaking in the general debate during the opening days of the Conference stressed the positive changes in East-West relations and in arms limitation negotiations since the Third Review Conference.

The Soviet Union said the period since 1985 had coincided with the "beginning of a transition from the era of confrontation and opposition of military blocs to the era of co-operation, disarmament, and new evolving mechanisms and structures ensuring security for all". It also stressed the important step towards nuclear disarmament taken when the Soviet-United States INF Treaty of 1987 entered into force, in that it had broken a vicious circle of action-reaction.

The United States also cited the INF Treaty as well as a number of other arms control agreements and negotiations, including: the measures for notification and observation of certain military exercises in the final document of the Stockholm Conference; the establishing of nuclear risk reduction centres in Washington and in Moscow; a bilateral Agreement on advance notification of ballistic missile launches; the reaffirmation by 140 participants at the Paris Conference on chemical weapons of the need to uphold the 1925 Geneva Protocol and of the importance of a universal ban on chemical weapons; a bilateral Agreement on the destruction of chemical weapons stockpiles; and new verification Protocols relating to the 1974 threshold test-ban treaty and the 1976 peaceful nuclear explosions Treaty.

Delegations which had a more critical assessment of events nevertheless also stressed the positive developments that had taken place since 1985. Yugoslavia, which introduced two major resolutions during the general debate on behalf of the Non-Aligned Movement, said that "after a long period of stalemate, serious comprehensive disarmament negotiations on nuclear, space, conventional and chemical weapons" were taking place, and that the relationship between the East and West based on nuclear deterrence was being gradually replaced by one based on a balance of common interests.

Mexico said that since 1985 some extremely encouraging events had taken place in the field of disarmament: measures had been adopted to diminish the risks of a nuclear war and increase confidence, especially in Europe; and important agreements had been reached with the participation of many countries to solve several crises and regional conflicts. All of this, Mexico felt, could only contribute to nuclear disarmament, nor were such achievements as the following insignificant: the INF Treaty on the elimination of intermediate-range nuclear weapons; negotiations on strategic arms reductions (START), which had been stepped up as a consequence of the Malta summit; and negotiations on short-range nuclear weapons which were anticipated once the Vienna negotiations on conventional forces in Europe (CFE) had been completed. At the same time, Mexico and other non-aligned countries expressed the view that the threshold test-ban and the peaceful nuclear explosions protocols were a step backward in that they could be seen as legitimising the continued testing of nuclear weapons at an excessively high threshold.

Calls for More Rapid Action to End Testing

The main thrust of the argument of the non-aligned States that participated most actively in the Review Conference was that more should be done, especially to implement the commitment under article VI to pursue negotiations in good faith on effective measures relating to cessation of the nuclear-arms race, to nuclear disarmament and to a treaty on general and complete disarmament.

The resolution of the group of non-aligned and other States on disarmament and other security-related issues, introduced by Yugoslavia (NPT/CONF.IV/L.1), called for a large number of far-reaching measures. It asked the three nuclear weapon States parties to institute a moratorium on nuclear testing; to support the 1991 amendment Conference of the States parties to the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water; to agree to a freeze on testing, production and deployment of all nuclear weapons; to cease the production of fissionable material for weapons purposes; to intensify negotiations on the reduction of nuclear weapons; to make individual declarations that each would never be the first to use nuclear weapons; to convene a conference aimed at providing negative security assurances to non-nuclear weapon States parties; to respect nuclear weapon free zones and zones of peace and to promote negotiation on a treaty on general and complete disarmament under strict and effective international control. The non-aligned draft resolution also called upon the Conference on Disarmament to undertake negotiations in 1991 on a comprehensive nuclear-test-ban treaty, and to intensify negotiations on a convention on security assurances to non-nuclear weapon States, on a prohibition of radiological weapons and armed attacks or their threat against nuclear facilities, on a convention for the elimination of all chemical weapons, on a treaty on the prevention of an arms race in outer space, on a comprehensive programme of disarmament and on general and complete disarmament under strict and effective international control.

Mexico cited the impatience which, it said, was already reflected in the Final Declaration of the 1985 Review Conference, which had concluded that "the aspirations contained in preambular paragraphs 8 to 12 had still not been met, and the objectives under Article VI had not been achieved". Accordingly, the non-aligned draft resolution was "aimed at strengthening the NPT and at ensuring its full effectiveness beyond 1995". The Mexican statement stressed the importance of negotiations to conclude a comprehensive ban on nuclear testing and that the absence of political will to conclude such a treaty continued to be an obstacle to full compliance with the spirit and the letter of the provisions of the non-proliferation Treaty with regard to nuclear disarmament. It asked: "How can the cessation of the nuclear-arms race be attained without first closing the door on perfecting and qualitatively developing nuclear arsenals?"

Nigeria, which had been closely engaged in the 1968 negotiations on the Treaty and was the second State to ratify it after Ireland, stressed positive factors. It said that, in spite of the asymmetry of the rights and obligations laid down in the Treaty, no non-nuclear weapon State party had so far exercised its option of withdrawal, and the number of adherents had continued to increase. At the same time, however, implementation of article VI was crucial to the realisation of the Treaty. "Concern had been expressed," Nigeria stated, "about the adverse effect of the military posture and defence doctrines of the nuclear weapon States and other militarily significant States parties on the attainment of the objectives of the NPT". While all States parties had accepted a legally binding commitment 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, and on a treaty on general and complete disarmament, the primary responsibility for this belonged to the Super-Powers and other nuclear weapon States. Nigeria then urged these States "to take advantage of the considerably improved relations between them to redouble their efforts towards fulfilling the aims of article VI of the Treaty. We are encouraged by their statements made at this Conference and hope that they will participate actively in the 1991 amendment Conference aimed at converting the partial testban Treaty into a comprehensive test-ban treaty to ensure its success."

Other non-aligned States made similar points during the general debate. Indonesia hoped the Review Conference would not be a purely formal exercise, but would furnish an opportunity to enhance the credibility of the Treaty; it was prepared to work towards this objective provided it could "count on the political will of the nuclear weapon States to fully discharge their obligations emanating from the Treaty". Since the Treaty's entry into force, Indonesia continued, the real progress which had been made towards halting the nuclear-arms race and vertical proliferation had been meagre—a situation which, it said, contrasted sharply with the fact that the obligations under article II had been fully discharged by the non-nuclear weapon States parties to the Treaty.

Yugoslavia welcomed the positive developments in the sphere of nuclear disarmament which had occurred between the Third and Fourth Review Conferences, but expressed dissatisfaction with the direction and pace of negotiations on a comprehensive nuclear-test ban. The complete cessation of testing with the conclusion of a treaty would, it said, be the surest way to check the nuclear-arms race and slow down the qualitative development of nuclear weapons and, hence, be the most efficient means of strengthening the non-proliferation regime.

Step-by-Step Progress

Most States participating in the Review Conference expressed strong support for the cessation of the nuclear-arms race and an end to all testing. At the same time it was held by the nuclear weapon States and their allies that this goal had to be sought through a step-by-step approach. Saying that it looked forward to a continuation of substantive work on the item on a nuclear-test ban in the *Ad Hoc* Committee of the Conference on Disarmament, Canada said it was encouraged by the fact that the Soviet Union and the United States had concluded verification Protocols to the 1974 and 1976 Treaties, and that it looked forward to the early resumption of bilateral super-power negotiations on further restrictions on nuclear testing. It added that the partial testban Treaty amendment Conference to be held in January would provide an additional opportunity for discussion that would focus on issues related to a comprehensive test-ban treaty.

Sweden, which said that the renunciation of nuclear weapons through accession to the Treaty by the vast majority of countries had become a norm for international conduct and that the Treaty had become a symbol for the growing belief that nuclear weapons were not legitimate, stressed the need for continued progress in nuclear disarmament negotiations. These should, it said, be comprehensive, including a prohibition of all nuclear weapons on all ships and submarines except those classes specifically designated by agreement. The most obvious step by which the nuclear weapon States could fulfil their obligations to implement the letter and spirit of the non-proliferation Treaty would be to conclude a comprehensive nuclear-test ban, since this would promote quantitative reductions, effectively stop qualitative improvements and hamper horizontal proliferation, and it would ensure that the effects of cuts in strategic arsenals would not be reduced by the development of new nuclear weapon systems. Anticipating that the Ad Hoc Committee on a nuclear test ban would be re-established at the beginning of 1991 in the Conference on Disarmament, Sweden stated that there were no insurmountable technical obstacles to concluding a treaty banning all nuclear tests in all environments for all time, since such a ban could be verified and draft treaty texts were already available.

Japan, which supported negotiations in the Conference on Disarmament and a step-by-step approach to a ban on nuclear testing, said the verification Protocols agreed between the Soviet Union and the United States for the 1974 and 1976 Treaties contained detailed provisions for newly devised methods, including hydrodynamic and seis-mological methods and on-site inspections. It stressed the value of the non-proliferation regime in preventing any increase in the number of nuclear weapon States, but indicated concern regarding the reported nuclear weapon capability of various States and regarding the failure of some States parties to fulfil their obligations to conclude safeguards agreements with IAEA.

Security Assurances, Safeguards, and Co-operation

Issues, other than those arising from article VI, which were raised in the general debate included further co-operation to develop nuclear energy; the transparency of IAEA safeguards; the nuclear capabilities of South Africa and Israel; and security assurances. Yugoslavia said that the promotion of co-operation among the States parties in the peaceful use of nuclear energy as specified in article IV, including assistance to non-nuclear weapon States, did not meet the real needs and expectations of the non-nuclear States.

Sri Lanka, which expressed disappointment that there were no effective limitations to curb the qualitative development of nuclear weapon systems and thus supported a comprehensive test-ban treaty, as a barrier against the emergence of more nuclear weapon States and new nuclear weapons, called for greater transparency in IAEA safeguards reports to enable States parties to assess IAEA safeguards activities. It expressed concern that the ongoing nuclear trade might provide greater advantages to non-parties than to parties, and stressed the importance of technical co-operation and assistance from IAEA for States parties that needed increasing resources and services to benefit from nuclear technology applications relating to medicine, agriculture, hydrology and food technology.

A number of East-Central European States parties spoke on the importance of strengthening the IAEA safeguards system. Hungary said that, being aware that IAEA financial conditions were barely sufficient to ensure an effective and reliable operation of the safeguards system, it supported efforts to improve the financial, technical and organisational condition of IAEA and would continue to participate, both as donor and beneficiary, in this form of international co-operation. Poland said the IAEA system was generally in good shape, with some 95 per cent of all fissionable material and the same percentage of nuclear installations under safeguards, and that it was a matter of satisfaction that among States parties which had nuclear activities, all but one had accepted full-scope safeguards. At the same time, the other 5 per cent of fissionable material was not subject to IAEA inspection, notably in India, Pakistan, Israel, South Africa, Argentina and Brazil, all nonparties to the non-proliferation Treaty. Stressing the importance of nuclear exports, Poland expressed concern that there were quite a number of reported cases of transfer of nuclear equipment, material and technologies without safeguards to some countries that were not parties to the non-proliferation Treaty.

Japan stressed the importance of universal adherence to the Treaty, and the need for the three acknowledged nuclear weapon States parties to increase the number of their installations under IAEA safeguards agreements. It also supported increased cost-effectiveness of safeguards procedures and increased technical assistance and co-operation with developing countries that had acceded to the Treaty and accepted fullscope safeguards agreements.

Speaking as a depositary State party and a nuclear supplier State, the United Kingdom stressed its obligation and that of other supplier States to ensure that they did not contribute to the development of nuclear weapons by any non-nuclear weapon State. Where significant nuclear exports to non-nuclear weapon States were concerned, the United Kingdom continued, it would be ready to join a consensus of other major suppliers to insist on full-scope safeguards as a condition of supply, a condition that would affect its policy towards importing States not parties to the Treaty, since those that were parties already accepted such safeguards.

Drawing attention to the commitment of the nuclear weapon States parties to their obligation under article I do not to transfer to any recipient whatsoever nuclear weapons..., and not in any way to assist, encourage or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons...", Nigeria stated that the spread of nuclear weapon capabilities had become rather disturbing and endangered the non-proliferation regime, since it would not have been possible without the collaboration and assistance of some nuclear weapon States and other suppliers that were parties to the Treaty. Believing that this had resulted in South Africa's nuclear weapon capability which continued to frustrate the realisation of the goal of a denuclearized continent—Nigeria maintained its demand that South Africa should take immediate steps to join the Treaty and submit all its nuclear materials and facilities to full-scope safeguards.

Nigeria urged that high priority be given to its proposal for an agreement on the prohibition of the use or threat of use of nuclear weapons against non-nuclear weapon States parties. This proposal sought to allay the concern of parties that, by forgoing the nuclear option through their adherence to the Treaty, they would place themselves at a permanent military disadvantage and make themselves vulnerable to nuclear intimidation. Nigeria asked that a conference be convened in 1991 to work out terms for such assurances.

Another approach to security assurances was introduced by Egypt, which proposed that the Conference should urge the Security Council to adopt a new resolution, updating its resolution 255 (1968), so as to reflect a collective commitment and resolve to deter nuclear aggression and to decide immediately upon measures required under Chapter VII of the United Nations Charter in the case of a threat or use of nuclear weapons against any non-nuclear State party. The measures would include technical, financial and humanitarian assistance as well as the imposition of sanctions upon the State that used nuclear weapons.

Overview of the General Debate

Above all, the general debate demonstrated a broad and serious commitment to the nuclear non-proliferation regime. A number of speakers noted with satisfaction that no party to the Treaty had withdrawn, and that IAEA, in carrying out its safeguards activities, had not detected any diversion of a significant amount of safeguarded material to the production of nuclear weapons. Even those non-aligned States parties which stressed that the Treaty had not curtailed the proliferation of nuclear weapons but had resulted only in the nonproliferation of nuclear weapon States, recognised that the legal norm constraining additional countries from having nuclear weapons was an important standard that had been set by the Treaty.

The industrialized States that could most easily have decided to develop nuclear weapons gave the Treaty the staunchest support. A joint declaration by the two German States reaffirmed that the united Germany would not manufacture, produce, or have control over nuclear weapons and would continue to be bound by the Treaty. The German delegations joined the East-Central European countries and the nonaligned parties in expressing clear support for strengthening security assurances to non-nuclear weapon parties to the Treaty. The announcement by Foreign Minister Hans-Dietrich Genscher that Germany would only export nuclear material or technology to a State, whether a party or not, having full-scope safeguards, was particularly important, because German technology has gone to nuclear installations in a number of non-party States, and the German commitment raises the norm for the European Community, in which members tend to coordinate their policies regarding nuclear non-proliferation. A number of other delegations also said they would be willing to apply their export policies in such a way as to give more comprehensive support to full-scope safeguards.

Although there is no obligation in the Treaty for the nuclear weapon States parties to sign safeguards agreements with IAEA, a number of such agreements have been concluded. The Soviet Union, which has had a smaller share of its plants under safeguards than the other two depositary States, announced that it would significantly enlarge the list of its nuclear facilities to be safeguarded so that it would include all nuclear power stations and an additional number of research reactors.

Work of the Main Committees

The Preparatory Committee had arranged for the preparation of 15 background papers for the Conference by the secretariats of the United Nations, IAEA, the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL) and the South Pacific Forum. An additional 28 documents were submitted by various delegations setting forth their positions, proposals or assessments of the implementation of the Treaty since 1985.

Main Committee I held seven meetings between 24 August and 10 September, and, at its third meeting, on 29 August, established three Working Groups. The first dealt with articles I and II and preambular paragraphs 1 to 3, concerning the need to avert the danger of nuclear war and prevent the wider dissemination of nuclear weapons through an undertaking by parties not to transfer nuclear weapons or devices and not to receive their transfer. The second Working Group considered issues of security assurances allocated to the Committee, and the third Working Group considered article VI, concerning the undertaking by the parties to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control", and concerning the related preambular paragraphs 8 to 12.

A number of non-aligned states submitted proposals. The nonaligned draft resolution on disarmament and other security-related issues of 24 August (NPT/CONF/ IV/L.l) outlined above, was introduced in the general debate. On 3 September, a working paper (NPT/ CONF.IV/ MC.I/WP.4) submitted by Ghana, Kenya, Mexico, the Philippines and Venezuela, was issued with proposed text relating to the assessment of achievements in the field of nuclear disarmament between 1985 and 1990 and concerning the work to be done from 1990 to 1995. A further draft resolution (NPT/CONF.IV/ L.4) issued on 5 September, by Indonesia, Mexico, Sri Lanka, Venezuela and Yugoslavia, called upon all parties to the non-proliferation Treaty that were also parties to the partial test-ban Treaty to commit themselves to pursue negotiations in good faith at the amendment Conference for the achievement of a comprehensive nuclear test-ban treaty at an early date. This draft resolution also contained a recommendation that the amendment Conference continue its sessions until a comprehensive nuclear-test ban would be achieved.

These proposals from various non-aligned States parties became a major focus of debate in Main Committee I and especially in its third Working Group, where they were the basis for a large number of amendments proposed to a draft text prepared by the Chairman in order to reflect the common ground of the statements made in the general debate and of the drafts and documents submitted by delegations. While it was possible to reconcile differences in approach on some points, many paragraphs of the draft text were sent to the Drafting Committee without any agreement on the issues involved.

The first Working Group of Main Committee I fared better. It did achieve a consensus draft, subject to there being agreement on the balance of the draft declaration. The draft reaffirmed the determination of parties to prevent the spread of nuclear weapons and other nuclear explosive devices to additional States without hampering the peaceful uses of nuclear energy. This Working Group also found wording for referring to the nuclear capability of South Africa and Israel that would probably have been acceptable to all delegations.

The question of security assurances was considered in the second Working Group of Main Committee I, and, as a result of its discussions, each of the five acknowledged nuclear weapon States arranged to reaffirm its earlier unilateral statement on the non-use of nuclear weapons against non-nuclear weapon States parties to the Treaty. However, in view of the various qualifications in these statements, there was a widespread desire to have a legally binding commitment.

Nigeria had taken the lead in seeking such a general commitment. It had submitted a draft agreement to the three depositary Governments with the intention that this should lead to negotiations for a separate protocol to the non-proliferation Treaty which would provide legally binding assurances that the nuclear weapon States would not use or threaten to use nuclear weapons against the non-nuclear weapon States parties. In a memorandum submitted to the Review Conference, Nigeria stated that it was through membership in the non-proliferation Treaty that the nuclear option was relinquished by the non-nuclear weapon States parties and that the Treaty provided for a more appropriate forum within which to consider the question than did the Conference on Disarmament. During the Review Conference, many delegations indicated their readiness to undertake further work on the substance of the proposed agreement.

In addition to this proposal for a negative security assurance, the Working Group also considered a proposal for positive security assurances, introduced by Egypt. The latter was intended to enhance the effectiveness of Security Council resolution 255 (1968) so that sanctions would be imposed upon any State that used nuclear weapons against a non-nuclear weapon State party and comprehensive assistance would be provided to the State attacked, including technical, financial and humanitarian assistance.

Main Committee II held eight meetings between 24 August and 5 September. Reviewing the implementation of the safeguards systems provided under article III of the Treaty, the Committee reaffirmed the conviction that IAEA safeguards provided assurance that States were complying with their undertakings. It also affirmed the determination of parties to strengthen further the barriers against the proliferation of nuclear weapons and other nuclear explosive devices to additional States. It noted with satisfaction that once again, since the previous Review Conference, IAEA had not detected any diversion of a significant amount of safeguarded material to the production of nuclear weapons or other nuclear explosive devices or to purposes unknown. At the same time, the Committee stated that unsafeguarded nuclear activities in non-nuclear weapon States still posed serious proliferation dangers, and reiterated earlier calls for the continued pursuit of the principle of universal application of IAEA safeguards to all peaceful nuclear activities in all States.

Welcoming continued improvements in safeguards effectiveness and efficiency, the Committee urged that these be maintained, that IAEA use new cost effective technologies and that it consider studying new safeguards approaches, including randomized inspections. It also emphasized the importance of maintaining a staff of the highest professional standard, and called on States parties to ensure that IAEA was provided with the financial resources needed for effective and efficient safeguards.

The Committee agreed that the Conference should urge nuclear supplier States to require legally-binding commitments and acceptance of IAEA safeguards on all peaceful nuclear activities in all non-nuclear weapon States to which they would transfer any relevant nuclear supplies. This commitment would significantly strengthen the nonproliferation regime by ensuring that only States with IAEA safeguards agreements would receive transfers of relevant technology and material, and that States without such agreements, whether parties of not, would not obtain equal or better terms. Noting that there were 51 States parties to the Treaty that had yet to conclude their agreements with IAEA, the Committee proposed that the Conference should urge these States to complete their agreements and bring them into force as soon as possible.

The Committee decided that the Conference should urge IAEA not to hesitate to take full advantage of its rights, including the use of special inspections in the event of questions arising about the commitment of any State party to the non-proliferation objectives of the Treaty, in particular about its safeguards coverage or its source of special fissionable materials. It also agreed that IAEA should improve upon the transparency of presentation of the results of its safeguards activities so that information on these results could be made available to the public in order to prevent possible misinformation and misunderstanding.

Recognising that some nuclear weapon States had already made all their peaceful nuclear facilities eligible for safeguards under their voluntary offers, the Committee asked the Conference to call on all other nuclear weapon States to do so and to call for the wider application of safeguards to peaceful nuclear facilities in the nuclear weapon States in the most economical and practical way possible.

With regard to nuclear weapons-free zones, Main Committee II recognised the growing interest in using the provisions of article VII, and decided to ask the Conference to affirm the right of any group of States to conclude regional treaties in order to assure the absence of nuclear weapons in their respective territories.

Regarding the extension of the Treaty in 1995, either indefinitely or for an additional fixed period or periods, Main Committee II had before it a working paper submitted by Mexico and one submitted by the depositary States, both of which it decided to annex to its report due to the absence of consensus. The paper of the three depositary States parties called for the establishment of a preparatory committee for a single conference on review and extension of the Treaty.

The Mexican paper stated that "since the provisions of paragraph 2 of article X were drafted in connection with the provisions of article VI, it is incumbent upon the nuclear weapon States Parties to the Treaty

to begin to meet their obligations set forth in article VI in order to achieve a significant extension of the NPT beyond 1995". In a draft resolution issued on 3 September (NPT/CONF.IV/L.3), Colombia, Ethiopia, Ghana, Indonesia, Jamaica, Kenya, Malaysia, Mexico, Morocco, Nigeria, the Philippines, Sri Lanka, Uganda, Uruguay, Venezuela and Yugoslavia proposed that the 1995 Conference should be held in New York for four or five weeks, preceded by a preparatory committee, which would hold its first meeting in New York for one week in September 1991. Preparatory work would involve, inter alia, a draft agenda, rules, background papers, cost arrangements and the consideration of all substantive matters relating to the Conference, including measures aimed at strengthening the nuclear non-proliferation regime and at enhancing the possibility of a significant extension of the Treaty beyond 1995. No agreement was reached in the Committee or subsequently during the Conference on these proposals, although there were extensive useful consultations on possible arrangements.

Main Committee III held 5 meetings between 27 August and 5 September to consider articles IV, III(3) and V regarding the use of nuclear energy and nuclear explosions for peaceful purposes. The Committee asked that the Conference reaffirm that nothing in the Treaty should be interpreted as affecting the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes in conformity with articles I and II. It also asked that the Conference recognise the need for more predictable long-term supply assurances, with effective assurances of non-proliferation.

With regard to technical assistance, the Committee welcomed the continued growth of the IAEA Technical Assistance and Co-operation fund and reiterated the importance of the IAEA resolution by which the Agency's Board of Governors was requested to take the necessary measures for funding technical assistance through the regular budget of the Agency in order to meet its increasing financial requirements. The Committee noted the significant level of bilateral co-operation between States parties in the peaceful uses of nuclear energy and urged that States in a position to do so increase the level of their co-operation. As regards the promotion and financing of nuclear power, the Committee recommended that all States parties in a position to do so fully co-operate with the developing States parties, and it recommended that IAEA continue to provide assistance, upon request, in securing financing from outside sources such as the World Bank and United Nations Development Programme.

Considering questions of nuclear safety, radiation protection and radioactive waste management, the Committee stressed the importance of ensuring the highest standards of safety. It noted with the greatest regret the tragic accident at Chernobyl in April 1986 and welcomed the intensification of international co-operation that had taken place since, commending, especially, the entry into force in 1986 of the Convention on Early Notification of a Nuclear Accident and of the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency.

Addressing the question of attacks on nuclear facilities, the Committee recognised that an armed attack on a safeguarded nuclear facility, operational or under construction, or a threat of attack would create a situation in which the Security Council would have to act immediately in accordance with the provisions of the United Nations Charter, and further emphasized the responsibilities of the depositaries of the Treaty, as permanent members of the Security Council, to endeavour, in consultation with the other members of the Council, to give full consideration to all appropriate measures, including measures under Chapter VII of the Charter. Recognising that attacks on nuclear facilities could result in large releases of radioactivity with potentially grave consequences, the Committee proposed that the Review Conference appeal to all States to take this into account when reviewing their military doctrines.

Considering the nuclear capabilities of Israel and South Africa, the Committee expressed great and serious concerns that this situation could undermine the credibility and stability of the non-proliferation Treaty regime, and it noted the demands addressed to these two States to accede to the Treaty, to accept IAEA safeguards on all their nuclear facilities and to pledge themselves not to manufacture or acquire nuclear weapons or other nuclear explosive devices.

On the question of the potential for the safe and peaceful application of nuclear explosions, the Committee noted that no requests for such services had been received by IAEA since the Treaty had entered into force, but that if the potential were demonstrated and were to be made available to non-nuclear weapon States parties to the Treaty, IAEA would be the appropriate international body through which such applications could be made available.

Main Committee III also reviewed article IX and the need for strict compliance with the Treaty obligations by existing parties and the desirability of initiating an informal dialogue between the States parties and other States to enhance universality and encourage non-parties to adhere to the Treaty.

Final Drafting and Last Attempts to Reach Consensus

The Drafting Committee's primary task, according to the Conference's rules of procedure, was to co-ordinate the drafting and editing of all texts referred to it by the Conference or by a Main Committee without altering the substance of the texts. In the event, however, the Drafting Committee focused on the issues that had not as yet been resolved in the three Main Committees. The major unresolved issue concerned article VI and the related preambular paragraphs which had been discussed in Main Committee I on the basis of a consolidated draft incorporating the text presented by Ambassador Adeyemi plus various proposed changes, some of which had been agreed, and others of which had not.

The Drafting Committee met in plenary open-ended session from 10 to 12 September under the chairmanship of Ambassador Carl-Magnus Hyltenius of Sweden, and then continued in two sections until its 14th meeting on 14 September, when it submitted its report to the Conference. The smaller group, continuing under the chairmanship of Ambassador Hyltenius, addressed the issues regarding a comprehensive ban on nuclear explosions and assessments of achievements in the field of nuclear disarmament from 1985 to 1990, and on the work to be done between 1990 and 1995.

The other issues in the composite draft were addressed in the larger group of the Drafting Committee working under the chairmanship of Ambassador Peggy Mason of Canada. These issues included the manner of describing the content of article VI and preambular paragraphs 8 to 12, a number of references to various positive international developments since the 1985 Review Conference, and recognition of the importance of the work of the *Ad Hoc* Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events, established under the aegis of the Conference on Disarmament. Although the wording of a large proportion of the draft paragraphs was agreed in the meetings of the larger drafting group, it was understood that consensus would not be possible on certain paragraphs and sentences unless and until wording in the paragraphs being discussed in the smaller drafting group could be agreed.

During meetings throughout Thursday, 13 September, and for four hours on the morning of Friday, 14 September, the smaller drafting group was able to make some progress, but without achieving language acceptable to those involved on the critical issues. Ambassador Hyltenius then invited a restricted group to meet in the offices of the Swedish Disarmament Mission in a final effort to resolve the differences. Under his chairmanship, the following delegations met from 2.00 p.m. to 11.30 p.m.: the three depositary States – the USSR, the United Kingdom and the United States – together with Australia, Canada, Indonesia, the Islamic Republic of Iran, Mexico, New Zealand, Nigeria, Peru, Poland, Sri Lanka, Venezuela and Yugoslavia. Despite very considerable efforts, the differences of principle remained too wide to bridge and the group was unable to find formulations that would satisfy the political positions of those involved.

The plenary meeting convened at about 3.00 a.m., and the Chairman of the Drafting Committee reported the lack of consensus. The President of the Conference then distributed a proposal that represented a final effort to make it possible to save the sections of the draft final declaration which had been provisionally accepted by the Review Conference, while recognising that consensus had not been possible. The plenary meeting was then suspended for consultations. While the other Groups indicated informally that they had no objections to the proposal of the President, the Group of non-aligned countries met and was not able to find a consensus position. In the resumed plenary meeting, Mexico said that for its part, it would have preferred to be in a position to accept the proposal, but could not because the text it was being asked to accept was very different from that which had been negotiated, and it left several questions unresolved, including the conclusions regarding the review of article VI. The President, recognising that his proposed texts had not found consensus agreement, then withdrew them and announced that there would, therefore, be no final declaration emerging from the Conference.

Assessment and Conclusion

Notwithstanding the absence of an agreed final declaration, the Conference demonstrated a broad commitment to the goal of nuclear non-proliferation. The importance of the Treaty in establishing a legal norm that has constricted the growth in the number of nuclear weapon States was widely recognised, as was its value in providing access to the peaceful uses of nuclear energy while containing the spread of nuclear weapons. There is no requirement in the Treaty that it adopt a final declaration at each five-year review; what is important is the need for a thorough assessment of its operation. This was carried out by the Fourth Review Conference in a way that demonstrated general agreement on many constructive proposals which can be used to strengthen the non-proliferation regime over the coming five years. The review also showed that expectations for the Treaty are greater than some of the standards that have as yet been met. Fuller implementation may be needed if its viability is to be ensured well into the next century.

During the general debate of the forty-fifth session of the General Assembly, a number of delegations referred to the Review Conference. The main thrust of their comment is reflected in the following selection from their statements.

Soviet Foreign Minister Eduard Shevardnadze said that cracks had appeared in the nuclear non-proliferation regime and that difficulties were being encountered in expanding the zone of application of the IAEA safeguards. It was time, he said, "to trigger the emergency systems and face the question in all seriousness in order to save the situation. As a matter of the utmost urgency, nuclear tests have to be stopped."

The Canadian Secretary of State for External Affairs, Joe Clark, referred to the fact that the Review Conference, despite consensus on almost all issues, had been unable to agree on a concluding declaration a situation which, he said, should "alert us all to the dangerous prospect of the unravelling of this vital international Treaty. Canada believes that movement is needed on all sides." He welcomed the joint Soviet and United States commitment to a step-by-step approach to further restrictions on nuclear testing, and said that Canada believed "that commitment should be followed up immediately, with the final goal being a comprehensive ban on nuclear testing". At the same time, Canada was disturbed, Mr. Clark continued, by a tendency "to adopt positions which can only act to undermine the vital consensus which underlies the existing treaties on non-proliferation and nuclear testing". It was Canada's firm view that both the non-proliferation Treaty and a comprehensive test-ban treaty were too important for international peace and security to be held hostage one to the other.

The Minister for Foreign Affairs of Indonesia, Ali Alatas, told the General Assembly that the current scene impressed on the international community the sobering reality of how little progress it had made in disarmament and how marginally it had moved in stemming the arms race. A more effective strategy was therefore needed, he said, to reverse the arms race and to accelerate the process of arms reduction and disarmament, especially in the nuclear field. Beyond START, further negotiations should seek even deeper reductions in nuclear forces and limitations on qualitative improvements. "The conclusion of a comprehensive test-ban treaty should continue to be accorded high priority and, as such, should be clearly reflected in the forthcoming amendment Conference on the partial test-ban Treaty." It was a source of great disappointment to Indonesia that the Fourth Review Conference did not succeed in articulating a consensus concerning the cessation of the nuclear-arms race.

Australia,, like Canada, Indonesia, and the Soviet Union, had played an active role in the Review Conference. In a statement to the General Assembly, Australia's Minister for Foreign Affairs and Trade, Gareth Evans, said that his country would not rest until a comprehensive testban treaty had been achieved with appropriate verification. It considered the Review Conference to have been a considerable success, reaching agreement as it did on a number of important issues, in particular the question of full-scope safeguards as a condition for nuclear supply. Australia was working to build on the achievements of the Conference and to set the scene for a successful review and extension of the Treaty in 1995. The Treaty was, Australia said, an absolutely essential foundation on which the new relationships of the coming era must be built.

These assessments from the 1990 United Nations General Assembly parallel the assessments of the Treaty during the Review Conference. All the States parties participating in the review had demonstrated their support for the Treaty although there had been different perspectives on the best way to ensure its full implementation and extension well beyond 1995. Some commentators expressed the view that a final declaration of the 1990 Review Conference would have reflected more gains than in 1985: in that sense, by failing to agree on a final declaration it could be said that everyone lost. However, States which were most critical of the extent to which article VI was being implemented provided a thought-provoking challenge, which may yet come to be seen as a valuable spur to strengthening the Treaty.

A final thought. As the work of the Conference illustrated, in many respects the non-proliferation regime is working well, but over the issue of the continuation of nuclear testing there are serious political disagreements. With the matter of the consideration of the extension of the Treaty lying just over four years away, there can be little doubt that this issue will continue to be the focus of much attention between now and 1995.

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With the ending of the Cold War, there has been a definite acceleration in the pace of nuclear weapons reduction worldwide, and simple bilateral discourse on the subject seems to be moving gradually towards a broader, multilateral process. The actual control of nuclear weapons has ceased to be the sacrosanct issue it once was.

This subject, now frequently addressed in the mass media, has become one of vital concern to all. What has happened, or what is likely to happen, to the many strategic and tactical nuclear weapons in the hands of what used to be the military infrastructure of the Soviet Union? This is a matter of global concern. People in many countries are discussing the control of these weapons, or lack thereof, in the hands of independent republics, members of the new Commonwealth. It is entirely possible that, in spite of the years of effort to make the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) work, the number of States with nuclear weapons might have doubled instantly on 19 August, 1991, the date of the aborted Soviet coup. The manner in which this issue is handled internationally will have profound effects on the outcome of the next NPT Review Conference, to be held in 1995.

The situation in Iraq raised a number of issues which, so far, have managed to escape full-blown public attention. The International Atomic Energy Agency (IAEA) safeguards (spelt out in Information Circular (INFCIRC) 153, and established in accordance with article III of the NPT by the Safeguards Committee in 1970) are intended to deter proliferation by imposing a considerable risk of detection of the diversion of significant quantities of nuclear material. In Iraq, the international community confronted a State party to the NPT which was not deterred by a probability statement of diversion (see "NPT Safeguards" below) and which in the end had to be physically stopped from carrying out weapons-oriented programmes. Clandestine material and clandestine facilities became new focuses of attention.

These issues present complicated legal questions involving interpretations of both the NPT and the safeguards agreement. An even more serious problem is the determination of what may justifiably trigger the mechanism for forced inspection regarding either clandestine material or facilities. When the suspicion results from the use of national technical means (NTM), there may arguably be a case for international action in view of precedents in United States-USSR nuclear-arms control agreements. If less comprehensive and less well-established charges can trigger a mechanism, there is serious danger of abuse. There should be, in any case, well-defined procedures before an international organisation undertakes an operation which constitutes a challenge to national sovereignty. One cannot expect a text such as Security Council resolution 687(1991) to be always available to back up action against a violator. One should also remember that the IAEA safeguards went through a period of being suspect as an instrument for industrial espionage, and it would not be desirable for IAEA to try to operate its own CIA or KGB. In any event, output from the inspection system is extremely sensitive and needs to be handled with the utmost care because it could implicate a sovereign State as possibly being in violation of treaty obligations.

Intensified Concerns

The NPT verification process in the post-Cold-War period needs to be revamped in the two areas outlined below.

Stronger inspection authority

Inspection authority should be strengthened so that undeclared facilities and undeclared material may be subject to international control. It is necessary to be able to define clearly the legally acceptable triggering mechanism for such forced inspection. Challenge inspections allowing inspectors to carry out their work in any location when a certain set of conditions are satisfied (as is contemplated in a chemical weapons treaty) are extreme cases. In the opinion of those of us who originally drafted this document, the special inspection referred to in paragraph 73 (b) of INFCIRC/153 has been interpreted too narrowly. It is a matter of striking a correct balance between effectiveness and non-intrusiveness, and paragraph 73 (*b*) may need further clarification in writing in order to avoid confusion.

There will be an increasing need to agree upon and arrange for the orderly international transfer of sensitive technologies.

- Multilateral NTM requires the transfer of, or cooperation in, satellite-based information gathering and transmission as well as the processing of such information.
- In order to avoid the unrestrained transfer of weapons-related technologies, a new regime has to be worked out to supplement the "London Guidelines" (which apply to NPT-related technologies or components). Work along these lines is already under way. This will entail making very difficult and sensitive decisions which require the drawing of an imaginary dividing line between the proliferation of weapons and freedom of international transfer of scientific and industrial knowledge and hardware.

NPT Safeguards

In order to clarify the problems, it is useful to examine the NPT safeguards.

When the Safeguards Committee met in Vienna in 1970, article III of the NPT presented some difficulties, because paragraph 1 spoke of "diversion of nuclear energy" and separately of "source or special fissionable material". The Committee decided that those who had drafted the NPT did not really understand what was meant by nuclear energy, because it might be construed to mean that, for example, electricity generated in nuclear power stations should not be diverted for use in military or weapons facilities. The same type of problem exists today in the prohibition of a military attack on peaceful nuclear facilities. The statements about material are very clear, and therefore INFCIRC/ 153 has had more or less to slip in facility inspectors through the back door with such devices as subsidiary arrangements and facility attachments. This has led to some inevitable ambiguities regarding treaty obligations to inform IAEA of nuclear facilities under construction (paragraph 42 of INFCIRC/153 stipulates "as early as possible" and not "within 180 days", as some seem to believe). Clandestine construction of uranium enrichment, plutonium separation, or weapons fabrication facilities may not be a violation of the letter of any obligation unless nuclear material (source or special fissionable) is placed inside them.

A scenario often described by Committee members during the 1970 meetings may explain the difficulties. Suppose an inspector observes a

large number of plutonium metal hemispheres being machined under the pretext that they are new and commercially secret breeder reactor fuel. The material balance of plutonium shows nothing wrong or missing (that is, no diversion) and the inspector is not at liberty to disclose information about commercially sensitive technologies, therefore the inspector has nothing to report to the headquarters. He also observes that next door to the plutonium plant is a large workshop where people are building high-explosive lenses. The inspector becomes very suspicious, but has no basis for airing any concerns because high explosives are not nuclear material, and he is prohibited from mentioning any non-nuclear commercial activities he may by chance have observed. The reported nuclear activity in the Democratic People's Republic of Korea may not be very different from this hypothetical case, which so seriously concerned those gathered in Vienna.

Another point realized by the Committee's technical people, but which they failed to communicate fully to their non-technical colleagues, was the tricky nature of the probability statement. The Director General of IAEA would report to the Board of Governors that with an 80 per cent confidence level, he could not confirm that there had *not* been a diversion by a State party. The Board would very likely ask, "What in plain language does that confidence level mean?" The Director General would have to refer the matter to his technical staff, who would explain that this was a statistical statement, which more or less meant that there was a 20 per cent chance that diversion had not taken place. Can an international body take action against a sovereign State when there is a 20 per cent chance that it has not violated treaty obligations? Many Committee members were confident that this type of accounting of material would act as a deterrent. Obviously they foresaw very little chance of ever having actually to call such a Board meeting.

In actual practice, with the increasing throughput of nuclear material in varieties of nuclear fuel cycles, it became obvious that accumulating measurement errors over time would leave more than a significant quantity of plutonium or highly enriched uranium unaccounted for. Mathematically, there is no way other than to be satisfied that the material balance is closed independently every six months or so in every material balance area (MBA). The MBA may be a reactor core, oxide fuel pelletizing room, or an irradiated fuel cooling pond. Put cynically, the amount of material unaccounted for could total 10 to 50 bombs every six months (depending on the number of MBAs in a country).

There is no question that those in charge of the implementation of safeguards in IAEA have been working seriously to carry out what they believe to be their mandate and to structure a workable safeguards system. There have been some comments that inherent difficulties mentioned above were already well appreciated at the time of the drafting of INFCIRC/153, but had somehow failed to receive sufficient attention through the implementation stages. Accumulated safeguards efforts and the allocation of safeguards resources according to the amount of nuclear material in the various nuclear fuel cycles (that is, without any other consideration of assigning different weights) undoubtedly reach a saturation point when it is understood that safeguards resources, in both human and monetary terms, have a limit. In fact, already in Vienna in 1970 there were considerable calls for the financing of safeguards to be related to the benefits countries expected to reap from the extensive exercises. The points mentioned above serve to emphasise the importance of the deterrent nature of this instrument. There is nothing in the document to restrain those in charge in IAEA from devising methods which are less nuclear-material measurement focused than is the current practice.

Immediately after the adoption of INFCIRC/153, Japan took the initiative in the creation of the Standing Advisory Group on Safeguards Implementation (SAGSI) and tried to point out the importance of this consideration to IAEA and NPT member States. It can be claimed that efforts have continued to build on the imaginative approach of the initial period, with the result that the safeguards activities do not get buried under the heavy burden of routine work.

Rethinking the Cases of North Korea and Iraq

The problem with North Korea is obvious: only on 30 January 1992, after several years of delay, did it sign a safeguards agreement as called for in article III of the NPT ("Documentation Relating to Disarmament"). Although many States parties to the NIT have not yet concluded safeguards agreements with IAEA, they are countries with little or no nuclear research activity. Even though an agreement has now been signed by North Korea and a pledge made to place all its peaceful nuclear activities under full-scope safeguards, there is still the problem of ratification, and that of the amount of time that may be required under North Korean law, about which few claim to be knowledgeable. Even after the agreement has entered into effect, the North Koreans are under no clear obligation to report, much less to place under safeguards, the large thermal output reactor and what is suspected to be a plutonium extraction plant nearby. According to intelligence reports in the world press, these two facilities will be completed by 1995, and, as mentioned above, a country is under no clear obligation to report its nuclear facilities when there is no nuclear material housed within it. At most, it is required to provide design information "as early as possible".

Given the implication of possible nuclear arms in the northern half of the Korean peninsula for security considerations in the region, and the way in which various experts have underestimated the work of Saddam Hussein's regime, this is hardly a satisfactory situation. Not many countries would be against the mandatory "voluntary submission" of design information at the inception of the development of a nuclear facility, or against reporting such benchmarks as the start of construction and the granting of operating permits from time to time. Such cooperating countries could be placed in one category: let us call it "category A". In fact, in most countries this is open information, available in government annual reports and in trade journals. Unwillingness to enter into such arrangements may be taken as an indication of possible non-compliance, and IAEA may be justified in placing such countries in a second category, "category B", where extra attention could be directed to possible unannounced nuclear activities.

The situation of inspecting Iraq would be somewhat complicated if there were no such extraordinary authorisation as Security Council resolution 687 (1991). Iraq is one of the original signatories of the NPT and has been under IAEA safeguards from the beginning. It has not yet manufactured nuclear weapons or other nuclear explosive devices. Article III of the NPT states that safeguards arrangements should be applied to all source or special fissionable material in all peaceful nuclear activities. If, as is reported, Iraq was producing its own natural uranium and using it in a very large calutron plant in Tarmiya to produce 465 grams of 4 per cent enriched uranium, the only way for the Iraqi regime to claim non-violation of paragraph 2 of the safeguards agreement (which is a repetition of article III of the NPT regarding all source or special fissionable material) would be for it to claim that it was for non-peaceful activities. In order for that to be effective, Iraq should have identified the material and informed IAEA according to paragraph 14, which it did not do. Even if IAEA had known of wide-ranging activities in preparation for nuclear weapons in Iraq, it could not have done anything in particular under the current practice. As clearly stipulated, the IAEA Board may take major action only when it "finds that the Agency is not able to verify that there has been no diversion", and this, as mentioned earlier, refers to each MBA for a significant quantity with something like an 80 per cent confidence level. In the case of highly enriched uranium, the current significant quantity is 25 kilograms, which is far more than 465 grams of 4 per cent enriched uranium.

If the story of advanced G-2 centrifuge machines in Iraq is true, this alone does not place the country in violation of NPT or the safeguards agreement, because no fissionable material had been placed in the enrichment test facilities. Extraction of 3 grams of plutonium was also reported, and one is not quite sure how this was carried out. The significant quantity for plutonium is 7 kilograms, and 3 grams is a minute amount. One only notices that the plutonium extraction exercise has been performed without notifying IAEA of the intention. This implies a very serious problem because plutonium extraction is a far more commonplace route—indeed it is the expected one—for nuclear weapons diversion in the third world.

There are several lessons to be drawn from the cases of North Korea and Iraq:

- 1 Provision for voluntary submission of design information and construction schedules of nuclear facilities should be included in the safeguards agreement. Those that comply should be placed in category A. Others should be placed in category B, and will be subject to extra attention by the parties to the NPT for any indication of possible nuclear fuel cycle activities.
- 2 Export control of fuel-cycle technology and components, including software, should be agreed on very carefully, and any suppliers found to be in violation of, or in insufficient exercise of, the agreements should be duly reprimanded, including those who may be named responsible for supplying information and components to Saddam Hussein's projects.
- 3 A multilateral international mechanism should be worked out to establish a depository of information gathered through NTM and other non-routine means of detecting possible violation of treaty obligations. The violators, as in the case of Iraq, would be dealt with by this means to make sure that only well-founded suspicion could pass through this filter. Only when this mechanism has determined that a particular suspicion is well founded may IAEA be authorized to take action, A single

organisation such as IAEA should not have the right to collect covert information and/or to determine suspicion on its own unless presented with sufficient evidence *and* unless the Board of Governors has determined to act, and has so directed the secretariat.

4 IAEA needs to reallocate safeguards resources with less of a focus on the category A countries, which already possess a "national system of accounting for and control of all nuclear material" (INFCIRC/153, para. 31). Deterrence effects of inspection activities can be achieved with a very low level of confidence statistically, thus requiring the deployment of considerably fewer inspectors in the field. Exercise of this sort of judgement, given due reference to criteria, should be within the terms given to organisations such as IAEA as specifically spelt out in paragraph 81 of INFCIRC/153. Insufficient consideration seems to have been given in the past to the application of criteria of this type.

Conclusion

IAEA is the only international mechanism entrusted with verification of arms control arrangements, namely those relating to article III of the NPT. The provision of safeguards was only one of the reasons why IAEA was established. While at the time it was found convenient in article III of the NPT to make use of IAEA, neither the Eighteen-Nation Committee on Disarmament, which drafted the original text of the NPT, nor IAEA was aware of the extent and magnitude of the task that was to be undertaken. In fact, the safeguards document had to be rewritten in 1970 to accommodate NPT requirements. This also explains why the 1970 amendments were intended to be flexible enough to accommodate new situations as they arose.

The events of 1991 have made evident the need for further clarification of the safeguards system in accordance with the original intention of the 1970 safeguards understanding. This article is an effort to indicate the direction to be followed. It is of fundamental importance that the credibility of the safeguards system be strengthened as we look towards the NPT Review Conference of 1995. It will also present a worthwhile precedent when one contemplates the structure and content of further international verification regimes, such as the use of multilaterally owned and operated satellites, to cover such a variety of technologies as those relating to chemical weapons and long-range ballistic missiles.

SAFEGUARDS: NEW THREATS AND NEW EXPECTATIONS

The revelation, in the aftermath of the Cold War, of an extensive and previously unknown Iraqi nuclear weapons programme has raised hard questions about the efficacy of the non-proliferation regime and its supporting international safeguards system. What happened in the case of Iraq revealed a systemic failure of the non-proliferation regime: national intelligence failed to detect ongoing clandestine activity; national export-control policies largely failed to close down the possibility of exporting components that could contribute to a nuclear weapons programme; and the safeguards system of the International Atomic Energy Agency (IAEA) was not only focused and implemented in such a way as to reduce the likelihood of detecting a range of unauthorized activities, but also lacked some of the capabilities necessary for dealing with clandestine activity.

Strengthening the effectiveness and credibility of IAEA safeguards and restoring international confidence in them are central concerns. The Iraqi imbroglio is the proximate cause for such an inquiry, but the inquiry is also dictated by the sea change in international relations. The domination of the inter national political-security agenda by United States-Soviet relations also meant a diminished involvement of the two nuclear Super-Powers in conflicts and a commensurate lessening of their capacity to exert an influence over the security policies of these countries. And it has meant higher priority on the international agenda for regional and even locally based conflicts and confrontations and an increase in the relevance of these situations to international stability and security.

A number of factors have led to increased risk of proliferation in the Third World: the spread of technological knowledge, an increase in the sources of nuclear supply, the perception in some quarters that nuclear weapons can serve to bolster hegemonic ambitions, deter outside interference or compensate for the diminished role of the major nuclear States in providing security assurance.

The focus of concern is the possibility of clandestine programmes even more than diversion of nuclear material from nuclear fuel cycles dedicated to peaceful use. For States with relatively limited nuclear power reactor programmes, facing a substantial probability of the detection of diversion of nuclear material from declared peaceful activities, and having relatively modest nuclear military requirements, clandestine programmes seem to offer a preferred route to the acquisition of nuclear weapons. This in turn raises new questions and new challenges for traditional non-proliferation safeguards. These safeguards were largely predicated on the idea that States voluntarily undertaking solemn non-proliferation commitments were not significant risks as regards proliferation. Nevertheless, their peaceful commitments had to be effectively and independently verified. In fact, IAEA has approached its safeguards responsibilities on the assumption that the existence of clandestine facilities could not *a priori* be excluded, and that there existed a risk of non-compliance with undertakings.

Expectations and Perceptions of Safeguards Prior to the Situation in Iraq

Until recently, IAEA safeguards enjoyed a substantial degree of confidence. Important political statements to this effect were made in the 1985 and 1990 Review Conferences of the non-proliferation Treaty. The Final Declaration of the 1985 Conference expressed:

"the conviction that IAEA safeguards provide assurance that States are complying with their undertakings and assist States in demonstrating this compliance. They thereby promote confidence among States and... help to strengthen their collective security. IAEA safeguards play a key role in preventing the proliferation of nuclear weapons and other nuclear explosive devices."

The draft final document of the 1990 Conference reiterated these views, but added the recommendation that IAEA should study "the possible scope, application and procedures" of special inspections to deal with the contingency of States not fulfilling their non-proliferation commitments to place under safeguards all source or special fissionable materials, thus indicating an emerging concern about clandestine activity.

Supplier States have relied on an effective international safeguards system as a condition for doing international nuclear business. It is generally acknowledged that without safeguards there would be little if any international nuclear cooperation, but also that this would not mean an end to nuclear activity, only a sharply increased uncertainty about the nature of the nuclear activity that was going on and an inevitable rise in insecurity and instability resulting from the dynamics of the security dilemma.

On the other hand, it was largely understood in the beginning that safeguards were not panaceas and did have limitations, although thinking about this has tended to become blurred as the notion that safeguards do or should *prevent* proliferation has taken hold. At the dawn of the nuclear age the Acheson-Lilienthal Report concluded that "a system of inspection superimposed on an otherwise uncontrolled exploitation of atomic energy by national governments will not be an adequate safeguard", and that "systems of inspection cannot *by themselves* be made effective safeguards... to protect complying States against the hazards of violations and evasions." The words emphasized make clear that from the outset safeguards were seen as essential but not conclusive measures in foreclosing the risk of proliferation. This formed the basis of the proposal in the Baruch Plan that all nuclear activities that were potentially dangerous to world security be placed under the ownership and control of an international agency.

Rejection of the Baruch Plan was followed by a period of secrecy which, failing to forestall continued dispersion of nuclear knowledge and development, led to a policy of controlled nuclear cooperation spearheaded by the United States with its Atoms for Peace initiative. In this context, control meant the application of a system of international safeguards on nationally owned and operated nuclear programmes to verify that nuclear activity was not diverted from peaceful to military use. Safeguards were applied, as a condition of cooperation, on any equipment, plant or material that was provided. On-site inspection was made an integral part of this approach.

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which came into force in 1970, introduced the concept of comprehensive or full-scope safeguards, meaning that safeguards were to apply to all nuclear material in peaceful use in all non-nuclear weapon States parties to the Treaty. Parties were required to declare *all* nuclear material in all peaceful nuclear activity. If all nuclear material subject to safeguards could be accounted for through IAEA inspection, it could be concluded that there was no reason to suspect any diversion from peaceful to proscribed uses. It is this system, based on material accountancy and the auditing of records and reports through on-site inspections involving independent verification, that has been the mainstay of non-proliferation verification. It is probable that the notion that safeguards prevent proliferation derived from this linkage.

Although IAEA safeguards under the non-proliferation Treaty generate the confidence described in the final declarations or documents of NPT Review Conferences, there have also been some questions and concerns about them. India's nuclear test in 1974 not only dramatized the fact that the technical capability to design and fabricate nuclear explosives successfully was spreading, but also raised the question of

the adequacy of safeguards for dealing with separated plutonium. Although measures were taken through national policies and multilateral understandings, such as the Nuclear Supplier Guidelines, to minimise the opportunity for the spread of reprocessing capabilities that would lead to plutonium stockpiles under national control, there has been, since the mid-1970s, a continuing debate concerning the adequacy of safeguards of any kind in dealing with plutonium. A vocal segment of the interested public contends not only that separated plutonium cannot be safeguarded, but that in large-scale nuclear facilities such as reprocessing plants, material accountancy, even accompanied by containment and surveillance, cannot detect the diversion of quantities of material large enough to make one or more nuclear weapons and that plutonium separation should therefore be banned. It must be noted, however, that IAEA has demonstrated considerable, if not infallible, capabilities for dealing with reprocessing facilities. What it cannot do is assure that a Government will not suddenly alter its peaceful-useonly policy and seize nuclear material for proscribed military use.

At the heart of the 1981 Israeli attack on the Iraqi research reactor, Osirak, lay the concern that, however accurately international safeguards may account for nuclear material at a given time, they cannot anticipate or control future conduct. As expressed by a senior member of the Israeli nuclear establishment, "The mechanism of safeguards is good and reasonable as long as it is respected. The problem is that it can be abrogated unilaterally." It should be recalled that under article X of the non-proliferation Treaty a State has the right to withdraw from Treaty commitments when its supreme national interests have been jeopardized, although it is required to provide justification and three months' notice, thus giving the international community time to address the alleged reasons and to make an effort to accommodate them. At a minimum, this means that, to be legitimate, withdrawal cannot be frivolous. While withdrawal would not release the State from obligations it had undertaken bilaterally to suppliers regarding the use of nuclear material or facilities they had provided, it would release it from its obligations with respect to indigenous nuclear assets.

Other limitations or constraints on international safeguards have shown up in operational experience. Some are more important than others, but all affect either how the system is perceived or how efficiently it is implemented. In normal circumstances involving routine inspections, there are limits on the access rights of inspectors, on where they can go, as well as on the frequency and intensity of inspection effort. The document underlying the NPT full-scope safeguards system was drafted to provide the secretariat with flexibility in negotiating safeguards agreements, but the politics of the situation have led to restrictive rather than liberal interpretations, in individual agreements, of what IAEA can do. This does not mean that safeguards cannot be effective, but it does impose de facto limits on the implementing of safeguards agreements.

States have the right to accept or reject inspectors proposed to them by the Agency. Some States will not accept as inspectors nationals of States which are not parties to the NPT, or with whom they do not have diplomatic relations, or persons who do not speak the native language. This has an impact on the efficient use of staff. Other States set limits on the number of inspectors that can be designated for assignment to them, again affecting the optimal distribution of personnel. Only a few States have waived visa requirements for inspectors, and this has meant curtailment of the opportunity to conduct unannounced inspections.

Nevertheless, at the last two Review Conferences the parties to the NPT strongly affirmed the credibility of the IAEA safeguards system and their confidence in it. Safeguards have, by and large, done what was expected of them *with regard to declared nuclear material*. It has been understood that they are evolutionary in nature, that actual experience is their ultimate testing-ground, and that adjustment, adaptation and change are inevitable features of safeguards. The political judgement was that the system provided the necessary confidence that nuclear activities under safeguards were being used only for peaceful purposes, the limitations and problems noted above notwithstanding. It is the judgement of political authority that ultimately determines the fate of international arrangements.

Effect of the Iraqi Situation on Safeguards

The Iraqi situation and the discoveries made by the IAEA-UNSCOM (IAEA/United Nations Special Commission) inspection teams have had negative and positive effects on the safeguards system. On the negative side they showed that even ratification of the NPT and acceptance of full-scope safeguards were not a guarantee against clandestine nuclear activity; and they brought to light the fact that the IAEA safeguards system, keyed as it was to declared nuclear material, could not, as matters stood, provide assurances that undeclared nuclear materials or plants did not exist in States under NPT safeguards. In this respect

the revelations undermined confidence in the regime and the safeguards system. Put simply, the nature of the threat or risk to be protected against had changed and so did the expectations. The existing system, as practised at present, could not meet those expectations and provide that degree of confidence.

On the positive side, however, the very fact of undermining confidence has resulted in more sustained and higher-level political attention to non-proliferation and safeguards than has been evident for a long time, and in more concentration on improving both nonproliferation and the verification system. Governments wish to ensure that the contribution the regime has made to stability and security can be perpetuated, and to that end are exploring not only what new authority might be needed, but how their own past policies and behaviour might have contributed to the limitations of the present system and how that could be changed.

Iraq was the first case of deliberate and substantial cheating on the NPT and safeguards obligations in the more than two decades they have been in place. Until then there had been no situation indicating the presence of undeclared facilities in a country subject to full-scope safeguards, no known case of deliberate failure by a State to report a facility it was obliged to report, and no confirmed diversion of nuclear material. The inability of the current system to cover all contingencies did not nullify the effectiveness of the current system for the situations it was designed to address. As discussed earlier, this comes at a time when international political change more generally dictates the need for assessing what would be required to sustain non-proliferation in the post-Cold-War world.

One of the most significant effects of the Iraq experience is that it has shifted emphasis with respect to assessing the confidence that safeguards provide. Before the violations by Iraq, the question was how adequately IAEA was carrying out its assigned responsibility of verifying that all material in all peaceful activity under safeguards could be accounted for and to what extent it provided confidence that the activities submitted to safeguards were being used for peaceful purposes only. Because of the discoveries made, pursuant to United Nations Security Council resolution 687 (1991), of an extensive clandestine nuclear programme in an NPT State, concern is now focused on ensuring that countries are not secretly engaged in nuclear weapons development. The question now is therefore whether the safeguards system provides the necessary confidence that no unauthorized activities are under way and no undeclared facilities or material are present in a safeguarded country. The first part of this concern is a broader question

under way and no undeclared facilities or material are present in a safeguarded country. The first part of this concern is a broader question than that for which IAEA was assigned safeguards responsibility under the NPT. While, in its article II, the NPT requires all non-nuclear weapon States parties not to "receive the transfer... of nuclear weapons or other nuclear explosive devices or of control over such weapons...; not to manufacture or otherwise acquire nuclear weapons...; and not to seek or receive any assistance in the manufacture of nuclear weapons...", the Agency was charged—in article III, paragraph 1—only with verification of obligations assumed under the Treaty "with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices". This is not to say that IAEA could not be called upon to verify other NPT obligations, but that the specific mandate relates only to the use of nuclear material subject to safeguards. How even this responsibility is implemented, however, could uncover evidence of the pursuit of alternative paths to nuclear weapons, and to this extent the Agency could contribute to bringing the existence of such activities to public attention.

There are really two issues here. One is whether the actual scope of safeguards responsibility could be expanded beyond verification of the end-use of nuclear materials and facilities to cover other routes to nuclear weapons. That question lies beyond our present purpose. The other issue is the extent to which changes in the implementation of safeguards under existing authority can contribute to meeting the new expectations. Three points are relevant here. First, it is clear that inspection of declared nuclear materials and facilities only is not enough to verify compliance with non-proliferation pledges, and that the system needs to be oriented also towards the problem of undeclared nuclear activity. Secondly, the emphasis in the present system on material accountability places a premium on quantitative measures, sometimes at the expense of other more qualitative attributes of safeguards such as observation of activities at or around a safeguarded site. Thirdly, the proliferation risk is not proportional to the size of a nuclear programme. In fact, if one considers the three or four largest and most advanced nuclear programmes and the three or four highest-risk States in the NPT regime, there would if anything seem to be an inverse relationship between size and risk. This is obviously a matter of political judgement, but it is inescapable that where States are located (for example, in stable or volatile regions) and the character of their nuclear activities (such as large research reactors or sensitive fuel-cycle facilities in a programme lacking any nuclear-power projects) have some bearing on how the risk of proliferation may be judged.

The case of Iraq is relevant to all of these points: it involved extensive undeclared nuclear activity leading to the only two condemnations of safeguards violations ever issued by the Board of Governors of IAEA; the focus on material balance diverted the attention of Agency inspectors from significant nuclear activity in the vicinity of the safeguarded facilities; and the continued interest of Iraq in reconstructing Osirak as well as considerable reporting of attempted imports of equipment and components that made sense only if nuclear weapons were an end goal were never treated as a basis for closer inquiry.

The Iraqi situation also underscored the problems that arise from defining the frequency of inspection by the quantity of nuclear material in each facility as distinguished from the quantity in the country as a whole. A country basis for inspection frequency in the case of Iraq would have led to monthly instead of semi-annual on-site inspections and could well have resulted in detecting the diversion of a quantitatively very small, but symbolically very important, amount of nuclear material at its safeguarded reactor. It could have eliminated the possibility of successful diversion at the site. In the same vein, Iraq raises questions about the advisability of the Agency's continuing to use the values for significant quantities of nuclear materials that it does (for example, 8 kg plutonium, 25 kg highly enriched uranium), since they are relevant to frequency of inspection. Lowered values could increase inspection frequency in all safeguarded States under the present regime and, thereby, reduce the chance that a country with a partially clandestine fuel cycle (for example, a hidden reprocessing plant that depended for feed on a safeguarded research or power reactor) might be able to divert nuclear material without being detected. Lesser values would have resulted in more frequent inspections of the small Iraqi research facility.

Where Do We Go from Here?

In considering the steps that might be taken to extend existing confidence in safeguards with respect to declared nuclear material to undeclared activities and related problems, it is essential to keep in mind that they are only one element, albeit a critical one, of a broader non-proliferation regime. Safeguards are not panaceas. They cannot prevent proliferation by a determined State, but they can provide the international community with early warning of the risk of proliferation and, fully implemented, they can play an important deterrent role or at the very least complicate the life of a would-be proliferator and increase the probability of detecting anomalous events that might suggest the possibility of illicit activity.

Since the exposure of Iraq's non-proliferation and safeguards violations, many suggestions have been made as to what to do about verifying non-proliferation. These range from abandoning IAEA in favour of some as yet undefined alternative organisation, to adding to the Agency's authority through amendment of underlying NPT and equivalent conventions and of the safeguards system, to focusing on existing authority and taking appropriate steps to ensure its full implementation. This last approach, at least as a first step, has the merit of avoiding the need to negotiate new agreements or to modify existing ones. There is also reason to believe that it can carry the system reasonably far towards meeting public concerns about clandestine nuclear activity in safeguarded States. This does not rule out the possible need for additions to existing authority, as was done, for example, by the mandate assigned to IAEA under Security Council resolution 687 (1991).

Rather than listing and discussing the range of proposals already in the public domain for strengthening existing IAEA safeguards authority, it is proposed to focus on two themes: transparency and political will.

Transparency. In the idiom of IAEA safeguards, transparency usually refers to the system and its results. It can refer also to the transparency of the activities being inspected. Both uses apply here. Transparency is extremely important to safeguards credibility. The safeguards document relating to the NPT, IAEA information circular INFCIRC/153, was drafted with the advanced industrial States primarily in mind. These States were keenly sensitive to any further discrimination beyond that already imposed by the NPT division of nuclear weapon and non-nuclear weapon States, and the obligation of the latter to accept safeguards on all nuclear activity. The many provisions in the safeguards document regarding limiting intrusion on sovereignty, protecting commercial and proprietary interests, and specifying the obligations of the Agency and its inspectorate reflect the sensitivity of the participating weapons States to these concerns. Many of these States have been equally sensitive about publishing the results of the secretariat's annual Safeguards

Implementation Report, which reviews accomplishments and problems experienced in implementing safeguards and draws conclusions with respect to the diversion or non-diversion of nuclear material. Many of these States have also emphasized the service aspect of safeguards, and have rejected the notion that safeguards somehow serve to deter them from doing what they have in good faith forsworn in signing the NPT.

But, safeguards are not just a service to the State wishing to demonstrate its bonafides; they are also a service to other States that seek credible and convincing evidence that their safeguarded neighbours are indeed living up to their non-proliferation undertakings and engaging in exclusively peaceful uses of nuclear energy. They know not to take declarations of benign intent by non-NPT neighbours for granted, but they want independent verification of the fulfilment by NPT neighbours of their pledges. The more transparency there is to this process and to the nuclear activities of full-scope safeguards States, the more credible the affirmations of peaceful intent become. Therefore, the more transparency the better. However, one must understand the need for some balance between transparency, on the one hand, and legitimate commercial, industrial and proprietary concerns of the non-nuclear weapon States parties, on the other. There is no inherent reason why a reasonable balance cannot be achieved.

What does transparency involve? Four key elements may be mentioned, although there are others.

- One is as full and open a book on the nuclear fuel cycle in the safeguarded country as possible. This means that States will voluntarily release even information on their nuclear activities that is not required if that information can help to dispel suspicions.
- A second is adoption of a system of reporting all transactions involving nuclear material (already required for NPT parties and adopted as a matter of policy by some non-parties, such as Argentina) and plants, equipment or components that can be used for nuclear purposes (not required for transactions between NPT parties because of the focus of safeguards on nuclear material and the assumption that any facility that has any nuclear material in it will automatically be under safeguards).
- A *third* is acceptance of a liberal implementation of rights of access by verification authorities even beyond agreed key

measurement points, if such access would serve to circumvent the need for the Agency to pursue procedures related to anomalies in order to reach a conclusion on the accountability of nuclear material under safeguards. This would exceed any routine inspection rights that IAEA now has, effectively broaden the concept of routine inspection, and reinstate rights that the Agency may have agreed to curtail in negotiating the subsidiary arrangements which activate safeguards agreements.

— The fourth is adoption of a reporting system that publicises the findings of verification activities country by country. This could be troublesome in that, often, inspection activities are in some respects incomplete or the results contain certain ambiguities, either or both of which could be construed as reason for suspicion when the facts are completely otherwise. However, the principle of open reporting of results in some manner would seem to be in the interest of the credibility of the safeguards system, especially if the other measures for transparency that have been mentioned were adopted.

Certain measures already under active consideration or discussion in IAEA either support or implement the notion of transparency. Three deserve mention here: design notification procedures, universal reporting and special inspections.

States accepting full-scope safeguards are obliged to provide the Agency with design information for any nuclear facilities "as early as possible before nuclear material is introduced" (INFCIRC/153, para. 42). The practice evolved of interpreting this to mean no less than 180 days before material is introduced. It is clear that unreported construction of nuclear facilities raises concern and suspicion when learned of by other States and that notification from no later than the time that construction begins is important. The Director General has already recommended to the Board of Governors the adoption of new timelines for notification and their formal incorporation in subsidiary arrangements to safeguards agreements, thereby providing a legal basis for the obligation. Among other things, although not technically involving an inspection, this would enable Agency inspectors to visit construction sites periodically. This could be further strengthened if supplier States would require that any facilities, equipment or components provided to *any* State be notified to IAEA and submitted to Agency safeguards. This is not currently required under the NPT safeguards system; and safeguards can, of course, be applied only where there exists an underlying obligation. Requirements by supplier States would provide that basis.

There is now a strong interest in encouraging a system of *universal reporting* of all exports of nuclear material even when it is destined for non-nuclear purposes. Non-nuclear weapon States parties to the NPT are required to report exports of nuclear material unless it is to a nuclear weapon State. Subject to certain exceptions, nuclear weapon States are under a similar obligation with respect to exports to non-nuclear weapon States, while States without safeguards agreements have no legal obligation to report nuclear exports. Universal reporting would obviously support the principle of transparency discussed above. As mentioned in discussing design information, obligatory reporting of exports of any nuclear-related items could be considered and placed on the agenda for strengthening non-proliferation and international safeguards.

Special inspections have received considerable attention in both official and non-official circles and are the subject of a paper communicated to the Board of Governors by the Director General of IAEA. The right of special inspection already exists but has been used almost exclusively to clarify situations arising from routine inspection where, despite discussion and investigation, certain questions remained unresolved. They have never been carried out at locations other than those under safeguards. However, exercise of the right to investigate the possibility of undeclared nuclear material and to call for inspection at undeclared locations is now widely regarded as an important means of implementing non-proliferation safeguards. It is instructive to note that the IAEA Statute provides for access at all times to all places, data and persons involving material, equipment or facilities required to be safeguarded, but that this sweeping authority was quickly circumscribed as States were unprepared to accept the implications such rights would have for national sovereignty. The case of Iraq has given rise to second thoughts, and more extensive use of this right is now seen as a critical feature of credible international safeguards. The conditions for effective use of this right have been spelt out by Hans Blix, Director General of IAEA: access to information indicating the existence and location of clandestine activity, access to suspected sites that are identified, and support by the United Nations Security Council of this access.

Effective use of existing safeguards-derived and other readily available information may suffice to establish a basis for calling for a special inspection, but in some cases information from outside sources, including national intelligence, may be required, and it is this additional information to which the Director General referred. As the Agency is not a police or military body, it cannot force its way into a State. It must be admitted voluntarily. Assured access is an obligation of States under safeguards, however, and their failure to comply with their obligation is a violation subject to actions built into the IAEA system, namely reporting non-compliance to the United Nations for appropriate action. Security Council support speaks for itself. But, a Security Council resolution declaring that violations of NPT and international safeguards undertakings would be considered *ipso facto* a threat to international peace and security could provide a powerful deterrent to violations and could induce compliant behaviour on the part of a State. This would be all the more effective if the Security Council and leading powers of the world were to be constructively responsive to the legitimate security concerns of States that might otherwise be induced to seek their security in nuclear arms.

Political will. Political will is essential to the success of nonproliferation and to the effective implementation of international safeguards. International organisations are creatures of their client sovereign States, not independent political entities with political constituencies independent of their State members upon whom they can call for the support necessary for their effective operation. If the States of the international system want a strong non-proliferation regime and credible verification in which they can place confidence, they must provide the international secretariats to which they assign responsibilities with the necessary authority, resources and political support.

There are three relevant elements for successful implementation of a regime such as that of non-proliferation: expectation, authority and resources. When authority and resources are in synchronous relation with expectations, the system can work; if they are not, problems arise. Public expectation tended to exceed the authority and certainly the resources made available to IAEA for carrying out its safeguards responsibilities when it came to the question of clandestine nuclear activity and the preventing of nuclear proliferation.

It is a political call for the States in the new world order to decide whether or not they want, and are prepared, to pay the political, financial and related costs of a credible safeguards system. Such a system must go further than the present one in mapping, publicizing and verifying the nuclear activities of participating States, a system in which they can place sufficient trust and confidence to allow it to serve as a basis for planning their own security policies.

Today's system meets some, but not all, of these requirements. Whether this can be fully achieved is open to question, for it involves many parameters not discussed here. What is certain is that the worst possible outcome would be to allow expectations to reach beyond the authority and resources the international community is prepared to give.

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SAFEGUARDS: NEW CHALLENGES

There has always been an acute awareness of the fact that some of the materials, technologies and expertise that are relevant for the peaceful uses of nuclear energy can be equally of use for the making of nuclear weapons. Since the launching of the "Atoms for Peace" programme in 1953, the promotion of the peaceful uses of nuclear energy has, therefore, invariably been linked to policies and measures for preventing the proliferation of nuclear weapons. By and large, this two-pronged approach has been successful. There are now some 430 nuclear power plants and an even larger number of facilities for other applications of nuclear energy (for example in medicine, agriculture and industry), yet the number of nuclear weapon States has remained very limited.

Many different factors account for the relative success of nonproliferation efforts. One important factor has been the common interest of the five States officially recognised as nuclear weapon States — China, France, the former Soviet Union, the United Kingdom and the United States — in impeding any further horizontal spread of nuclear weapons, a common interest that transcended their differences during the Cold War. Another factor was that, until recently, most States that were not protected by the nuclear umbrellas of major military alliances were not at a technological level that would make it possible for them to develop nuclear weapons. Yet, other factors have been the public aversion to nuclear weapons and the ability to provide verifiable, treatybased assurances of non-proliferation. At the present time, in a world moving towards greater *detente* and nuclear disarmament, and in which a growing number of States may be reaching a technological level that could make it possible for them to construct nuclear weapons, it is fortunate that the non-proliferation precept has become strongly established. In the recent past, three so-called threshold States— Argentina, Brazil and South Africa—have entered into legally binding non-proliferation commitments that are subject to verification, and the subject of a nuclear weapon free zone has appeared on the agenda of the Middle East peace talks.

Thus, there are some reasons for optimism about the prospects for non-proliferation. However, the case of Iraq has raised several important questions. One of them is how International Atomic Energy Agency (IAEA) safeguards, which are designed to give confidence about respect for non-proliferation commitments, can be strengthened so as to minimise the risk that a clandestine nuclear programme may go undetected.

IAEA safeguards were a radical novelty some 30 years ago when the first on-site inspection took place. They have been instrumental in creating confidence in the peaceful nature of many nuclear programmes and have constituted a *sine qua non* for nuclear trade. Moreover, they have served as a source of inspiration in the wider discussions of arms control.

The case of Iraq was, however, a reminder of some of the limitations of the present safeguards system. It is important, therefore, to examine the evolution of IAEA safeguards and the current efforts to strengthen them.

The Agency was created in 1956, with the twin objectives of promoting peaceful uses of nuclear energy and of ensuring that assistance provided by it or at its request, or under its supervision or control, was not used in such a way as to further any military purpose.

Under the IAEA Statute, safeguards are obligatory for IAEA-related activities. Other nuclear activities can be subject to safeguards, but only at the request of the State or States concerned. This statutory scheme for the application of safeguards was based on an assumption that nuclear know-how would be confined to a privileged few and that IAEA would be the centre of most nuclear activities.

By the mid-1960s, with all the permanent members of the Security Council already in possession of nuclear weapons, it became clear that this statutory scheme alone would not prevent the spread of nuclear weapons. Nuclear technology was being acquired by more and more countries, and the assumption that IAEA would be the principal channel for the transfer of nuclear technology had proved incorrect. A major new approach was taken through the development of what is referred to as the "non-proliferation commitment": the legal obligation not to manufacture or acquire nuclear weapons and to accept IAEA safeguards on all existing and future nuclear activities. This commitment was first embodied in a regional treaty—the 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America, known as the Treaty of Tlatelolco. With the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) a universal approach was taken. Under this Treaty, open to all States, non-nuclear weapon States assume an obligation, *inter alia*, not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and to conclude an agreement with IAEA for the application of safeguards to all source or special fissionable material in all peaceful nuclear activities within their territories, under their jurisdiction, or carried out under their control anywhere.

Subsequent regional non-proliferation commitments were embodied in the 1985 South Pacific Nuclear Weapon Free Zone Treaty (the Treaty of Rarotonga) and the 1991 Argentina-Brazil Agreement for the Exclusively Peaceful Uses of Nuclear Energy. Through these treaties, IAEA safeguards have become obligatory in character and comprehensive in scope for the 146 States parties to one or other of them.

The Application of Safeguards

The actual application of safeguards requires the conclusion of an agreement between IAEA and the State in which the safeguards are to be applied. This is irrespective of whether the application of safeguards follows and fulfils a prior legal obligation to accept safeguards—as in the case of safeguards following adherence to the NPT—or is the result of a separate voluntary undertaking.

The safeguards agreements set out the parties' basic rights and obligations relevant to the application of safeguards. These include the State's basic undertaking, which is to be verified through the application of safeguards, its obligation to maintain a system of accounting and control for all nuclear material subject to safeguards, and its obligation to provide the Agency with all information relevant to the application of safeguards. They also include the obligation on the part of IAEA to verify the State's compliance with the basic undertaking, its obligation to avoid "in doing so" hampering the economic and technological development of the. State and its obligation to protect the State's commercial, industrial and other confidential information that comes to the knowledge of IAEA through the application of safeguards.

Detailed implementation procedures are found in a set of technical "subsidiary arrangements", which are tailored to the specific requirements of safeguarded facilities.

Four categories of safeguards agreements have been entered into by IAEA.

First, there are agreements with non-nuclear weapon States that have made a binding non-proliferation commitment in a multilateral or a bilateral context. This includes States parties to the NPT, the Treaty of Tlatelolco, the Treaty of Rarotonga, and the Argentina-Brazil Agreement for the Exclusively Peaceful Uses of Nuclear Energy. These safeguards agreements cover all the nuclear activities of the State present and future.

Secondly, there are agreements with non-nuclear weapon States that have not made a binding non-proliferation commitment. These agreements are normally entered into upon the conclusion of a project agreement between IAEA and a member State, upon unilateral submission by a State, or upon the conclusion of a supply agreement between the State and a supplier State requiring the application of IAEA safeguards. Agreements in this category cover only specified facilities, equipment and material. In these cases, assurances by IAEA are necessarily limited to the facilities, equipment or material submitted to safeguards and do not extend to the totality of the State's nuclear activities. This is the case of IAEA safeguards in Algeria, Cuba, Israel, India and Pakistan, none of which has accepted safeguards on its entire nuclear programmes—present and future.

Thirdly, there are agreements with nuclear weapon States. All five of the recognised nuclear weapon States have made declarations, not required by any treaty, to accept the application of safeguards on some or all of their peaceful nuclear activities. As a result, IAEA has entered into agreements with each of them. The agreements with nuclear weapon States are obviously not designed to verify non-proliferation. They are meant to broaden the Agency's safeguards experience, to affirm that nuclear weapon States are not favoured by being exempt from safeguards on their peaceful activities, and to promote the principle that all peaceful nuclear activities in all States should be subject to safeguards.

Fourthly, there is an agreement with a non-nuclear weapon State which had not yet made a non-proliferation commitment but which was ready to make such a commitment as part of the safeguards agreement. This is the safeguards agreement concluded with Albania before it became a party to the NPT.

Nature of the IAEA Safeguards System

IAEA safeguards are technical means of verifying compliance with legal obligations. Their objectives are to assure the international community of the peaceful nature of safeguarded nuclear activities and, through the risk of early detection, to deter the diversion or misuse of safeguarded materials or facilities.

Agency safeguards are limited to verifying compliance by a State with its specific undertakings under the safeguards agreement. They are based primarily on information provided by the State as to the existence of nuclear material or equipment that should be subject to safeguards pursuant to the agreement. Safeguards do not prevent States from acquiring nuclear material, facilities or technology, nor can they assure the physical protection of nuclear material or facilities or, by themselves, prevent a violation of a safeguards agreement. Safeguards cannot read the future intentions of States, but are designed to provide an early warning of a violation, by a State, of its undertakings, setting in motion response mechanisms within IAEA, among States and in the United Nations.

The IAEA safeguards system has three basic elements which, taken together, are designed to verify that no nuclear material is diverted for non-peaceful purposes. These elements are: material accountancy, containment and surveillance measures, and on-site inspections.

Material accountancy establishes the quantities of nuclear material present in the State and the changes that take place in those quantities. Reports on the nuclear material subject to safeguards in the State are provided by the State itself to IAEA.

Containment and surveillance measures are designed to take advantage of physical barriers such as walls or containers to restrict or control access to, or the movement of, nuclear material or equipment, and to reduce the probability of undetected movements. These measures include the use by IAEA of seals, automatic cameras and videotape recorders, which would reveal the removal of nuclear material.

On-site inspections are designed to verify the information provided to IAEA. During an inspection, the inspectors perform a number of functions—for example, they check that fuel quantities actually match the reported quantities, they take independent measurements and samples, they verify the functioning and calibration of instruments, and they apply surveillance and containment measures.

The type, intensity and frequency of inspections vary with the kind of facility and the particular circumstances. Verification is concentrated on the stages of the fuel cycle that involve weapons-grade nuclear materials, such as plutonium and highly enriched uranium.

The Agency carries out ad hoc, routine and special inspections under conditions prescribed in the safeguards agreements. Ad hoc and routine inspections constitute the bulk of inspection activities. During ad hoc and routine inspections, IAEA has access to the relevant records and to locations where safeguarded nuclear material is declared to be present. The Agency may carry out a certain fraction of routine inspections unannounced.

Special inspections are carried out if IAEA has concluded, through an initiative taken by the State or on its own, that unusual circumstances as specified in the applicable agreement warrant them. Under comprehensive safeguards agreements, the Agency may conduct special inspections to verify information provided by the State in special reports, or if it considers that information made available by the State "is not adequate for it to fulfil its responsibilities". These responsibilities under comprehensive safeguards agreements include the obligation to ensure that safeguards will be applied on all source or special fissionable material in all peaceful nuclear activities within the territory of the State, or under its jurisdiction or control. In carrying out special inspections under comprehensive safeguards agreements, IAEA may obtain access to information or locations additional to those to which it has access during routine and ad hoc inspections.

The circumstances under which IAEA might consider that information provided by a State was inadequate for it to fulfil its responsibilities and under which a special inspection was warranted would naturally depend on the particulars of each situation. In all cases, however, the information provided has to be assessed in good faith by the Director General or the Board of Governors, as the case may be.

Efforts to Strengthen Safeguards

Safeguards are a set of measures designed to create confidence that States are complying with specific non-proliferation obligations. The continuation of such confidence is essential for the transfer of nuclear technology and for the maintenance and evolution of the nonproliferation regime. For States to accept obligations that are directly related to forgoing a military option, it is essential that they be assured that such obligations are respected by other parties—especially neighbouring parties—to the compact. It is natural, therefore, that States should want safeguards to be subject to periodic evaluation so as to ensure their continuing effectiveness. The latest such evaluation was made during the 1990 Review Conference of the Parties to the NPT. Many recommendations relevant to the strengthening of NPT safeguards in the light of new technological and political developments were discussed at that Conference, and have since been followed up in IAEA.

Iraq's clandestine enrichment programme in violation of its safeguards agreement with IAEA has brought out dramatically both the strengths and the weaknesses of the IAEA safeguards system and has prompted efforts to strengthen it.

The fact that for its weaponisation programme Iraq did not use nuclear material which was under safeguards inspection was probably due to the effectiveness of IAEA safeguards. It would have been discovered and have triggered an alarm. On the other hand, the ability of Iraq to construct and operate undeclared uranium enrichment facilities without detection highlighted a weakness in the system. The system has worked well in providing assurances with regard to the non-diversion or other misuse of material and facilities declared by the State, but it was not designed to detect possible undeclared material and facilities.

The IAEA secretariat and Board of Governors are currently engaged in an effort to close this loophole and to identify other areas where comprehensive safeguards need to be strengthened and streamlined. A number of papers are under consideration by the Board of Governors, and others are being prepared.

In a paper that is currently the focus of attention, the Director General of IAEA proposes that he activate and make full use of the Agency's right to carry out special inspections. As already indicated, IAEA has the right and the obligation to *ensure* that safeguards *will be applied* to all nuclear material in peaceful nuclear activities in States with comprehensive safeguards agreements. The agreements do not distinguish between declared and undeclared material. The Agency's obligation is to ensure that *all* material subject to safeguards is in fact safeguarded. A way for IAEA to fulfil that obligation is to exercise its right of special inspection. The procedures for carrying out special inspections are identical in all comprehensive safeguards agreements. If IAEA considers that information made available by the State is not sufficient to enable it to fulfil its responsibilities under the agreement, IAEA shall forthwith consult with the State. In the light of the consultations, IAEA may request access "in agreement with the State" to additional information or to locations in addition to those declared by the State. Any disagreement concerning the need for such access shall be resolved in accordance with the dispute settlement procedures provided for in the agreements. However, if the Board of Governors determines that action by the State to grant access for the Agency to carry out a special inspection is essential and urgent, the State has to take the required action without delay, irrespective of whether dispute settlement procedures have been invoked.

The actions to be taken by the Board in the event of non-compliance by the State with its safeguards obligation— for example, refusal to allow the access demanded by the Board—are provided for in the Agency's Statute and in the Relationship Agreement between IAEA and the United Nations. Article XII.C of the Statute provides that the "Board shall report the non-compliance to all members and to the Security Council and General Assembly of the United Nations". The Relationship Agreement contains a similar provision.

The Agency has, so far, had occasion to carry out special inspections only at locations declared by the States concerned; the special inspection mechanism provided for in comprehensive safeguards agreements has not been used in order to secure access to undeclared nuclear material or facilities because no sufficiently specific information has been before IAEA suggesting that such access was called for.

Although the IAEA inspections in Iraq have been carried out pursuant to a Security Council resolution—resolution 687 (1991)-under Chapter VII of the United Nations Charter and are not special inspections under a comprehensive safeguards agreement, the lesson learned in Iraq is that three conditions need to be fulfilled in order to make special inspections under comprehensive safeguards agreements an effective instrument for the detection of undeclared nuclear material.

First, the inspectorate must have access to relevant information. No inspectorate can comb the entire territory of a State in a blind search for proscribed facilities or activities. They must have information indicating locations that merit inspection. Apart from information routinely collected in the course of safeguards activities, publicly available information and relevant information in the possession of member States may give such indications. This includes reports on the production, import and export of nuclear material and of sensitive equipment and non-nuclear material. It also includes information available to States through national technical means. The information would have to be analysed for its veracity before the Director General or the Board of Governors could decide whether there was any justification for setting in motion the procedures for a special inspection.

Secondly, The inspectorate must have a right of timely and unrestricted access to any location which, according to credible information, might be an undeclared nuclear installation or contain undeclared nuclear material.

Thirdly, IAEA must be able to exercise its right—under its Statute and the Relationship Agreement with the United Nations—of access to the Security Council if a State rejects a request for a special inspection or refuses access. Awareness of possible recourse to the Security Council may deter States from failing in their duty under a safeguards agreement.

In another paper submitted to the Board of Governors of IAEA it is proposed that the Agency be given design information on nuclear facilities as soon as the decision to construct a facility or to modify an existing facility has been taken. The early provision of such information demonstrates an openness that is likely to inspire confidence and to facilitate the effective and efficient implementation of safeguards.

Other papers under preparation deal with: ensuring universal reporting of the production, import and export of nuclear material, sensitive equipment and relevant non-nuclear items in States with comprehensive safeguards agreements; prompt and unhindered access for IAEA inspectors; and effective application of safeguards in States with small, but significant, quantities of nuclear material.

As IAEA goes through the process of adjusting its safeguards to new technological and political realities, it is important to bear certain facts in mind.

First, safeguards are not a static concept. They have to be constantly adjusted to take account of technological developments. They are aimed at a moving target and always have to be in focus.

Secondly, safeguards are not a uniform concept. Different models have been developed to deal with different legal commitments and

political realities. They vary from safeguards designed to verify specified facilities in countries that have not accepted comprehensive safeguards to those designed to verify the complete nuclear fuel cycle in a State, and while certain safeguards models have been developed for application as the only safeguards system, others have been developed to operate in conjunction with other safeguards; this is so in the case of the EURATOM countries and of Argentina and Brazil, where EURATOM (the European Atomic Energy Community) and ABACC (the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials) apply their own safeguards.

Thirdly, because the objective of safeguards is to provide assurance and create confidence, the degree of intrusiveness required may vary with the degree of trust or distrust existing in different areas. In some regions and in the relations between some countries where hostility and fear have reigned, more intrusive safeguards may be needed to create confidence. A case in point is the Middle East. The Director General of IAEA has been requested by the Agency's General Conference to prepare a model safeguards agreement that could apply to that region, and preliminary contacts indicate a need for considerably more far-reaching verification and control measures than those practised under existing comprehensive safeguards, possibly including mutual inspections by the parties themselves in addition to IAEA safeguards.

Fourthly, safeguards are not an infringement of a State's sovereignty. States accept safeguards as they do other international obligations, because they perceive them to be in their national interest. Opening up installations for international inspection, waiving or relaxing visa requirements for inspectors and providing a transparent flow of information on nuclear activities do not diminish a State's sovereignty, but rather help create the conditions necessary for peace, in which sovereignty can be enjoyed.

Fifthly, safeguards cost money, and money has to be made available and be assured if the safeguards system is to work effectively and without interruption. Regrettably, the financing of safeguards, like the financing of so many other activities of international organisations, is today inadequate and in jeopardy.

At the beginning of 1992 IAEA is having to reduce all budgeted expenses by 13 per cent because of uncertainty about the availability of funds. This will not strengthen safeguards. Nevertheless, thinking and planning regarding safeguards must proceed on the assumption that reason will prevail and that solutions will be found to the current financial problem.

Developments during the past few months suggest that a universal non-proliferation regime could become a reality in the not-too-distant future. It is therefore important to ensure that adequate machinery for verifying such a universal commitment is ready. The process of taking a hard, fresh look at safeguards has begun. To complete it, imagination, resolve and resources are required.

105 STRENGTHENING THE NPT REGIME: A CTBT AND A CUT-OFF OF FISSIONABLE MATERIAL

For many years there has been broad international agreement that a comprehensive nuclear-test-ban treaty and a cessation (commonly known as a "cut-off") in the production of fissionable material for weapons purposes belong to the category of global arms control measures that are uniquely capable of consolidating the international nuclear nonproliferation regime. The history of non-proliferation has been intimately intertwined with the history of nuclear test-ban efforts and attempts to put an end to the manufacture of fissionable material for weapons. Both have been considered as fundamental instruments for arresting the nuclear arms race and mitigating the discriminatory character of NPT. A CTBT and a cut-off agreement have been the subject of countless resolutions of the United Nations General Assembly and of various international disarmament bodies, and both were top agenda items at all four NPT Review Conferences—in 1975, 1980, 1985 and 1990. Owing to the controversy between non-nuclear weapon States and nuclear weapon States over the test-ban issue, two conferences—those in 1980 and 1990—failed to agree on a substantive final document.

At a time when NPT parties are contemplating the prospects for the nuclear non-proliferation regime in 1995 and thereafter—well into the twenty-first century—the future and durability of this regime will, to a large degree, depend on what decisions on a CTBT and a cut-off agreement are made in the coming months, before the NPT extension conference in 1995.

A Comprehensive Test-ban Treaty

Ever since a CTBT became a high-priority issue on the international agenda some forty years ago (the first statesman to raise it was Jawaharla)

Nehru, who in April 1954, after a United States nuclear explosion on Bikini, urged the world community to agree on a test ban), there has been no lack of excuses, diversions or manoeuvres aimed at delaying, if not blocking, a comprehensive agreement.

Generations of United States and Soviet negotiators spent years discussing detection and identification thresholds below which there would allegedly be no way to verify a test ban; the "big hole" theory, according to which it would be possible to conduct "decoupling" in an underground cavity and thus greatly diminish the magnitude of a seismic signal; the quota of on-site inspections annually permitted to each side -20, as proposed by the Americans, or 3, as accepted by the Russians; the number of seismic stations to be emplaced on the territories of participating States, and so on.

As a result, it has been possible so far to reach only limited agreements—the partial test-ban Treaty of 1963, prohibiting nuclear testing in the atmosphere, in outer space and under water; the threshold test-ban Treaty of 1974, prohibiting tests above 150 kilotons, and the peaceful nuclear explosions Treaty of 1976. The quite promising (at least as they were seen at the time) tripartite United States-United Kingdom-Soviet talks of 1977-1980 initiated by the Carter Administration were cut short by the Reagan Administration. Since then, efforts to negotiate a CTBT have been stalled.

The recent United States legislation initiated by the Democratic majority of the Congress and signed by President Bush on 2 October 1992 sets a moratorium on United States nuclear tests until 1 July 1993, thus making a four-power suspension of tests (Russia and France announced their moratoria earlier, and the United Kingdom cannot continue testing at the Nevada site while the United States moratorium is in effect). The legislation permits up to 15 nuclear tests to improve the safety and reliability of nuclear weapons from the end of the moratorium until October 1996, and prohibits United States testing after that, unless another country conducts tests. It also calls on the President to submit to the Congress a plan for achieving a multilateral comprehensive test ban "on or before September 30, 1996". Presidents Clinton and Yeltsin, at their April summit in Vancouver, agreed that "negotiations on a multilateral nuclear test ban should commence at an early date".

This positive trend that has opened up encouraging prospects for a CTBT in, hopefully, the not-too-distant future is, to a large extent, the

consequence of a growing realisation of the diminished value of nuclear weapons and of nuclear deterrence in the post-Cold War environment. NATO's present strategy reflects "a reduced reliance on nuclear weapons." This seems to be even more true for Russia. The two principal nuclear powers have now entered a period of deep reductions in and dismantlement of their nuclear arsenals. It appears that this process is constrained only by such practical limitations as availability of disassembly capabilities, storage facilities and financial resources (in the case of Russia).

Discussion has already started—if not yet among the Governments concerned, at least in the arms control community and academic circles as to what the next steps in nuclear arms control should be. What is a minimum nuclear deterrent? Should the 3,000-3,500 warhead limit agreed to under START II be lowered to 1,500, 300 or even 100 warheads? How far and how soon can we move towards the abolition of nuclear weapons? Should national nuclear armaments be replaced by some sort of international control of atomic energy? No less an authority than Dr. Edward Teller, father of the H-bomb, has proposed the "revival of the Baruch Plan". Stanford University has recently conducted a workshop on the theme of "International Control of Nuclear Weapons: myth or reality?"

However, before a CTBT can become a reality, its negotiators will have to address two challenging issues: how to set up an effective international system of verification to monitor it; and whether or not there is a need for any arrangements to ensure the safety of the remaining nuclear explosives.

With regard to verification, if this problem is to be approached in an unbiased way and with due account taken of the new and encouraging climate of openness and transparency that is now replacing decades of all-embracing secrecy, then this issue should not become a stumbling block, as it did in the past. We are witnessing today wide acceptance of intrusive verification and transparency in armaments. The United States and Russia have agreed to far-reaching inspection rights under the INF and START Treaties. Under the chemical weapons Convention, its signatories have accepted "challenge inspections" "any time and anywhere". IAEA has recently activated its long-dormant right to conduct "special inspections" of undeclared locations which may be triggered on the basis of "additional" (or intelligence) information provided by member Governments. So we now have a verification-friendly environment for the first time. Also, there is today more mutual understanding and trust among major participants of a future agreement. However, to be truly effective, the agreement should be based on the principle of "trust and verify", as an old Russian saying goes.

CTBT verification should, as far as it is practicable, be international and cost-efficient. In addition to national technical means of verification, it should include all required and available detection techniques: global seismic monitoring, radioisotope sampling, outer space monitoring, etc., as well as on-site inspections.

Administration and management of such a verification system would require an appropriate international mechanism. It was suggested that this task should be given to IAEA. Though placing such a responsibility upon the Agency would require substantial changes in its administrative arrangements and, especially, in its financing, this new role would be consistent with its statutory objective of seeking to prevent the use of atomic energy for military purposes. Moreover, it would be in compliance with the provision of the Statute that authorises the Agency to "conduct its activities in accordance with the purposes and principles of the United Nations to promote peace and international co-operation, and in conformity with policies of the United Nations furthering the establishment of safeguarded worldwide disarmament and in conformity with any international agreements entered into pursuant to such policies".

As the sole agency of the United Nations system in the field of nuclear energy, IAEA would be well suited to provide the needed services. Assigning CTBT verification services to the Agency would significantly reinforce its role of monitoring the international nuclear non-proliferation regime.

As to the safety of nuclear weapons, the existing United States legislation, as mentioned above, requires only a strictly limited number of nuclear tests for safety, after which they will be ended, and even this limited testing is contested by many experts. Reports that President Clinton was considering ordering a resumption of testing after 1 July led to strong opposition on the grounds that new tests were not needed and would be counter-productive and damaging to the nuclear nonproliferation regime. If the United States resumed testing, the United Kingdom would automatically do the same, and Russia and France would, in all probability, follow. The resumption of nuclear tests after many months of the moratoria on testing by the United States, Russia and France and at a time when NPT parties are engaged in a process of preparation for the 1995 NPT Conference would indeed be a disservice to all efforts to improve conditions for a long-term extension of the Treaty. This would also greatly reduce the leverage on near-nuclear nations not to pursue their nuclear ambitions.

Not an insignificant question is whether some kind of experiments should be permitted for the purposes of assuring weapons safety. Scientists responsible for the safety of weapons will undoubtedly contend that some method of testing would be necessary. In addition, industrialized nations working to produce fusion energy for civilian needs may want to continue experiments that could be described as a controlled series of tiny fusion explosions.

Should a CTBT include a definition of "nuclear explosion" that would allow for some kind of experiments for the above-mentioned or similar purposes? The NPT experience, fortunately, offers useful guidance for avoiding a "definition" pitfall that has haunted CTBT negotiations since they began in 1958. Experience has convincingly demonstrated that a precise definition of what constitutes a nuclear explosion can be avoided without compromising the integrity of the regime. Using similar guidelines as in the NPT, a CTBT should simply prohibit the testing of "nuclear explosive devices", without trying to define them in the treaty, relying instead on the negotiating history of the NPT and of the new CTBT to define the coverage of the treaty.

During the negotiation of the NPT, a broad definition of nuclear weapons was used uncontestedly, under which "all nuclear weapons have one characteristic in common... that upon activation of a prearranged trigger mechanism they can release large quantities of energy in a very short period of time from sources of relatively small volume and light weight".

The NPT bans nuclear explosive testing by non-nuclear weapon States by prohibiting them from manufacturing or otherwise acquiring nuclear weapons or other nuclear explosive devices. If such a State set off a nuclear explosion, that would be evidence that it had acquired or manufactured such a device. The NPT thus prohibits non-nuclear weapon States parties from conducting such tests, even though the text of the Treaty does not contain a definition of "nuclear explosive devices".

On the other hand, experiments such as those conducted in Los Alamos during the 1958-1961 moratorium, though useful for testing

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the safety of nuclear weapons, are "zero yield" or equivalent to less than a pound of high explosive and thus do not fall under the broad definition of a nuclear explosive device accepted by NPT parties. Omission of a definition in a CTBT would not, in practice, weaken the treaty. Its text, objectives and negotiating history would provide adequate guidance for its parties to identify a nuclear explosion if one ever occurred.

To be meaningful, a CTBT should have to have universal membership and include among its parties all nuclear weapon States and States like India, Israel and Pakistan. Thus, to be widely accepted, it should be negotiated by a multilateral forum—the Geneva Conference on Disarmament. The United States and Russia, announcing during the Vancouver Summit their agreement to negotiate a multilateral nuclear test ban, also expressed their intention to "consult with each other". It would be important for the success of the CTBT effort to broaden these consultations later on so as to include other nuclear weapon States as well as countries with advanced nuclear capabilities.

A Cut-off in Production

A worldwide cut-off in the production of fissionable material for weapons purposes is also an extremely important nuclear arms control measure capable of strengthening the non-proliferation regime. Its achievement would signal the determination on the part of the nuclear weapon States and other nations with advanced nuclear capabilities to exclude any resumption of a nuclear arms race and to start, once and for all, at the global level, to de-emphasise nuclear weapons.

The Bush Administration announced in its July 1992 initiative that the United States would not produce plutonium and highly enriched uranium, two key ingredients of nuclear weapons, for nuclear explosive purposes. This announcement is largely symbolic, since the United States has not produced uranium for weapons since 1964, and it ceased plutonium production in 1988. The United States cut-off was a unilateral step, rather than an element in a binding treaty, and, in principle, can be reversed, though this is highly unlikely.

In January 1992, President Yeltsin declared:

"Russia intends to continue implementing the programme for halting the production of weapons-grade plutonium. Industrial reactors for the production of weapons-grade plutonium will be shut down by the year 2000, and some of them, under an accelerated timetable, as early as 1993. We confirm our proposal to the United States of America to reach agreement on a monitored cessation of the production of fissile materials for weapons."

Three production reactors are still operational (two in Tomsk-7 and one in Krasnoyarsk-26), and in addition to producing plutonium, they supply electricity and heat for the local population.

Russian production of highly enriched uranium for weapons purposes had been halted earlier. A United States-Russian agreement of February 1993 calls for the United States to buy at least 500 metric tons of highly enriched uranium from the Russian Government over 20 years. The uranium is to be blended down into commercial reactor fuel for civilian power plants.

Thus, there seems to exist a favourable opportunity for a joint United States-Russian initiative leading to a worldwide verifiable cutoff agreement. The United States-Russian agreement, which is to be the corner-stone of a global effort, should not of course be deferred until the year 2000. Ways must be found to reach such an agreement without too much delay, with some accommodation for the Russians with regard to the operation of the three remaining reactors. Without awaiting the results of their discussions, both powers should approach London, Paris and Beijing, as well as New Dehli, Islamabad and Tel Aviv. The Bush proposal of May 1991 for Middle East arms control has already placed this topic on the agenda for that region.

The urgency of dealing with the problem of plutonium and highly enriched uranium is highlighted by the projected release of approximately 200 tons of plutonium from dismantled United States and Russian warheads. To this figure one must add 80 tons of separated civilian plutonium. If present plans are implemented, the civilian reprocessing plants of France, the United Kingdom and Japan will more than double the stocks of separated plutonium by the end of the decade. This would yield enough fissionable material for several thousand nuclear weapons.

As was suggested by a study of the Stockholm International Peace Research Institute, the first step in the direction of a cut-off would be an international register of plutonium and HEU stocks, with an international body collecting and publishing annual data on plutonium and HEU. Governments would be asked to submit information on their inventories, both military and civilian, at the end of each year. This would go for nuclear—as well as non-nuclear weapon States.

The next step would be verification of all existing stocks by international machinery. The verification regime for a cut-off should be based on full-scope IAEA safeguards and include the right to conduct "special" or challenge inspections (perhaps of the type provided for in the new Convention on chemical weapons).

A cut-off agreement should provide for safeguarded disposal of all plutonium and HEU through an international storage regime, permitting the release of fissionable material for eventual civilian use under appropriate international procedures that would provide additional assurances concerning non-diversion and exclusively peaceful use. The use of plutonium is plagued by security, safety and environmental problems. An international plutonium storage regime (IPS) appears today to be the only viable option. The original concept of IPS, unsuccessfully addressed by an IAEA group of experts some ten years ago, was intended for plutonium retrieved from civilian reactors of non-nuclear weapon States. Naturally enough, it should apply now in the first instance to plutonium to be discharged from nuclear weapons of nuclear weapon States, as well as to plutonium accumulated by nations with advanced nuclear technology.

IAEA is uniquely qualified to be the monitoring agency for a cutoff agreement. The safeguarding of enrichment and reprocessing plants is a task which is already one of the Agency's duties. As for an international plutonium storage regime, it is authorized by IAEA's Statute.

Both, a CTBT and a cut-off of production of fissionable material for weapons purposes should be given top priority on the international agenda. Agreements on these two burning issues would greatly contribute to the universality of the nuclear non-proliferation regime and might lay the groundwork for a more ambitious scheme of international control of atomic energy in the future.

106 TOWARDS A GENUINE NUCLEAR NON-PROLIFERATION REGIME

Until 1945, the world was a nuclear weapon free zone. Since then, it has been flooded with tens of thousands of nuclear weapons—on land, on sea and in the air. For almost fifty years the international community has been grappling with the problem of the existence of nuclear weapons, their possible use by some and acquisition by others. However, it has yet to agree on a clearly defined path with regard to these weapons of mass destruction.

To some, the Cold War provided the needed rationale, if one dare speak of "rationale" in this context, for a nuclear-arms build-up. Bigger and better weapons were developed and more accurate missiles were deployed. Then smaller and better warheads were built. During the late 1940s and 1950s, diverse theories were advanced regarding the nature of these weapons and their possible use in war. As the socalled "nuclear club" grew, so did the fears of a further and further proliferation of such weapons. Individuals were accused of passing the secret of the bomb to others and nations were classified as to their real or perceived intentions "to go nuclear". By the late 1950s, many countries were searching for a way to stop the spread of nuclear weapons. But, if one could perhaps prevent the physical acquisition of weapons, it was to prove impossible to halt the acquisition of the knowledge and know-how necessary to build them.

To others, the mere existence of nuclear weapons posed an unparalleled threat to the survival of mankind. Nuclear weapons were intrinsically evil and should therefore be banned. The enormous mushroom clouds of the atmospheric tests came to symbolise that evil. Doomsday scenarios were described in print, on film and in music, and the so-called "atomic alert" mentality invaded the classrooms of the principal nuclear weapon states. Over the time, the advocates of nuclear weapons—the defenders of the legitimacy of their role in international relations—began to lose ground. During the 1980s, at the height of Cold War rhetoric, doubts were expressed with regard, not to the legitimacy, but to the *utility*, of nuclear weapons. As early as 1976, presidential candidate Jimmy Carter had referred to the "elimination" of nuclear weapons as a tangible goal. But, that position was couched in rather moralistic terms, not unlike those used in United Nations General Assembly resolutions sponsored by those seeking to ban nuclear weapons altogether.

The Debate Regarding Weapons of Mass Destruction

The approach that began to emerge in the early 1980s was different in that it was based on a utilitarian premise: did one really need nuclear weapons? That approach has evolved even further in the late 1980s and early 1990s and some milestones are obvious: the discussions between Presidents Reagan and Gorbachev at the 1986 Reykjavik Summit; the collapse of the USSR and the end of the Cold War; and the experience of the war in the Persian Gulf.

It was, in fact, in the sands of the Middle East that United States military leaders learned something which only some theoreticians had proposed earlier: a military force equipped with high-technology conventional weapons could defeat a large army that might even have chemical and other weapons of mass destruction. The lesson was clear and its effects were immediate: the United States decided to intensify the negotiations on a convention for the elimination of chemical weapons (CW). The idea here, as it had been in 1971 with regard to bacteriological (biological) weapons (BW), was rather simple: the United States was ready to give up unilaterally its CW stocks because it did not have any use for them; and the corollary was obvious—no one else should have them. The advantages of a BW-free and later a CW-free world outweighed the advantage of any possible military use of those weapons. Today we seem to be approaching a similar but perhaps not yet identical situation with regard to nuclear weapons. Does it make sense to maintain the enormous nuclear stockpiles of the 1980s? The answer is no, according to the 1991 and 1993 Strategic Arms Reduction Treaties (START I and START II).

The Cold War logic, if indeed there was a logic to the Cold War, has lost its underpinnings. Now, in Europe and elsewhere, there is a struggle between those leaders who continue to seek some sort of justification for maintaining nuclear weapons and those who feel that the usefulness of nuclear weapons has disappeared and that, therefore, they should be banned through a multilateral agreement that will ensure an end to their production. The lines are beginning to be drawn and the debate will undoubtedly intensify as we draw closer to the 1995 review and extension Conference of the Treaty on the Non-Proliferation of Nuclear Weapons. What we are witnessing now is a rebirth of the international debate of the 1960s, a debate that was truncated with the signing of the NPT in 1968.

The idea of creating nuclear weapon free areas was seen as the first step towards achieving a nuclear free world. Like individual families that declared their homes or neighbourhoods nuclear weapon free zones, individual States first addressed this question in the 1950s when the geographic spread of nuclear weapons began. Some countries accepted the physical presence of nuclear weapons on their territory; others did not and declared themselves nuclear free. The Antarctic Treaty of 1959 was aimed at ensuring that region's *demilitarisation*, including its nuclear free status. The 1967 Treaty of Tlatelolco sought the military denuclearisation of Latin America and the Caribbean. In it the States of the area proclaimed their region a nuclear weapon free zone and then negotiated the terms of cooperation that they required from the nuclear weapon States, including negative security assurances. The underlying philosophy of the Treaty of Tlatelolco and other, subsequent, regional treaties was one of avoiding a nuclear competition in the area while seeking protection from possible attacks from beyond. It thus recognised that the nuclear arms build-up elsewhere in the world would probably continue.

Whereas the Treaty of Tlatelolco is a step towards a nuclear free world, the aim of the NPT was defined in different terms. It stressed the urgency of freezing at five the number of nuclear weapon States by securing a commitment from other States that they would not "go nuclear". In return, non-nuclear weapon States obtained a promise from the nuclear weapon States that they would begin to reduce their nuclear stockpiles and stop nuclear testing. Almost a quarter of a century later and despite the levels set by START I and START II, those nuclear stockpiles are still larger than they were in 1970 and testing has continued, although here, too, there are now encouraging signs.

Its critics notwithstanding, the NPT has achieved, by and large, its main goal. By adhering to a multilateral legal instrument such as the NPT, a number of countries put an end to internal debates on whether to go nuclear or not. Some countries, such as Canada, renounced nuclear weapons in the late 1940s, long before the NPT. For others, however, the negotiations that led to the NPT in 1968 were the catalyst that finally resolved their domestic debates. This was the case in Sweden, for example. These and other nations were torn between two sets of conflicting considerations. On the one hand, if nuclear weapons were instrumental in keeping the peace between East and West, why would they not have similar effects in other regions? On the other hand, the more countries with nuclear weapons, the greater the danger. Or, to put it in shorthand, the argument was between "what is good for the goose is good for the gander" and "the fewer the better". And the NPT embodied the triumph of the latter position.

The NPT Nuclear Caste System

The NPT codified the division of the world's nations into two groups: the five nuclear weapon States (China, France, USSR, United Kingdom and United States) and the rest. In article IX, paragraph 3, the NPT identified those five States as follows: "For the purposes of this Treaty, a nuclear weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967". The NPT is the only international instrument that defines the membership of the so-called "nuclear club". It is therefore the legal foundation of the present asymmetrical nuclear regime. That asymmetry has been recognised and accepted by the more than 150 non-nuclear weapon States parties. In other words, the world's nuclear caste society has been sanctioned by practically all countries. And yet the tension continues between the nuclear haves and have-nots.

The NPT is considered to be the corner-stone of the present nonproliferation regime. In recent years it has been joined by China and France, as well as dozens of other countries, including South Africa. In 1995, twenty-five years after its entry into force, the parties will decide, by a simple majority, whether "the Treaty shall continue in force indefinitely, or shall be extended for an additional fixed period or periods" (article X, paragraph 2). This provision—unique in multilateral arms regulation treaties—was included for a very simple and healthy reason: the non-nuclear weapon States, led by the Federal Republic of Germany, Italy, Japan and Switzerland, wanted a safety valve in order to review the implementation of the Treaty's provisions before undertaking a permanent commitment not to exercise their own nuclear option. They wanted to review in particular the provisions regarding nuclear disarmament and especially a comprehensive nuclear test ban. These are the provisions that have been at the centre of the five-year reviews held in 1975,1980,1985 and 1990. In 1995 the parties will combine the fifth quinquennial review with the extension Conference.

Quite obviously, the reasons that led to the inclusion of the Treaty's review and limited duration are still valid. Unfortunately, considerations of a different nature have led a group of Western countries to attempt to shift the focus of the debate to other, secondary questions. These include the tightening of safeguards and the strengthening of unilaterally proclaimed guidelines for the export of sensitive technologies. Interestingly enough, the proponents of this shift are the very same countries that oppose the participation of non-governmental organisations in the preparatory process of the 1995 NPT Conference and yet insisted on broad NGO participation in the Vienna World Human Rights Conference in 1993 and the United Nations Conference on Environment and Development in 1992. Why so much transparency in those areas and so little in nuclear disarmament?

"Weapons Control"

With the end of the Cold War, covert activities and secrecy have given way to increasing openness. One result of this trend has been the publication of a string of horror stories of nuclear mismanagement in the former Soviet Union. Another is the call, made initially by Japan and the European Community, for greater transparency in conventional arms transfers which resulted in the establishment in 1992 of the United Nations Register of Conventional Arms. All of this is encouraging to those who believe that the road towards a less armed world begins with an inventory of existing stockpiles and information on arms transfers. But, for now, the emphasis has been on *conventional* weapons, especially in situations where, according to General Assembly resolution 46/36L, "excessive and destabilising arms build-ups pose a threat to national, regional and international peace and security".

In order to gain widespread acceptance of the United Nations Register of Conventional Arms, the developed countries agreed to its eventual expansion, and the Conference on Disarmament was requested "to address the problems of, and the elaboration of practical means to increase, openness and transparency related to the transfer of high technology with military applications and to weapons of mass destruction, in accordance with existing legal instruments". For the time being, therefore, the Register is limited to conventional weapons while weapons of mass destruction should be dealt with within the existing legal instruments. But, these matters must certainly be addressed as well by the entire international community. Nuclear and chemical disarmament will neither be easy nor cheap. What is one going to do with the tens of thousands of tons of chemical warfare agents when we do not yet know what to do with our civilian toxic waste? What will be done with the 200 tons of plutonium and the 1,000 tons of highly enriched uranium? And what will the thousands of unemployed scientists do?

The transition from a militarily bipolar and confrontational world to one of greater cooperation and understanding will not be very smooth. This is borne out by the war in the Persian Gulf, the rise of nationalism and ethnic conflicts in Europe and the persistent penury, famine, and political instability in some developing countries. And some of the current trends in disarmament will certainly not make that transition any easier. A handful of countries cannot proclaim themselves the custodians of an "international security" that they themselves have defined according to their own particular interests.

The non-proliferation of weapons of mass destruction and of their ballistic missiles is a subject that has acquired increasing importance in the light of the war in the Persian Gulf. At the same time, the indiscriminate trade in conventional arms—intensified by the voracity of the sellers and/or the mindlessness of the buyers—has become a general concern; hence the 1991 London proposals of the G-7 countries and those of France, a series of meetings of the five permanent members of the Security Council and the 1991 European-Japanese initiative at the United Nations for greater transparency in conventional arms transfers.

The foregoing is part of a trend—all too evident—to multiply the so-called "suppliers cartels", such as the Nuclear Suppliers' Club, the Missile Technology Control Regime and the Australia Group (chemical and biological materials), all aimed at imposing export restrictions on equipment and technology. This trend was also apparent in the negotiations for a chemical weapons Convention, as it was in 1991 at the Third Review Conference of the BW Convention. In sum, the thrust of the initiatives taken thus far with regard to non-proliferation has been to preserve a monopoly over such weapons and ballistic technology and "to manage better" the conventional arms trade. Another way should be sought, one in which all States participate in the quest for a lasting and equitable solution to this problem.

Non-Proliferation in All its Aspects

The proliferation of weapons and military technologies has been a constant in history. From the dawn of the atomic age, scientists and political leaders have been concerned with the danger of their further spread. Only a few nations have had the material resources and the scientific knowledge necessary for the production of atomic bombs. Canada's unilateral decision (and that of a number of European countries), together with the constitutional bans imposed by the allies on Germany and Japan, reduced even further the potential nuclear powers.

With the 1963 Moscow Treaty, the door to the horizontal proliferation of nuclear weapons was partially closed when testing was banned in the atmosphere, in outer space and under water. But, underground nuclear testing has continued for three decades. Therein lies the importance that a vast majority of States parties to the 1963 Treaty attach to that Treaty's ongoing Amendment Conference, aimed at converting it into a comprehensive nuclear test ban.

The 1968 NPT was the first international instrument aimed at preventing the horizontal proliferation of a specific type of weapon. To achieve this, the USSR, the United Kingdom, and the United States had to make certain concessions and commit themselves to negotiate agreements on the vertical non-proliferation of those weapons. The key to halt both vertical and horizontal proliferation is a comprehensive nuclear test-ban treaty. As the former Director of the United States Arms Control and Disarmament Agency, Gerard C. Smith, wrote in 1990: "It is difficult to conceive of any single measure that would do more to stem the spread of the nuclear scourge than a comprehensive ban on nuclear testing". Ambassador Smith is not the first high official of a nuclear weapon State whose opinion on nuclear testing changed after leaving Government service. Something similar has occurred in the scientific community, especially among those directly involved in testing programmes. Once retired, some of these scientists have ceased to attempt to justify testing and, with a change of heart, have joined the ranks of those seeking a test ban.

During the NPT negotiations in 1967 and 1968, a link was established between the NPT's limited duration and the fulfilment of its provisions regarding nuclear disarmament, that is, a comprehensive test ban and the reduction of the *then* existing nuclear arsenals. The NPT will not run out in 1995; rather, a majority of the parties will have to decide how long it will be extended. The adequate preparation of that extension Conference is crucial to the future of nuclear disarmament efforts.

Whereas in the conventional arms field States are being required to be more transparent, at least in their transfers of such weapons, in the nuclear sphere there continues to be supplier secrecy and silence. Transparency has yet to pervade nuclear matters, as it will pervade chemical disarmament with the entry into force of the 1993 chemical weapons Convention.

In recent years, almost all nuclear weapon States have begun to move towards nuclear disarmament. Nuclear-testing moratoria are in place in three of the five nuclear weapon States and a fourth is observing a de facto moratorium. START I and START II are, as already noted, significant steps towards reversing four decades of nuclear competition unbridled at first and later, with the 1972 and 1979 Strategic Arms Limitation Treaties (SALT I and II), better managed and controlled. China and France have finally joined the NPT and this will allow for a fuller examination of the kind of nuclear non-proliferation regime that will be required for the next century.

The NPT: Signs of Aging

Over the past few years, however, the current nuclear nonproliferation regime—based largely on the NPT but which, according to most Western countries, also covers the suppliers clubs—has begun to reveal certain cracks. To be sure, no one ever professed the regime to be watertight. But, progress in nuclear science and technology, together with some unforeseen developments, have underlined the need for a general review of today's regime. By way of example, here are some elements that might be covered in such a review.

In contrast to the 1960s, the 1990s are witnessing a blurring of the lines between nuclear weapon States and some non-nuclear weapon States. Some States that are not declared nuclear weapon States are importing large quantities of plutonium for their advanced civilian nuclear industry. These and other highly industrialized countries are "potential nuclear weapon States", since they could produce a nuclear device in a matter of months or weeks. Then there are the so-called "nuclear threshold States", countries that have significant nuclear programmes but are not parties to the NPT (India, Israel and Pakistan). Argentina and Brazil were once on that list, but they have recently taken a number of steps to join the Tlatelolco Treaty. There is now a third category of non-NPT country, the "temporary nuclear weapon State", a category which has included Belarus and South Africa.

In the USSR, nuclear weapons were stationed in Belarus, Kazakhstan and the Ukraine, as well as Russia. The collapse of the Soviet Union was so sudden that Russia, as its successor State, had no time to remove nuclear weapons from Belarus, Kazakhstan and Ukraine. After a rather confused process, all three new States committed themselves to implement the START agreements, declared themselves non-nuclear weapon States and reiterated their intention to join the NPT as such. In Ukraine, however, the situation remains unclear. So far this year there has been a lively domestic debate regarding whether or not to "return" the nuclear weapons to Russia. Some leaders seek economic aid in exchange for doing so quickly. Others believe that Russia poses a nuclear threat and, therefore, wish to keep the weapons as a deterrent. And there are many that enjoy the international "status" that comes with possessing nuclear weapons.

Ukraine has 176 intercontinental missiles charged with 1,240 warheads, as well as some 600 nuclear warheads on about 40 bombers. According to the Russians, those missiles cannot be launched without access to the secret code in Moscow. But, the Kiev scientists are close to decoding it. According to the Ukrainians, they have no intention of launching those missiles, they simply want to preserve temporarily their "nuclear status".

Russia, as the successor State to the USSR, is committed by the NPT "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" (article I). What will the international community do if Ukraine manages to keep its nuclear arsenal? Could it be said that Russia, as the successor State of the USSR, has violated the NPT by transferring, albeit unwittingly, nuclear weapons to another State? What is the responsibility of a State that involuntarily violates a treaty?

South Africa is a most unusual case. Its adherence to the NPT in July 1991 was acclaimed by the international community. On 24 March 1993, however, President de Klerk announced that, between 1979 and 1989, South Africa had produced six nuclear weapons and had some of the compo-components and the highly enriched uranium for a seventh device. He stated that these devices had been intended as deterrents, that no nuclear test was ever conducted and that the dismantling of the programme began in November 1989. The dismantling operation of the devices and the transfer of the nuclear material involved to the State's Atomic Energy Corporation for storage were completed in September 1991. In other words, it is possible that, upon acceding to the NPT in July of that year, South Africa was still a nuclear weapon State. The foregoing are some of the questions which the NPT parties should examine during the preparatory process, begun in May 1993, of the 1995 review and extension Conference. Another question concerns what occurred in Iraq, a party to the NPT, and why it happened. United Nations and IAEA inspectors have found an impressive amount of material in Iraq—enriched uranium, tools, machines, electronic equipment, computers, precision instruments, etc.—that point to an ambitious nuclear programme. And the list of suppliers reads like a "Who's Who" of the nuclear industry: the companies are from France, Germany, Italy, Japan, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States.

How is it possible that for years, especially in the 1980s, this socalled "sensitive" material was exported and in such quantities (for example, 1.7 tons of enriched uranium and 580 tons of natural uranium) without any Government of the exporting States (all of them NPT parties) suspecting that the Iraqis were building something?

What will be the impact of the recent case of the Democratic People's Republic of Korea on the future of the non-proliferation regime established by the NPT? The DPRK has also tested successfully an intermediate-range ballistic missile (about 1,000 km).

In Japan, the developments in the DPRK have given rise to a debate regarding its own future in the nuclear field. Some have begun to utter the unthinkable: the possibility that Japan, in turn, might decide to produce ballistic missiles and nuclear weapons.

The continued presence of nuclear weapons in Ukraine could have a similar impact on some European countries. A nuclear Ukraine could reverse the present trend of "diminished nuclear threat". It could have an impact on France's policy of "minimum deterrence", and public opinion in countries such as Germany and perhaps Poland would ask how long they could continue to live between two nuclear weapon States. The response might surprise us.

The chemical weapons Convention, opened for signature in January 1993, attempts to remedy these rather confusing situations regarding the non-proliferation of weapons of mass destruction. The Convention requires each party to declare, once the Convention enters into force, whether it possesses chemical weapons, whether there are such weapons on its territory, whether it has transferred or received them since 1 January 1946 and whether there are (or were) CW facilities on its territory. Therein lies the key to the Convention's uniform regime for all parties. The chemical weapons Convention has yet to enter into force and its implementation is still in the realm of the theoretical. But, it will establish a more equitable non-proliferation regime: those parties which have chemical weapons must destroy their stockpiles and all parties are subjected to a single verification system. There is nothing resembling a *chemical* caste society. Nor is there one for biological weapons. This exists only in the nuclear field, and it will have to disappear soon if we are to build a nuclear non-proliferation regime that is genuine, universal and equitable. Nuclear weapon States (and some others) cannot continue to demand a right to observe others' nuclear installations, either unilaterally or through IAEA, or both. This is certainly not conducive to the climate of confidence or openness so often required of other countries with regard to other weapons and weapons systems.

Conclusion

The international community in general and the five nuclear weapon States in particular now have an opportunity to move forward decisively in the field of nuclear disarmament. The preparatory process of the 1995 NPT review and extension Conference offers the best vehicle for undertaking a frank dialogue on the future nuclear non-proliferation regime. Some countries are still hesitant to embark on such an exercise. They fear that it might "unravel the NPT"; they argue that the NPT "should not be held hostage to a CTBT"; they act, not unlike ostriches, as if everything is just fine and all that is needed is to extend the NPT indefinitely and unconditionally after 1995, tighten unilaterally imposed export restrictions of sensitive or dual-purpose technology and, if necessary, organise unilateral action against any would-be proliferator.

The fact is that the NPT is already unravelling and that it has indeed been held hostage for years to the nuclear weapon States' determination to continue to build and improve their nuclear arsenals and thus try to maintain their nuclear monopoly. Supplier cartels have simply not worked and unilateral coercive action is simply out of place. Moreover, the calls for an indefinite and unconditional extension of the NPT, which are being made well in advance of the 1995 review, are in themselves preconditioning and prejudging the results of that Conference.

The NPT parties would be well advised to follow a different course of action. Previous NPT Review Conferences have left the discussion and resolution of substantive issues to the very last moment. The preparatory process for those Conferences has been perfunctory, dealing mostly with organisational questions. The 1995 Conference is different from all past NPT Conferences in that it will have to decide on the Treaty's future duration. Moreover, as already noted, the 1990s are different from the 1970s and 1980s. The NPT parties must therefore initiate at once a substantive discussion of the Treaty's provisions with a view to identifying possible shortcomings and reaching agreed solutions to them. This cannot be left to the 1995 Conference itself.

The NPT parties might begin by asking themselves a number of questions: Have the non-nuclear weapon States abided by the Treaty's provisions? Have the nuclear weapon States lived up to their side of the bargain struck in 1968 regarding mutual and balanced obligations? Have some of the NPT's provisions ceased to make sense? What is the relationship between the NPT and treaties establishing nuclear weapon free zones? Is there a need to strengthen the NPT's verification system and, if so, how should it be improved? What are the implications of an indefinite extension of the Treaty? What would be the purpose of extending it for an additional fixed period or periods? What nuclear disarmament measures could the non-nuclear weapon States reasonably expect the nuclear weapon States to achieve in the near future? In short, what kind of a nuclear non-proliferation regime do the NPT parties want for the next century and how can the NPT help to ensure it?

107 NUCLEAR NON-PROLIFERATION: THE CURRENT CONTEXT

Nuclear non-proliferation encompasses a vast and daunting field. In reality it requires a survey of the entire gamut of contemporary international security and disarmament issues because all of them impinge on the possession or self-denial of what is still the most awesomely destructive weapon—the nuclear explosive device.

In a philosophical sense we have to look at the human condition to see what links the current context with the past. We have still not arrived at a global consensus on the pacific settlement of disputes and the universal applicability of the renunciation of resort to weapons. Perhaps we never will. National security and its defence have a mystical aura and are frequently invoked to justify the possession and use of arms notwithstanding the noble principles of the Charter and in particular Article 2, paragraph 4, on abjuring the threat or use of force. Article 51 recognises the "inherent right of individual or collective self-defence if an armed attack occurs", implying the right to possess and use arms for defence. No norms govern or limit this right until the Security Council acts, except through peace, non-aggression, disarmament and arms limitation treaties of a multilateral and a bilateral nature. Hence the international legal loopholes through which the armoured tanks of *realpolitik* roll. Blurred distinctions between offensive and defensive arms capabilities and between the wait for an actual occurrence of an armed attack or the pre-emption of a putative plan for attack help this assertion of the obsolete Clausewitzean concept that war is an extension of politics by other means.

Given this reality, those of us who work conscientidusly towards the achievement of that universally agreed objective of "general and complete disarmament under effective international control", as stated in the Final Document of the Tenth Special Session of the General Assembly (SSOD I) must focus on the need to circumscribe, in an equitable manner, the use of force in international affairs through the extension of the rule of international law. The conclusion of verifiable treaties to eliminate or limit various categories of weapons is clearly a viable route to pursue. The success of this course of action has been proved, although recent revelations of treaty violations and clandestine development of nuclear weapons have shaken our complacency and forced us all into tougher verification measures and sanctions.

It is in this context that we have to look at nuclear non-proliferation for our time and for the twenty-first century. The importance we must ascribe to nuclear weapon non-proliferation as against other forms of weapon proliferation—on which work must surely go on—is self-evident. The Final Document—which has not been superseded and which remains, at the conceptual level, a valid and relevant consensus document 15 years after its adoption—was unequivocal in its identification of the priority task of undertaking nuclear disarmament.

"47. Nuclear weapons pose the greatest danger to mankind and to the survival of civilisation. It is essential to halt and reverse the nuclear arms race in all its aspects in order to avert the danger of war involving nuclear weapons. The ultimate goal in this context is the complete elimination of nuclear weapons"

The need to maintain this priority task remains simply because no other weapon has the destructive power to raze mankind and its achievements forever. Another important principle in the Final Document is that "an acceptable balance of mutual responsibilities and obligations for nuclear and non-nuclear weapon States should be strictly observed" (paragraph 30).

Our task then is to assess what elements in the present international context influence the commonly desired objective of achieving the non-proliferation of nuclear weapons. The nuclear non-proliferation regime that exists today has as its centre-piece the nuclear non-proliferation Treaty, which came into force in 1970. With the Fifth Review Conference and the extension of the NPT due in 1995, it is timely to evaluate its possible role in the changed international context of today if we wish to carry the NPT into the twenty-first century.

In comparing and contrasting the world scene at the time of the conclusion of the NPT and today, the obvious difference is that we have moved from the Cold War of a bipolar world situation into a more pluralistic world society uni-polar in politico-military terms but multi-polar in the increasingly crucial politico-economic area. That has immediately distanced the prospect of global war, especially nuclear war. It has also seen the dismantling of nuclear arsenals. The cumulative effect of the 1987 INF Treaty, the 1991 START Treaty and the bilateral United States-Russian agreement of 1992 is that we will have a 70 per cent reduction of nuclear warheads by the turn of the century. A de facto moratorium on nuclear testing and good prospects for a very low threshold testing arrangement, if not a CTBT, are also gratifying. Thus, major advances have been made in arresting and reversing the vertical proliferation of nuclear weapons.

Certainly there is more that can be done. With the advantage of having all five declared nuclear weapon States within the fold of the NPT, the obligations of article VI of the Treaty and security assurances to non-nuclear weapon States could be made applicable to all of them so that more progress is achieved. The actual conclusion of a CTBT is another major achievement that can realistically be expected now. What remains disturbing is that the plutonium and highly enriched uranium released through implementing the bilateral nuclear disarmament treaties that have been concluded is being stored under national control. There is no guarantee that this material will not be recycled into missiles in the future. The time is opportune therefore for a revival of the Baruch Plan and for IAEA to take charge of this fissile material.

The end of the Cold War resulted in the sketching out of many possible global scenarios. We have seen the Fukuyama "End of History" thesis justify a Western triumphalist approach. "Imperial overstretch" has been another explicative approach. Barry Buzan has outlined the possibility of a "civilisational Cold War" between the now dominant North (the centre) and a subordinate South (the periphery), as if the end of East-West confrontation must inevitably be followed by a North-South stand-off. Unfortunately these views do not see the world as the totality that it is—nor do they all look at peace and security in their complex multi-dimensional character. This is the first prerequisite in the global security agenda. What we may be actually witnessing is a transition towards non-ideological nineteenth century balance-of-power politics, which makes our task of nuclear non-proliferation perhaps as onerous as in the Cold War era.

Another significant change over the period since the NPT has been in existence is the resurgence of nationalism that is manifesting itself around the world, often in militant forms. While this is clearly an inevitable trend after the containment of nationalist sentiments through the Cold War structures of Europe—NATO and the Warsaw Pact what is dangerous is the escalation of crisis situations and the eruption of dormant disputes, mainly over territory. In the absence of durable political solutions, these could lead extremists to arm themselves with nuclear weapons as the ultimate security solution. We need therefore to have all the new States formed after the fragmentation of the former Soviet Union and the former Yugoslavia enter the NPT regime. The majority of them have already done so, but in the case of those which have not done so, disquieting statements have been made that do not augur well.

Linked to this trend is the sudden unloading of nuclear weapon expertise with the dismantling of nuclear arsenals, especially in the former USSR. This and the deteriorating economic conditions there could tempt many scientists to be lured by bidders for their services. Some band-aid solutions have been attempted with funds being established to pay these experts. Mercenaries are created by the demand that exists for their services. This demand has to be monitored more closely and reported to the Security Council for action to be taken.

I have already referred to the weakening of the NPT by violations. A further weakening took place recently by the withdrawal (now suspended) of the DPRK from the NPT in the exercise of its rights under article X, paragraph 1. While one hopes that diplomatic efforts, especially by countries in the region, will continue in order to persuade the DPRK to return to the NPT fold and its treaty disciplines, we may need to prolong the stipulated three-month period of notice through informal arrangements. Equally worrisome is the laying of preconditions by some of the new States for entering the NPT.

The current international context has seen the continued attraction of nuclear weapon status for many States, although the reluctance of the threshold States to cross the threshold and declare themselves overtly nuclear weapon States does say something for the normative strength of the NPT. Significantly, the examples of the reunified Germany and of Japan have done more for the cause of nuclear non-proliferation than the nuclear weapon States. Admittedly, they enjoyed the shelter of the United States nuclear umbrella through security arrangements with that super-power during the Cold War. However, the pursuit of economic strength and the conscious rejection of nuclear weapon status is admirable. The economic success of these two countries, temporarily slowed by recession, should be a beacon to all non-nuclear countries within and outside the NPT. Japan has significant territorial disputes with Russia and other problems with China and the United States for which nuclear power parity may have been a tempting strategy. That this has been firmly rejected is a healthy example.

The emergence of democratic regimes in Eastern Europe and the former USSR has illustrated the reassertion of popular participation and civil societies throughout the world. The conclusion of international treaties is a State function for which democratic societies obtain popular mandates through various means. Consequently the process of extending a treaty should be a transparent exercise, and the debate for a meaningful extension of the NPT in 1995 should therefore be a public one, involving non-parties to the Treaty, inter-governmental organisations, nongovernmental organisations, the media and others. It is also necessary, as in the case of global issues like human rights, environment and development, that people's groups like NGOs should be permitted to observe the preparatory process of global conferences. No one is trying to extend the NPT by stealth. There are cogent reasons for an extension, and they can and should withstand public scrutiny and debate. Any attempt to conduct the preparatory process in an exclusive manner will unfortunately convey a hint of a clandestine exercise by a few powerful States—a situation repugnant to the contemporary mores of openness and free discussion.

There is also a danger of approaching the 1995 Conference as though it were Armageddon. I am confident that the consensus that will emerge will be the right one for our time. I cannot see any State party to the NPT not wanting the extension of the Treaty. Whether all would agree to "an unconditional and indefinite" extension is not certain. There are fundamental issues involved which will need careful consideration as we approach 1995. Do nations wish to freeze for all time the present monopoly of five powers on nuclear weapons? On the other hand, will the inherent tensions in the NPT arising from the original political compromise endanger the longevity of this international legal barrier to nuclear weapon proliferation? Nations are entitled to ponder over these issues and make their own decisions. Whatever those decisions may be, the NPT must be strengthened because the world is indisputably safer with fewer nuclear weapon States and nuclear weapons than with more of the same.

There are many ways to strengthen the Treaty, responding to the lessons we have learnt from the recent past. The need to tighten supervision of compliance is one area. IAEA has already acted to fulfil its responsibilities under INFCIRC/153 agreements on safeguards, particularly through special inspections. Adequate provisions exist for IAEA, with the objective and non-partisan cooperation of States which have their own national technical means, to discover clandestine violations of the Treaty which could be reported to the NPT parties and to the Security Council.

Controls on the export of nuclear material which were agreed at the 1990 Review Conference need to be endorsed and, if possible, added to. This must have the sanction of the entire Conference of NPT parties and not remain a decision of only the exclusive Nuclear Suppliers' Group. Other areas include security assurances to non-nuclear weapon States, assistance to developing countries in the peaceful uses of nuclear energy, agreed universal guidelines on transfer of technology and support for IAEA.

We must also be conscious of the fact that there can be genuine believers outside the church. In other words, very conscientious adherents of the principle of nuclear weapon non-proliferation could be outside the NPT in regional arrangements like the Treaty of Tlatelolco. The example of Brazil and Argentina is outstanding—two countries which have voluntarily renounced the nuclear weapon option and have entered the Tlatelolco process as provided for in article VII of the NPT. Some aspects of the NPT may present major difficulties for sovereign countries which would, however, be ready to enter into a regional arrangement to renounce the nuclear weapon option on the basis of equitable obligations. There is a qualitative difference between such States and those which merely make unilateral statements on nuclear nonproliferation.

Many elements in the current world situation require us to strengthen the norms against both vertical and horizontal nuclear weapon proliferation. The most important of such norms is the NPT, to which almost seven-eighths of the United Nations membership subscribes. The process of preparing for the extension of this important Treaty must be undertaken with careful diplomacy, absolute transparency and candour, and guarantees of an equitable outcome mutually beneficial to all parties. We have four sessions of the Preparatory Committee spread over two years to do this, together with inter-sessional consultations. Unnecessary disputes on procedural and conference management issues must be avoided in the interest of ensuring a climate conducive for the constructive discussion of the substantive issues when they come up. A new world order cannot be fashioned according to the national interests of a few. It has to be a collective exercise democratically decided upon. The extension of the NPT will be such an exercise, and I am confident that we will all be in a safer world as a consequence of it.

NON-PROLIFERATION ISSUES AND THE FUTURE OF THE NPT

Return of a Nuclear Nightmare

How much time is left before a nuclear holocaust and the end of the world? Only three or four minutes! This was the answer given in the early 1980s, during the first Administration of President Reagan, according to the "nuclear clock" published in the *Bulletin of the Atomic Scientists*, representing the anxiety of the general public at the time. However, the clock was set back to ten minutes before the zero hour in 1990 when the wave of democratisation swept across Eastern Europe and the Cold War came to an end. In 1991, when START I was signed and the former Soviet Union collapsed, the clock was set back to seventeen minutes before the hour, indicating the great relief felt by people all over the world.

However, the good news did not last long. Has the danger of a nuclear war diminished today, only two years afterwards? The answer is, regrettably, "No". Rather, the danger is growing. Let me illustrate this.

First is the suspicion about the nuclear activities of the Democratic People's Republic of Korea (referred to here as North Korea). Although North Korea acceded to the NPT in 1985, it failed to conclude any safeguards agreement with IAEA for a long time, giving rise to this suspicion. After various dealings, the situation had improved by the beginning of 1992, when a Joint Declaration of the Denuclearisation of the Korean Peninsula, providing for mutual inspections in order to resolve nuclear suspicion, was signed between North and South Korea, and when North Korea concluded a safeguards agreement with IAEA. But, again, the good news did not last long. The talks to implement the mutual inspections between the North and South were stalled almost as soon as they started, and have gone nowhere for more than a year.

As for IAEA inspection, six ad hoc inspections have been conducted since May 1992 with respect to facilities declared by North Korea. Reportedly, discrepancies were found between the data submitted by North Korea and that obtained by the inspectors concerning the composition and amount of plutonium. Thereupon, the IAEA Secretariat decided to request a "special inspection" of two undeclared sites near Yongbyon in North Korea. The North Korean response to this request was a flat "No". On 25 February 1993, the Board of Governors of IAEA adopted a resolution supporting the IAEA Secretariat's decision to request a special inspection, and called upon North Korea to comply with the request by 25 March. The North Korean delegation denounced the resolution on the spot and then, on 12 March, without waiting for the deadline, North Korea announced its decision to withdraw from the NPT—a severe challenge to the international nuclear non-proliferation regime.

On the other hand, according to the testimony made by Director Woolsey of the United States Central Intelligence Agency before the United States Senate on 24 February, there is "the real possibility that North Korea has already manufactured enough fissile material for at least one nuclear weapon". Furthermore, North Korea has a new type of Scud missile with a range over 1,000 kilometres, and has sold such missiles to Iran and Syria. Therefore, according to Director Woolsey, "a North Korean nuclear weapon would threaten both our allies in all of Asia and US forces as well". This certainly is a serious situation. It is only natural that suspicion regarding the North Korean nuclear capability has been one of the central issues in the normalisation talks between Japan and North Korea that have been going on for the last two years. The head of the Japanese delegation to these talks, Ambassador Tadasu Nakahira, has now been succeeded by Ambassador Tetsuya Endo. The latter served as Japanese Head of Delegation to IAEA until one year ago, and also had the experience of serving as the chairman of the IAEA Board of Governors. One may say that this was an appointment of the right person to the right post.

Another example of the state of the nuclear non-proliferation regime concerns the suspicions regarding the nuclear capacity of India and Pakistan. Both countries deny possessing nuclear weapons and affirm that they have no intention to do so. On the other hand, it is common knowledge today that, whenever they wish, they could possess them within a very short period of time. In fact, leaders of both countries do not bother to deny the fact that they have the technical capability to develop nuclear weapons. They fear that abandoning the nuclear option might seriously undermine their national security interests. What is required of us is to take these cold facts as they are, and to try to think, together with them, what practical ways can be found to keep them from going over the threshold and to induce them to step back from it. As is well known, India and Pakistan are parties to a long-standing dispute over the question of Kashmir. There is always the danger that this smouldering dispute could turn into an open conflict, and thus the question regarding the possible use of nuclear weapons could arise. The tragedy for over a billion inhabitants of the region would be immeasurable. This is not the time for the rest of the world, including Japan, to sit back and look on while doing nothing.

Concerns about Our Northern Neighbours Never go Away

Third, there is a case of an even more serious nature, relating to the proliferation threat in the territory of the former Soviet Union. It is estimated that over 30,000 nuclear warheads exist in the former Soviet Union. Most of them appear to have been transferred to the Russian Federation, except for about 3,000 strategic nuclear weapons left in the republics of Ukraine, Kazakhstan and Belarus, out of a total of about 10,000 strategic nuclear weapons. Fortunately, START I, its Protocol, and START II have been signed. Once these treaties have been ratified, about 4,000 strategic nuclear weapons, including those located in the three republics other than the Russian Federation, would need to be dismantled within seven years after the entry into force of START I. An additional 3,000 strategic nuclear weapons would be dismantled by 1 January 2003, so that only about 3,000 would remain. It is said that the Russian Federation is capable of dismantling about 2,000 nuclear weapon warheads annually. Therefore, assuming that Russia continues to dismantle these warheads at its full capacity, and that the warheads of tactical nuclear weapons will also be dismantled, we get the figure of about 3,000 strategic and 7,000 tactical nuclear weapons left for future dismantlement after 2003. Leaving aside the question of whether Ukraine will indeed ratify START I, the really big question before us is whether the Russian Federation can be relied upon to dismantle and exercise control over so many nuclear weapons in the next ten years and beyond in view of its crippled national authority as compared to the strong national control that the Soviet Union had, and in view of its protracted domestic political and economic problems. What if, for example, the Russian Federation were to be subdivided, as was the Soviet Union, into smaller units of Russians and non-Russians? What would then happen to the nuclear weapons located there? What if national control over these weapons became weaker? Is there a risk they would be smuggled out for money or stolen by terrorists? What if, on the contrary, the Russian Federation turned into a military dictatorship less sensitive to international responsibilities? Historically,

we have seen czarist Russia and the Soviet Union grow powerful and then collapse. Whatever happens, concerns about our "northern neighbour" do not seem to go away easily.

In this connection, it may be necessary to re-evaluate the merits of the START negotiations. Habits of thinking from the Cold War days make us applaud the achievement of START II, by which the number of strategic nuclear weapons is to be reduced by two thirds. As a matter of fact, the United States-Soviet or United States-Russian negotiations on the reduction of strategic nuclear forces were aimed at achieving stability at lower levels of these weapons by reducing or dismantling the launchers capable of reaching the North American continent or the former Soviet Union. The number of nuclear warheads may have been a subject of negotiations for reduction, but the dismantlement of warheads *per se* has never been made a subject of negotiation. This was only natural since the two Super-Powers were geographically located far apart, and negotiations for the dismantlement of launchers would achieve the objectives of the talks. However, for other nations, there is no distinction between the danger of strategic or tactical nuclear weapons, and there can be no effective nuclear disarmament without the dismantlement of warheads!

Fortunately, the United States and the Soviet Union made unilateral declarations in the autumn of 1991 by which they announced the withdrawal and dismantlement of most of their tactical nuclear weapons. It was just at the time the two nations proceeded to implement those declarations that the Soviet Union collapsed, giving rise to the risk of the proliferation of the weapons left there. As was already pointed out, about 10,000 nuclear warheads will remain untouched in 2003, even if we assume that everything goes well with the dismantlement programme in the former Soviet Union. Unlike the 13 kiloton or 22 kiloton bombs of Hiroshima and Nagasaki, they include a number of one-megaton-type bombs such as the one China experimented with in May 1992. A one-megatoh-type bomb is equivalent to about 80 Hiroshima-type bombs in its destructiveness. Mishandling of just one of those would constitute a major disaster. On the other hand, as regards the some 20,000 warheads to be dismantled by 2003, assuming that everything goes well, the result will be nothing other than a large amount of weapons-grade plutonium and highly enriched uranium. Eight kilograms of the former, and fifteen kilograms of the latter would be sufficient to manufacture a nuclear weapon. Therefore, the utmost care will be required throughout the process, from the stage prior to

the transportation of warheads to dismantlement sites until after their dismantlement. The States in the territory of the former Soviet Union are requesting the United States and other Western nations to come forward with technical and financial cooperation to assist in this process.

Transformation of the "Enemy"

The proliferation threat of today is not limited to nuclear weapons. As a result of the war in the Persian Gulf, still fresh in our memory, the United Nations inspection teams are engaged in the monitoring and destruction of chemical weapons and related facilities in Iraq in addition to nuclear weapon-related facilities. Iraq's initial chemical weapons declaration to the United Nations of about 10,000 munitions and less than 1,000 tons of chemicals has now grown to about 150,000 munitions and 5,000 tons of chemicals. It is almost a miracle that none of this stock of weapons was actually used during the Gulf conflict. Taking a lesson from such events, the chemical weapons Convention, which has been negotiated for the last two decades in Geneva, was finally signed in Paris in January of this year by 135 nations. The Convention is expected to enter into force within the next two years.

The danger of proliferation goes beyond nuclear and chemical weapons. Missiles and related technology or conventional weapons with high technology applications are also matters of concern. For example, Pakistanis flooded with refugees from the decade-long internal strife of Afghanistan. As a consequence, even the weapons of armed robbers were modernized. Missiles started to be used to attack railway stations and trains so that the crime situation got completely out of hand and could not be contained by any police force. Military forces had to be introduced to restore order. According to the testimony (referred to above) of Director Woolsey of the CIA before the United States Senate, the effectiveness of advanced conventional weapons demonstrated during the war in the Persian Gulf had the effect of encouraging the proliferation of those weapons. For example, antiship cruise missiles employing countermeasures and precision guidance have already been deployed by such nations as Iran, Syria and Libya. Increasingly advanced surface-to-air missiles, with enhanced anti-stealth capability, are also beginning to proliferate. It is said that there is a sharp increase in the demand for such high-technology weapons, and that there is no lack of suppliers of these weapons.

The interest of the world in the question of non-proliferation of weapons grew rapidly in inverse proportion to the process of cessation of the Cold War. This is clear when one reviews the chronology of non-proliferation-related events. During the Cold War days, military assistance to allies was regarded as "good", and the supply of weapons and related technologies to the enemy was regarded as "bad". Export controls under the COCOM regime were based on such an assumption. Non-aligned nations did not count because they were neutral and harmless. Thus, non-proliferation of weapons was seldom a matter of serious interest in those days. Nuclear non-proliferation might have been an exception. In 1968, soon after the Chinese success in conducting a nuclear test explosion in 1964, the NPT was signed, and it came into force in 1970. It prohibits the possession of nuclear weapons by nations other than those five nations (coinciding with the five permanent members of the United Nations Security Council) that had succeeded in testing explosions by 1 January 1967.

When India succeeded in conducting a nuclear test explosion "for peaceful purposes" in 1974, major nuclear supplier nations initiated talks in London, and came to adopt the London Guidelines, which control mainly the export of nuclear materials. Suspicious nuclear activities conducted by such nations as India and Pakistan or by Israel, Iraq and North Korea might have been matters of some concern. However, they were almost negligible compared to the danger of a United States-Soviet nuclear showdown. Preventing the Cold War from turning into a hot war, turning the confrontational relationship into that of dialogue, and seeing progress in United States-Soviet nuclear disarmament were the wish and dream of all mankind.

Finally, we were freed from the fear of a United States-Soviet nuclear war that had dangled over our heads by a thread like the sword of Damocles. Our dream came true! However, what awaited us was not a bright and rosy world. It turned out to be the continuation of a nightmare even more sinister, now multi-polar and gigantic in nature, taking the form of the threat of the proliferation of weapons of mass destruction and related technology.

Under these circumstances, the struggle against proliferation started to pick up speed. For example, in view of the changed situation, in which former enemies claim the status of allies, the COCOM export control regime began to relax its regulations in 1990, and a new industrial list focusing upon more restricted dual-use items was worked out. Even a COCOM Cooperation Forum meeting encompassing former "enemy" nations came to be created. Clearly, COCOM is heading for a change.

At the same time, as was pointed out, the need for preventing proliferation of dangerous weapons and related technology has become a matter of great interest to a degree never foreseen during the Cold War days. One may be tempted to ask if a new list of "enemies" could not be worked out, replacing the COCOM's old list of former enemies? If the new list were to include only those already sanctioned by United Nations resolutions and to which the export of arms is forbidden, such as Iraq, Libya, Serbia and Montenegro, it would not be too difficult to work out. However, if we are to include in the list others, such as North Korea, the task would not be so easy. Unlike the Cold War days when "the enemy" was highly visible, subjective judgement as to which other nations are "risky" would differ from country to country. The exercise might turn into a kind of witch-hunt, and caution would have to be used in order not to exacerbate the North-South confrontation. In this connection, could it be that the international community has matured to such a degree that, as in a national community, criminal acts could be corrected without punishing a nation? Is it the act of spreading, accumulating and making use of such dangerous weapons and related technology that needs to be punished and not the nations engaged in such activities? In any event, this is one of the issues that the world today is urgently called upon to address.

United Nations Register of Conventional Arms

As is well known, Japan has maintained strict arms export controls over the years. In 1967, Prime Minister Eisaku Sato declared three principles on arms export, prohibiting arms exports to: communist bloc countries, countries subject to embargoes under United Nations resolutions, and countries engaged in international conflicts. In 1976, Prime Minister Takeo Miki announced a Government Policy Guideline on Arms Export, which, in addition to the three areas specified previously, also restricts exports in accordance with the position of Japan as a peace-loving nation.

However, speaking in general terms, it is easy to talk about arms export controls, but extremely difficult to implement them effectively. Take, for example, the case of the talks between the five permanent members of the Security Council for the control of arms exports to the Middle East. Recognising that about 85 per cent of arms imports by the Middle East nations in the five years prior to the war in the Persian Gulf came from these five nations, talks were initiated in Paris in May 1991, immediately after the war, and continued on in London and Washington. The talks appeared to be nearing success when, in the autumn of 1992, China denounced the sale of F-16 fighter planes to Taiwan announced by President Bush and the sale of Mirage fighter planes to Taiwan by France, calling them "acts of interference in the internal affairs of China", and began to boycott the talks. It is interesting to question whether there can be an effective method to control arms exports in a situation where the United Nations Charter itself recognises the right of its Member States to individual and collective self-defence. The more arms exports are restricted, the more "exports" may be conducted under the guise of "internal transaction" by multinational enterprises, or under the guise of "licensed production" in the importing countries. Even if some of the supplier countries of arms, such as the Security Council permanent members, succeeded in agreeing on certain export control measures, this would also result in offering unexpected profits to suppliers outside of such an agreement. Furthermore, there are States which find arms exports to be the easiest way to earn valuable hard currency. More importantly, when we look at the rapid pace of scientific and technological developments, it may be almost impossible to achieve an effective control over the exports of arms and related technologies.

It is encouraging, under such circumstances, that the United Nations Register of Conventional Arms was established in order to bring more transparency to arms transfers. The Register came to be established by United Nations resolutions of 1991 and 1992, adopted with overwhelming concurring votes as a result of determined initiatives taken by Japan, the European Community nations and others. The Register may be regarded as a very modest but firm step forward for the future control of arms exports. Also, the establishment of the Register was welcomed by the world community as an epoch-making measure for global confidence-building.

Japan's contribution in the field of disarmament activities in the post-Cold War era is not limited to support for the establishment of the United Nations Register. Much has been done also in the field of nuclear non-proliferation. Until the end of the Cold War, the NPT, the IAEA safeguards and the London Guidelines appeared to be sufficient for the purpose of preventing proliferation of nuclear weapons. However, following the Persian Gulf conflict, it became clear that Iraq had been able to carry out its clandestine nuclear activities to an unexpected degree in spite of the routine IAEA inspections it received. Consequently, nuclear supplier nations got together in 1991 for the first time in the 13 years following the establishment of the London Guidelines and, in 1992, agreed upon part II of the London Guidelines regulating the export of nuclear related dual-use goods and items that could be used both in nuclear and non-nuclear fields. Also, it was agreed among those States that future exports or cooperation in the field of nuclear activities with a third country would be made conditional on the latter's acceptance of IAEA full-scope safeguards. The choice of Japan as the contact point or the secretariat for the newly-established London Guidelines, part II, gave recognition to Japan's determined efforts in promoting nuclear non-proliferation.

Revival of the IAEA Special Inspection Mechanism

In addition, as a result of energetic efforts made by Japan and other nations, the IAEA Board of Governors took a decision early in 1992 to reactivate the special inspection mechanism that had seldom been used in the past. It was generally believed that the IAEA inspections would be conducted only with respect to declared facilities and sites. However, after the Iraqi experience, the view came to prevail that unless IAEA was empowered to inspect undeclared sites suspected of clandestine nuclear activities, the *raison d* 'etre of IAEA would be lost. In this way, the special inspection mechanism was revived. Difficulties inherent in this mechanism were pointed out also. For example, how would IAEA address doubts about clandestine nuclear activities in facilities and sites not declared by its member States? Therefore, it had to be reaffirmed that special inspections could not be forced upon a member State. In such a case, however, it was agreed that the case would be referred to the Security Council as a case in which IAEA "could not establish the non-existence of the diversion of nuclear materials for military purposes". The Security Council Summit Meeting held in January 1992 echoed this in its presidential statement that "the Members of the Council will take appropriate measures in the case of any violations notified to them by the IAEA".

As a result, encouraging developments took place. Inspections by IAEA with respect to undeclared facilities and sites in Iran and South Africa were carried out successfully. It was under just such circumstances that the North Korean decision to refuse the special inspection requested by IAEA and to withdraw from the NPT was announced. There is virtually no support from the international community for the move made by North Korea. Not to speak of the Western industrialized nations, the position expressed by China, for example, to the effect that the question had to be resolved through talks with a view to strengthening the NPT non-proliferation regime, seemed to differ in its nuance from the position taken by North Korea. In India, the news of North Korean withdrawal from the NPT came on the very day of its bilateral talks with Japan on non-proliferation issues. Even India, which is not a party to the NPT, was of the view that, once North Korea decided to accede to the Treaty, it should comply with the obligations it accepted under it. For this reason India supported the decision of 25 February of IAEA's Board of Governors, of which India is a member. To honour international commitments is the minimum norm a member of the international community is expected to observe. Therefore, it is very encouraging that North Korea has given due attention to the the opinions of the international community and has reconsidered its decision to withdraw from the NPT.

Extension of the NPT: indefinite or definite

As the Cold War came to an end, a series of measures were taken to strengthen the nuclear non-proliferation regime at the initiative of Japan and other like-minded nations. Such efforts happily coincided with the increase in the number of States parties to the NPT. Over a dozen nations acceded to the Treaty during the last two years, bringing the number to above 155. Of particular significance was the accession by China and France, the two nuclear weapon States which had stayed out for nearly a quarter of a century. Indeed, the NPT is just about the only international agreement which, while prohibiting possession of nuclear weapons to other than the five recognised nuclear weapon States parties, obliges all its member States, including the five nuclear weapon States, to negotiate nuclear disarmament. The fact that China and France undertook such an obligation should be recognised as an epoch-making development. It has been written that Japan's efforts to persuade China to join the NPT were ridiculous because a "discriminated" against" nation took the trouble to persuade a "discriminating" nation to join a treaty that was "out-dated, unequal and discriminatory". Such an argument is far from being relevant. As a result of the increase in the number of States parties to the NPT, only a handful of nations such as Algeria, Argentina, Brazil, Cuba, India, Israel, Kazakhstan, Pakistan, and Ukraine—are still outside.

Of this group of States, Argentina and Brazil signed a full-scope safeguards agreement with IAEA at the end of 1991, and are taking steps to ratify the Treaty of Tlatelolco. In this way, suspicion regarding the nuclear activities of these two nations has become a thing of the past. The safeguards agreement, signed between Argentina and Brazil, IAEA and the Brazilian-Argentine Agency charged them with ensuring implementation, and provides for safeguards on all nuclear material in all nuclear activities of both countries and for verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices; it thus create a precedent that could be of interest in other regions of the world.

Twenty-five years after the entry into force of the NPT, which means in the spring of 1995, a Conference will be convened to decide, in accordance with the provisions of the Treaty, on the length of its future extension. The first session of the Preparatory Committee for this Conference met in New York in May 1993. Debates on the issue of the extension of the Treaty are already taking place. According to the provisions of the Treaty, the length of its extension will be decided by a majority of the parties choosing one of three options: "an additional fixed period" (of 10 years, for example), "fixed periods", or "indefinitely". Even if, hypothetically, the majority of the States parties out of the more than 155 were of the view that the NPT should not be extended, they could not make such a decision in accordance with the provisions of the Treaty. They would have to resort to extending the Treaty for a short "fixed period" of time.

Consequently, the debates taking place are concentrating at this stage on the question of whether the Treaty should be extended "indefinitely" or for a "definite" period. The main reasons given for arguing against an "indefinite" extension, and for a "definite" extension are that the NPT is an "outdated, unequal and discriminatory" treaty. It is alleged that the Treaty is "outdated", having failed to prevent the proliferation of nuclear weapons, and thus does not deserve "indefinite" extension. It is also alleged that the Treaty is "discriminatory", giving privileged status only to the five nuclear weapon States, and thus should not be extended indefinitely. Another argument often put forward on occasions such as the NPT Review Conferences is that the nuclear weapon States have not lived up to their obligations under the Treaty to "negotiate in good faith" nuclear disarmament. Thus, it is argued that the international community should put pressure on these States by asking them to take certain nuclear disarmament measures, including a comprehensive ban on nuclear weapon testing, within a limited timeframe. It is argued that if such a commitment is not being honoured, a long-term extension should not be taken for granted. From this perspective, an "indefinite" extension of the Treaty is not desirable.

The Big Question of a "Discriminatory" NPT

Let me begin by taking up the last point first. I attended the Fourth NPT Review Conference, held in 1990, as Head of Delegation of Japan. In drafting a final document summarising the results of the Review Conference, inclusion in the document of certain ideas became a big issue. The wording was meant to assert that the conclusion of a comprehensive nuclear test ban treaty would be important for the strengthening of the non-proliferation regime under the NPT. Mexico and some other non-aligned nations argued for the inclusion of such a phrase in the final document, while two nuclear weapon States, the United States and the United Kingdom, as well as a number of Western nations, argued against the inclusion. Desperate attempts were made to work out toned-down compromise language that could accommodate the positions of both sides. Towards the end of the Conference, the attempts to find a compromise went on for four sleepless nights and five days, but the Conference had to adjourn at about 5 a.m. without being able to adopt a final document.

At the time, two other nuclear weapon States, China and France, were not yet parties to the NPT. The presence of another nuclear weapon State, the Soviet Union, was not very much felt due to the wave of political change and democratisation that was sweeping across Eastern Europe.

It is often said that the 1985 NPT Review Conference was a success and the 1990 Conference was a failure because the former could adopt a final document and the latter could not. This does not accurately reflect reality. Actually, the 1990 Review Conference was the most fruitful and substantial of all the Review Conferences held so far. For example, the Third Committee of the 1990 Review Conference, which dealt with the peaceful uses of nuclear energy under the chairmanship of Ambassador Chusei Yamada of Japan, adopted by consensus a report that was supposed to form a portion of the final document. Even today, this report is regarded as a valuable document showing ways to strengthen the nuclear non-proliferation regime.

Some nations maintained that a comprehensive nuclear test ban would effectively prevent "vertical" proliferation (a qualitative improvement of nuclear weapons), which was more dangerous than "horizontal" proliferation (an increase in the number of nations having nuclear weapons), and would also facilitate the reduction of nuclear weapons. In the days when the United States and the Soviet Union were engaged in a dangerous arms race in nuclear weaponry and the rest of the world could do nothing about it, such an argument might have had certain persuasive force.

However, in today's world, in which the Cold War has come to an end and the Soviet Union no longer exists, and in which China and France, the two nuclear weapon States which stayed out for such a long time, have joined the NPT, we should, I would propose, ask ourselves whether the approach taken during the Cold War can still be relevant. Even at the time of the 1985 NPT Review Conference, the Final Document adopted by it contained a paragraph which stated that there were views that placed a comprehensive nuclear test ban ahead of the reduction of nuclear weapons, and also views that placed the reduction of nuclear weapons ahead of a comprehensive nuclear test ban. The Mexican delegation to the 1990 NPT Review Conference took the position that such a wording in the Final Document amounted to the admission of the absence of consensus, and that the precedent of 1985 should not be repeated. In this way, the type of final document that it had been possible to adopt in 1985 became impossible to adopt in 1990.

When the Conference is held in 1995, it will fill the function of both a fifth NPT review conference and an extension conference. It is not yet clear what position will be taken by Mexico and some other non-aligned nations. It may well be that they will adhere to the position that a comprehensive nuclear test ban is the precondition to a longterm extension of the NPT. Also, in view of the recent steps taken by the United States, Russia and France in the field of nuclear-test explosions, it is possible that the parties to the NPT will insist that certain nuclear disarmament measures should be taken not only by the United States and Russia, but also by China and other nuclear weapon States as a precondition to a long-term extension of the Treaty.

Such an approach to the issue, however, is based on the assumption that it should be possible to make the nuclear weapon States commit themselves to some nuclear disarmament measures by making a hostage of the question of the extension of the NPT. There might be room for defending such an approach as a political tactic. But, in today's world, in which China and France are already parties to the NPT, the Soviet Union no longer exists, and there is an imminent danger of "horizontal" proliferation of nuclear weapons, such an approach would be too risky and unrealistic. The NPT cannot be amended, according to its provisions, without the consent of all the nuclear weapon States parties to the Treaty (China, France, Russia, United Kingdom and United States). Therefore, any attempt to force by a majority vote the nuclear weapon States to accept certain obligations that go beyond those provided for in the NPT, amounting to the amendment of the Treaty, cannot create legally binding obligations. Such would be the case of urging nuclear weapon States to carry out certain nuclear disarmament measures within a fixed time-frame.

Suppose that the NPT were extended by 10 years, and that its further extension were made conditional upon the realisation of certain concrete nuclear disarmament measures by the nuclear weapon States within that period. Such an arrangement would not work unless it was understood that the NPT could be terminated after 10 years, legalizing nuclear proliferation thereafter. This is a risky idea and, at the same time, is clearly a form of bluffing. The danger of nuclear proliferation today is already too serious to be dealt with by bluffing.

India, Brazil, Argentina and others have long held that the NPT is a discriminatory treaty, and that, unless its discriminatory nature is removed by amendment, they will not accede to it. In Japan, also, the discriminatory nature of the Treaty was questioned. Both at the time of its signature and its ratification, the Japanese Government clarified its position on this question by issuing statements to the effect that the Treaty permitted only the nuclear weapon States to possess nuclear weapons and that "this discrimination" should ultimately be made to disappear through the elimination of nuclear weapons by all the nuclear weapon States. There is no difference between the position of India and that of Japan in the sense that both want the discriminatory nature of the Treaty to be rectified. India wants to achieve this by staying outside of the Treaty, while Japan wants to do so from within, by urging as many nations as possible to accede to the Treaty in order to realise universal adherence, and by urging the nuclear weapon States to pursue nuclear disarmament.

In fact, the United States-Soviet, or the United States-Russian nuclear disarmament talks could achieve significant progress. As for China and France, they only recently joined the NPT, but this fact should be regarded as significant also. If we are to aim at the elimination of nuclear weapons, the time-frame for its realisation becomes unclear when we look at the large number of nuclear warheads due for dismantling. If we are to talk about verifiable, complete elimination of all nuclear weapons, including those held by the so-called threshold nations, it would become even more difficult to foresee a time-frame for its realisation. Brazil and Argentina are of the view that they cannot accede to the NPT because of its discriminatory nature, but the earlier suspicion about their nuclear activities has now been resolved by their conclusion of full-scope safeguards agreements with IAEA, as mentioned earlier. However, unlike those two nations, India continues to fight the discriminatory nature of the Treaty by not giving up its option to become a nuclear weapon State. India, which succeeded in a nuclear test explosion after China, was not permitted to possess nuclear weapons because its test explosion took place a decade after China's and it was not a permanent member of the Security Council. Therefore, India may have a special sentiment concerning the discriminatory nature of the NPT. Also, the memory of the Sino-Indian border war may have some bearing on India's nuclear policies.

Options for Japan

Under these circumstances, one can consider the position which Japan should take with respect to the question of the extension of the NPT. Suppose Japan opposed an "indefinite" extension of the Treaty, and supported a "definite" extension for a specific time period on the grounds that the Treaty was discriminatory, and also in order to urge nuclear weapon States to pursue nuclear disarmament. In this case, there would be no difference in Japan's position from that taken by Mexico and some of the non-aligned nations, or that taken by India. Also, such a move might give rise to speculations that Japan would perhaps wish to see the Treaty terminated and the possession of nuclear weapons legalized. Thanks partly to the recent transportation of plutonium by the Akatsukimaru, Japan's policy on the use of plutonium is now a matter of international attention. Therefore, it could be argued that the right option for Japan would be to come out in support of an "indefinite" extension of the Treaty, demonstrating Japan's firm resolve to uphold the cause of nuclear non-proliferation. Will there be any disadvantages if Japan decides to support an "indefinite" extension of the Treaty and not to insist on its "definite" extension? Japan's efforts to persuade nuclear weapon States to pursue nuclear disarmament and to remove the discriminatory nature of the Treaty through such means cannot in any way be made more difficult as a result of an "indefinite" extension of the Treaty. At the same time, if extraordinary events threatened to jeopardize the supreme interests of Japan, the right to withdraw from the Treaty with three months' advance notice is guaranteed under the provisions of the Treaty.

Of course, it is not possible to predict what will be the majority decision on the length of the extension to be taken at the Conference of States parties two years from now. However, it appears that there are no good reasons for Japan to withhold its support for an "indefinite" extension. This would be better from the viewpoint of strengthening and stabilising the NPT regime. At the same time, there is a possibility that the majority of States parties may wish to extend the Treaty for a fixed period or periods. In such a case, an extension of the Treaty for several long-term periods would become Japan's preferred position as an alternative means of securing stability of the international nuclear non-proliferation regime.

Lastly, let me briefly take up the argument that the NPT has become "out-dated" or "obsolete" for purposes of preventing nuclear proliferation. This is exactly the reason that, as the Cold War has come to an end, efforts are being made by Japan and other nations to strengthen the NPT regime. In the case of the Treaty itself, one cannot just throw it away for being "outdated" or "obsolete" as if it were an old coat, and don a new one.

108 The role of the nuclear powers

The nuclear Non-Proliferation Treaty (NPT) rests on an explicit bargain between the nuclear and non-nuclear weapon States: the latter agreed to forgo the acquisition of nuclear weapons on the condition that the nuclear powers would, in the words of the Treaty's article VI, "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament". The indefinite and unconditional extension of the NPT, to which each of the five recognised nuclear weapon States is committed, will depend in part on whether all NPT parties believe that the five powers have made sufficient progress to this end. The United States and Russia in particular can justifiably claim that they have made major strides in recent years in not just halting, but actually reversing, the nuclear arms race. They have concluded two strategic arms reduction Treaties, and both have made significant unilateral reductions in their nonstrategic nuclear forces. Once implemented, these agreements will reduce United States and Russian nuclear forces by over seventy per cent from the level both deployed at the time of the last NPT Review Conference, held in 1990.

There can be little doubt that nuclear force reductions of the magnitude negotiated in recent years represent a dramatic departure, one that is fully in keeping with both the letter and the spirit of article VI of the NPT. Welcome as these efforts are, however, more can and should be done to reverse the nuclear buildup in the years ahead. Even after the very deep reductions mandated by the START II Treaty have been implemented, United States and Russian force levels will have been reduced to a level similar to that deployed in the late 1960s, when the NPT was signed. Moreover, the three other nuclear powers—Britain, China, and France—have yet to commit themselves to the kind of negotiated reversal of the nuclear arms race that the two major

nuclear powers have undertaken. Yet, they too have a commitment under the NPT to pursue nuclear arms control and disarmament negotiations. For these reasons, the recent arms control success should be regarded as the beginning of a process rather than as its end.

What should be the goal of future nuclear arms negotiations? Article VI of the NPT makes clear that the ultimate goal must be nuclear disarmament, and many if not all of the non-nuclear signatories will demand no less. But, this goal will of necessity be achieved only in stages. Clearly, the negotiation of the START Treaties and the unilateral reductions in United States and Russian non-strategic forces represent one stage in this process. The next stage should involve a concerted effort to reduce the value of nuclear weapons in the national security policies of the nuclear powers. This will require a phased reduction of nuclear weapons involving bilateral negotiations between the United States and Russia, five-power negotiations among all nuclear weapon States, and multilateral negotiations designed to enforce global restraints and reduce existing asymmetries between the nuclear "haves" and "have-nots". Only once this stage has been fully implemented will it be possible to consider how to move towards complete nuclear disarmament

Devaluing Nuclear Weapons

Whatever the merits of the elaborate nuclear deterrence strategies devised by the United States and the Soviet Union in the past, it is clear that they no longer serve a useful purpose. The principal reason for maintaining nuclear weapons today is the difficulty of devising a secure and verifiable way for ensuring their elimination. Since no such magic wand is likely to be discovered any time soon, the best that can be hoped for in the short and medium term is a concerted effort to devalue nuclear weapons as instruments of national security. In so doing, the conditions may eventually emerge for their complete elimination. To this end, the United States, Russian, French, British, and Chinese nuclear force levels must be drastically reduced from levels each currently contemplate under existing arrangements. Indeed, it should be possible for Washington and Moscow to agree to reduce their respective forces to 200 weapons each and for the other countries to undertake a similar reduction in their respective forces. As part of this process, global restraints on the actual or inherent nuclear capabilities of other countries should also be agreed.

A comprehensive arms control strategy should aim to achieve agreement on these issues in two phases by the year 2000, although the actual destruction of weapons will take more time. The strategy should combine bilateral negotiations between Russia and the United States, negotiations among all five declared nuclear powers, and multilateral negotiations.

In phase one, to be completed by 1995:

- The international community would negotiate a comprehensive nuclear test ban (CTB) and a worldwide cut-off of fissile material production for weapons purposes;
- The five nuclear powers would agree to eliminate their nonstrategic nuclear weapons entirely; and
- The United States and Russia would negotiate further reductions in their strategic forces.

Halt Nuclear Testing and Fissile Material Production

Central to any effort to devalue or depreciate nuclear weapons as instruments of military and political power in international affairs should be international agreements to ban nuclear testing and to halt the production of fissile materials for weapons purposes. Both agreements would place non-discriminatory restrictions on nuclear weapons capabilities of all countries and should therefore encourage wider adherence to international non-proliferation standards. More importantly, the agreements would effectively cap the nuclear weapon capabilities of actual proliferators and deny potential proliferators the ability to acquire such a capability. Both agreements are, therefore, critical to achieving reductions in nuclear forces to very low levels.

A major stride in the direction of a CTB was made in early July 1993 when United States President Bill Clinton announced that the United States would extend its moratorium on nuclear testing, already in effect since October 1992, for another fifteen months so long as no other nation tests. The President also called on the other nuclear powers to join the United States in negotiating a comprehensive test-ban treaty. Reactions to the United States announcement were mixed. Russia and France both announced that they would extend their own moratoria on testing and both reiterated their support for a CTB, although Paris placed a number of conditions on its support. Britain, which relies on the United States testing site in Nevada, had little choice but to endorse the moratorium as well as a CTB. Finally, China, while welcoming the United States announcement, refrained from instituting a moratorium itself and also reiterated that it supported a CTB only as part of a nuclear disarmament process. Nevertheless, with the United States and Russia firmly on record in favour of a CTB and with four of the five nuclear powers supporting the testing moratorium, prospects for a successful negotiation of a comprehensive ban by 1995 would appear to be bright.

A second element of a concerted strategy to devalue nuclear weapons should be an international agreement banning the production of fissile materials for weapons purposes. In August 1993, the Clinton Administration announced that it supported negotiation of such a convention. Under the United States proposal, countries would only be allowed to produce plutonium and highly enriched uranium if the production facilities were placed under IAEA safeguards. In addition, the United States would urge some countries to forgo production of these materials altogether as well as to close existing production facilities. Ultimately, it would be preferable if the agreement were extended to a ban on the production of fissile material for any purpose. Such an agreement would require France and Japan to forgo current plans to use plutonium for the production of nuclear energy, and it might also require changing the design of reactors fuelling nuclear-powered submarines. The latter is not an impossible task, while the economics of the plutonium economy are likely to ensure that countries currently embarked on plutonium-power programmes will soon revisit the issue.

Eliminate Non-Strategic Nuclear Forces

To be effective, multilateral negotiations restraining actual and potential nuclear weapons production and testing capabilities should be complemented by negotiations that limit the capabilities of the nuclear powers specifically. As a first step to further reductions in their nuclear arsenals, the five nuclear weapon States should enter negotiations aimed at eliminating all their non-strategic nuclear forces, that is, weapons of less than intercontinental range. Significant strides in this direction have already been made through unilateral action. In the fall of 1991, the United States, the then-Soviet Union, and Britain announced that they would eliminate their ground-based tactical nuclear weapons and remove all non-strategic weapons from surface vessels and submarines. Each country also decided to cut its air-based weapons by 50 per cent or more. France has also announced changes, though less extensive, in its tactical nuclear weapons inventory, notably by cancelling the modernisation plans for its short-range missile force, which will now be phased out by 1994. The time has come to move the process towards its logical conclusion by negotiating the complete elimination of all non-strategic nuclear forces, including ground, air, and sea-based systems. The retention of these short-range weapons compels the belief

that nuclear weapons still have a military purpose, a belief that clearly goes contrary to the need to devalue nuclear weapons. Moreover, as the weapons least subject to secure command and control, the need to ensure their rapid elimination at a time of rising political difficulties, especially in Russia, is clear. If only for this reason, a five-power agreement to eliminate tactical nuclear weapons would be very worthwhile.

Cut United States and Russian Strategic Forces

Finally, in the first phase of this concerted arms control strategy, the United States and Russia should negotiate further reductions in their strategic nuclear forces. Before doing so, however, both countries should accelerate the implementation of the START II Treaty. As a first step, Washington and Moscow should agree to deactivate all weapons slated for reduction under the Treaty within twelve months. (The United States should even consider doing so unilaterally if Russian agreement is not immediately forthcoming.) The weapons thus removed should be placed in central storage sites that are subject to bilateral or international on-site and electronic monitoring. The two countries should also agree to destroy all weapons reduced under this arrangement, a provision currently absent from the START Treaties. An agreement along these lines might provide Ukraine with sufficient incentive to accelerate implementation of its obligations under START I. Rather than removing the weapons to Russia for immediate dismantlement, Kiev might consent to their storage on Ukrainian territory under United States-Russian-Ukrainian or international supervision, as the United States has proposed.

Once these arrangements have been agreed upon, Washington and Moscow should enter negotiations aimed at further reduction in their nuclear stockpiles. The goal of these negotiations should be an agreement eliminating all land-based missiles, banning all multi-warhead or MIRVed sea-based missiles, and reducing conventional and nuclear strategic bombers to 100 on each side, while limiting their weapons load to 200 air-launched cruise missiles (ALCMs) in total. An agreement along these lines would reduce United States and Russian nuclear weapons inventories to about 650 weapons on each side: 200 weapons on strategic bombers and approximately 450 weapons on sea-based missiles. All weapons to be reduced under this proposal would eventually be dismantled. Until that time, the weapons should be disabled and placed in the storage sites containing weapons reduced in earlier stages, which should continue to be subject to permanent bilateral or international monitoring. Fissile materials recovered from dismantled warheads should be placed under international safeguard or, where possible, converted for use in civilian power reactors.

With a concerted effort on the part of the major powers, it should be possible to complete negotiations on the agreements proposed for phase one by 1995. This assumes, of course, that the nuclear powers are committed to devaluing nuclear weapons in their foreign and security policies. On that assumption, the steps advocated are relatively straightforward. Many have been part of the international nuclear arms control agenda for years, some even since the mid-1940s. In completing phase one, the nuclear powers will have taken decisive steps towards reducing the nuclear danger still further, while clearly devaluing the role of nuclear weapons in general. That should clearly demonstrate their commitment to the NPT bargain. It would also open the way towards phase two.

In phase two, to be completed by the year 2000:

- The international community would negotiate a worldwide ban on military ballistic missiles based on land with ranges greater than 150 km;
- The five declared nuclear powers would agree to de-MIRV all ballistic missiles; and
- The United States and Russia would limit their nuclear forces to approximately 200 weapons and place the bulk of them in monitored storage sites.

Eliminate Land-Based Missiles

With the United States and Russia having agreed to eliminate their land-based ballistic missiles in the earlier phase, the next step would be to begin negotiations on a global ban on all military ballistic missiles based on land with ranges greater than 150 km. The dangers of ballistic missile proliferation to international security have become increasingly apparent in recent years, as the war of the cities between Iran and Iraq and the SCUD attacks on Israel and Saudi Arabia demonstrated. Rather than concentrating on the development of highly capable theatre and strategic ballistic missile defences, the appropriate response to this growing threat would be to seek a complete ban on such missiles on a worldwide basis. Having demonstrated by their own actions that landbased missiles have little military utility, the United States and Russia can together attempt to convince other countries that they should follow in Washington's and Moscow's footsteps. Although the practical details of verifying such a ban on land-based missiles will take some time to work out given the continuing desire and need of some to have access

to space, an agreement that land-based missiles for military purposes be banned would strengthen international security in general. Whether all countries (including China and, thus, India and Pakistan) would immediately sign on is perhaps doubtful, but the pressure of the United States and Russian example would be more helpful than if both countries still deployed land-based missiles of their own.

Ban Multi-Warhead Missiles

The second element of phase two would consist of an agreement among the five declared nuclear powers to de-MIRV their ballistic missiles. Such an agreement would in practice affect only France and Great Britain, since China does not possess any MIRVed missiles and the United States and Russia would have de-MIRVed their SLBMs in the earlier phase. A de-MIRVing of French and British sea-based missiles would limit their nuclear forces to about 64 to 80 warheads, depending on the number of submarines each would deploy. If Britain were to produce a fourth submarine, as seems likely, it would deploy 64 warheads; the same would be true for France, unless it developed a fifth submarine, in which case it could deploy 80 warheads. Assuming that strategic missile defences were banned, forces of this size should suffice to perform the limited deterrent functions for which they have been developed.

Down to 200 Weapons

Finally, assuming the first two elements had been agreed upon, it would be possible for the United States and Russia further to reduce their strategic forces. Both should agree to remove missiles from their submarines so that each deployed no more than 108 single-warhead SLBMs. They should also agree to limit the number of warheads at sea to 24 at any one time and operate these SLBMs on a "modified" alert, which is the normal alert status for United States submarines leaving port. According to Bruce Blair, submarines on modified alert require at least 18 hours "to complete the complex procedures—for instance, the removal of the flood plates from the launch tubes and the installation of vital electronic components into the fire control system — that enable them to assume a launch-ready disposition." The remaining warheads would be placed in monitored storage sites. In addition, both countries should limit their nuclear air-delivered inventory to 100 ALCMs, all of which would be placed in monitored storage sites. The ALCM and SLBM warhead sites should be monitored electronically so that entry (and possible retrieval) would be communicated instantly to the other side. Both would then be in a position to take necessary counter-action

in case unexpected developments occurred. At the same time, neither side would be able to make preparations for use of these weapons without the other being informed well in advance.

This final phase of the proposed arms control strategy would bring all declared nuclear powers into the strategic nuclear reductions process. France, Britain, and China will have to make fundamental choices about the role of their nuclear weapons (as opposed to those of Russia and the United States) for the first time. None could claim that the two "super" powers had not reduced their forces to sufficiently low levels and all would therefore be confronted directly by their rhetoric and promises of participation in the disarmament process that they made in the past. It may be that London, Paris, and/or Beijing will refuse to play. But, in that case, the onus would be on them for the first time to explain to the international community why nuclear disarmament is good for Washington and Moscow but not for them. Confronted with this political reality, as well as the concerted effort by the United States and Russia to emphasise the growing irrelevance of nuclear weapons as instruments of international power and prestige, Britain, France, and China may find it difficult to oppose the course proposed here.

Conclusion

The end of the Cold War demands a radical reassessment of the role of nuclear weapons in international politics. To date, the major nuclear powers have begun a process that is slowly bringing them down the thermonuclear ladder both ascended, often with precious little thought, during 40 years of confrontation. Old habits of thinking may have convinced many that the United States and Russia are now approaching the very bottom of the ladder. But, even after agreed commitments have been implemented, both countries will deploy nearly 7,000 strategic nuclear weapons, as well as thousands more non-strategic weapons.

The integrity of the NPT regime demands that the nuclear powers go further down the thermonuclear ladder. Getting from here to there is by no means an easy task. The details of the phased arms control strategy proposed here make this clear. But, success or failure will not be determined by these details; instead, success is possible only if we all abandon old habits of thinking about nuclear weapons, deterrence, and arms control. The time to start is now.

109 THE NUCLEAR NON-PROLIFERATION REGIME: OPTIONS AND OPPORTUNITIES

The current concerns to strengthen the nuclear non-proliferation regime arise from three stimuli:

- Known weaknesses in the regime, some of which have been highlighted to the world community through recent attempts by States to proliferate;
- The changes in the world political system consequent upon the end of the East-West global confrontation and the fragmentation of the former USSR into its constituent States;
- The imminence of the 1995 Conference at which a decision needs to be taken on the further duration of the nuclear nonproliferation Treaty.

Given these stimuli, the first necessity is to analyse the degree to which the non-proliferation problem has changed since the regime was first created, and thus offer a basis for evaluating the ability of the existing regime to deal with the new problems that confront it.

Changing nature and Definition of the Nuclear Non-Proliferation Problem

When the first steps were being taken in the mid-1960s to create an international regime to prevent nuclear weapons from spreading, the task appeared herculean in its nature. There was wide acceptance of the view that nuclear weapons would inevitably spread. This belief, amounting to a form of technological determinism, appears in retrospect to have been based on several assumptions:

 Nuclear technology was a "spearhead technology". Competition to acquire it would be fierce, and it would be used to evaluate a State's political, military and economic standing;

- As there was no real "secret" involved in fission weapon technology, there would be an inevitable dissemination of this knowledge to specialists in additional States as nuclear technology evolved and matured;
- The use of nuclear energy for power generation would spread rapidly, and with it the knowledge and technology to manufacture the fissile material required for nuclear weapons;
- Nuclear warheads would have an increasing number of military applications, especially because of their ability to compensate for the inaccuracy of existing weapon delivery systems. Warheads of relatively small yield would be regarded as "normal" weapons and capable of being used in "limited" war;
- Strategic warheads would make wars involving reciprocal strategic bombardment unthinkable, and thus would be widely acquired to deter such bombardment.

From the perspective of 1993, it is clear that most of these assumptions have not survived the test of time. Above all:

- The "secret" of developing and manufacturing reliable thermonuclear weapons has been largely restricted to the five declared nuclear weapon States, thanks to the inability of others to gain information from atmospheric testing and the implicit acceptance of a ban on testing by other "ambiguous" nuclear weapon States. This in turn has self-deterred States which might be able to manufacture first generation fission devices from publicizing their status, as this technology may not seem an effective deterrent when confronted by that of an existing therrnonuclear weapon State;
- Nuclear energy has rapidly been overtaken as the spearhead technology by computer and communications technologies, while the growth of nuclear power capacity appears to have peaked, and its restriction to a relatively few States appears increasingly probable;
- The direct military utility of nuclear warheads has been largely discounted, due to the advent of highly accurate and lethal conventional weaponry; the inability to distinguish between battlefield and strategic use of nuclear weapons and thus to remove the risk of suicidal escalation to a nuclear holocaust; and the sustaining of the custom of nuclear weapon non-use for 48 years;

— The security value of a nuclear deterrent now seems to be largely restricted to providing countervailing force against other nuclear weapon States. Such a deterrent is obtainable only at great absolute and opportunity cost, due to the need to provide credible delivery systems and their supporting infrastructure. Alternative methods of providing nuclear security benefits are now available through non-proliferation pledges, security guarantees, IAEA safeguards assurances and nuclear disarmament.

These positive developments, and above all the loss of the political driving mechanism of the nuclear arms race, the East-West confrontation, have made it possible to contemplate not only preventing the emergence of additional declared nuclear weapon States, but also the disarmament of both categories of States: those States with ambiguous nuclear capabilities and the existing nuclear weapon States. In the latter case, however, the magnitude of the stockpiles of the United States and the former USSR makes the safe dismantling of their nuclear warhead stocks within ten to fifteen years impractical, though they could be rendered inoperable in a lesser period of time by disablement and the destruction of their associated delivery systems.

One of the key changes since the 1960s arising from these developments is an enhancement in the expectations placed upon the nuclear non-proliferation system. Originally, the realistic aspiration was that nuclear dissemination and proliferation might be slowed down if the nuclear arms race could be brought under control. In 1993, the realizable ambition is to prevent nuclear proliferation and roll back the arming of the existing nuclear weapon States. Several events since 1991 appear to support this change, including the acceptance by Argentina and Brazil of full-scope IAEA safeguards, and the accession of China, France and South Africa to the NPT.

At the same time as aspirations have changed, so too have perceptions of the most likely technical paths that States might use to proliferate and the identity of probable proliferators. The Iraqi and South African cases have indicated that the most likely path to acquire fissile material is no longer by diversion of plutonium produced in nuclear power facilities, but through the construction and operation of uranium enrichment plants, often using dual-use technologies, which are not open to IAEA inspection. They have also illustrated that the problem is no longer dissemination or proliferation of nuclear weapons to allies of the major nuclear weapon States, but to States outside of security alliance systems. The situation in which States wishing to proliferate could be easily identified as they remained outside the NPT or did not accept fullscope safeguards has also undergone change. The number of "suspect States" falling into this category has been halved with the removal of Argentina, Brazil and South Africa from the list, leaving only India, Israel and Pakistan with significant nuclear facilities and stockpiles of fissile materials not under IAEA safeguards. Yet, NPT membership can no longer be regarded as an absolute certificate of a State's nonproliferation credentials, following the activities of Iraq.

The result is that the nature and definition of the proliferation problem, which the non-proliferation regime seeks to address, has been changing. The technical dimension no longer centres upon diversion from the nuclear fuel cycles of advanced industrialized States, such as Germany and Japan, but upon the operation of clandestine uranium enrichment plants built specifically for security purposes in both NPT parties and non-parties. The political dimension no longer involves only States with ambiguous policies over nuclear weapons and unsafeguarded nuclear facilities that have remained outside the NPT, but it now includes renegade NPT parties also. Perhaps more significantly, however, a new set of proliferation concerns has arisen consequent upon the evolution of the former USSR into a number of independent sovereign States. Several quite distinct proliferation problems resulted from the collapse of the former USSR. These included the dangers that:

- Nuclear weapons could be acquired through secession by some of the States emerging out of the former USSR. This danger was very acute in the early months of 1992, but has now been reduced to the continued presence of strategic nuclear warheads on Belarus, Kazakhstan and Ukrainian territory;
- The dismantling process in Russia (and the other nuclear weapon States) for retired nuclear weapons and the existence of reserve fissile material stocks would result in accounting uncertainties in relation to fissile materials and weapon components. This in turn would make assurances that no materials were being traded illegally or smuggled to other countries problematic;
- Nuclear specialists from nuclear weapon States, becoming either unemployed or destitute or both, would sell their expertise to aspiring nuclear weapon States;
- No satisfactory technical solution would be found in the short term for the disposal of stocks of separated plutonium resulting

from weapon dismantlement, and it would have to be stored and guarded, unlike the situation in respect of highly enriched uranium (HEU), which could be blended down for use as powerreactor fuel.

One result of these developments is that while nuclear weapon States may have ceased to be a cause for concern as far as the initiation of nuclear warfare is concerned, they are now becoming an increasing focus of concern as sources of nuclear proliferation.

The definition of the problem of nuclear proliferation can thus be seen to have evolved since the 1960s from one of an accepted response to State insecurity by advanced industrialized States, utilising civil fuel cycle facilities to acquire the necessary fissile materials; through the adoption of this response by non-parties to the NPT with significant nuclear facilities; to a concern for renegade parties to that Treaty and the consequences of the fragmentation of the USSR and the resultant processes of nuclear disarming.

Constituent Elements of the Nuclear Non-Proliferation Regime

For the purposes of analysis, the international arrangements that have evolved since the mid-1960s to address the problems of nuclear proliferation can be divided into four main components:

- A global process of norm creation through diplomatic consensusbuilding;
- A global system of technology denial;
- A global system of enforcement of regime compliance;
- Regional structures to reinforce the global institutions.

The boundaries between these components are often not well defined. But, the underlying rationale is that nuclear proliferation can only be prevented by reducing political and security motivations to proliferate; by manipulating the cost/benefit calculations of potential proliferant States by denying the relevant technologies; by implementing measures to enhance the prospects of discovery of clandestine programmes; and by highlighting the very adverse consequences should discovery occur.

Norm Creation and Diplomatic Consensus-Building

This process can be seen to be focused upon the global norm not to acquire, develop or deploy weapons of mass destruction, and specifically nuclear weapons and devices. The significance of this norm can be argued to have been reinforced by sustaining the taboo against the use of nuclear weapons for 48 years. Among factors contributing to this have been: the increasing belief in the irrelevance of nuclear weapons as military instruments; the limited number of States capable of developing nuclear weapons which have overtly done so; and the fact that one State, South Africa, did develop nuclear devices covertly and then dismantled them.

Currently, the global legal instrument which exclusively embodies the non-nuclear weapon norm is article II of the NPT. This is a major reason why this Treaty provides the diplomatic foundation for the global nuclear non-proliferation regime. At the same time, the NPT contains no absolute provisions dealing with the total elimination of nuclear arms by the existing nuclear weapon States, and is thus perceived to be both inherently discriminatory and inconsistent. Hence, the problems at NPT Review Conferences concerning the implementation of article VI, dealing with nuclear disarmament, where the areas of consensus, or lack of it, in relation to the diplomatic foundations of the regime are addressed.

In this context, all moves to implement nuclear disarmament by the nuclear weapon States could be regarded as significant reinforcements to the regime. What remains in dispute, however, is the pace of the process; the role of non-nuclear weapon States in relation to it; and differing perceptions of the priorities to be accorded to specific measures of nuclear disarmament. These controversies in turn reinforce doubts that the nuclear weapon States are seriously committed to eliminate the logical contradiction underlying the diplomatic system—in other words, are truly committed to the end-state of nuclear disarmament as a long-term goal. Arising from these areas of disagreement are several specific issues upon which consensus is still lacking. These include:

- The need for enhanced negative nuclear security assurances and/or a no-first use commitment from the nuclear weapon States, until such time as nuclear disarmament does occur;
- The priorities to be given to proposals aimed at reducing the ability of the existing nuclear weapon States to modernize, maintain and reinstate their nuclear arsenals (a CTBT, fissile material cut-off for military purposes, transfer of fissile material formerly allocated to military uses to IAEA safeguards), as against unilateral and bilateral measures to dismantle these arsenals (INF, and START I and II);
- Whether the nuclear weapon States alone should be involved in the nuclear disarmament process, in order to reduce

dissemination of weapons information. The alternative view is that the nuclear weapon States are now an integral part of the nuclear proliferation problem, both because of their example and the potential dangers posed by diffusion of their own weapons technology and nuclear materials.

One further element of norm creation and diplomatic consensusbuilding is the role played by the IAEA safeguards system. This has based its past activities on the assumption that States are adhering to their declarations of the uses made of nuclear materials within their jurisdiction. Its role has been to provide assurances to the international community that these declarations are being complied with, and to offer early warning if they are not. By so doing it has provided an essential basis for international nuclear trading, and legitimized the proposition that a distinction can be drawn between military and civil uses of the atom, and that all NPT parties have a right of access to these civil uses.

Technology Denial

This element of the regime, together with compliance and enforcement measures, is based upon the proposition that consensus politics will not prevent a determined State from proliferating: only denial of capabilities and coercion will achieve this. By creating conditions whereby imports of essential nuclear materials and technology are denied to such States, what is sought is at best to prevent proliferation and at worst to slow it down. This involves two apparent contradictions in relation to the consensual elements of the regime: exports are to be denied to a State on the discriminatory basis of the perceptions held by a group of advanced industrialized States of its propensity to proliferate; and IAEA safeguards in themselves are not seen as adequate to assure that such exports will not be misused. However, since at its inception this system of export controls was nominally directed against non-parties to the NPT, and thus did not breach the right of Treaty parties to have access to nuclear technology, the latter contradiction was initially less visible. Moreover, operating the guidelines on the basis of the sovereign right of States to make individual export decisions has allowed these contradictions to be legally finessed.

A number of separate nuclear export guideline systems have evolved since the late 1960s. Since these export guidelines have been used in practice to discriminate against NPT parties, as well as non-parties, they have had the effect of denying capabilities to "suspect" States at the expense of the consensus foundations of the non-proliferation regime, though they have probably had the desired effect of slowing down the process of proliferation in these States. The best known export guidelines are those related to nuclear materials, plants and technologies which were agreed by a group of supplier States in the 1970s. In practice, these were aimed at denying reprocessing and enrichment technologies to "suspect" States. In 1992, they were supplemented by a new system of guidelines on dual-use technologies—in other words, those technologies which had uses other than in nuclear applications. At the same time, it was agreed that exports would henceforth only be made to States which were either parties to the NPT or accepted full-scope IAEA safeguards. Additionally, in 1987, an attempt was made to address another aspect of the proliferation problem by extending export controls to nuclear delivery systems, specifically to missiles, through the Missile Technology Control Regime.

Regime Compliance and Enforcement

Whether the nuclear non-proliferation regime should move beyond consensus on norms and denial of technologies to enforcement of compliance with those standards has been a profound challenge for the non-proliferation regime. The fact that such action is now on the agenda is an indication of the quantum change that has taken place in the nature of the regime created in the 1960s. It has been made possible by the new international political environment, in which concerted action by the United Nations Security Council is feasible. The transformation has been stimulated by the enforcement action taken by the Council in the special case of Iraq, and has given rise to activity in two distinct contexts.

The first is whether IAEA should adopt a more adversarial stance in its relationship with States it is inspecting, including NPT parties. More particularly, there is the issue of whether it should make use of information supplied through "national technical means" (i.e., national intelligence information) to demand the right to conduct special inspections of alleged undeclared nuclear activities and facilities. The situation over North Korea during 1993 has been a case in point.

The second is whether the Security Council should take enforcement actions against potential and actual proliferators, including those States which have been referred to it by IAEA for non-fulfilment of their safeguards commitments. Again, the action against Iraq has been the stimulus for this, and North Korea is the current focus of attention. Moreover, the January 1992 statement by the President of the Security Council, indicating that proliferation would in future be regarded as a threat to the peace under Chapter VII of the Charter, reinforced perceptions that international enforcement action was now an active possibility. What remains to be seen is what form such action might take in specific cases, and whether it will involve the use of military force.

Regional Structures

As the United Nations system reverts towards the type of structures for dealing with international conflicts envisaged by the authors of its Charter in 1944, regional conflict prevention and resolution organisations will probably play an increasingly important role as a first line of defence before resort to the United Nations itself. Such a development has already occurred in the nuclear non-proliferation area. Here, the most significant regional structures have been the nuclear weapon free zone treaties in Latin America and the South Pacific, and perhaps by 1994 in Africa. Such treaties are an important means of reinforcing the global norm against nuclear weapon possession, without competing with the commitments in the NPT itself. Arguably prior to 1989 the East-West security alliance structures also performed a regional role in preventing nuclear proliferation, and the CSCE/NATO arrangements and those between the United States and nations on the Pacific rim might continue to do so. In addition, regional nuclear energy cooperation and control organisations such as ABACC between Argentina and Brazil in Latin America, and EURATOM in Western Europe have been significant reinforcers of the global non-proliferation systems.

Options and Opportunities for Reinforcing the Regime

Reinforcing Global Non-Proliferation Norms and Diplomatic Consensus

The priority need here, in the absence of any alternative treaty offering similar benefits to the international community as those under the NPT, is to ensure that the Treaty is extended in 1995 by consensus for a lengthy period. This will provide the opportunity to reinforce the global non-nuclear weapon and non-nuclear proliferation norms. Extending it for a short fixed period would send a signal to potential renegade parties, and to any States considering accession, that the global community has abandoned the attempt to prevent proliferation: only a decision to extend it indefinitely, in an unconditional or procedurally conditional manner, would not send that signal. Similarly any lack of consensus over the extension decision would damage the authority of the Treaty.

At the same time, the opportunity might be taken to reinterpret elements of the Treaty, and to contemplate supportive agreements with regard to others. This has already been undertaken de facto with article HI, paragraph 2, where full-scope IAEA safeguards have become a condition of supply to non-parties. This means they are denied access to modern nuclear technology, and for those with aspirations to future nuclear power programmes, this could be a significant incentive to persuade them to abandon nuclear ambiguity and accede to the NPT. There is also an overwhelming case for strengthening IAEA safeguards by allocating more resources to the enterprise; by insisting on greater transparency over the nuclear energy activities of all States; and by making special inspections more routine and thus more acceptable. The negotiation of an agreement on enhanced negative security assurances/no-first use of nuclear weapons would also be welcome, as it would assist in reducing perceptions of the utility of nuclear weapons, as well as addressing security concerns and redressing to some extent the discrimination inherent in the Treaty.

There remains one area where enhanced consensus remains highly unlikely, however, namely the implementation of nuclear disarmament. This has presented a perennial problem for the consensual base of the non-proliferation regime, given its connotations of highlighting areas of inconsistency and discrimination within the NPT. It has also been indicative of a wider issue, namely that a nuclear holocaust resulting from an East-West conflict was the overriding cause of nuclear concern. This issue has now been largely discounted, and nuclear proliferation has replaced it as the number one item on the arms control and disarmament agenda.

There is little doubt that negotiation of a CTBT and a cut-off of fissile material production for nuclear weapon purposes would clear the air, heal many long-running diplomatic sores, generally be beneficial for the atmospherics of the non-proliferation regime and appear to offer the prospects for enhancing the consensual base for that regime. But, underneath this traditional disarmament agenda are two sets of issues waiting to emerge, which will demand even more difficult attempts at consensus building. One is the nuclear disarmament process beyond the year 2000 and the future role of nuclear weapons within the global political system, including the possible retention of a small stock for deterrent use by the United Nations itself. The other is the role of disarmament arrangements between nuclear weapon States in preventing proliferation: not vertical proliferation as in the past, but horizontal proliferation.

It is accepted that the safe dismantling of the existing nuclear arsenals will require much time and technical effort: they cannot disappear overnight. In the case of Russia, the target appears to be to dismantle at a rate of about 2,000 warheads per annum, and reduce down to levels of about 3,000 strategic warheads by the year 2003, or by 2000 if additional resources can be injected into the process. In the case of the United States the figure would be 3,500. No clear targets, or prediction of stockpile levels, appear to exist for sub-strategic warheads at this date, though joint holdings seem likely to remain at five-figure levels given current plans. Beyond this there exists no clear international vision of what happens next, and in particular how the process might move stockpiles down to much lower levels and aim to eliminate them entirely. Such visions will need to be linked to new thinking on the evolving structure of the global political system and the role of the United Nations and nuclear weapons within that system. The lack of any dialogue on these issues, while avoiding opening new areas of contention in the short term, is not likely to be conducive to the creation of a consensus on these matters able to take the international community constructively into the next century. And such a dialogue seems essential if the consensual base for the regime is to be reinforced at that time. Commencing work now on future nuclear disarmament strategy thus appears an essential reinforcement of the consensual non-proliferation regime.

The need for such a vision is made more urgent by the nuclear weapon States themselves having started to become part of the horizontal proliferation problem. This has occurred in two ways. First, the problematic status of the nuclear warheads remaining in Belarus and Kazakhstan, but more particularly in the Ukraine, offers the prospect of additional nuclear weapon States emerging by succession, in the absence of their accession to the NPT. The ratification of the START I and START II Treaties by these States and their accession to the NPT are thus essential acts of reinforcement for the nuclear non-proliferation regime. Second, concerns over "loose nukes", the smuggling of fissile materials and nuclear weapon components, and the emigration of nuclear weapon scientists have highlighted the desirability of providing assurances to the global community of the effectiveness of military material accountancy systems and the security and the safety of weapon and material storage and dismantling facilities in all nuclear weapon States. Without such assurances, and enhanced transparency on the part of all these States, this issue seems likely to grow in significance. The purchase of blended down U235 for civil power use still leaves a need for initiatives to place all remaining fissile materials from retired weapons under IAEA safeguards. This would reduce some of the existing concerns, and also serve as a useful reinforcement of the consensual basis of the non-proliferation regime.

Such initiatives would also bring to prominence contention over whether additional technical constraints should be imposed on NPT parties. Changes in nuclear technology since the 1960s suggest that there is no essential need for reactors to be fuelled by weapons-grade HEU, the only exception being at most a handful of isotope production and materials testing facilities. Similarly, changes in the scale of nuclear activities mean that there will exist plentiful substitutes for the use of plutonium as a reactor fuel for the next 15-20 years. This has led to demands that, whether informally or formally, global production and separation of plutonium should cease. This issue is further complicated by the creation of additional stocks of these materials through weapon dismantlement. The advantage of such a move is that it would simplify IAEA safeguarding problems, as any production of other than lowenriched uranium or separation of plutonium would be outlawed, and thus a further technical barrier would be created to proliferation. Alternatively, the problem might be addressed through internationalisation, specifically by the creation of global plutonium and HEU management systems.

Reinforcing the Denial System

No new initiatives in this area, other than keeping guideline items under review, appear to offer the prospects of enhancing the ability of suppliers to deny technology to those they perceive as potential proliferators. What does appear possible, however, are moves to expand the membership of the supplier groups, and thus enhance the consensual basis for their operations. However, this can only be a palliative, as it is in the nature of this type of arrangement that it will be inherently discriminatory. In addition, there seems to be scope to adapt the MTCR in two directions, the most obvious of which is to increase its membership. The second is to contemplate creating a much more comprehensive regime, which might attract consensus support. One option would be to do so along the lines of article V of the NPT, with redundant military ICBMs providing extremely cheap launch services for those States aspiring to operate satellites. In return, those States would not proceed with indigenous development programmes. A second would be to include certain types of military aircraft within the regime.

Reinforcing the Enforcement System

The structure for a future enforcement system has existed since the 1960s, but has now been activated, with IAEA acting as the investigative arm and technical judge for the United Nations, and the Security Council acting as the political judge and political and military enforcer. What remains to be seen is whether the collective political will can be generated to carry through enforcement action against potential proliferators. At the same time, the development of some system to enable IAEA or the United Nations to have access to independent sources of intelligence materials and evaluation, such as a United Nations satellite reconnaissance agency, might be very beneficial.

Reinforcing Regional Systems

The key vehicle for this appears likely to be the creation of additional NWFZs. At the same time, it seems clear that what is urgently needed is an increase in regional collaborative structures in all areas to build up their own conflict resolution capabilities. This suggests an urgent need for the creation of regional nuclear collaboration fora, which can act as a working-level stimulus and underpinning to NWFZs. Areas where such a development might be urgently encouraged include North, South-East and South Asia and the Middle East.

Conclusions

Since 1991, after some decades of virtual stagnation, the definition and nature of the non-proliferation problem has changed rapidly. Although the four elements of the existing regime are capable of collectively addressing the changed nature of the redefined problem, they need strengthening in areas where deficiencies have been demonstrated to exist. In addition, the regime itself requires widening in scope, to address more directly those outside of it and the nonproliferation problems arising from nuclear disarmament. This suggests that the international community, and the United Nations in particular, needs to address as a matter of urgency a new nuclear disarmament agenda centred around the necessity of preventing nuclear proliferation, both to deal directly with problems arising from the process and to reinforce the consensual base for the regime. For one of the key changes since 1991 is that the nuclear non-proliferation regime and the NPT are no longer a peripheral element of the substantive super-power arms control process; that process, in particular START I and II and their implementation, has now become transformed into an integral part of the substantive nuclear non-proliferation process.

At the same time, the tools available within the non-proliferation regime have been made more powerful, in particular through the greater willingness of the Security Council to become seized of non-proliferation issues, and of IAEA to press for greater transparency and to implement special inspections. In addition, a new layer of non-proliferation instruments to reinforce the global regime is starting to emerge at the regional level. Above all, however, there is the need to extend the NPT indefinitely, or quasi-indefinitely, by consensus in 1995. For not to do so would send an unambiguous message to would be proliferators that the international community is no longer seeking the indefinite prevention of nuclear proliferation, but some lesser goal.

110 STRENGTHENING THE NPT AND THE NUCLEAR NON-PROLIFERATION REGIME

Nuclear weapons have haunted two generations. Since their first use on Hiroshima and Nagasaki, these instruments of mass destruction have paradoxically contributed to global strategic stability, but at an enormous cost in terms of both money and human anguish. The fear generated by these weapons has helped to ensure that they have never again been used. However, it did not stop the spread of nuclear weapons to additional countries. With the major transformations of the world order of the last few years, there is reason to hope that we can construct a more secure world out from under the shadow of nuclear destruction. This will be the challenge of the remainder of this decade and the challenge facing the parties to the Treaty on the Non-Proliferation of Nuclear Weapons, when they meet in 1995 to review the twenty-five year history of the Treaty and to consider its extension.

Alongside the nuclear weapons that have so preoccupied politicians, strategists and diplomats, the peaceful uses of nuclear energy have grown in importance for the world community at large. Over the last four decades, some of the most talented scientific and engineering minds have turned nuclear power into a significant source of energy. That growth, however, has not been, and is not, smooth and straight. We now know only too well that it was fanciful to imagine—as scientists once did—that nuclear energy would be too cheap to be worth metering. Nevertheless, it has been proven that it can be a competitively priced and environmentally benign source of energy. Its future role will depend on how soon these qualities will prevail over the present perceptions of the risks of nuclear power, including the spectre of the tragic Chernobyl accident. This in turn depends on the success of the global nuclear industry in maintaining in the years to come a record of nuclear operation without significant radioactive releases to the environment.

Nuclear science and technology have found a place in almost all areas of human activity, from the use of carbon dating in archeology to the use of radiation treatment in the cure of cancer and the production of new strains of crops to assist in the battle to feed a growing world population. These techniques are employed widely in both the developed and developing world, and there is a need to ensure that these benefits of the peaceful uses of nuclear energy remain available to the international community.

Arrangements that ensure peaceful use are a precondition for the wide use of nuclear applications and of nuclear energy and for commercial trading in nuclear materials and technology.

Non-Proliferation and the International Community

As we prepare for the 1995 NPT Conference, it is worth recalling the efforts of the last 50 years to reach an international consensus on the exclusively peaceful use of nuclear energy. The early optimism and idealism that characterized the Baruch plan proved unrealistic. The antagonistic world immediately following the Second World War did not provide a fertile environment for international control of all nuclear material and facilities, nor has the world today reached a level of cooperation which would permit such a scheme.

The Atoms for Peace plan declared by President Eisenhower in 1953 was certainly less radical than the Baruch plan, but still overly optimistic for its time in proposing an international agency to remove fissionable material from the stockpiles of the three nuclear weapon States then existing and to distribute it to others for peaceful use. It is nevertheless to the Atoms for Peace plan that we owe a central part of the non-proliferation strategy of the last 40 years, namely the sharing of peaceful nuclear technology in return for verified pledges of peaceful use.

This dual approach characterized the Statute of IAEA, adopted in 1956, with its objectives of enlarging the contributions of atomic energy on the one hand and of ensuring as far as possible that the transfer of technology will not serve any military purpose. This approach recognised that a policy of denial of technology would almost certainly have provided an incentive for States to develop indigenously enrichment and nuclear power technology without any non-proliferation commitments. The provisions of the Statute which allow IAEA to "acquire or establish any facilities, plant and equipment" in the nuclear field (article III:A:7) or to "establish control over the use of special fissionable materials received by the Agency, in order to ensure that these materials are used only for peaceful purposes" (article III:B:2) are echoes of the early internationalism. They have not been used so far, but might become practicable if we continue to move ambitiously towards a nuclear weapon free world.

President Kennedy's gloomy vision of a world with dozens of nuclear weapon States assumed that States would go ahead and make or acquire nuclear weapons if they reached the technical level which enabled them to do so. This prospect was avoided as a result of the tenacious work which has constructed what is termed today "the non-proliferation regime". A central element of that regime is the NPT, which was negotiated a little more than ten years after the establishment of IAEA and which incorporates the safeguards system of IAEA as its mechanism for international verification of non-proliferation commitments. The NPT, which came into force in 1970, has become the most widely accepted arms control instrument, with over 155 States party to it. A central element of the NPT compact parallels the basic principles in the Statute of IAEA: the facilitation of an exchange of nuclear technology among the States pledging themselves to non-proliferation. But, the NPT represented a quantum leap forward with the requirement that the condition of peaceful use be applied not just to the specific material or equipment supplied, but to all nuclear installations and material in the State-indigenously constructed or produced, or imported. States committing themselves to non-proliferation were offered the transfer of technology and an undertaking by the nuclear weapon States "to pursue negotiations in good faith" on cessation of the nuclear arms race and complete disarmament. With this development, the nonproliferation regime graduated from conditions attached to the export of individual items to a comprehensive non-proliferation policy comprising a number of mutually reinforcing elements.

Underlying the non-proliferation regime is the understanding that the major incentive for acquiring nuclear weapons arises from national security concerns. To eliminate the incentive, the concerns must be allayed. In the case of many countries, these concerns are met through the nuclear umbrellas offered by alliances. Other countries, like Sweden and Switzerland, concluded that it might be even more dangerous to have nuclear weapons than not to have them, and renounced such weapons out of fear of being subject to pre-emptive nuclear strikes in a crisis. Other countries have been given a measure of assurance by the declarations made by nuclear weapon States in the Security Council, promising non-use of nuclear weapons against non-nuclear weapon States. To the vast majority of developing countries in 1970, nuclear weapons were either not a realistic security tool or remained out of reach of their technical capabilities.

There has sometimes been a tendency to describe comprehensive IAEA safeguards as the key barrier to proliferation. While I would be the last person to underestimate the role of the IAEA safeguards system, I submit that it is important to recognise that the creation and maintenance of political and security conditions which are conducive to non-proliferation are the most crucial elements in preventing proliferation. Safeguards are not in themselves an incentive to nonproliferation, they are rather the verification tool of the non-proliferation regime. However, through the confidence which effective verification creates, they help to eliminate security concerns which might otherwise arise about neighbours or other States perceived as potential adversaries.

It must be remembered, however, that if a State begins to perceive a strong security need for nuclear weapons, its formal adherence to the NPT and the application of full-scope safeguards may not prevent it either from withdrawing from the NPT or from trying secretly to develop or acquire the weapons. One must therefore be conscious of the importance of maintaining the political-security disincentive to nuclear weapons acquisition. The main reason for optimism about nonproliferation today lies precisely in the reduced global tensions and the consequent reduction in political-security incentives to acquire nuclear weapons. With the drastically reduced risk of a general nuclear conflagration and with accelerating nuclear disarmament, there is no general political-security incentive for non-nuclear weapon States to abandon their status. This perception may well have helped Argentina and Brazil to renounce any nuclear weapon option in favour of nonproliferation pledges. South Africa's decision to adhere to the NPT and to terminate its own weapons programme evidently is linked to the writing off of any communist-inspired threats.

We can also see how the remaining principal proliferation problems are linked to perceived political-security considerations—in the Middle East, on the Indian subcontinent and on the Korean peninsula. It is evident therefore that the main effort to prevent further proliferation and to achieve a roll back, as in South Africa, must be made in the political-security sphere through peace, *detente* and security guarantees.

Against this background, the 1995 NPT Conference will review the implementation of the Treaty as it has done at its four previous Review

Conferences. Unlike the other Review Conferences, however, a decision must be taken in 1995 on the extension of the Treaty. This adds significantly to the importance of the Conference and of perceptions of the value of the Treaty to international security. The 1990 Review Conference failed to agree on a final declaration; however, the Conference did develop a number of ideas and proposals relevant to safeguards and nuclear technical cooperation, the two areas of particular relevance to IAEA. These issues need to be revisited against the background of the dramatic changes in the international scene since 1990.

Nuclear Safeguards: The NPT Verification System

At the 1990 Review Conference the parties to the NPT affirmed among other things their determination to strengthen further the barriers against the proliferation of nuclear weapons; called for universal adherence to the NPT; urged continued improvements in the effectiveness and efficiency of safeguards; and urged IAEA not to hesitate to take full advantage of its rights, including the use of special inspections as provided for in safeguards agreements. Although not formally adopted by the Conference, these recommendations have been behind some of IAEA's work in the last three years. Moreover, since 1990 the NPT has been embraced by the remaining two declared nuclear weapon States, China and France, and by a number of non-nuclear weapon States, including South Africa. At the same time the dissolution of the Soviet Union resulted in a number of additional States, some with significant nuclear facilities. Of these, some have already joined the NPT and others are committed to doing so.

The effort to strengthen safeguards proposed by the 1990 Conference was given even greater importance with the discovery of Iraq's clandestine nuclear programme in early 1991 —the first occasion on which a party to the NPT had been discovered to have developed secretly and outside safeguards the elements of a nuclear weapons programme based on uranium enrichment technology.

The various steps taken or proposed to strengthen safeguards must be studied against the background of the system which has evolved over the last 20 years. The technical objective of safeguards verification has been stated to be to "deter from diversion by risk of detection". This formulation creates the impression that the system is a genuine barrier, deterring proliferation. It is true, of course, that a State which might be tempted to develop nuclear weapons, after having renounced them and having accepted safeguards, might be deterred because it would know that the reactions of other States would be very strong if the safeguards system revealed diversion. In most cases, however, the function of the system is to provide a higher level of confidence than a State itself can give thoughts own national declarations that its material and installations under safeguards are used only for peaceful purposes.

The safeguards verification system operated by IAEA costs annually some \$65 million and employs some 500 people, of whom some 200 are inspectors. It is essentially an audit system involving independent verification through measurement and observation. As such, safeguards operated under the NPT focus on declared inventories of nuclear material. Their basic features are material accountancy supplemented by direct surveillance of nuclear material within monitored and confined areas. This focus on nuclear material—as the crucial material for weapons production— emanated from a wish to minimise intrusion in legitimate peaceful nuclear activities and guard against industrial espionage by inspectors. Regrettably, the approach does somewhat limit the vision of inspectors. A renewed emphasis on qualitative aspects of inspection activity, combined with greater freedom of movement, could contribute to transparency and increased confidence.

Another important aspect of the safeguards system is its capacity to detect. It is geared to detect with a high degree of confidence diversion of so-called "significant quantities" of nuclear material—quantities significant for weapons—some 8 kg of plutonium or 25 kg of highlyenriched uranium. Safeguards are capable of detecting smaller diversions, but generally not gram quantities. This is a consciously introduced limitation. In the cases of Iraq and Romania, we must note that gram quantities of plutonium were separated without being detected by safeguards. If it were at all possible to design— and it probably is not—a fine-mesh verification system that would detect very small quantities of diversion, it would be unacceptably costly. Moreover, it could give rise to a disturbingly high number of false alarms.

The Iraq experience made it clear that the safeguards system as practised had been limited to declared programmes. This limitation has been well understood by Governments, but it was the cause of a lot of criticism after the revelation of the secret programme in Iraq. The Agency was criticized not only for ignoring the existence and locations of the clandestine facilities of the Iraqi enrichment programme, but was also accused by some of giving Iraq a "clean bill of health" before the war in the Persian Gulf. This is a misreading of what the IAEA said. The Agency only reported that "material under safeguards" was adequately accounted for. It also deserves to be noted that, contrary to the fears of some, Iraq did not divert any of this material to its weapon programme—presumably because it was aware that any diversion would have been reported by the Agency and raised an alarm. In this sense safeguards acted as a deterrent. Instead, Iraq embarked on a vast and expensive effort itself to produce enriched uranium.

The revelations in Iraq have raised the question whether the increasing number of adherents to the NPT has masked increasing disregard for the obligations of the Treaty. As a result, the demands on the safeguards system have increased. As was foreshadowed by the Fourth NPT Review Conference, assurance is now sought of the non-existence of undeclared material and facilities. With the political momentum created by the shock of Iraq, the Agency's Board of Governors and Secretariat have taken a number of steps designed to enhance the ability to uncover non-declared nuclear installations and material. The steps involved envisage three types of access: access to information, access to sites and access to the Security Council.

The most crucial element for discovering secret nuclear activities is access to information. If the State accepting safeguards withholds information about some nuclear activities, the information must come from somewhere else. International inspectors cannot roam vast territories in a random search for secret installations or hidden material. They must be directed to specific places and installations, as they were in Iraq with the help of information obtained through defectors and satellites. IAEA has neither satellites nor its own intelligence sources. However, it amasses information from its overall verification activities and, in recent times, additional information from member States about exports and imports of nuclear material and equipment. The Agency seeks also to extract clues from an analysis of media and other open sources and, since Iraq, it receives some information which member States have obtained through national means, such as satellites. Some member States have not been comfortable with the idea that the Agency might receive "intelligence" information. In my view, the Agency cannot ignore relevant information from whatever source it may come. At the same time, however, in view of the existence of much disinformation and erroneous information, the Agency must critically examine all information available to it before making use of it.

Secondly, there must be a right of access to sites about which relevant information has been obtained. In the case of Iraq, that right was founded upon an exchange of letters between Iraq and the United Nations and IAEA following the cease-fire and the adoption of Security Council resolution 687 (1991). For NPT-type safeguards, IAEA is now stressing its right contained in NPT safeguards agreements to undertake "special inspections". The Agency has asserted that right in the DPRK. The question has been asked why the Agency had not asserted a right of special inspection of a non-declared location prior to the case of the DPRK. The simple answer is that the Agency was never in possession of any information about non-declared sites meriting such inspection.

Thirdly, where access to information is assured but access to sites is not forthcoming, access to the Security Council assumes particular importance. The relationship agreement between the United Nations and the Agency provides for prompt interaction between the two organisations, including the Security Council. The Agency is obliged to refer cases of non-compliance with a safeguards agreement to the Security Council, which may then decide to take enforcement action. In the Gulf War and its aftermath, the Security Council's use of its power as the primary repository of enforcement action in the United Nations system resulted, *inter alia*, in Iraq having to concede far-reaching rights of inspection to IAEA and to accept the dismantling of its programme related to nuclear weapons and the production of weaponsusable material.

It can certainly not be taken for granted that the Security Council will marshal substantial military might in every case which appears to involve nuclear proliferation. However, we can be sure that the Council will be very firm in taking measures in the event of breaches of nonproliferation agreements. The Security Council's Summit statement of 31 January 1992 emphasized not only the integral role of fully effective IAEA safeguards in implementing the NPT, but also the Council's readiness to take "appropriate measures in the case of any violations notified to them by the IAEA". The Council is acutely conscious of the risks inherent in proliferation, and of the need for Agency safeguards to be capable of uncovering any breaches or concealment with a high degree of probability. Indeed, existing legal instruments aimed at ensuring exclusively peaceful uses of nuclear energy, the NPT, the Tlatelolco and Rarotonga Treaties, and a range of bilateral agreements require IAEA safeguards. The issue is not "either" the IAEA "or" the Council. Events have shown that both may need to be involved.

In Iraq, defeated in war, the rights of the inspectors under resolution 687 (1991) and the exchange of letters with Iraq are almost unlimited.

In the DPRK, they are laid down in a standard NPT safeguards agreement. But, the case of the DPRK demonstrates the active use of some of the enhanced safeguards verification arrangements. For example, advanced methods of chemical analysis of material from inspected installations as well as satellite imagery have provided much relevant information. In addition, when requests to visit sites and to obtain additional information were turned down, IAEA requested access to such sites and information by special inspection, as provided for in the safeguards agreement. And in the last resort, the matter was referred to the Security Council, the authority which has to ensure access for verification, where access is not willingly granted.

Despite progress since 1990, a number of improvements in IAEA safeguards still need to be made. The system was designed some 30 years ago as the world's first on-site inspection system. States have since then become more accustomed to confidence-building measures in the form of international inspection. The long-negotiated chemical weapons Convention contains some features, notably regarding the practicalities of access, which appear to be advances over the model nuclear safeguards agreement under the NPT. Such features could be adapted to IAEA safeguards. There is also room for Governments to agree on greater degrees of nuclear transparency by adding new features to the safeguards system, such as fuller reporting about their nuclear programmes, wider access of inspectors to installations, and perhaps acceptance of so-called environmental monitoring, including the taking of samples of soil, water or air for radiological analysis.

The criticism voiced by a handful of writers of the safeguards inspections to the effect that they are sleepy and ineffective stands in sharp contrast to the praise expressed by Governments. Perhaps this criticism is based on a lack of understanding that a system that is to verify a vast number of installations around the world must have some routines, some log sheet, some order. But, it remains important at the same time to maintain the curiosity and alertness of the inspector, to fully use the human resource that he or she represents.

Thus, safeguards are more a confidence-building measure than a watertight barrier to proliferation. The NPT and safeguards agreements can theoretically be denounced as was recently shown by the DPRK. However, the non-proliferation regime in the wider sense includes other measures of a national character, including national export controls, which also serve as barriers to proliferation. Export controls, for example, are designed to make the acquisition or development of nuclear weapons more difficult, where the political-security disincentives may not have worked. The case of Iraq showed that there was room for considerable improvements in export controls and, as a result, that system is now also being strengthened.

Sharing Peaceful Uses of Nuclear Energy: NPT Article IV

The NPT is not exclusively an instrument for verifying nonproliferation undertakings. The NPT also promotes the peaceful uses of nuclear energy among those States which have committed themselves to non-proliferation. Successive NPT Review Conferences have considered all commercial and aid assisted activities between States parties in the area of peaceful uses of nuclear energy to be relevant to article IV of the NPT.

Thus, for example, purely commercial activities such as the export of uranium or the sale of power-generating plants have been issues for consideration. One area of particular concern over the years has been assurance of supply. Countries embarking on a nuclear power programme have sought through international negotiation to define agreed parameters within which they could be assured of an uninterrupted supply of the materials and equipment needed to maintain their nuclear power programmes. This discussion has centred on the need for importing countries to accept safeguards as a prerequisite for assurance of supply.

Most exporters and importers of nuclear-power-related items have now agreed in practice that full-scope safeguards, that is safeguards on all nuclear activities in a State, are the appropriate and necessary condition for nuclear cooperation and supply. The result is that most international commerce related to nuclear power generation, from the supply of uranium to the reprocessing of spent fuel, takes place within the framework of non-proliferation controls provided by the NPT. The accession to the NPT in recent years of some major supplier States has consolidated this framework. While normal commercial channels are the dominant form of cooperation and technology transfer in the peaceful uses of nuclear energy, there are also active bilateral and multilateral programmes involving technical assistance geared particularly to the needs of developing countries. IAEA is the one major international organisation with a mandate in this area.

The programmes of IAEA cover the full range of the peaceful uses of nuclear energy. Safety of nuclear power plants has been one high priority area, particularly since the Chernobyl disaster. Equally, safety and radiation protection aspects of the use of radioactive sources are a fundamental part of all Agency-assisted programmes.

For those many countries without plans for nuclear power, the most useful applications of nuclear technology are in the areas of health, agriculture, industry and environmental protection. In many cases, IAEA activities in these areas are undertaken in conjunction with other international organisations. In fact, IAEA has a Division operated jointly with the United Nations Food and Agriculture Organisation (FAO) devoted to food and agricultural applications. Its Marine Environment Laboratory in Monaco operates in close collaboration with the United Nations Environment Programme (UNEP). In the areas of health and food preservation there is close cooperation with the World Health Organisation (WHO). The Agency's resources can be supplemented when its activities are conducted in collaboration with multilateral funding mechanisms such as UNDP (the United Nations Development Programme). While IAEA technical assistance is normally only provided to its own member States, in projects conducted in collaboration with other United Nations agencies or UNDP, IAEA is able to assist countries which are members of the other organisation.

Article IV of the NPT continues to be seen by parties to the Treaty as an integral part of the total balance of obligations. But, this view has not gone unchallenged. Some critics of IAEA have argued that the twin roles of facilitating the transfer of nuclear technology and applying safeguards to ensure the peaceful use of nuclear installations are incompatible. If those critics were correct, the NPT itself should be considered as a contradictory and unenforceable instrument. These critics seem to consider any strengthening of nuclear infrastructures and any transfer of knowledge in the area of nuclear science as contributing to the proliferation of nuclear weapons. Even the International Centre for Theoretical Physics in Trieste was recently the subject of a press report implying that it was the "training ground for Third World bomb makers". That Centre is run by IAEA and UNESCO, with extensive financial support from the host country, Italy. It is headed by the Nobel Prize winning physicist from Pakistan, Professor Abdus Salam, and is a highly regarded centre of learning. It provides a unique environment for scientists from the developing world to work in and to exchange experience in numerous fields, and it contributes to arresting the "brain drain".

The extremist views of such critics are rejected by IAEA. The strength of IAEA—and indeed of the NPT—lies in the recognition of the beneficial

uses of nuclear technology. Nuclear applications, both power and nonpower, have already contributed much to the achievement of sustainable development and promise to continue to do so.

Like earlier NPT Review Conferences, the 1995 Conference is expected to review the record of implementation of article IV (and preambular paragraphs 6 and 7). IAEA is also expected again to prepare a report on its activities relevant to that review.

Previous Review Conferences have commented on the balance of the technical assistance programme. The Agency has attempted to meet the differing needs and stages of development of its member States. As noted, many member States seek assistance in non-power applications. Those interested in nuclear power argue for additional resources in that direction. Another issue has been the ability of donors that wish to do so to direct their assistance specifically to NPT parties in accordance with the calls of the parties to the NPT for preference to be given in nuclear cooperation to Treaty members. As a result, a scheme has been developed in the Agency to permit funding by donors of separate projects which could not be included in the regular programme of assistance. Assistance to least developed member States has been emphasized at previous reviews. In response, IAEA has developed a programme for "pre-project planning" to identify needs and assist these countries to formulate sound project proposals. Finally, it should be mentioned that Review Conferences have encouraged the creation of regional co-operation mechanisms. The 1990 review welcomed the continuing contribution of the Asia and Pacific regional arrangement and welcomed the creation of the Latin American Regional Arrangement (ARCAL, 1984) and the African Regional Co-operative Agreement (AFRA, 1990), all three being based on the concept of "technical cooperation among developing countries" (TCDC)-so-called South-South Cooperation.

We are convinced that the Agency's technical cooperation has been instrumental in creating in many developing member States a scientific infrastructure which will enable them to fully benefit from the applications of nuclear technology.

Building upon this achievement, it will be possible in many countries to concentrate Agency inputs more and more on those endeavours which are directed towards end users well beyond the scientific establishment. There are numerous examples already where, with Agency assistance, nuclear applications have made an appreciable difference in the quality of life through better health care, increased crop production, improved animal husbandry and insect and pest control. In the industrial area, significant investments by the private and public sector have followed the introduction of nuclear techniques through Agency projects. The demonstration effect that will spread from these activities may ensure that even in a situation where development resources are scarce, sufficient support will be found both at the international and national level to continue and expand the peaceful applications of nuclear energy. This is, of course, all the more desirable in view of the special contribution nuclear applications can make to lessen the threat to our soils and seas, our atmosphere and our climate.

Prospects for 1995

A climate of *detente*, stability and nuclear disarmament should lead to diminished general interest in nuclear weapons acquisition. However, for the universalisation of non-proliferation and the unlimited extension of commitments, several things are needed. There is global *detente*, but some regions remain very tense. Drastic nuclear disarmament has been agreed, but it is not yet accomplished. International verification is being much strengthened to provide the confidence that States need so as to dare to live without, or with few, nuclear weapons, but the safeguards strengthening process is not yet finished. It is not naive to aim at the universalisation of non-proliferation and at an unlimited extension of the NPT, but it is prudent to be aware of the considerable hurdles.

Accelerated nuclear disarmament measures by the nuclear weapon States have a great value *per se* and will also do much to facilitate the NPT Conference in 1995. I am not sure that the absence of a complete test ban agreement would block success, but I am sure that the conclusion of such an agreement would be of great help. A cut-off in the production of direct-use nuclear material for weapons purposes would also seem a plausible proposition at a time when the United States and Russia seem to have much more such material than they need. A verified cutoff might also be an interesting venture for countries like Israel, India and Pakistan.

To universalise reliable non-proliferation pledges, *detente* will be needed in the Middle East, on the Indian subcontinent, on the Korean peninsula and in the region of the former Soviet Union. Tailor-made solutions above and beyond adherence to the NPT may be needed in several of these cases. We have already seen how North and South Korea have agreed to renounce enrichment and reprocessing capacity. Such agreement obviously goes beyond the NPT and some such arrangement may well be needed in the Middle East, where no legitimate peaceful need can be seen for such capacity at present. A nuclear weapon free zone in the Middle East would certainly only come about in the context of a peace settlement in that region. It could also be of importance for the extension of the NPT. Unless it comes about and comprises all relevant States, including Israel, there is a possibility that Arab States will be reluctant to commit themselves to nonproliferation for an unlimited period of time. I should add that a nuclear weapon free zone in the Middle East would require far-reaching arrangements for verification, perhaps combining international verification with some arrangements for mutual verification.

Role of IAEA

IAEA will continue to provide a framework for the full implementation of the basic understanding that the beneficial uses of nuclear energy be made more widely available in a framework ensuring exclusively peaceful use.

I have repeatedly stressed that the primary factor for inhibiting proliferation of nuclear weaponslies in political-security considerations. However, the need for confidence that commitments are being respected will continue to result in the need for effective on-site inspection. Some have suggested that the NPT-type safeguards agreements should be renegotiated in the light of recent experiences. I do not think this is either realistic or risk-free in the immediate future. The approach, I think, is more likely to continue to be incremental.

Provided that the safeguards system of IAEA is further strengthened, developed and given adequate resources, it is not far-fetched to believe that it could be used to verify the peaceful storage or use of nuclear material—highly enriched uranium or plutonium—once the material has been recovered from dismantled weapons and moved to the civilian sector. In fact, this is what now is happening in South Africa. The safeguards system is likely to be used in further nuclear weapon free zones, as it is now used in the Tlatelolco Treaty in Latin America and the Caribbean and in the Rarotonga Treaty in the South Pacific.

The safeguards system might also be used to verify a cut-off of the production of weapons-usable material, a task that would be both very difficult and resource demanding, as it would involve large bulkhandling facilities. Even a complete test ban, it has recently been suggested, could be anchored in IAEA. Obviously some new unit would be needed in the Agency to coordinate reports from national systems of seismological surveillance and to coordinate any other agreed verification provisions. The nuclear expertise of the Agency could be of direct use in these areas and in identifying the radioactive traces of any test explosion. Furthermore, the Board of Governors of IAEA, with its balance between North and South and special representation of States which are advanced in the technology of atomic energy, would seem to be a well-designed body to supervise the implementation of a test-ban treaty, without the creation of a new organisation. It is not necessary to create new international organisations for every new task.

In conclusion, new verification tasks will continue to arise with further measures in the nuclear arms control and disarmament field. Safeguards are dynamic, not static. Personnel with new expertise can be recruited for new functions. Were some or all of the political developments which I have outlined to come to fruition, IAEA could be faced with significant new challenges.

111 AFRICA AND THE INTERNATIONAL NUCLEAR NON-PROLIFERATION REGIME

Africa's position on the question of the non-proliferation of nuclear weapons has been consistent and well-articulated. African States are opposed to the proliferation of nuclear weapons, whether such proliferation is vertical or horizontal, and they have sought to combat that development not only through rational argument and international discourse, but also by concrete action. African States have been at the forefront of non-proliferation efforts from the beginning, and have contributed to the success of the non-proliferation regime not only through adhering to the Treaty on the Non-Proliferation of Nuclear Weapons and to the Statute of IAEA and through entering into safeguards agreements with the Agency, but also through efforts, begun in 1964, to establish a nuclear weapon free zone in Africa. This study shall therefore involve tracing the role and contribution of the African States to the present international nuclear non-proliferation regime and current efforts aimed at strengthening that regime not only by way of support for its central edifice, the NPT, but also by way of establishing a NWFZ in Africa.

Contribution to the Current International Nuclear Non-Proliferation Regime

As early as 1959, African States requested the General Assembly to pass a resolution restraining France from conducting atomic tests in the Sahara. In 1961, after France had conducted tests, the African States persuaded the General Assembly to adopt a resolution whereby all States were requested to consider and respect the continent of Africa as a denuclearized zone. African States were so supportive of the idea of international efforts aimed at curbing the nuclear arms race and the horizontal proliferation of nuclear weapons that, at the very inception of the OAU, at Addis Ababa in 1963, African States *as a group* welcomed the Moscow Treaty, which drove nuclear testing underground, and urged OAU members to accede to it. Again at Cairo, in 1964, African States endorsed the international approach to curbing the proliferation of nuclear weapons when the Heads of State and Government of the OAU, in adopting the Declaration on the Denuclearisation of Africa, stated their readiness to undertake, in an international treaty to be concluded under the auspices of the United Nations, not to manufacture or otherwise acquire control of nuclear weapons.

Hence, it is hardly surprising that African States welcomed the NPT, when it was negotiated in 1968. Today, 46 out of the 54 African States are parties to the NPT and a significant number have concluded safeguards agreements with IAEA, as required under the Treaty.

Africa's contribution to global non-proliferation efforts is proceeding apace even now. The continent has participated constructively in the Review Conferences of the NPT and sought, by example and by assisting in the search for a better balance in the Treaty, to bring it to its goal of universality and enhance its moral standing. Even as of now, African States are poised to play a pivotal role at the coming extension Conference of the NPT, in 1995. With its 46 parties, Africa will be a crucial factor in the decision to be taken by a majority of the parties concerning the extension of the Treaty. Africa also has ample capacity to contribute to the global non-proliferation through its role as a supplier of uranium and also through efforts aimed at the establishment of a NWFZ in Africa. As most of Africa's producers of uranium are parties to the NPT, they are now enjoined to apply the system of non-proliferation controls in the NPT in the conduct of their exports of this vital product. Equally, if the efforts at present under way to establish a NWFZ in Africa bear fruit, African States will again have made a significant contribution to the international nuclear non-proliferation regime. They will have done this first by removing a sizeable portion of the globe from the realm of nuclear competition, and secondly by the power of the example set for other regions, perhaps inspiring them to try harder to achieve the same in their own areas.

Current Efforts to Achieve Implementation of the Declaration

As stated above, the African wish to preclude and proscribe the extension of the nuclear arms race to Africa was expressed more than a generation ago. Indeed, the Rapacki plan for Central Europe notwithstanding, the very concept of a nuclear weapon free zone owes its genesis and appeal in part to those African efforts of the late 1950s and early 1060s. African States were the first to originate, articulate and endorse, *as a group*, the concept of limitation of the tentacles of the nuclear arms race by geographical region.

Many arguments can be adduced to explain the hiatus in activity to establish a NWFZ in Africa after 1965. Immediately self-evident factors are: (a) the prophylactic effect on the African security situation of the global efforts aimed at curbing the wider dissemination of nuclear weapons that culminated in the conclusion of the NPT in 1968; (b) the transfer of French nuclear tests from Africa to the South Pacific in the mid-1960s, and (c) the disturbing development of the search for a military nuclear capability by South Africa from the early 1970s, which posed a serious security dilemma for African States with regard to how they would respond.

Of the factors mentioned above, the most important was the South African quest for a military nuclear capability. That quest was a direct challenge to the African concept of a continent-wide NWFZ. Moreover, the confrontational relations between that country and the rest of Africa made that capability particularly malevolent and, therefore, objectionable to African States. It was thought that a NWFZ that excluded South Africa would not be effective enough to achieve the security objectives of the African States. Moreover, in the international environment prevailing during the Cold War, it was not clear what obligations the nuclear powers and countries responsible for colonies or other territories within the area of the proposed zone would be prepared to undertake towards the zone. Plans for the denuclearisation of Africa, therefore, remained largely on the shelf.

Beginning in 1989, there occurred a sea-change in the international environment. The Cold War effectively came to an end. And with the end of the Cold War, several intractable regional crises, including the South African crisis, appeared ripe for solution. In tandem with its process of democratisation at home, the South African regime discarded its confrontational stance with Black Africa. On 10 July 1991, South Africa acceded to the NPT. On 16 September 1991, the country concluded a safeguards agreement with IAEA, and later, the same year the representative of South Africa informed the IAEA Board of Governors that not only did South Africa no longer possess nuclear weapons or undeclared nuclear materials or operate any clandestine nuclear plan, but it also supported the 1964 OAU Declaration on the Denuclearisation of Africa, and it would be ready to contribute to the establishment of a NWFZ in Africa. Already on 4 December 1990, the General Assembly of the United Nations had passed a resolution requesting the Secretary-General "to provide all necessary assistance that the Organisation of African Unity may seek regarding the convening, at Addis Ababa during 1991, of a meeting of experts to examine the modalities and elements for the preparation and implementation of a convention or treaty on the denuclearisation of Africa".

The meeting held by the experts at Addis Ababa from 6 to 10 May 1991 may be rightly regarded as the start of the second phase of efforts to establish a NWFZ in Africa. Although, in response to a directive from the Council of Ministers, the OAU Secretariat had as early as 1964 put together a draft convention for the denuclearisation of the continent of Africa, it is the process started at Addis Ababa in 1991 that appears to be the first substantial attempt to transform the verbal African expression of will to establish a denuclearized zone into a viable legal instrument designed to achieve that objective.

There have been so far three meetings of the Group of Experts. The meetings in Addis Ababa (6-10 May 1991) and Lome (28-30 April 1992) were largely brainstorming sessions, where the experts exchanged ideas on the modalities and elements for the preparation of a treaty or convention. The Harare session (5-8 April 1993) was qualitatively different in that experts actually engaged in drawing up a draft treaty. Because of this changed focus, the Harare meeting, in addition to the original Group of Experts, also included delegates from Senegal and Mauritius, expert observers from South Africa (ANC, PAC and Government) and an expert from IAEA.

For the purpose of this study, however, the three meetings shall not be treated in chronological order. Every idea shall be considered from its inception in discussions among experts up to the manner, if any, in which it was incorporated in the draft treaty.

From the outset, it was clear to the experts that their effort should be informed by (a) the 1964 Declaration; (b) the international trends in the field of disarmament and security; (c) the development of the concept of nuclear weapon free zones as enunciated in the 1975 and 1982 United Nations studies on the subject, and as put into practice by the Tlatelolco and Rarotonga Treaties; and (d) the objective circumstances of the African continent. For example, Africa is the only region attempting to establish a NWFZ, where a State that had developed nuclear weapons is to be included in the area of the zone. Regarding the choice of the name of the instrument—convention or treaty—the experts opted for the latter. They were aware that the 1964 Declaration stipulated either/or, and that the draft prepared by

1964 Declaration stipulated either/or, and that the draft prepared by the OAU Secretariat in 1964 in fact referred to a convention. But, they believed that "treaty" was more appropriate, in tune as it is with the similar instruments of Rarotonga and Tlatelolco.

A more complicated issue revolved around the question whether to call the denuclearisation regime a "nuclear weapon free zone" or a "nuclear free zone". The attraction of the latter was mainly in that the title itself would imply anti-dumping aspects and circumscription of all nuclear explosive devices, rather than dedication to the prohibition of nuclear weapons only. However, such a title would suggest also the proscription of peaceful uses of nuclear energy, and that was judged to be its fundamental flaw. Thus, the African treaty will be called a NWFZ treaty to underscore the right and intention of African States to avail themselves of the peaceful applications of nuclear energy. It is true that African States are also wary of the dangers of a loophole allowing peaceful nuclear explosive devices and realise that the utility of the technology of peaceful nuclear explosions has not been proven. It is equally true that African States are against the dumping of radioactive and toxic wastes. But, it was felt that these concerns should be addressed in the treaty's provisions rather than be reflected in the title. Consequently, articles 3,4 and 5 of the draft treaty, which deal with renunciation; prohibition of testing; and declaration, dismantling, destruction and conversion, refer to nuclear explosive devices rather than to nuclear weapons. The draft contains specific provisions on the prohibition of the dumping of radioactive wastes.

In elaborating the draft treaty, the experts used the following elements which, for easier treatment of the subject, shall be used in this discussion: preamble; renunciation of nuclear explosive devices; prohibition of testing of nuclear explosive devices; declaration, dismantling, destruction or conversion of nuclear explosive devices and the facilities for their manufacture; prohibition of dumping of radioactive wastes; peaceful nuclear activities; verification of peaceful uses; physical protection of nuclear materials and facilities; mechanism for compliance; reports and exchange of information; amendments; reservations; duration and withdrawal; signature; ratification and entry into force; depositary functions; status of the annexes; IAEA safeguards; African Commission on Nuclear Energy; complaints procedure; protocol to be signed by the nuclear powers not to attack States of the zone; protocol to be signed by the nuclear powers not to test or assist or encourage the testing of nuclear explosive devices anywhere within the zone; and protocol to be signed by extra-zonal States internationally responsible for territories within the zone. All these elements, except the preamble, were dealt with by the Harare drafting group. With regard to the preamble, it was felt that its content would be best decided upon in the context of a clearer understanding of the provisions in the body of the treaty and that, therefore, it should be considered last. There was no time to consider it at Harare, however. In all, at Harare the experts drew up a draft treaty of 18 articles, 4 annexes and 3 protocols.

At the outset, the experts considered the question of usage of terms for the purposes of the treaty and its protocols. The terms singled out for definition were: "African nuclear weapon free zone", "territory", "nuclear explosive device", "stationing", "dumping", and "nuclear installations".

"The African nuclear weapon free zone" was defined as meaning the continent of Africa and the adjoining islands. Due recognition was given to the OAU Council of Ministers resolution CM/Res 676 (XXXI), which contains the OAU definition of Africa. However, it was decided that the extent of the zone needed to be delimited precisely through the services of an experienced cartographer, and that the map of the zone should be attached to the treaty as an annex.

"Territory" in the context of the African NWFZ was defined to mean internal waters, territorial sea and archipe-lagic waters, the seabed and subsoil beneath, the land territory and the airspace above them.

The experts defined "nuclear explosive device" as any nuclear weapon or other explosive device capable of releasing nuclear energy, irrespective of the purpose for which it could be used. The term includes such a weapon or device in unassembled and partly assembled forms, but does not include the means of transport or delivery of such a weapon or device, if separable from and not an indivisible part of it.

"Stationing" was defined as meaning implantation, emplacement, transportation on land or inland waters, stockpiling, storage, installation and deployment.

"Dumping" was defined as disposing of, unloading or depositing. It was felt that in the African treaty, the term should retain its normal usage rather than the more technical meaning it has in such instruments as the London Dumping Conventioa. "Nuclear installation" was defined to include nuclear power and research reactors, fuel fabrication, uranium enrichment, isotopes separation and reprocessing facilities, as well as any other installations with fresh or irradiated nuclear fuel and materials in any form and establishments storing significant quantities of radioactive materials.

The experts were of the opinion that the obligation of renunciation of nuclear explosive devices should be explicit and should include research, development, manufacture, stockpiling, acquisition, possession and control of nuclear explosive devices. To that end, a State party to the African NWFZ is expected (a) not to undertake research, develop, manufacture, stockpile or otherwise acquire, possess or have control over any nuclear explosive device by any means anywhere; (*b*) not to seek or receive any assistance in the research, development, manufacture, stockpiling or acquisition or possession of any nuclear explosive device; (*c*) not to take any action to assist or encourage the research, development, manufacture, stockpiling or acquisition or possession of any nuclear explosive device by any State; and (*d*) to prohibit, in its territory, the stationing of any nuclear explosive device.

It was also felt by the experts that there needed to be a specific prohibition of the testing of nuclear explosive devices in the treaty, and to that end they included an article whereby States parties undertake not to test any nuclear explosive device, to prohibit the testing of nuclear explosive devices in their territories, and not to assist or encourage the testing of any nuclear explosive device by any State anywhere.

Africa is a region where one of the States expected to become a party to the NWFZ, namely, South Africa, not only has a nuclear weapon capability but has actually admitted to having developed six nuclear explosive devices. For this reason, the experts believed there was a need for clear provisions pertaining to States with nuclear weapon capability and in possession of nuclear explosive devices already developed before the entry into force of the treaty. To that end, they included in the treaty an article on the declaration, dismantling, destruction or conversion of nuclear explosive devices and the facilities for their manufacture. Through that article concerned parties would undertake: (*a*) to declare any capability for the manufacture of nuclear explosive devices manufactured prior to the coming into force of the treaty; (c) to destroy facilities for the manufacture of nuclear explosive devices or, where possible, to convert to peaceful uses; and (*d*) to permit

international inspectors to ascertain the processes of dismantling and destruction of the nuclear explosive devices as well as the destruction or conversion of the facilities for their production.

Through the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, the region already has sufficient provisions for dealing with the problem of the dumping of radioactive waste. The only problem is that not all States party to the African NWFZ will also be parties to the Bamako Convention. To avoid any duplication, while at the same time ensuring that all African States abide by the same standard, it was decided to incorporate into the treaty provisions whereby each party undertakes to support effective implementation of and apply measures equivalent to those contained in the Bamako Convention insofar as that instrument is relevant to the issue of radioactive waste; and not to take any action to assist or encourage the dumping of radioactive waste and other radioactive matter anywhere within the African NWFZ. Several African States are suppliers of nuclear fuel, and the question was raised concerning commercial agreements whereby a State has to take back spent fuel or waste products resulting from an initial export by it of the original fuel material. The general feeling was that where a State has adequately developed disposal and storage facilities for this purpose, an exception should be made. However, it was still considered that the issue needed further study.

It was clear to the experts that the developmental aspects of an instrument such as the one they were drafting were at least as important for the African States as the non-proliferation aspects. The promotional aspect of the treaty in terms of peaceful uses of nuclear energy therefore needed to be emphasized. The goals of non-proliferation should be achieved less through restrictions, embargoes or proscriptions, and more through transparency and removal of the anxiety that leads both to the attractiveness of the nuclear option for regional States and the imposition of restrictions and embargoes by supplier countries. Consequently, the experts stressed that nothing in the African NWFZ treaty should be interpreted as obstructing the access of parties to the use of nuclear technology for peaceful purposes.

The experts emphasized, however, that all activities for the peaceful use of nuclear energy should be conducted under strict non-proliferation measures in order to provide assurance of exclusively peaceful use. They recommended that comprehensive safeguards agreements should be entered into between the parties to the treaty and IAEA, but went on to note that it may be necessary to ensure transparency by operating regional facilities, especially for sensitive parts of the fuel cycle. The experts nevertheless emphasized that Africa should not bar itself from access to technology that can prove vital in the future and that nonproliferation requirements should be assured in a positive manner, through transparency, rather than negatively, through the renunciation of certain processes such as reprocessing and enrichment by African States. In this connection, in their draft they incorporated provisions whereby parties undertake to promote jointly and severally the use of nuclear energy for economic and social developmental purposes and, to that end, to establish and strengthen mechanisms for cooperation at the bilateral, subregional and regional levels, to make full use of the

programme of assistance available in IAEA and thus to strengthen the 1990 African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology (AFRA).

To ensure that nuclear energy in Africa is used exclusively for peaceful purposes, the experts incorporated provisions in the draft dealing with the verification of peaceful uses. According to those provisions, each State party will undertake (*a*) that all activities for the peaceful use of nuclear energy shall be conducted under strict nonproliferation measures to provide assurance of exclusively peaceful uses; (*b*) to conclude comprehensive safeguards agreements with IAEA and (*c*) not to provide source or special fissionable material or equipment or material especially designed or prepared for the processing, use or production of special fissionable material for peaceful purposes to (i) any non-nuclear weapon State unless subject to a comprehensive safeguards agreement concluded with IAEA; (ii) any nuclear weapon State unless subject to applicable safeguards agreements concluded with IAEA.

On the issue of the physical protection of nuclear materials and facilities, the experts were of the view that in order to prevent theft or other unauthorized use or handling, States parties needed to undertake (*a*) to maintain the highest standards of security and effective physical protection of nuclear materials, facilities and equipment; and (*b*) to apply measures of physical protection that provide protection equivalent to that provided for in the Convention on Physical Protection of Materials and International Transfer Guidelines on protection of materials developed by IAEA for that purpose. The experts also considered the

possibility of armed attacks on nuclear installations and coalesced around the view that such attacks were not permissible in any circumstances. To this end they included in the draft a provision whereby parties to the treaty would undertake not to take, assist, or encourage any action aimed at an armed attack by conventional or other means against nuclear installations in the African NWFZ.

In connection with the question of compliance with treaty obligations, it was considered that any mechanism for this purpose should strike a balance between the prohibitive and the promotional aspects of the treaty. It was recommended that an African Commission on Nuclear Energy (AFCONE) should be established to have responsibility for collating information about the nuclear activities of States, bringing into effect the complaints procedure of the treaty in incidents of violation of treaty obligations, reviewing the application of IAEA safeguards to peaceful nuclear activities in the African NWFZ, requesting extraordinary inspections by IAEA, encouraging regional cooperation in the peaceful uses of nuclear energy, and promoting international cooperation with extra-zonal States to enhance capacity for the pacific applications of nuclear technology.

It was recommended that AFCONE be composed of twelve members elected by parties to the treaty, bearing in mind their expertise and interest in the subject-matter of the treaty, equitable geographical distribution, and the need to include members from countries with substantial nuclear programmes. A further recommendation was that members of the Commission should be elected for a three-year period, with a quorum being constituted by two thirds of the members, and decisions being taken by a two thirds majority of those present and voting. The experts also suggested a complaints procedure in the treaty whereby (a) a party which considers that there are grounds for a complaint that another party is in breach of its obligations under the treaty shall bring the subject-matter of the complaint to the attention of the party complained of and shall allow the latter reasonable opportunity to provide it with an explanation and resolve the matter; this could include technical visits agreed between the parties; (b) if the matter is not so resolved, the complainant party may bring the complaint to the Commission, which shall (i) give the party complained of reasonable opportunity to provide it with an explanation of the matter; and (ii) if it decides there is sufficient substance in the complaint to warrant an extraordinary inspection in the territory of that party or elsewhere, request IAEA to conduct such an inspection.

The Agency and regional inspectors shall report in writing as quickly as possible to AFCONE, outlining their activities and stating their conclusions. AFCONE shall report fully to all States parties to the treaty informing them whether, in its judgement, the party complained of is in breach of its obligations. If AFCONE decides that the party complained of is indeed in breach of its obligations or that the party did not cooperate fully with IAEA and regional inspectors, or at any time at the request of the accuser or the accused party, AFCONE shall meet promptly to discuss the matter. It may then decide how to enforce compliance either at its own level, at the level of the OAU, the General Assembly of the United Nations or the Security Council.

The experts also recommended a system of reporting and exchange of information among treaty parties whereby (a) each party shall submit an annual report to AFCONE on all its nuclear activities; (b) each party shall promptly report to the Commission any significant event affecting the implementation of the treaty; and (c) the Commission shall receive an annual report from the Secretariat of AFRA on its (AFRA's) activities.

Considering the question of IAEA safeguards, the experts noted that it was a treaty requirement of the NPT that parties conclude safeguards agreements with the Agency within eighteen months of joining the Treaty. They proposed that parties to the African NWFZ treaty which do not have an NPT-type of agreement in force should also enter into a safeguards agreement with IAEA within eighteen months of the entry into force of the African NWFZ treaty or within eighteen months of the date of entry into force of the treaty for that party. For purposes of IAEA safeguards, it was suggested that each party should transmit to the Commission, for its information; a copy of the overall conclusions of the most recent report by IAEA on its inspection activities in the territory of the party concerned, and advise the Commission promptly of any subsequent findings of IAEA in relation to those conclusions. It was also recommended that, for the purpose of ensuring confidentiality, the information furnished by the parties should not be disclosed or transmitted to third parties by the addressees of the reports unless express permission is given by the parties reporting.

The experts recommended that there be no reservation procedures allowed in the treaty. They were aware that States could always give their interpretation of various clauses in the treaty, but the deleterious effect of these would be less than that of reservations, were these to be expressly allowed by the treaty. The experts also recommended that the African NWFZ treaty should be of unlimited duration, but that each party shall, in exercising its sovereignty, have the right to withdraw from the treaty if it decides that extraordinary events related to the subject-matter of the treaty have jeopardized its supreme interests. Notice of withdrawal is to be made twelve months in advance, and should include a statement of the extraordinary events the withdrawing party regards as having jeopardized its supreme interests. Such notice is to be given to the depositary of the treaty who, in turn, will circulate it to all other parties.

The African NWFZ treaty should be open for signature by all States in the area of the zone and shall be subject to ratification. It is recommended that it enter into force upon ratification by a simple majority of those States. For States ratifying the treaty after this date, it shall enter into force on the day of deposit of their instrument of ratification. It is also recommended that the depositary of the African NWFZ treaty be the Secretary-General of the OAU.

The experts also recommended that there be three protocols to the treaty. The first protocol, addressed to the nuclear weapon States, would have those States undertake not to use or threaten to use under any circumstances nuclear explosive devices against parties to the treaty or the territory of the African NWFZ; not to contribute to any act of a party to the treaty which constitutes a violation of the treaty; or to any act of another party to a protocol which constitutes a violation of the protocol. The second protocol, also addressed to the nuclear weapon States, would have those powers undertake not to test or assist or encourage the testing of any nuclear explosive device anywhere within the African NWFZ. The third protocol, addressed to States outside the African NWFZ that are internationally responsible for territories situated within the zone, would have those States undertake to apply in respect of such territories the obligations contained in the African NWFZ treaty as they relate to the prohibition of research, development, manufacture, stockpiling, stationing and testing of nuclear explosive devices as well as to the dumping of radioactive waste, ensuring physical protection against and prohibition of armed attacks on nuclear installations within those territories, and the application of safeguards.

All three protocols shall be of unlimited duration, though they acknowledge the right to withdraw in the event that a State decides that extraordinary events, related to the subject-matter of the protocol, have jeopardized its supreme interests. In that event, the States intending to withdraw shall give twelve months' notice to the depositary, accompanied by a statement of the extraordinary events cited as having jeopardized the States' supreme interests.

The above is an outline of some of the efforts that have been going on to implement the 1964 Declaration on the Denuclearisation of Africa. As already stated, these efforts are not yet complete. The experts themselves have not yet concluded their work, especially as regards the preamble to the treaty, the return of spent fuel products to the country of origin and a clear delimitation of the area of the zone. And when the experts complete their efforts, the draft treaty has still to gain the official stamp of approval of Africa's leaders. However, the fact that it is being prepared by African experts mandated by the OAU, with technical assistance from the United Nations and in pursuance of an objective routinely endorsed by all African States, augurs well for the successful conclusion of these efforts. When such success comes, Africa will have once again notched up a victory for global nonproliferation efforts.

112 DENUCLEARISATION IN AFRICA: THE SOUTH AFRICAN DIMENSION

In accordance with the United Nations General Assembly resolution 47/76 of 15 December 1992, the Group of Experts designated by the United Nations in cooperation with the Organisation of African Unity gathered in Harare on 5 April 1993 "in order to draw up a draft treaty or convention on the denuclearisation of Africa".

In itself this fact was significant, as calls for Africa to become a nuclear weapon free zone had been made since France carried out tests of nuclear explosive devices in Algeria in 1960. It had taken over thirty years for this stage, which marked the third annual meeting of the Group of Experts, to be reached.

The meeting was even more significant for it was attended, at the invitation of the United Nations, by an expert observer nominated by the Government of the Republic of South Africa. Although the presence of South Africa and its participation in the drafting of such a document was recognised by almost all members of the OAU as essential to its success, they had not until then been willing to include a South African representative in their deliberations. In fact, South Africa had, for reasons that the other African States regarded as valid, been totally excluded from any discussions or negotiations on this issue until its accession to the Nuclear Non-Proliferation Treaty on 10 July 1991 and signature of the appropriate safeguards agreement with IAEA only six weeks later.

Even then, the decision to invite a governmental expert was not taken without considerable effort and negotiation. The invitation was issued in New York on 30 March 1993, less than a week after State President F. W. de Klerk had informed the South African Parliament of the existence of a limited nuclear deterrent programme, which had been terminated prior to the completion of the safeguards agreement with IAEA. It was formally accepted in Harare on 2 April 1993, when all the members of the Group were attending a workshop of the Programme for Promoting Nuclear Non-Proliferation (PPNN). There is no doubt that the informal discussions at the workshop facilitated the work of the Group of Experts by removing many preconceptions and misconceptions they might have had.

South Africa, as is clearly recognised, has been the most advanced State of the African continent in the field of nuclear research for more than three decades. As early as 1948, Parliament passed the Atomic Energy Act establishing an Atomic Energy Board, part of whose functions was "to undertake the production of atomic energy", and laying down conditions for "prospecting and mining for prescribed materials", mainly uranium and thorium.

The nuclear research programme resulted in the construction of the 20 MW SAFARI-I (South African Fundamental Atomic Research Installation) research reactor at Pelindaba, west of Pretoria, which went critical on 18 March 1965, marking the achievement of the first selfsustaining nuclear chain reaction in sub-Saharan Africa. The development of the research reactor had been made possible in cooperation with other States engaged in nuclear research, notably the United States, with which South Africa had entered into a bilateral agreement on the civil uses of atomic energy in July 1957. The SAFARI reactor has therefore been placed under IAEA safeguards since its commissioning under a trilateral agreement between South Africa, the United States and IAEA.

South Africa, as an important producer of uranium that also possessed abundant supplies of fossil fuel, was well-placed to pursue investigation into the possibilities of enriching its own uranium supplies. Apart from the importance of ensuring continuity of provision for the research reactor and the future functioning of nuclear-power stations, the possibility of selling enriched uranium in the international market, under appropriate safeguards, was a strong inducement to undertake such research. When an indigenous uranium-isotope separation technology called the stationary walled centrifuge was developed, it was even thought possible that international partners would be available to ensure that the process became commercially viable.

On 20 July 1970, the Prime Minister was able to inform Parliament:

"Scientists of the Atomic Energy Board succeeded in developing a new process for uranium enrichment, as well as the extensive associated technology, and they are presently engaged on the building of a pilot plant for the enrichment of uranium based on this process. The South African process, which is unique in its concept, is presently developed to the stage where it is estimated that under South African conditions, a large scale plant can be competitive with existing plants in the West."

Emphasising that South Africa's nuclear research and development programme was directed towards peaceful purposes and that South Africa was prepared to collaborate in the exploitation of the process "with any non-communist countries desiring to do so", Prime Minister Vorster added:

I also wish to state emphatically that South Africa is prepared to subject its nuclear activities to a safeguards system including inspections, subject to the conditions that:

- (a) South Africa will in no way be limited in the promotion of the peaceful application of nuclear energy;
- (b) South Africa will not run the risk of details of the new process leaking out as a result of the safe guards inspection system; and
- (c) The safeguards system, while efficient, is to be implemented on such a reasonable basis as to avoid interference with the normal efficient operation of the particular industries".

The Government's hopes for international collaboration, which would have obviated any thought of developing a nuclear deterrent, were destined for political reasons to fail. During the 1970s certain nuclear weapon States tended to deny access to "sensitive" technology and materials to "politically unacceptable" States, a category into which the United States in particular increasingly placed South Africa. As a result, export permits under a standing South Africa/ United States contract for fuel elements of highly enriched uranium for SAFARI-I were refused by the United States Administration in 1976, while Congress enacted non-proliferation legislation in 1977 precluding the transfer of nuclear technology to States not party to the NPT. In this political climate the search for partners or, indeed, purchasers of enriched uranium proved abortive.

During that decade, the security situation with which South Africa was confronted, particularly in the aftermath of Portugal's withdrawal from Mozambique and Angola, coupled with concern about the designs of the Warsaw Pact countries on the region, contributed to a strong sense of isolation and the conviction that in the event of a direct threat to its territorial integrity, the Government would not, without compelling reason, be able to rely on the international community for assistance. In the circumstances the argument that the country had no alternative to developing its own deterrent became ever more persuasive.

An investigation of the available options convinced the Prime Minister that the most cost-effective would be the development of a limited nuclear deterrent capability. A decision was taken to this effect.

It was obvious from the outset to the architects of the strategy that South Africa would not actually deploy the devices offensively on the sub-continent. Nevertheless, as its isolation increased, it was essential that, if the threat of outside attack assumed realistic proportions, it would have to be able to demonstrate an ability not only to defend itself but to inflict serious damage on its aggressors. In this way the policy makers hoped to be able to persuade the international community, by way of obvious example the United States, to intervene to defuse the situation. As long as there was no overt threat, South Africa would neither confirm nor deny the existence of a nuclear deterrent capability.

In retrospect one may argue that the policy was naive and that the moment it did declare its capability South Africa would have been more likely to bring upon itself the joint wrath of the United States and the Soviet Union to say nothing of the United Nations Security Council. This view is reinforced by the fact that the two test shafts drilled in the Kalahari desert between 1974 and 1977, with the aim of demonstrating the capability, were officially abandoned in 1977 as a result of pressure from the two Super-Powers. Thus, the site was never used, being closed before the first device had been completed or the pilot plant had produced its enriched uranium. The shafts are currently being rendered inoperable under IAEA supervision.

Nonetheless, many who might argue this way now in respect of the South African strategy would no doubt quote with approval, when their own security was at stake, the fourth century AD dictum of Vegetius: "Qui desiderat pacem, paret bellum".

It was a long process. From the decision in 1974, nearly six years were to elapse before the first device was produced. In that time South African participation in the United Nations General Assembly and the specialized agencies was suspended. South Africa was subjected to a mandatory weapons and a voluntary oil embargo by the United Nations Security Council. For purely political reasons it was denied its designated seat on the IAEA Board of Governors as the most advanced State in the nuclear field in Africa and subsequently participation in the General Conference. There was a notable buildup of Cuban forces in Angola with the help of the Soviet Union and the German Democratic Republic, while, with the looming independence of Zimbabwe, South Africa's borders would become increasingly vulnerable.

The bilateral agreement with the United States was treated on the advent of the Carter Administration in 1977 as a dead letter, and while pressures were continually exerted on it, South Africa could at that stage still discern no particular advantages in acceding to the NPT. Like some other nations, it noted that the nuclear weapon States did not appear anxious to fulfil all their obligations in terms of article IV, viz. the "inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination" and "the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information" and article VI relating to the active pursuit of nuclear disarmament.

What this means is that there were no developments in the political and security fields between the policy decision and its initial implementation to dissuade the Government from its chosen strategy. Neither did the position improve during the major part of the 1980s, when a limited stockpile of six nuclear fission devices was completed. A seventh was planned but abandoned when the programme was terminated in 1989.

Much information on the programme has already been made public but some of it will bear repeating:

- (a) The devices were of the gun-type to be fuelled with enriched uranium: their components were stored separately in steel vaults and they were never stockpiled in assembled form;
- (b) The total cost of the programme was less than 0.5 per cent of the defence budget at the time and amounted to a total of between 700 and 800 million Rand over the ten-year life of the programme;
- (c) South Africa did not at any time conduct a nuclear test: allegations that it had done so in the South Atlantic were incorrect, neither was any nuclear fall-out measured in the area at the time;
- (d) The programme was conducted by South Africa alone. It received no cooperation from any other country. Even those involved in it were required to be South Africans by birth.

By September 1989 much had changed both in South Africa and abroad. It is not necessary to go into detail as the events chronicling the improvement in South Africa's security situation have been well documented. Suffice it to say that the newly-elected State President F.W. de Klerk was able to consider the introduction of far-reaching changes inside South Africa. They included a decision to terminate the nuclear deterrent programme, to decommission the pilot enrichment plant, to dismantle and destroy the nuclear devices, in other words to destroy South Africa's entire nuclear deterrent capability.

This decision opened up the prospect of accession at long last to the NPT; of resumption of full participation in the activities of IAEA; of closer collaboration with other African countries in the development of nuclear technology; of unconditional support for the principle of declaring Africa a nuclear weapon free zone and of joining the global efforts towards the prevention of the proliferation of all weapons of mass destruction.

All of this, it may be noted, was possible without declaring the existence of a nuclear weapons programme, since South Africa was able to accede to the NPT, complete its negotiations for the safeguards agreement in a record period of seven weeks and supply to the IAEA verification team an inventory so detailed that the Director-General was able to report to the Board of Governors in September 1992 that, after a large number of inspections "nothing had been found to suggest that South Africa's inventory of nuclear materials was not complete, nor was there anything to suggest that the list of facilities and materials submitted for controls was incomplete".

There is nothing surprising in this, for the inventory presented to the verification team was complete. None of the additional facilities which have more recently been visited on the invitation of the South African Government pursuant to the State President's declaration to Parliament on 24 March 1993 was, at the time of signature of the safeguards agreement, a nuclear facility or even equipped for nuclear work. As he said in his statement: "I wish today to confirm unequivocally that South Africa is adhering strictly to the requirements of the NPT and that it will continue to do so."

It follows from what has been said that South Africa has its own reservoir of highly enriched uranium. It recognises that, although the possession of this substance is compatible with the provisions of the NPT, some observers may still harbour concerns. It is accordingly necessary to remind them that this highly enriched uranium is stored under strict IAEA safeguards. South Africa is a producer of medical isotopes. To do so entails using highly enriched uranium particularly with a view to their commercial exploitation. It will ensure that this reserve is exploited only under the strict application of IAEA safeguards. International concerns should, in the light of these practical steps, be dissipated.

Accession brought other advantages, as it enabled South Africa to participate in the spectrum of international disarmament activities. It joined the Conference on Disarmament as an observer and became an original signatory to the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons, and on Their Destruction. After a long absence it is making a positive input into the preparatory discussions for the review of the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, and has announced its intention to abide by the rules of the Missile Technology Control Regime, which also includes export restrictions related to dual-use technologies.

All these developments have been synthesized into the promulgation of a draft bill on the non-proliferation of weapons of mass destruction, which has been laid before Parliament, for adoption during the current session. The new law will make it illegal for any South African to assist in any programme related to the construction of such weapons.

In the nuclear field, South Africa has expressed its interest in membership of the Nuclear Suppliers' Group and the Zangger Committee and has just received an invitation to join the latter. Of regional significance, it became a member of AFRA, the African Regional Cooperative Agreement, an organisation within IAEA which coordinates peaceful nuclear projects and cooperation between African States. At the most recent meeting of AFRA, South Africa proposed and indicated that it would support two peaceful nuclear projects in Africa. It has also been designated as the host country for the 1995 AFRA annual meeting. It will, in addition, assist in training within the framework of AFRA projects as well as the IAEA Fellowship Training Programme.

An essential dimension of the decision to abandon the nuclear deterrent programme lay in the fact that it enabled South Africa to speak more forcefully in favour of proposals for the denuclearisation of Africa. The policy of neither confirming nor denying a deterrent capability can be argued to have proved successful. So long as it was deployed the threat of large-scale attack never materialized, and in the end the devices were destroyed without ever having been tested. Thus, the country's commitment to the principle of non-proliferation remained unchallenged.

At the same time, suspicions grew that the capability existed. Ambassador Bariyu Adeyemi's comments describe such suspicions:

"... some fairly credible evidence has emerged that South Africa... might well have acquired a nuclear capability in a grand design to silence opposition at home and to intimidate neighbouring sovereign African States through nuclear threats and blackmail."

As is now clear, the author like most other critics mistook the basis of the design, but the constant reference to a "clandestine nuclear programme" served as deterrent enough and absolved South Africa of the need to do more than remain silent.

The reverse side of the coin was that the suspicions provided a shield for those States in Africa which were not enthusiastic about denuclearisation. Far from being drawn into negotiations, South Africa was systematically excluded from every forum in which it could make its views on denuclearisation known with any sort of credibility. Whatever forms of persuasion were considered, positive encouragement to join the discussions was not one. As it happens, the most effective way of dealing with the problem would have been to proceed with drafting a treaty and establishing the necessary regional mechanisms for mutual security. Evidence of Africa's willingness to disarm would have impacted positively on South Africa, as was demonstrated by its reaction to the improving security situation in 1989 and 1990.

But, the Africans themselves must surely have appreciated that in the circumstances obtaining at the time, South Africa would never have been in a position actually to make use of the nuclear devices they suspected it of having. Consequently it must be assumed that simply voicing those suspicions and passing resolutions with which South Africa, having been dealt with in absentia, would not comply, was regarded as sufficient excuse to postpone implementation of the proposals adopted both by the General Assembly and the OAU. The fragility of peace in the Middle East and the existence of super-power rivalry in Africa may well have served as the inhibiting factor, for it is really only in the aftermath of the Cold War that more than lip service has been paid to denuclearisation proposals. While the objective observer will acknowledge the distance South Africa has travelled in less than four years, the question is still asked as to the timing of the State President's announcement. Serious consideration was given to doing so when South Africa acceded to the NPT, but it was felt that neither the internal situation where constitutional negotiations were at an embryonic stage, nor the external where the situation in Iraq was colouring international thinking, was propitious.

The reaction by African States to its accession to the *NPT*, however, the desire of several of them to expand cooperation in nuclear technology, and their recognition that the essential element for the establishment of a nuclear weapon free zone in Africa was South Africa's acquiescence—all this persuaded the Government that negotiations could not be fully developed, as long as any uncertainty remained. Without full transparency, the vestiges of mistrust would remain.

The Harare meeting provided further evidence of the accuracy of this analysis. South Africa was able to bring to it a demonstrable and demonstrated commitment to the NPT and to an African NWFZ. It had shown that a country that had developed a nuclear capability could renounce it in the interests of regional and global security, particularly when it accepted that its own safety was no longer in doubt.

It has been strengthened in this view by the identity of interests that was apparent at the meeting of the Group of Experts despite the long years of hostility. The meeting demonstrated the importance of talking frankly and avoiding trying to second-guess the strategy of a partner or an adversary. A successful conclusion to this process will achieve many goals. It will bring a nuclear weapon free southern hemisphere closer to realisation, not only advancing a goal of the countries involved but also serving to protect and preserve the ecosystem of Antarctica.

It will do more. It will demonstrate that sovereign States can transcend their suspicion of one another in the interest of joint security. If this can lead to the diversion of funds in the budgets especially of developing nations, from military expenditure to socio-economic improvement programmes, it will have taken an important step in helping the countries of Africa to rescue themselves from the global marginalisation with which they are threatened.

Because so many disparate interests will be gathered into the ambit of the treaty, a precedent, exceeding those of Tlatelolco and Rarotonga, will have been created that can serve as a beacon to other regions where the maintenance of peace and security has been regularly threatened. South Africa hopes that its presence will encourage the participation of other States, particularly in North Africa, which may be hesitant on the grounds that their concerns on this continent are affected by those of their neighbours in the Middle East. The benevolent interest of the nuclear powers in the successful operation of the treaty can help to convince these States that their safety will be guaranteed.

South Africa's participation in the draft treaty also takes it into realms beyond its two predecessors for it means the inclusion of a State which has reached the stage of developing explosive devices. Furthermore, the extent of South Africa's research into the uses of nuclear technology, notably in the production of radio and medical isotopes and the irradiation of perishable food and other substances to mention only a few, as well as its experience in the construction of a nuclear power station, has enabled the drafters to stress the right of African States to the development of nuclear energy and technology for peaceful purposes. The attainment of this objective is now closer and more realistic that it was before South Africa took part.

Similarly, the approach to the disposal of nuclear waste can be developed on a more pragmatic basis. While the opposition to "dumping" remains as strong as ever and the principles of the Bamako Declaration on Hazardous Waste will continue to provide guidelines, the sovereignty of States to consult their own interests in a rational and environmentally acceptable manner strengthens the emphasis on the inalienable right of Africans to participate in technological research and so reduce their dependence on third parties. It is of particular importance to countries which have significant reserves of uranium.

South Africa too is an important producer of uranium. Consequently, it appreciates the concerns that have been expressed regarding the reporting of stockpiles and production of uranium and has indicated its willingness in principle to consider participation in the proposed universal reporting system currently under discussion in IAEA. Full participation would have to be preceded by enabling legislation, after in-depth consultations with local interests; it would be facilitated by a coordinated approach from all African producers.

South Africa sees the draft treaty as complementary to and strengthening the NPT. After so long a period of hesitation, it would have served little purpose to accede to an international instrument with a limited life span. Hence, it recognises the need for the NPT's extension, preferably on an indeterminate basis. Nevertheless, its approach to article X, paragraph 2, will be decided in the light of its participation in the treaty for the establishment of a NWFZ in Africa and the views of those countries with which it has participated in drafting that treaty. It will, therefore, pay close attention to the commitment of State parties to the NPT to their obligations under articles IV and VI.

Although a combined Africa vote would weigh heavily in decisions taken at the Review Conference, in principle South Africa would welcome a consensus approach to the decision-making process. Much has changed in the quarter-century since the NPT was drafted and the importance of the issue emphasises the need for the highest level of agreement. Imposing decisions by simple majority is, in its view, an unsatisfactory alternative which limits the credibility of the NPT as an effective instrument of disarmament.

In the final analysis, security will best be served by international collaboration and transparency. South Africa believes that it has set a valuable example in the latter field. It welcomes the cooperation extended by its fellow Africans in response to the steps it has taken and looks forward to frank and cordial relations with them in the years to come.

113 NUCLEAR NON-PROLIFERATION AND CONFIDENCE-BUILDING IN THE SOUTHERN CONE

The negotiations and agreements between Brazil and Argentina in the nuclear field during the latter part of the 1980s and into the first years of this decade sought to respond to simultaneous and equally important national impulses and perceptions.

Both countries wanted to increase confidence between themselves, to enhance security in South America (particularly in its southern cone), to advance the cause of nuclear non-proliferation while retaining their long-standing reservations regarding the built-in inequalities of the non-proliferation Treaty, to strengthen the Tlatelolco system and, last but not least, to pursue peaceful nuclear research and development in a manner that would not be perceived as threatening or ambiguous by each other, by their immediate neighbours and, ultimately, by the international community as a whole. The exercise involved initially the two original players, but was later extended to bring in IAEA and the full membership of the Tlatelolco Treaty.

At no time did the two countries consider that what they were trying to accomplish was either exemplary or a model which could automatically be extended to other regions of the world. Both countries were quite aware of the uniqueness of their shared circumstances, and their choice of approaches was suggested by their diversified and longstanding relations as immediate neighbours whereby, despite mutual misgivings and suspicions, they had maintained peace between themselves for more than a century and a half.

This is not to say that Brazil and Argentina were unmindful of the fact that the ultimate success of their endeavours would have a positive

impact on international relations locally and at large. At all stages the main negotiators and other significant actors of both countries understood that the outcome of the enterprise would be highly beneficial to their respective national constituencies and to international peace and security as a whole. A little background information seems necessary to place events in some perspective.

Brazil and Argentina are and have been two significant regional powers, which together represent more than half of Latin American's land mass. As regards other significant indicators (population, GNP, etc.), the same proportions roughly apply. Each country has normally stressed over the years those factors that gave it, *vis-a-vis* the other, stronger credentials and a comparative statistical or a psychological advantage.

Brazilians, by and large, have leaned towards quantitative factors (great land mass, large population, abundant resources, large-scale economy, etc.), while Argentina has mostly selected qualitative aspects (higher per capita income and educational standards, milder climate, fertility of soil, quality immigration, etc.).

The end result of these displays and contrasts was that each nation recognised the other as its only significant rival and as a well-matched adversary in a region long known for remarkable international stability and domestic turbulence.

Since very early in this century, when residual colonial border disputes were settled through arbitration and on an equitable basis, substantive grounds for open conflict between the two countries have not been easy to identify.

Both nations had relatively small populations for the vast spaces that they each occupied, and few if any motives of an historical, economic, geographic, ethnic or religious nature seemed to exist that would make conflict between them probable or even possible. In a purely rational world—and ours is certainly not that—Brazil and Argentina would have long ago paved the way for intense and fruitful cooperation with each other.

To understand why this has not been so until quite recently a number of factors should be noted:

 During most of the twentieth century, Argentina and Brazil were under authoritarian regimes or under fragile civilian regimes normally subject to intense military influence, and in both countries vested interests of the military establishment had a stake in the politics of rivalry rather than in the politics of cooperation;

- During this same period both countries and their corporate establishments were under the influence of the intense mistrust and rivalry (ideological or not) that so clearly marked the first eighty years of our century throughout the world;
- In Argentina and Brazil, over many decades, "geopolitical" thinking held sway in most circles concerned with "strategic" considerations, and such thinking reinforced and provided conceptual legitimacy to a state of rivalry and mutual mistrust.

It is, therefore, not surprising that while the logic of cooperation and association was not actively pursued or was pursued on a purely rhetorical basis, rivalry with all its consequences was accepted as the almost inevitable lot of powers that occupied the respective positions that Argentina and Brazil occupied in the regional and global contexts.

It is also fair to stress that in the rivalry game there was much that was simply posturing and "grandstanding" and that, by and large, political and military leaders on both sides shied away from overt conflict and did not seriously contemplate carrying the competition to its ultimate conclusion, and even at the worst of times many influential voices advised restraint and conciliation.

To understand more clearly the set of more immediate circumstances that prompted both countries at a certain point in time to change course, especially in the nuclear field, we must attempt a very brief overview of some domestic and external factors that, in the late 1980s, came into play and interacted in a rather powerful way.

It is significant to note that democratic regimes were restored in both countries more or less at the same time and after quite a few years in which poorly performing economies had created the need for more realistic policies and more cost-effective projects.

With the collapse of the Soviet Union and the end of the Cold War, quite a number of assumptions and scenarios could no longer be held with any measure of credibility, and consequently a profound revision of strategic premises had to be undertaken all over the world.

The 1980s also witnessed a vigorous trend in favour of the reduction of the size and expenditure of the public sector and a parallel increase of concern regarding environmental matters. Policies dictated largely by considerations of prestige or predicated on Cold War scenarios lost a great deal of status and real or perceived threats to the environment became a major preoccupation of a public opinion critical of projects which entailed considerable expenditure and little benefit, at least from the perspective of the ordinary citizen.

The time was ripe for action and the nuclear domain was chosen by elected Brazilian and Argentinian leaders because advances here would have a profound impact on the military, industrial and scientific sectors of both societies and provide an eloquent symbol for the two recently restored democracies.

The two major South American countries were, at the same time, fully committed to the building of the Free Trade Zone between themselves and two other immediate neighbours, an entity that is generally known as the MERCOSUL. It is quite obvious that economic and commercial integration could not easily coexist with military rivalry and strategic planning of an adversarial nature.

It is not necessary to describe at length each step of the process that began in earnest at Foz de Iguazu in November 1985 and culminated in Vienna in December 1991.

Brazilian and Argentinian negotiators were always aware of the necessity to respond to specific circumstances that prevailed in the relationship between the two countries but they were also mindful of the need to set up procedures so transparent and so reliable that international credibility would be assured. It was essential that their efforts would not be compromised by any suspicion that the two countries were engaged in a game whereby one side would provide the other with a screen of credibility behind which nuclear programmes of an ambiguous nature would continue to be carried out.

Another strong parallel conviction was that it was necessary to engage the highest elected authorities of both countries in the project from the very beginning and that crucial steps in this confidence-building process should be given focus by including the participation of the highest elected officials of both countries.

This explains why the Presidents of Brazil and Argentina were present at Foz de Iguazu and met again several times and finally in Vienna at the IAEA headquarters to sign, in the presence of the Secretary General of the Agency and before a wide international assembly, the fundamental documents that capped a long and complex process. Only a passing but necessary reference should be made in this paper to the negotiations of a rather complex and inter-disciplinary nature that led to the amendment of the Tlatelolco Treaty, thus rendering more precise the scope of some of its clauses as well as updating that instrument in terms of its practical applicability. Suffice it to say that, as a direct consequence of the understanding reached between Brazil and Argentina, the Tlatelolco system at last will be rendered fully effective over the extensive geographical zone covered by its provisions.

It might be relevant to add that both the Common System of Accounting and Control of Nuclear Materials (SCCC) and the Agency for Accounting and Control of Nuclear Materials (ABACC) set up by Argentina and Brazil are functioning as anticipated, and meetings are regularly held in Rio de Janeiro and Buenos Aires. Furthermore the legislatures of both countries are by and large on track and on schedule in carrying out the necessary ratification of the appropriate legal instruments.

Building on the strength of the confidence and transparency achieved in the nuclear exercise, Brazil and Argentina have sought to extend this approach to other sensitive areas. With regard to chemical weapons, the same partners—with the welcome addition of Chile—jointly made some significant gestures of which the Mendoza Declaration is an eloquent example.

Brazil and Argentina are looking into some possibilities to build greater confidence and better reciprocal knowledge in other sensitive areas—such as the field of missiles and space technology—where the first building blocs of what will be a long process are just beginning to be carefully placed.

One might say that South America—and especially its southern cone—is well on the way to making the subregion free from all weapons of mass destruction. This, surely, is no mean achievement.

In a less systematic but no less tangible and meaningful way, the whole gamut of questions involving conventional weapons has been favourably affected by the new climate in southern South America.

The armed forces in the subregion are clearly more willing to implement policies leading to greater transparency and to pursue in a concerted manner cooperative projects. This will be, of necessity, a long-term affair, as the very essence of confidence-building lies in the fact that each step should be taken in a relaxed and spontaneous fashion and after fundamental prerequisites have been met. Comprehensive and practical integration schemes— and in our part of the world its symbol is MERCOSUL—have occupied the space of and funnelled the energies previously allocated to sterile rivalries and mistrust.

In the middle of June 1993, very senior military officers of the four MERCOSUL countries (Argentina, Brazil, Paraguay and Uruguay), plus observers from Bolivia and Chile, met in Buenos Aires to set an agenda for better understanding and further cooperation.

Moving along a parallel track, information on military matters (budget figures, statistics on arms transfers, etc.), once jealously guarded, are now supplied as a matter of course in response to United Nations resolutions. It should also be noted that not only has South America long been one of the most stable regions of the world, as stated earlier, but also it is a region in which the current levels of military Expenditure, and particularly those in Brazil and in Argentina, are at an exceptionally low level.

Compliance by Brazil and Argentina with the appropriate United Nations resolutions, whereby military information of international relevance is to be widely disseminated, is quite thorough. The diplomatic missions of both countries in Geneva and New York maintain active cooperation with the Office for Disarmament Affairs, with the Secretariat of the Conference on Disarmament and with UNIDIR, and a steady flow of reliable information is conveyed to the established bodies of the United Nations system concerned with disarmament and arms limitation.

Another development that should be noted and praised is the growing participation of military personnel from our subregion in peacekeeping operations and the willingness of our Governments to do even more, on a selective basis, and within national budgetary constraints.

Summing it all up, and attempting to make a personal assessment from our regional perspective, I think that it can be said that the part of the world from which I come feels that, with most of its external security concerns adequately dealt with, it can make a not insignificant contribution to the strengthening of peace elsewhere by way of example and through participation in operations mandated by the United Nations or conducted, under different rules, under the aegis of the Organisation of American States.

Another important contribution that our countries could make—as they have done in the past—is in the promotion of a new agenda for

disarmament and arms control negotiations free from the constraints, rigidities and dogmas prevailing during the Cold War years

Extraordinary opportunities and challenges lie just ahead of us. The nuclear non-proliferation Treaty will be re-examined at its forthcoming Conference in 1995, and the new international environment could possibly allow the rectification of certain imbalances which have flawed this important instrument.

My own country has sought to obtain observer status in the preparatory stages of the 1995 Conference, thus signalling our profound commitment to the cause of non-proliferation and our desire to listen and be listened to during this crucial preliminary period.

It is perhaps not appropriate for non-signatory countries to get overly involved in the review process of an international instrument to which they are not parties. It is my view, however, that Governments which are obviously committed to the goal of curbing nuclear weapons proliferation and are respected members of the international community could be helpful in further defining an appropriate regime—or regimes that would make the world safer against the spread of nuclear arms.

The fiftieth anniversary of the United Nations—also in 1995—should provide us with an opportunity to look again at its Charter, which is the fundamental document guiding international relations in our time, to seek with wisdom and restraint possible ways to render the principles set out in San Francisco more universally applicable and to make the organisation's machinery more effective and more responsive to the needs and expectations of the world in which we live.

Just as in 1945 a brief window of opportunity opened, so 1995 may offer another such moment. It must be seized with imagination and vigour—as history has shown that the construction of a safer and happier world is not a linear and incremental achievement, but rather the result of crucial, if fragile, moments which happen only from time to time and have been shown to be precarious and short-lived.

To take full advantage of such opportunities, adequate instruments have to be available to achieve the desired results. The United Nations should increase and reinforce its disarmament and arms control machinery to take full advantage of the present favourable winds.

We are well served by the Secretary-General's report entitled *New Dimensions of Arms Regulation and Disarmament in the Post-Cold War Era,* which provides a wealth of ideas which should of course be examined and pursued.

The Conference on Disarmament and the dedicated people—both delegates and staff—that make it work should be strengthened so that the multilateral approach to questions that in one way or another affect all of us may be given a new lease on life. The Conference on Disarmament should be able to show how much more can be accomplished now that imagination and energy have been unshackled to do all that remains to be done.

In Geneva, in New York and elsewhere, new ideas and new impetus should converge so that objectives that for many decades were *de facto* unattainable—such as a CTBT— should now be at the top of our agenda as practical and urgent objectives.

It is quite obvious that a CTBT should become the major objective of disarmament negotiations over the next two years and that the Conference on Disarmament should be adapted so as to enable it to act as a credible and effective forum for these crucial negotiations. It is my belief that the pursuit of a comprehensive test ban treaty is a major task which would provide the multilateral disarmament process with an important focus.

It is never repetitive—from my standpoint—to say that only multilateral negotiations, conducted in a fair and open manner, can provide the legitimacy indispensable for long lasting disarmament and arms control instruments.

In this context it is encouraging to observe that the UNDC—which just a few years ago was lingering—has been given a new lease on life and is undertaking important studies, specifically on the complex and timely issue of sensitive transfers of science and technology. It seems evident that informal "clubs" and arrangements operative in this field should be replaced by formal arrangements that would emerge from ample and responsible negotiations between concerned parties.

It is clear to me that in a time of diminished tension we should not rest on our oars but move forward at the greatest possible speed.

Our founding fathers are still revered because in San Francisco they realized that global and permanent peace should be pursued when a precarious truce had been achieved.

PEACE AND DENUCLEARISATION: AN ISRAELI PERSPECTIVE

It is already apparent that the end of the Cold War did not usher in the "end of history". Reality has intruded rudely, ricocheting from crisis to crisis against the high hopes and expectations of the postCold War. The post-Cold War geopolitical situation presents us with a complicated and bewildering puzzle of threats and dangers. Instead of a clear and present danger, we see a diffusion of threats and the forces of separatism and fragmentation feed new tensions and conflicts. The demise of the Cold War has favoured and revived the old type of conflicts which were dormant for awhile: civil, ethnic and religious wars, or worse, a blend of all three, as in Bosnia. With the lack of a super-power's tight control, sources of unrest are no longer kept in check and ethnic rivalries have reignited with even more lethal fury. The spread of violence, inter-State and intra-State, has clearly marked the "return of history".

In political theory, there are contending approaches to the relationship between the distribution of power and international stability. Some theoreticians claim that a bipolar world is safer since it tends to be a tight system where all actors must be aligned with one of the rival blocs. In such a system there are no vacuums, no room for uncontrolled regional conflicts. Nuclear proliferation, for instance, is manageable under the watchful eyes of the "big two". Multi-polarity, say these analysts, increases the chances of war because of sheer statistical probability; the more ambitious actors you have, the more wars are likely to occur.

Others argue differently, claiming that "as the system moves away from bipolarity toward multi-polarity, the frequency of war should be expected to diminish." There is an assumption that major alliance systems reduce the freedom of their members to interact with outside countries. Basically, this is the school of thought which regards interaction among States as producing "cross-cutting loyalties", which encourage integration and reduce hostility.

The collapse of communism and the disintegration of the Soviet Union have dealt a major blow to many Sovietologists as well as to Cold War analysts. The post-Cold War era places some major question marks on the conventional wisdom of "integration" and "functional" theories in international relations. Particularly with regard to those aspects related to crisis management and arms control, the days of the Cold War may be looked upon as a preferable framework for stability. During the Cold War the Super-Powers tried hard to increase their influence and to manipulate events to their own advantage. However, at the same time, their rivalry was carefully controlled and both sides strove to avoid dangerous crises which might have led to a global war. As a matter of fact, they carefully developed an operational code of tacit and explicit rules of behaviour and engagement. Moscow and Washington have observed these rules with the clear aim of limiting and controlling regional conflicts throughout the world. This superpower cooperation was expressed in an outstanding way in the field of nuclear arms control.

The nuclear non-proliferation Treaty was an obvious product of the Cold War regime of bipolarity. In developing countries it was regarded as another attempt to maintain the gap between the "haves" and the "have nots". The inequality and disproportion of rights and duties under the NPT were the cause of the loudest protests and criticism in different United Nations forums. The Treaty was regarded as "explicitly and officially, an unequal treaty" and was perceived "as the most visibly discriminatory of the post-war arms limitation agreements". The Non-Aligned Movement, which, at its foundation in 1961 criticized the Super-Powers for their arms race and the threat of their nuclear build-up, later did not like detente and rapprochement between Moscow and Washington, viewing them as a ploy to maintain super-power superiority and nuclear monopoly. The non-aligned rejection of both rivalry and cooperation between the Super-Powers was expressed eloquently in a proverb used by the Foreign Minister of Sri Lanka in his capacity as the Chairman of the Movement: "When two elephants get together whether to fight or to make love, the grass and shrubs always get crushed".

During the 1970s, developing countries entertained great illusions about their ability to establish a so-called New International Economic Order (NIEO). The Arab oil embargo of 1973 and the ensuing panic with the quadrupling of oil prices were viewed as *models* for the reallocation of resources from North to South. In this context the NPT was regarded as a symbol of the evils of inequality in the world and as a major obstacle to efforts to reform the international order. When the first United Nations special session on disarmament was convened in 1978, the developing countries viewed disarmament mainly as part of the NIEO struggle:

"The primary task for Southern strategists is to postulate a credible and attainable field theory organically linking disarmament to the main collective task of the South—the New International Economic Order".

Similarly, the Foreign Minister of Sri Lanka stated, on behalf of the non-aligned countries:

"We hold that disarmament is not only a political question, but also an integral element in the new international order, and its co-relationship with development is an extremely close and critical one".

At the end of the 1970s, two different studies by SIPRI, which is known for its general support for the United Nations system and for the plight of developing countries, blamed those countries for distorting the arms control aspects of non-proliferation. This was particularly worrying because of the NPT provisions for the transfer of nuclear technology for so-called peaceful uses. The NPT, SIPRI argued, "cannot deal with the potential for weapons proliferation inherent in the expansion of nuclear energy".

In United Nations debates, the non-aligned countries did not seem to be worried by the loopholes and weaknesses of the NPT and its safeguards. Instead, in their collective position as well as in statements by individual States, the developing countries revolted against the "unequal" regime of non-proliferation. In order to encourage further distribution of power, they emphasized the promotional role of IAEA and at the same time belittled its role in preventing nuclear weapons proliferation. As pointed out by the SIPRI study, the rift between the developing countries and the nuclear powers, which had developed along North-South lines, "presents a real threat to the NPT's survival". The rift could not be bridged because it represented two opposing visions of international order and distribution of power. The developing world has committed itself under the NIEO platform to eliminate the sources of discrimination and inequality in the international system. The Super-Powers, on the other hand, shared a common interest in maintaining a "manageable" international system that could be endangered by the emergence of additional and smaller nuclear powers. Thus, the division of the world into "haves" and "have-nots" served the Super-Powers' interests. The critics of the NPT pointed out that this was "unfair".

However they failed, perhaps knowingly, to understand that *balance* in international relations is *balance of power*, which has nothing to do with the concept of equality or mutuality of obligation. The Super-Powers intended to do exactly what they are criticized for: to concentrate in their hands the major responsibilities in the world order and, therefore, they developed this "clever design to get the NPT to function as a seal on the Super-Powers' hegemonic world policy". In sum there should be no illusions about it:

"... there is a clash between the nuclear Super-Powers who stress the benefits of inequality, and the non nuclear weapon States, who seek to minimise the implications of hierarchy by stressing the benefits of equality".

Unsafeguarded Iraq

This hostile view of bipolarity and of the "discriminatory NPT" can explain the developing countries' attitude of benign neglect towards and even support of Iraq's attempt to acquire nuclear military potential. Observers welcomed "the militarisation of petrolpower" by the oil-producing countries as an important step in changing the international order. Professor Ali Mazrui, for instance, recommended using the "barrel of oil" to buy arms and even nuclear weapons capacity in order to bring about a "new international military order" on the way to creating a "new international economic order". Ali Mazrui was a leading proponent of the "Islamic bomb", and called several times for further proliferation of nuclear weapons in the Middle East and Africa. Ironically, he was appointed to the Group of Experts appointed by the Secretary-General of the United Nations, which prepared a report on Israeli nuclear armament.

While the attitude of the developing world was a mixture of benign neglect and satisfaction, Western countries turned a blind eye to Iraq's nuclearisation programme. The evidence of Iraq's nuclear weapons programme had been in the public domain as far back as the late 1970s. On 17 March 1981, Senator Alan Cranston told the United States Senate that, according to authoritative assessments, "the Iraqis are embarked on a Manhattan project-type approach—they are pursuing all avenues which could provide them with a capability to produce nuclear explosives". The Senator's concerns were heightened by the fact that Iraq was governed by what he termed "a radical, military aggressive regime which routinely employs terrorism to advance its aims". For Flora Lewis, a prominent columnist of the *New York Times*, the Iraqi goals were clear:

"Certainly, despite all denials, Iraq's purpose in building the reactor was to gain possession of the nuclear weapon. It was primarily to challenge Israel's right to exist, but also to shift the power balance in the profound rivalry among Arabs."

More then 450 Western companies helped to build Saddam Hussein's nuclear machine, sending thousands of technicians and signing lucrative commercial contracts to work in Iraqi weapons industries. The Iraqi death threat to other States was persistently nurtured by the cavalier and irresponsible policies of an informal coalition of bankers, arms salesmen, technology brokers, diplomats and governmental officials, as well as arms control proponents. Between 1984 and 1989 alone, Iraq enlisted foreign Governments, corporations and technological knowhow at a cost of over \$14 billion. A large number of countries, mainly from the West and particularly West Germany, France and the United States, are cited as members of the "death lobby". The Iraqi Foreign Minister, Tariq Aziz, was right when he said that, "for Europe, the primary supplier of weapons to the Middle East, to be outraged and shed crocodile tears is pure hypocrisy".

In June 1981, when the Israeli air force attacked the Iraqi nuclear reactor at Osirak, the raid was condemned by the international community and the United Nations Security Council resolution 487 (1981) defined the attack as a "clear violation of the Charter of the United Nations and the norms of international conduct". In January 1991 the United States, in a virtual replay of the Israeli air raid, bombed Iraqi nuclear research reactors received from France and the Soviet Union. Indeed the war effort of the United States and its allies was sanctified by the United Nations Security Council, but the bombing of the reactors amounted to a violent abandonment of the NPT and its safeguards system. Two years later, on 17 January 1993, the United States launched an intensive attack by 40 Tomahawk cruise missiles on what was described as a plant which manufactures components for the Iraqi nuclear programme.

On 28 October 1991, the American Secretary of Defense, Richard Cheney, made a major revision in the American public posture with regard to the attack on Osirak:

"And let me tonight in front of this group thank my good friend David Ivry for the action Israel took in 1981 with respect to the Baghdad reactor. There were many times during the course of the build-up in the Gulf and the subsequent conflict that I gave thanks for the bold and dramatic action that had been taken some ten years before."

Major General (ret.) David Ivry, the Director General of the Israeli Ministry of Defence, was the Air Force commander on 7 June 1981, when 16 Israeli F-15 and F-16 jet fighter bombers dropped 16 MK 84 iron bombs on the Osirak nuclear reactor. This statement of the American Secretary of Defense stood in sharp contrast to the harsh reactions from the United States Administration at the time of the bombing.

In 1981, IAEA officials preferred to criticise Israel rather than address the loopholes that had been exposed in the safeguards regime. From a narrow bureaucratic perspective, the Director General of IAEA was right in concluding at that time that the Israeli operation was an attack on the credibility of the Agency,'s safeguards system. Eleven years later, the Director General would be courageous enough to admit: "It is a chilling thought that if its armies had not invaded Kuwait in August 1990, Iraq might soon have had a nuclear bomb."

Cheating and Abrogation

Iraq showed the world the perilous and shaky nature of the NPT and its regime aimed at providing the developing nations with nuclear technologies in return for their commitment to "give up" their ambitions to acquire nuclear weapons.

The system of safeguards provided by the NPT consists of there main elements: material accountancy, containment and surveillance. All are aimed at enabling "timely" detection of diversion of "significant" quantities of nuclear material from peaceful activities to the manufacture of nuclear explosive devices. Experts agree and the IAEA itself admits that there are limits to the extent to which the Agency is able to detect diversions and to guarantee an effective international response to a non-proliferation violation, even when it is detected. Leonard Spector put it unequivocally, stating that the NPT "was ineffective in restraining Iraq's quest for nuclear arms, raising questions about the utility of this pact as a curb on proliferation elsewhere in the region". He added that the "failure of the IAEA to detect many of the violations committed by Iraq has raised serious questions about the effectiveness of the IAEA and the NPT".

Despite the serious criticism of its "discriminatory" nature and the evident inadequacy of its safeguards system, the NPT has succeeded in enlarging its membership, reaching 156 parties by the beginning of 1993. The universal outreach of the NPT is very impressive and it has contributed, no doubt, to non-proliferation efforts. Yet, in the Middle East and in other conflict-prone areas, the Treaty may create a false sense of security and can be exploited as a strategy for the acquisition of nuclear arms.

During the hearings on the NPT in the United States Senate in 1968, Secretary of State Dean Rusk and Army Chief of Staff General Earl G. Wheeler made it clear that the Treaty "does not apply to a situation of war" and that in a war situation, it "immediately becomes inoperative". In the harsh realities of the Middle East, this logic renders the withdrawal clause in the Treaty an absurdity. Article X of the NPT allows any party, if it so chooses, to declare at anytime its intention to withdraw from the Treaty after a period of three months. In other words, the IAEA system provides every State with what has been termed its "promotional role", namely, maintenance of a "peaceful" nuclear programme for as long as possible, virtually up to the threshold of making nuclear weapons. When ready, a State may merely notify IAEA and exercise its "national sovereignty", as stipulated in the NPT, and withdraw from the Treaty.

In March 1993, North Korea dealt another blow to international non-proliferation efforts when it became the first nation ever to denounce the treaty, barring the door to international inspectors who were on the trail of a secret cache of plutonium. How effective is a treaty that allows a country to develop nuclear weapons for seven years while barring inspectors, and that is denounced as soon as the first inspectors at the door become suspicious? In the Middle East, where Israel's right to exist is not yet recognised by all countries, the risk of unilateral withdrawal from the NPT is even higher.

It is pointless and dangerous to expect a Government in the Middle East to alert its declared enemies by giving them three months' notice. It would be more realistic to expect immediate denunciation of NPT obligations in a war or crisis. Indeed, in November 1980, Iraq blocked IAEA inspection for several months on the grounds that it was in a state of war with Iran.

In October 1990, a report of a group of experts appointed by the Secretary-General of the United Nations expressed some understanding of the unique situation of Israel. In unprecedented language, the report explained the threat to Israel from long-range and accurate ballistic missiles and its growing vulnerability to a situation of prolonged warfare. On the problem of denuclearisation, the United Nations report stated:

"Against this background, it is appropriate to point out that Israel's security position is characterized by three features that cannot but play a part in determining its attitude towards the creation of a nuclear weapon free zone: the relatively small size of its territory, the sustained hostility between itself and the great majority of States of the region, and the fact that it has no military allies in the region and that the one State that might support it in a conflict is geographically remote."

"... However, it is most unlikely that Isreal will give up the security it believes it now derives from its nuclear ambiguity, its presumed deterrent and its eventual weapon of last resort, without a much higher degree of assurance that such a conflict will not occur, as well as compensation in terms of arrangements to enhance regional security in all of its multiple and complex dimensions, conventional as well as chemical and nuclear, political as well as military."

Regional Denuclearisation

Arab posturing on arms control in the Middle East resembles the propagandist approach of the Soviet bloc during the days of the Cold War. Like the Soviets, the Arabs try to avoid discussions on the conventional arms race in their region. Instead, the focus of Arab speeches and initiatives in the field of arms control aims at "exposing" the threat of the alleged Israeli nuclear capability as the key to the military instability in the Middle East. They also disregard Israeli demands for "confidence-building measures" in the military field, and ignore the essential political component of recognition and negotiations on arms control measures. Also, like the Soviets in the European context during the Cold War, the Arabs refuse to approach arms control as a process of "mutual and balanced" reduction of arms. They demand "nuclear disarmament first", without taking into account other components of the Arab-Israeli balance of forces.

The Egyptian formula for a nuclear weapon free zone in the Middle East cannot be regarded as a regional approach to nuclear nonproliferation. As a matter of fact, the Arab call for a nuclear weapon free zone in the Middle East does not offer anything in terms of regional cooperation, negotiations or improvements in mutual confidence. Arab reactions to Israeli proposals for such a zone reflect a permanent refusal to participate in a multilateral, treaty-writing conference. The special characteristics of the Middle East conflict make the existing NPT measures especially fragile, and thus require different arrangements.

These Israeli concerns, also reflecting the "linkage" between conventional and nuclear arms control, were spelled out officially:

"The pressure on Israel to put its nuclear installations under full-scope safeguards ignores, for the sake of principle, Israel's special concerns, which were recently illustrated by the Gulf war. In particular, the Arabs' refusal to negotiate a nuclear weapon free zone with Israel, and their insistence on keeping up international pressure for Israel to include full-scope safeguards, does not bode well. Israel views this as an attempt to keep it well controlled in the nuclear realm while retaining the option of waging war against it. Israel needs a sustained climate of confidence in order to see things differently.

"Israel needs to be reassured, above all, that there is a will to redress its precarious situation, as described in the report. Confidence-building by way of direct negotiations and advances in the political process must precede confidence-building measures of a technical nature. The latter feed on the former."

Moreover, it must be emphasized that despite the attitude of the international media and Arab declarations that take Israeli nuclear military potential for granted, the nuclear factor cannot be treated as another element in the Middle East regional "theatre". Israel has never incorporated the nuclear doctrine into its strategic posture and even during difficult times, under military stress (during the Yom Kippur war of 1973, or during the Iraqi Scud attacks on its civilians in 1991 with the persistent threat of chemical and other non-conventional Iraqi missiles), there was no explicit reference to the nuclear factor in Israeli calls for retaliation. The permanent factor in Israel's policy of "nuclear ambiguity" has transcended all other ideological and party-line divisions between hawks and doves. There has never been any official hint that Israel may move towards an open nuclear posture, and calls by a few analysts for this were rejected forcefully by both the right and the left in Israel as irresponsible and dangerous. Some critics of the Israeli posture suggested replacing the term "ambiguity" with "opacity", to reflect a situation in which the public is sharing the secret consciously with the leadership.

For many years, Israel declared its willingness to negotiate a multilateral treaty, encompassing all nations of the Middle East, to establish a nuclear weapon free zone in the region. The Israeli proposal, introduced in the United Nations as early as 1980, calls for the provision of "a contractual assurance of others' compliance with the commitment to abstain from introducing nuclear weapons into the region". The Israeli initiative was rejected by the Arab States, which regarded it as an Israeli ploy to force on them recognition and negotiations with Israel.

The natural model which comes to mind, and is also brought up by Israeli spokesmen, is the 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, commonly referred to as the Treaty of Tlatelolco. This Treaty, which preceded the NPT, created the first nuclear weapon free zone in an inhabited area—a region covering some 7.5 million square miles with a population of 250 million people.

The nuclear weapon free zone in Latin America falls short of perfection because of such ambiguities as the question of peaceful nuclear explosions, the geopolitical extent of the Treaty and the fact that several countries are not bound by its provisions. The Treaty itself, however, with its verification provisions, is considerably superior to the NPT. Unlike the partial test ban treaty (PTBT) and the NPT, the Treaty of Tlatelolco defines nuclear weapons (article 5), and it enumerates more specifically the obligations of the parties. Protocol II of the Treaty obligates the nuclear weapon States not to threaten or use nuclear weapons against States in the zone—a so-called negative security assurance, which is absent from the NPT. But, most significant is the comprehensive system of verification provided by the Treaty of Tlatelolco, which—in addition to IAEA safeguards—established a permanent organ of its own to assure compliance and to perform inspections. This body, the Organisation for the Prohibition of Nuclear Weapons in Latin America (OPANAL), provides for challenge inspection when requested by its General Secretary or when any member may suspect a violation. Such a system strengthens confidence concerning diversions of weapons-grade material and makes it easier to detect a violation after a diversion has taken place.

The various provisions of a treaty on a nuclear weapon free zone in the Middle East should be left to the give-and-take of diplomacy. The degree of cooperation between the parties will determine their ability to address the special characteristics of the Middle East. From the Israeli position, one can infer that a treaty on a zone in the Middle East must go beyond the NPT and IAEA safeguards and even beyond arrangements which are not yet functioning in the Treaty of Tlatelolco.

A nuclear weapon free zone in the Middle East will require a reliable and workable challenge system such as the Latin American one under OPANAL, but with greater inspection powers based on mutuality. The permanent inspection organ of the zone will have to address the problematic overlap between peaceful and explosive uses of nuclear materials. One possible option for mutual security which is discussed in the professional literature is the permissive action link (PAL), a lock without which the reactor, enrichment plant or plutonium separation plant cannot operate. The locks would have different numeric combinations held by the parties, and any attempt to tamper with the locks would be forestalled by an automatic shutdown of the facility. Such a regional zone should be accompanied by parallel, and not less dramatic, steps by the industrialized powers which are exporting nuclear technology and know-how. A new control regime for nuclear exports must be created in order to establish tougher and manageable guidelines (the Glenn bill of the Nuclear Non-Proliferation Act of 1992 is a good example). The new guidelines should take precedence over commercial and trade considerations, which are always interfering with nonproliferation policies. At the same time the transfer of technology and any licensing to countries in the zone should be transparent and under permanent review. Special effort should be made to include all suppliers of nuclear technology in such a regime.

Peace and Non-Proliferation

The change of Government in Israel, in July 1992, made the Israelis more forthcoming on the participation of the Europeans and the United Nations in the multilateral peace talks, including the arms control group. It is encouraging that both sides, Arabs and Israelis, do not dismiss the option of arms control. In recent years in Israel, arms control has received high priority and there are special units which deal with the subject in the Foreign and the Defense Ministries. However, since arms control and particularly the nuclear issue touch upon existential problems and sensitivities in Israel, no policy changes were made in this field.

In outlining his new Government's policy in his first address to the Knesset, Prime Minister Rabin said: "The government, from its very outset—and possibly in collaboration with other countries—will address itself to thwarting any possibility that one of Israel's enemies will possess nuclear weapons". Rabin seemed to offer a political track to prevent the spread of nuclear weapons, with possible international cooperation, but did not exclude other means as well. In fact Prime Minister Rabin was reinforcing the words of Israel's Air-Force Commander Major-General Herzel Budinger, who had said a month earlier: "We must create the greatest disruption, whether military or political, in order to prevent the introduction of nuclear weaponry in the region".

There is a temptation to draw analogies between the European success in the field of arms control and the potential for agreements in the Middle East. But, the 1987 INF Treaty and the 1990 CFE Treaty cannot be divorced from the political drama in Europe, which brought about the downfall of the Soviet empire and the disintegration of the Warsaw Pact. Basically, there seems to be a strong correlation between the spirit of glasnost (openness) and developments in arms control.

The Helsinki process of the Conference on Security and Cooperation in Europe comprised three so-called "baskets": confidence-building measures and arms control; economic and technological cooperation; and human rights, dealing with cultural cooperation, free movement and communication. If the European experience can be taken as a lesson, it should be noted that the 15 years of virtual deadlock in arms cuts in Europe were broken only when significant changes took place in the third basket. The granting of certain measures of human rights and freedom preceded the process of confidence- and-security-building measures in Europe. It was a process in which the reality as well as the perception of the Soviet Union as an enemy were completely shattered. Even before the breakdown of the Soviet Union and the fall of President Gorbachev, the Soviets manifested a profound eagerness to demonstrate that they did not pose a threat to Europe and the West.

Institutions such as the Helsinki process do not exist in the Middle East and a "human rights" basket seems problematic. Arms control in the Middle East will, in the meantime, have to concentrate on confidencebuilding measures which can be sustained by continuing means of deterrence. At the same time, the industrialized powers should strengthen their coordination in order to prevent the transfer of conventional arms and other components of weapons systems of mass destruction, particularly nuclear, to the Middle East. Measures such as the NPT have proven counter-productive and even threatening in the Middle East. As long as its neighbouring countries do not change their political systems and become open, democratic societies, it will be difficult for Israel to lower its deterrence capabilities. A foolproof process of denuclearisation will have to await stable and genuine peace agreements between Israel and all its neighbours.

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As we draw closer to 1995, the year in which, pursuant to article X of the Treaty on the Non-Proliferation of Nuclear Weapons, a highly important conference will be held to decide whether the Treaty shall continue in force indefinitely or be extended for an additional fixed period or periods, speculation about the future of the nuclear nonproliferation regime continues to increase.

Meanwhile, recent events have helped to introduce elements of uncertainty into the question: the experience of Iraq, a party to the NPT, the dissolution of the Soviet Union and the appearance of new nuclear weapon States, and the withdrawal announcement and its subsequent suspension by the Democratic People's Republic of Korea *vis-a-vis* the NPT are among the factors which give rise to an atmosphere of concern.

Because the NPT has become the corner-stone on which the world's non-proliferation system rests, it is logical that the future of that international instrument should be paid the greatest attention and that great interest should continue to be expressed in increasing the number of parties to it until the entire international community is included.

Nevertheless, the significance of the non-proliferation Treaty should not be exaggerated. Without diminishing its real importance, the fact remains that the NPT is an international treaty which, while it embodies fundamental commitments, can also justifiably be criticized because of lack of compliance with some of the commitments it incorporates and because of the loopholes that have come to light in recent years, which could and should be closed. This will not happen because, as we know, the NPT is practically unalterable. In 1996 we will have exactly the same NPT as in 1995 and its influence on world nuclear policy will most probably be the same as it is now. I do not have the slightest doubt that the 1995 Conference will extend the life of the Treaty and will do so for a long period. Although its text will remain the same, the NPT will emerge from the 1995 Conference strengthened to the extent that its future will no longer be in doubt and its continued validity will be assured for a long time, perhaps indefinitely. The continued existence of the NPT should certainly not be ground for concern.

The NPT has acquired symbolic value, but it is not synonymous with non-proliferation. Adherence to the NPT has become the touchstone by which the sincerity and firmness of every country's non-proliferation policy is judged and great efforts are being made to bring every country outside the system into it by accession to the Treaty.

I believe that this is not the most productive approach. To get a country to accede to the NPT is a worthy objective, but it is not the final or sole solution. First, it has been shown that accession to the NPT is not a guarantee of non-proliferation unless it is accompanied by other steps which go beyond the obligations contained in the Treaty and secondly, because there are other, even more effective, means whereby countries can demonstrate clearly and firmly their commitment to non-proliferation.

I am referring to regional agreements and internationally guaranteed bilateral arrangements. The purpose of this article is really to highlight the fact that the NPT is not the only available means, and that in spite of its merits, there are other means which should be known, respected, and given their proper weight.

In support of the foregoing statement, I shall cite as examples the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (without neglecting to mention the existence of the denuclearized zone in the South Pacific) and the bilateral arrangements made between the Argentine Republic and Brazil.

The features of the Treaty of Tlatelolco have already been described many times. I shall not repeat them. It is, however, worth pointing out that Tlatelolco goes further than the NPT in some respects, the main one being that it prohibits the stationing of nuclear weapons in the territory of Latin American countries and in territories under the jurisdiction of extraregional countries, including those possessing nuclear weapons. When it takes full effect, the prohibition will cover the immense land and ocean area described in article 4 of the Treaty.

As is known, Tlatelolco permits, under certain conditions, something that the NPT prohibits: the carrying out of so-called peaceful nuclear explosions. However, in practice the danger is non-existent. No such explosion has been carried out and there is no one capable of carrying one out; moreover, the majority interpretation is that the possibility of carrying out such explosions would arise only if the technology necessary for them were different from that utilized for the manufacture of nuclear weapons. Furthermore, all the States parties to Tlatelolco must sign full-scope safeguards agreements with IAEA—in practice the same as those signed by the countries belonging to the NPT—prohibiting the explosive use of nuclear energy. Later on I shall refer to the policy currently followed in this respect by the Governments of two countries which have not yet acceded fully to the Treaty of Tlatelolco, that is, Argentina and Brazil.

Closely related to the scope and effectiveness of the prohibitions contained in Tlatelolco is the extent of the area to which it applies. It is a fact that in Latin America the territory of the countries which are not parties to Tlatelolco is as large or larger than that of the States which have ratified it. Worse still, the former group of countries includes the two most advanced with respect to atomic energy, that is, Argentina and Brazil. Accordingly, what those two countries do is essential to assessing the real scope of Tlatelolco and its effectiveness as a way of preventing nuclear proliferation in the region.

As is known, Brazil ratified the Treaty of Tlatelolco, but without waiving the requirements which, according to article 28, must be met in order for the Treaty to enter fully into force throughout the zone, one of these requirements being that the Treaty must be ratified by all States of the region entitled to do so. Chile has followed Brazil's example, and Argentina has signed the Treaty but never ratified it. Cuba has neither signed nor ratified it. The other State which had remained partly outside the Treaty, France, recently acceded to it fully by ratifying Additional Protocol I.

It is clear, therefore, that the policy followed by Argentina and Brazil, in the first instance, with respect to Tlatelolco is fundamental to achieving the definitive strengthening of the Treaty. We can expect Chile to follow the example of its two neighbours and, once that happens, Cuba has given positive signals that, when it comes to the point, it will not stand in the way of the Treaty's full entry into force. There is every indication that Argentina and Brazil will shortly become full members of Tlatelolco. It is important to emphasize, however, that this is happening not as an isolated event but as a direct consequence of the process of bilateral *rapprochement* with respect to nuclear matters which the two countries initiated in 1980 and intensified conspicuously as from 1985. One thing follows from the other.

I shall now make some comments on the bilateral arrangements concluded between the two countries. With regard to Tlatelolco, the Joint Declaration signed by the two Presidents at Foz de Iguazti on 28 November 1990 outlined the series of steps the two States would take to tighten and intensify their bilateral cooperation—steps, it should be emphasized, that the two Governments are taking with a speed and effectiveness rare in such matters.

The last of the measures to be taken bilaterally consists of the incorporation of the two countries into the Tlatelolco regime—but a regime that has been updated and improved. No sooner was the Joint Declaration signed than the Government of Chile indicated its desire to act jointly with Argentina and Brazil at that stage in order to accede fully to the Treaty.

Accordingly, the three South American Governments, in due course, agreed on some technical and procedural amendments which, without changing the substance of the Treaty, in their judgement improved the procedures proposed for the Treaty's control system. The amendments were consulted on and harmonized with Mexico, the country which initiated and promoted Tlatelolco and where the secretariat has its headquarters, and were then submitted to a special review conference of the Treaty, held in June 1992. The amendments were accepted unanimously by all the States parties, and the representatives of Argentina and Brazil announced that on the day that the Parliaments of their two countries approved the new documents, they would waive the requirements contained in article 28. As Chile will certainly do the same, it is to be hoped that Cuba will shortly be the only country that is not a party to Tlatelolco. Until Cuba's attitude changes—which, as has already been said, is quite likely – Tlatelolco's zone of application, although not that envisaged in article 4 at the time when the Treaty enters fully into force, will none the less be very extensive: the sum of all the territories of all the countries parties to the Treaty and of all the entities included in Additional Protocol I, including the countries of the region most advanced in nuclear development.

I should not neglect to mention that in regard to peaceful nuclear explosions, not only have Argentina and Brazil signed a blanket safeguards agreement with IAEA, but they have also included, in article 1, paragraph 3 of the Agreement for the Exclusively Peaceful Use of Nuclear Energy, signed in Guadalajara, Mexico, on 18 June 1991 and ratified by the Parliaments of both States, a clause which reads as follows:

"Bearing in mind that at present no technical distinction can be made between nuclear explosive devices for peaceful purposes and those for military purposes, the Parties also undertake to prohibit and prevent in their respective territories, and to abstain from carrying out, promoting or authorising, directly or indirectly, or from participating in any way in, the testing, use, manufacture, production or acquisition by any means of any nuclear explosive device while the above-mentioned technical limitation exists."

This means that, whatever the interpretation of article 18 of the treaty of Tlatelolco, the two Latin American countries capable of carrying out a nuclear explosion are legally precluded from doing so.

Moreover, with regard to the Treaty, the parliamentary approval process is at present somewhat more advanced in Argentina than in Brazil, though in the latter case it should be pointed out that only the amendments stand to be approved, not the main text of the Treaty, which was ratified some time ago unconditionally. Argentina, however, must ratify the new Treaty in its entirety, including the modifications introduced at the Conference of June 1992. The Argentine Senate unanimously approved the Treaty, as did, also unanimously, the Commission on Foreign Affairs of the House of Deputies. Such is the situation at the time of writing this article. In any event, all signs suggest that full accession of the Argentine Republic to the Tlatelolco system is a matter of time, and indeed a very short space of time.

It is clear from all that we have said that the Treaty of Tlatelolco is very near to achieving the objectives set by the drafters of this international instrument when it was opened for signature on 14 February 1967.

Full adherence to Tlatelolco would ensure the total absence of nuclear weapons in Latin America and the Caribbean. When they joined that system, the countries of the region made a number of strong and farreaching commitments on non-proliferation, which can be monitored, and which in some respects go further than does the NPT. In any event, it can be forcefully argued that the obligations of the States parties to Tlatelolco are not less than those of the States parties to the non-proliferation Treaty. Many have complied with both treaties, in the sense that honouring the stronger instrument necessarily means honouring the weaker one—the weaker one being the NPT. And yet, in actual fact, those countries that are parties to Tlatelolco but not to the NPT are sometimes seen as remiss, and the commitments they have made within the context of the regional agreement are viewed by some as having less value than the commitments expected of parties to the NPT.

As I mentioned earlier, the great step forward that the Tlatelolco system is now in the process of taking—with Argentina, Brazil and Chile on the verge of joining—is largely a consequence of the bilateral cooperation process begun in the nuclear arena by Argentina and Brazil a decade ago. It is perhaps worthwhile to point out that an exclusively bilateral approach to non-proliferation can also bring about results that are intrinsically valuable, and not merely the first step towards joining a multilateral system.

Dating back to the era when the two countries were colonies of Spain and Portugal and ever since they achieved independence, more than 150 years ago, Argentina and Brazil have maintained a relationship not so much of conflict, as of rivalry—competing, in a mostly friendly atmosphere, to be the "leader" of South America.

In the mid-twentieth century, political sectors in both countries began to perceive with increasing clarity that to continue with a regime of mutual antagonism and distrust was anachronistic and unreasonable, on the one hand, because there was no real reason for it and, on the other, because the world situation was changing, making it less and less probable that military conflict would erupt in the region—which may, for that matter, be the most peaceful in the world.

However, it was not easy to overcome centuries of suspicion and precautions; consequently, although the leaders of the two countries made several unsuccessful—perhaps because they were premature—attempts to establish bilateral relations on a different plane, it was not until the end of the 1970s that the climate seemed ripe for the big step.

Although a first *rapprochement*, in 1980, between the military Governments that were in power at the time in both nations failed to produce the hoped-for results, starting in the mid-1980s, when civilian authorities were in charge of the affairs of the two countries, the process gained strength and vigorous momentum.

It was then that substantive cooperation began in the nuclear area, but it should be firmly borne in mind that nuclear *rapprochement* was not an isolated phenomenon, independent of the overall-interrelationship of the two States. It was simply one aspect, certainly a very important aspect, of a process of fundamental reconstitution of bilateral relations. The two Presidents signed the first Joint Declaration on nuclear policy at Foz de Iguazu on 30 November 1985; six months later, in July 1986, the two countries concluded an Integration Instrument with a series of related protocols, whose number grew over time, concerning cooperation in a number of areas, the nuclear area being just one. In March 1991, Argentina and Brazil, together with their two neighbours Paraguay and Uruguay, signed a treaty which provides—and active steps are being taken to achieve this goal—for the establishment, by 31 December 1994, of a common market among the four countries.

It is, nonetheless, interesting to note that an issue as highly sensitive as the nuclear one should have provided the right conditions for becoming one of the areas in which integration between the two countries has progressed very vigorously. The nature of the subject, which is of such transcendental importance for the safety of the two nations, would not appear to make it very suitable for spearheading a process of bilateral *rapprochement*, particularly if we consider that it was preceded by decades of competition specifically in the nuclear area. The fact that this was possible shows that the trust which had been created, and which they sought to foster, was genuine and well-founded. It is worth pointing out, here, that mutual trust was the foundation on which the remarkable edifice that now stands was built, rather than the final outcome of an entire process of reciprocal controls and verification structures. These controls and structures were possible because there was an adequate level of confidence from the very beginning to permit the elaboration of measures which may be considered sufficiently intrusive and rigorous.

The process of nuclear *rapprochement* between the two countries proceeded in stages, starting in November 1985. There were successive visits by the two Heads of State from one country to the other, including tours of the most sensitive nuclear facilities; these were always followed by joint declarations on nuclear policy or, as time went by, *on joint* nuclear policy.

At the same time, a series of agreements were signed on specific aspects, such as the one on mutual assistance in case of nuclear accidents. What is more important, under the direction of the two Ministries of Foreign Affairs, a Joint Committee on Nuclear policy was created which, in fact, became the driving element and the planner of initiatives that, because it received the necessary political support at the highest level, led gradually to the adoption of the successive steps which have marked this process.

We have already emphasized the tremendous importance of the second Joint Declaration, signed at Foz de Iguazu on 28 November 1990. Pursuant to the guidelines stemming from that document, the two States established, in the Guadalajara Agreement of July 1991, a Common System of Accounting and Control of Nuclear Materials and a Brazilian-Argentine Agency (ABACC) responsible for verifying that the nuclear material in the possession of the two parties "is not diverted to nuclear weapons or other nuclear explosive devices".

This was followed, six months later, on 13 December 1991, by the signing, in the presence of the Heads of State of Argentina and Brazil and with the participation also of ABACC and IAEA, of a four-party comprehensive safeguards agreement in Vienna, which Argentina has already ratified.

Immediately thereafter efforts were begun to obtain certain amendments to the Treaty of Tlatelolco to which we have already referred. The effort was successful and the two Governments submitted the documents to their respective Parliaments for approval; this is currently being obtained.

All the foregoing demonstrates clearly that this process of bilateral arrangements has continued and even quickened over time. The change of Head of State which occurred in Argentina and Brazil did not affect the process, indicating that it was not driven by the individual will of either leader but was a decision in which all governmental sectors and concerned sectors of the community had participated.

Brazil's new President has been in office just a short while. Mr. Itamar Franco paid an official visit to Argentina in May of this year. The Joint Declaration signed by the Presidents on 26 May contains two paragraphs which are worth emphasising, out of many others which demonstrate the vigour of the integration process on which the two countries have embarked. The first paragraph states specifically that the two Presidents have resolved to expand and deepen, in the light of the rapidly changing international scenario, the strategy of acting in concert in the political field and to strengthen the process of economic integration of their two countries. With regard to the subject which specifically concerns us, paragraph 5 of the Declaration expresses the common desire to reaffirm, in accordance with their aspirations for peace, the bilateral and international commitments undertaken by the two countries regarding the exclusively peaceful use of nuclear energy, their decision to renounce the possession of weapons of mass destruction, including chemical and biological weapons, and the non-proliferation of nuclear weapons. They also reiterated their interest in the early entry into force of the safeguards Agreement mentioned above and the rapid entry into force, for Argentina and Brazil, of the Treaty of Tlatelolco, as amended.

Thus the decision to intensify integration in all fields, including the nuclear field, has been confirmed at the highest level of the two Governments, and at the same time the non-proliferation policy, established in the previously mentioned agreements and arrangements which have full legal validity, has been strongly endorsed. Not only do Argentina and Brazil follow a joint nuclear policy, but in the relevant international forums, their representatives normally act on behalf of both countries. At some meetings of a technical nature, there have even been cases where one person has represented both States.

This situation is not confined solely to the nuclear sphere. During the presidential visit at the end of May, the two countries signed an agreement providing for joint consulates in certain cities where diplomatic officers from both countries may work and in the offices of which both flags will fly. Consideration is even being given to the possibility, if the consular experience is successful, of having joint embassies. This example highlights the degree of integration that is being attained by the two countries, reaffirming what was said earlier. The close coordination in the nuclear-field is not an isolated phenomenon but a facet of a global relationship between the two countries based on trust and cooperation. The experience of Argentina and Brazil in the nuclear field could naturally serve as a model, with appropriate adjustments, for other situations that are in some way comparable, but it is essential to bear in mind that bilateral arrangements in the nuclear field will be possible only if they form part of a more far-reaching process in which the overall relations between two States undergo a fundamental change and proceed from conflict or rivalry to cooperation and the solution of pending problems. It is reasonable to believe, in the light of the Argentine-Brazilian experience, that in the absence of such an overall approach, the prospects for success of efforts limited to the nuclear field will be slim.

Lastly, I should like to return to a subject to which I referred earlier which could be termed an obsession on the part of some—that of regarding the non-proliferation Treaty as the *only* valid indication of a State's commitment not to produce these weapons of mass destruction.

I have briefly outlined the obligations in this field which are included in the Treaty of Tlatelolco and in the agreements signed by Argentina and Brazil. To use the example of Argentina, not only has it undertaken or is in the process of undertaking solemn commitments of indisputable legal value, but it was also admitted, in March 1993, as a full member of the Missile Technology Control Regime and, in December 1992, of the Australia Group for the control of chemical substances. It participates as an observer in the Nuclear Suppliers Group or London Club, and is in the process of being accepted as a full member. I could mention other actions which are evidence of the same desire for peace and non-proliferation.

However, it seems that all these facts, along with those already referred to in this article, are insufficient to justify accepting Argentina's credentials as a non-proliferating country. The only valid way for a country to prove its credibility seems to be for it to accede to the NPT. Nothing else matters, at least for a substantial number of countries. In my view, this position is unreasonable and, in fact, amounts to an underestimation of the significant measures a country has taken, overcoming many difficulties and attitudes from the past, with utmost seriousness and in good faith. At the same time it may even be counterproductive to reduce all efforts in the field of non-proliferation exclusively to the question of accession or non-accession to the NPT, to the extent that it counteracts and precludes other alternatives which may lead to the same result. Furthermore, it is essentially contradictory to promote or encourage bilateral or regional approaches and then deny that they have any value.

In saying this I do not wish to rule out the possibility that Argentina may, in the end, join the NPT regime, despite the justified criticisms which it has always voiced concerning it. However, considering that Argentina has actually assumed greater obligations than those emanating from the NPT, the appropriateness of persisting in the view that accession to the non-proliferation Treaty is the *only* valid indication of a State's commitment not to produce nuclear weapons is, to say the least, questionable.

115 EXCERPTS ON NEGATIVE SECURITY ASSURANCES*

China

- 1. China undertakes not to be the first to use nuclear weapons at any time or under any circumstances.
- 2. China undertakes not to use or threaten to use nuclear weapons against non-nuclear weapon States or nuclear weapon free zones at any time or under any circumstances. This commitment naturally applies to non-nuclear weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons or nonnuclear weapon States that have undertaken any comparable internationally binding commitments not to manufacture or acquire nuclear explosive devices.

France

Specifically, France reaffirms that it will not use nuclear weapons against non-nuclear weapon States parties to the NPT, except in the case of an invasion or any other attack on it, its territory, its armed forces or other troops, its allies or a State towards which it has a security commitment, carried out or sustained by such a State, in alliance or association with a nuclear weapon State.

Russian Federation

The Russian Federation will not use nuclear weapons against nonnuclear weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons, except in the case of an invasion or any other

^{*} Excerpted from the records of the meeting of the CD on 6 April (CD/ PV.705). The full declarations were also circulated as United Nations documents (see footnote 8).

attack on the Russian Federation, its territory, its armed forces or other troops, its allies or a Slate towards which it has a security commitment, carried out or sustained by such a non-nuclear weapon State in association or alliance with a nuclear weapon State.

United Kingdom

The United Kingdom will not use nuclear weapons against nonnuclear weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons except in the case of an invasion or any other attack on the United Kingdom, its dependent territories, its armed forces or other troops, its allies or on a State towards which it has a security commitment, carried out or sustained by such a non-nuclear weapon State in association or alliance with a nuclear weapon State.

United States

The United States reaffirms that it will not use nuclear weapons against non-nuclear weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons except in the case of an invasion or any other attack on the United States, its territories, its armed forces or other troops, its allies, or on a State towards which it has a security commitment, carried out or sustained by such a non-nuclear weapon State in association, or alliance with a nuclear weapon State.

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SECURITY COUNCIL RESOLUTION 984 (1995)

The Security Council,

Convinced that every effort must be made to avoid and avert the danger of nuclear war, to prevent the spread of nuclear weapons, to facilitate international cooperation in the peaceful uses of nuclear energy with particular emphasis on the needs of developing countries, and reaffirming the crucial importance of the Treaty on the Non-Proliferation of Nuclear Weapons to these efforts,

Recognising the legitimate interest of non-nuclear weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to receive security assurances,

Welcoming the fact that more than 170 States have become Parties to the Treaty on the Non-Proliferation of Nuclear Weapons and stressing the desirability of universal adherence to it,

Reaffirming the need for all States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to comply fully with all their obligations,

Taking into consideration the legitimate concern of non-nuclear weapon States that, in conjunction with their adherence to the Treaty on the Non-Proliferation of Nuclear Weapons, further appropriate measures be undertaken to safeguard their security,

Considering that the present resolution constitutes a step in this direction,

Considering further that, in accordance with the relevant provisions of the Charter of the United Nations, any aggression with the use of nuclear weapons would endanger international peace and security,

1. *Takes note* with appreciation of the statements made by each of the nuclear weapon States (S/1995/261, S/1995/262, S/1995/263,

S/1995/264, S/1995/265), in which they give security assurances against the use of nuclear weapons to non-nuclear weapon States that are Parties to the Treaty on the Non-Proliferation of Nuclear Weapons;

- 2. *Recognises* the legitimate interest of non-nuclear weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons to receive assurances that the Security Council, and above all its nuclear weapon State permanent members, will act immediately in accordance with the relevant provisions of the Charter of the United Nations, in the event that such States are the victim of an act of, or object of a threat of, aggression in which nuclear weapons are used;
- 3. *Recognises further* that, in case of aggression with nuclear weapons or the threat of such aggression against a non-nuclear weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons, any State may bring the matter immediately to the attention of the Security Council to enable the Council to take urgent action to provide assistance, in accordance with the Charter', to the State victim of an act of, or object of a threat of, such aggression; and *recognises also* that the nuclear weapon State permanent members of the Security Council will bring the matter immediately to the attention of the Council and seek Council action to provide, in accordance with the Charter, the necessary assistance to the State victim;
- 4. *Notes* the means available to it for assisting such a non-nuclear weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons, including an investigation into the situation and appropriate measures to settle the dispute and restore international peace and security;
- 5. *Invites* Member States, individually or collectively, if any nonnuclear weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons is a victim of an act of aggression with nuclear weapons, to take appropriate measures in response to a request from the victim for technical, medical, scientific or humanitarian assistance, and affirms its readiness to consider what measures are needed in this regard in the event of such an act of aggression;
- 6. *Expresses* its intention to recommend appropriate procedures, in response to any request from a non-nuclear weapon State

Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is the victim of such an act of aggression, regarding compensation under international law from the aggressor for loss, damage or injury sustained as a result of the aggression;

- 7. *Welcomes* the intention expressed by certain States that they will provide or support immediate assistance, in accordance with the Charter, to any non-nuclear weapon State Party to the Treaty on the Non-Proliferation of Nuclear Weapons that is a victim of an act of, or an object of a threat of, aggression in which nuclear weapons are used;
- 8. *Urges* all States, as provided for in Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons, to pursue negotiations in good faith on effective measures relating to nuclear disarmament and on a treaty on general and complete disarmament under strict and effective international control which remains a universal goal;
- 9. *Reaffirms* the inherent right, recognised under Article 51 of the Charter, of individual and collective self-defence if an armed attack occurs against a member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security,
- 10. *Underlines* that the issues raised in this resolution remain of continuing concern to the Council.

117 DOCUMENTS OF THE 1995 NPT REVIEW AND EXTENSION CONFERENCE*

DECISION 1

STRENGTHENING THE REVIEW PROCESS FOR THE TREATY NEW YORK, 11 MAY 1995

1. The Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons examined the implementation of article VIII, paragraph 3, of the Treaty and agreed to strengthen the review process for the operation of the Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized.

2. The States party to the Treaty participating in the Conference decided, in accordance with article VIII, paragraph 3, that Review Conferences should continue to be held every five years and that, accordingly, the next Review Conference should be held in the year 2000.

3. Conference decided that, beginning in 1997, the Preparatory Committee should hold, normally for a duration of 10 working days, a meeting three years prior to the Review Conference. If necessary, a fourth preparatory meeting may be held in the year of the Conference.

4. The purpose of the Preparatory Committee meetings would be to consider, objectives and ways in order to promote the full implementation as well as its universality, and to make recommendations thereon to the Review Conference. These include those identified in

^{*} The documents reproduced in this annex are contained in the Final Document of the 1995 Review and *Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons*, New York, 1995 (NPT/CONF: 1995/32). Decisions 1-3 and the resolution on the Middle East are found in part I of the *Final Document*.

the decision on principles and objectives for nuclear non-proliferation and disarmament, adopted on 11 May 1995. These meetings should also make the procedural prepic next Review Conference.

5. The Conference also concluded that the present structure of three Main Committees should continue and the question of an overlap of issues being discissed on more than one Committee should be resolved in the General Committee, which would coordinate the work of the Committees so that the substantive responsibility for the preparation of the report with respect to each specific issue is undertaken in only one Committee.

6. It was also agreed that subsidiary bodies could be established within the respective Main Committees for specific issues relevant to the Treaty, so as to provide for a focused consideration of such issues. The establishment of such subsidiary bodies would be recommended by the Preparatory Committee for each Reviev Conference in relation to the specific objectives of the Review Conference.

7. The Conference agreed further that Review Conferences should look forward as well as back. They should evaluate the results of the period they are reviewing including the implementation of undertakings of the States parties under the Treaty, and identify the areas in which, and the means through which, further progress should be sought in the future. Review Conferences should also specifically what might be done to strengthen the implementation of the Treaty and to achieve its universality.

DECISION 2

PRINCIPLES AND OBJECTIVES FOR NUCLEAR NON-PROLIFERATION AND DISARMAMENT NEW YORK, 11 MAY 1995

The conference of the Parties to the Treaty on the Non-Proliferation of Nuclear weapons,

Reaffirming the preamble and articles of the Treaty on the Non-Proliferaction of Nuclear Weapons,

Welcoming the end of the Cold War, the ensuing easing of international tension and the strengthening of trust between States,

Desiring a set of principles and objectives in accordance with which nuclear non-proliferation, nuclear disarmament and international cooperation in the peaceful uses of nuclear energy should be vigorously pursued and progress, achievements and shortcomings evaluated periodically within the review process provided for in article VIII, paragraph 3, of the Treaty, the enhancement and strengthening of which is welcomed,

Reiterating the ultimate goals of the complete elimination of nuclear weapons and a treaty on general and complete disarmament under strict and effective international control,

The Conference affirms the need to continue to move with determination towards the full realisation and effective implementation of the provisions of the Treaty, and accordingly adopts the following principles and objectives:

Universality

1. Universal adherence to the Treaty on the Non-Proliferation of Nuclear Weapons is an urgent priority. All States not yet party to the Treaty are called upon to accede to the Treaty at the earliest date, particularly those States that operate unsafeguarded nuclear facilities. Every effort should be made by all States parties to achieve this objective.

Non-proliferation

2. The proliferation of nuclear weapons would seriously increase the danger of nuclear war. The Treaty on the Non-Proliferation of Nuclear Weapons has a vital role to play in preventing the proliferation of nuclear weapons. Every effort should be made to implement the Treaty in all its aspects to prevent the proliferation of nuclear weapons and other nuclear explosive devices, without hampering the peaceful uses of nuclear energy by States parties to the Treaty.

Nuclear Disarmament

3. Nuclear disarmament is substantially facilitated by the easing of international tension and the strengthening of trust between States which have prevailed following the end of the Cold War. The undertakings with regard to nuclear disarmament as set out in the Treaty on the Non-Proliferation of Nuclear Weapons should thus be fulfilled with determination. In this regard, the nuclear weapon States reaffirm their commitment, as stated in article VI, to pursue in good faith negotiations on effective measures relating to nuclear disarmament.

4. The achievement of the following measures is important in the full realisation and effective implementation of article VI, including the programme of action as reflected below.

- (a) The completion by the Conference on Disarmament of the negotiations on a universal and internationally and effectively verifiable Comprehensive Nuclear-Test-Ban Treaty no later than 1996. Pending the entry into force of a Comprehensive Test-Ban Treaty, the nuclear weapon States should exercise utmost restraint;
- (b) The immediate commencement and early conclusion of negotiations on a non-discriminatory and universally applicable convention banning the production of fissile material for nuclear weapons or other nuclear explosive devices, in accordance with the statement of the Special Coordinator of the Conference on Disarmament and the mandate contained therein;
- (c) The determined pursuit by the nuclear weapon States of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons, and by all States of general and complete disarmament under strict and effective international control.

Nuclear Weapon Free Zones

5. The conviction that the establishment of internationally recognised nuclear weapon free zones, on the basis of arrangements freely arrived at among the States of the region concerned, enhances global and regional peace and security is reaffirmed.

6. The development of nuclear weapon free zones, especially in regions of tension, such as in the Middle East, as well as the establishment of zones free of all weapons of mass destruction, should be encouraged as a matter of priority, taking into account the specific characteristics of each region. The establishment of additional nuclear weapon free zones by the time of the Review Conference in the year 2000 would be welcome.

7. The cooperation of all the nuclear weapon States and their respect and support for the relevant protocols is necessary for the maximum effectiveness of such nuclear weapon free zones and the relevant protocols.

Security Assurances

8. Noting United Nations Security Council resolution 984 (1995), which was adopted unanimously on 11 April 1995, as well as the declarations of the nuclear weapon States concerning both negative and positive security assurances, further steps should be considered to assure non-nuclear weapon States party to the Treaty against the use

or threat of use of nuclear weapons. These steps could take the form of an internationally legally binding instrument.

Safeguards

9. The International Atomic Energy Agency is the competent authority responsible to verify and assure, in accordance with the statute of the Agency and the Agency's safeguards system, compliance with its safeguards agreements with States parties undertaken in fulfilment of their obligations under article III, paragraph 1, of the Treaty, with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Nothing should be done to undermine the authority of the International Atomic Energy Agency in this regard. States parties that have concerns regarding noncompliance with the safeguards agreements of the Treaty by the States parties should direct such concerns, along with supporting evidence and information, to the Agency to consider, investigate, draw conclusions and decide on necessary actions in accordance with its mandate.

10. All States parties required by article III of the Treaty to sign and bring into force comprehensive safeguards agreements and which have not yet done so should do so without delay.

11. International Atomic Energy Agency safeguards should be regularly assessed and evaluated. Decisions adopted by its Board of Governors aimed at further strengthening the effectiveness of Agency safeguards should be supported and implemented and the Agency's capability to detect undeclared nuclear activities should be increased. Also, States not party to the Treaty on the Non-Proliferation of Nuclear Weapons should be urged to enter into comprehensive safeguards agreements with the Agency.

12. New supply arrangements for the transfer of source or special fissionable material or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to non-nuclear weapon States should require, as a necessary precondition, acceptance of the Agency's full-scope safeguards and internationally legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices.

13. Nuclear fissile material transferred from military use to peaceful nuclear activities should, as soon as practicable, be placed under Agency safeguards in the framework of the voluntary safeguards agreements in place with the nuclear weapon States. Safeguards should be universally applied once the complete elimination of nuclear weapons has been achieved.

Peaceful Uses of Nuclear Energy

14. Particular importance should be attached to ensuring the exercise of the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I, II as well as III of the Treaty.

15. Undertakings to facilitate participation in the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy should be fully implemented.

16. In all activities designed to promote the peaceful uses of nuclear energy, preferential treatment should be given to the non-nuclear weapon States party to the Treaty, taking the needs of developing countries particularly into account.

17. Transparency in nuclear-related export controls should be promoted within the framework of dialogue and cooperation among all interested States party to the Treaty.

18. All States should, through rigorous national measures and international cooperation, maintain the highest practicable levels of nuclear safety, including in waste management, and observe standards and guidelines in nuclear materials accounting, physical protection and transport of nuclear materials.

19. Every effort should be made to ensure that the International Atomic Energy Agency has the financial and human resources necessary to meet effectively its responsibilities in the areas of technical cooperation, safeguards and nuclear safety. The Agency should also be encouraged to intensify its efforts aimed at finding ways and means for funding technical assistance through predictable and assured resources.

20. Attacks or threats of attack on nuclear facilities devoted to peaceful purposes jeopardize nuclear safety and raise serious concerns regarding the application of international law on the use of force in such cases, which could warrant appropriate action in accordance with the provisions of the Charter of the United Nations.

The Conference requests that the President of the Conference bring the present decision, the decision on strengthening the review process for the Treaty and the decision on the extension of the Treaty on the Non-Proliferation of Nuclear Weapons, to the attention of the heads of State or Government of all States and seek their full cooperation on these documents and in the furtherance of the goals of the Treaty.

DECISION 3

EXTENSION OF THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS NEW YORK, 11 MAY 1995

The Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,

Having convened in New York from 17 April to 12 May 1995, in accordance with article VIII, paragraph 3, and article X, paragraph 2, of the Treaty on the Non-Proliferation of Nuclear Weapons,

Having reviewed the operation of the Treaty and affirming that there is a need for full compliance with the Treaty, its extension and its universal adherence, which are essential to international peace and security and the attainment of the ultimate goals of the complete elimination of nuclear weapons and a treaty on general and complete disarmament under strict and effective international control.

Having reaffirmed article VIII, paragraph 3, of the Treaty and the need for its continued implementation in a strengthened manner and, to this end, emphasising the decision on strengthening the review process for the Treaty and the decision on principles and objectives for nuclear non-proliferation and disarmament, also adopted by the Conference,

Having established that the Conference is quorate in accordance with article X, paragraph 2, of the Treaty,

Decides that, as a majority exists among States party to the Treaty for its indefinite extension, in accordance with its article X, paragraph 2, the Treaty shall continue in force indefinitely.

Resolution on the Middle East New York, 11 May 1995

The Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear "Weapons,

Reaffirming the purpose and provisions of the Treaty on the Non-Proliferation of Nuclear Weapons,

Recognising that, pursuant to article VII of the Treaty, the establishment of nuclear weapon free zones contributes to strengthening the international non-proliferation regime,

Recalling that the Security Council, in its statement of 31 January 1992, affirmed that the proliferation of nuclear and all other weapons of mass destruction constituted a threat to international peace and security,

Recalling also General Assembly resolutions adopted by consensus supporting the establishment of a nuclear weapon free zone in the Middle East, the latest of which is resolution 49/71 of 15 December 1994,

Recalling further the relevant resolutions adopted by the General Conference of the International Atomic Energy Agency concerning the application of Agency safeguards in the Middle East, the latest of which is GC(XXXVIII)/RES/21 of 23 September 1994, and noting the danger of nuclear proliferation, especially in areas of tension,

Bearing in mind Security Council resolution 687 (1991) and in particular paragraph 14 thereof,

Noting Security Council resolution 984 (1995) and paragraph 8 of the decision on principles and objectives for nuclear non-proliferation and disarmament adopted by the Conference on 11 May 1995,

Bearing in mind the other decisions adopted by the Conference on 11 May 1995,

- 1. *Endorses* the aims and objectives of the Middle East peace process and recognises that efforts in this regard, as well as other efforts, contribute to, *inter alia*, a Middle East zone free of nuclear weapons as well as other weapons of mass destruction;
- 2. Notes with satisfaction that, in its report (NPT/CONF. 1995/MC.III/ l), Main Committee in of the Conference recommended that the Conference "call on those remaining States not parties to the Treaty to accede to it, thereby accepting an international legally binding commitment not to acquire nuclear weapons or nuclear explosive devices and to accept International Atomic Energy Agency safeguards on all their nuclear activities";
- 3. *Notes with concern* the continued existence in the Middle East of unsafeguarded nuclear facilities, and reaffirms in this connection the recommendation contained in section VI, paragraph 3, of the report of Main Committee III urging those non-parties to the Treaty on the Non-Proliferation of Nuclear Weapons that operate unsafeguarded nuclear facilities to accept full-scope International Atomic Energy Agency safeguards;
- 4. *Reaffirms* the importance of the early realisation of universal adherence to the Treaty, and calls upon all States of the Middle East that have not yet done so, without exception, to accede to the Treaty as soon as possible and to place their nuclear facilities under full-scope International Atomic Energy Agency safeguards;

- 5. *Calls upon* all States in the Middle East to take practical steps in appropriate forums aimed at making progress towards, *inter alia*, the establishment of an effectively verifiable Middle East zone free of weapons of mass destruction, nuclear, chemical and biological, and their delivery systems, and to refrain from taking any measures that preclude the achievement of this objective;
- 6. *Calls upon* all States party to the Treaty on the Non-Proliferation of Nuclear Weapons, and in particular the nuclear weapon States, to extend their cooperation and to exert their utmost efforts with a view to ensuring the early establishment by regional parties of a Middle East zone free of nuclear and all other weapons of mass destruction and their delivery systems.

118 THE IMPLICATIONS OF SOUTH ASIA'S NUCLEAR TESTS FOR THE NON-PROLIFERATION AND DISARMAMENT REGIMES

Introduction

On 7 and 8 September 1998, fifty experts, drawn from over twenty-five countries and from academia, non-governmental organisations and governments, met in their personal capacities in an off-the-record, "track one and a half style meeting to discuss the implications of the nuclear tests by India and Pakistan in May 1998. The meeting was hosted by the United Nations Institute for Disarmament Research and sponsored by the governments of Australia, Denmark, Italy, Norway, New Zealand and the United States.

The conference was divided into five sessions, each beginning with one or two short opening statements from selected experts followed by discussion amongst all the participants. The final session comprised a summary from two of the participants, which was circulated soon after the meeting.

This report outlines the various discussions in the meeting and provides a list of possible policy directions that were suggested during the meeting. Not all policy suggestions received the full support of all participants, nor does their inclusion herein imply any endorsement by UNIDIR, the United Nations or any of the sponsoring governments. That said, there was a great deal of agreement during the two days and many of the policy proposals received wide support. More views were expressed than can possibly be printed here but it is hoped that the general flavour of the meeting is represented in this document and that minority views have been given, adequate coverage.

The Responses to the Tests

The tests by India and Pakistan came at a difficult time within the Non-Proliferation Treaty enhanced review process. The second PrepCom following the indefinite extension of the Non-Proliferation Treaty in 1995 had just taken place in Geneva and had failed to achieve some very basic agreements. There was a great deal of dissatisfaction expressed by many States Parties to the Treaty and even some rumblings about possible withdrawals in the long term if key concerns were not addressed before the Non-Proliferation Treaty Review Conference in 2000. Three days later, India conducted its first nuclear tests since 1974 and later that week announced that it had also conducted sub-kiloton tests. Within the same month, Pakistan carried out its tests in response.

The nuclear weapons tests drew strong and categorical condemnation from some countries, such as Japan. In other countries the response was more muted, and in neighbouring South Asian states some politicians even expressed support. Sanctions have been imposed by some states but not by others and there were strong statements from the P5, the G8 plus Task Force, 47 States in the Conference on Disarmament, the UN Security Council and the UN Secretary-General. In several Latin American countries, there was strong reaction against the tests because of the high level of awareness of the Treaty of Tlatelolco and a fear of the unraveling of the non-proliferation system. Many experts at the meeting expressed the view that, in general, the practical response to the tests had so far been inadequate. The prospects of India and Pakistan testing in this manner had not been seriously addressed outside the region and governments were ill-prepared to respond. Some from non-nuclear weapon states felt uneasy with the P5 taking such a strong and vocal role in this matter and worried that it might set a precedent. Remarks were made on double standards and hypocrisy. It was felt that one of the weaknesses of the reaction to the tests was that so much was viewed only in the framework of the conflict between India and Pakistan whereas the aspirations of India to become a nuclear weapons power-and thus important on the international scene—had not been adequately taken into account.

China's first response was moderate but became stronger when Indian leaders said that the tests were in response to a threat from China. It was as though the improvements in the relations between India and China and the series of confidence-building measures and high-level talks between the two countries were irrelevant to the new Indian government. However, India is now more aware of the of the difficulties the tests introduced into its relationship with China and bilateral relations are improving again.

In other South Asian states, the degree of reaction differed depending on the degree of closeness to India and Pakistan. Generally, smaller regional states did not want to antagonize and shake up bilateral relations. Non-aligned countries have showed mixed reactions and the Non-Aligned Summit that took place in Durban at the end of August 1998 was discussed at length during the meeting.

In India, the initial response was highly emotional. The tests came as a surprise to most of the population the vast majority of which fully supported the tests at first. That response was later moderated, when the wider implications of India's actions were revealed and when Pakistan carried out its tests. In Pakistan, at least among the ruling elite, India's tests were somewhat expected. The public expressed their outrage and demanded reciprocal tests. Pakistan was ready to test within a few days but delayed in order to explore its options fully.

India is now very concerned about stability in the region and knows that it needs; a stable Pakistan. India is also aware now that the issue of Kashmir is back on the international agenda, which has been the long-held wish of Pakistan but an approach that India has resisted.

There was a general sense in the meeting that India could sign the 1996 Comprehensive Test Ban Treaty but there was some doubt as to which government could best achieve that and a degree of consensus amongst the political parties will be required. Pakistan, having delinked its nuclear policy from India's could sign the Comprehensive Test Ban Treaty with or without India, although certain actions by India could prevent signing. India's desire to be recognised as a nuclear weapon power was thought by some analysts to be lessening although there were many hurt feelings in both India and Pakistan at the suggestion that they be considered as reckless and irresponsible states.

Concern was expressed about the connection to Islam and the "Islamic bomb" that has been made in Pakistan and other countries. Such sentiments were exacerbated by the bombing of training camps in Afghanistan and the implications for regional security. In Pakistan, the concern is that bombing a state when not at war could have consequences for the relationship between Pakistan and India. It was thus asked whether hot pursuit over the Kashmiri border could more easily lead to large-scale conflict.

Causes of the Tests

The reasons behind the nuclear weapons tests by India and Pakistan were many and complex. There was/is a belief that nuclear weapons confer status, prestige and security. India had some long-term security concerns about the military cooperation between China and Pakistan and decided that going nuclear was the quickest, easiest way to get the attention it desired and the long-term economic benefits it needed. The 1995 decision to extend the Non-Proliferation Treaty indefinitely came as a shock to India and it has since hardened its approach to nuclear weapons. The zero option in the Comprehensive Test Ban Treaty may also have factored into the equation, because there was some evidence to suggest that India felt that it could not join the Comprehensive Test Ban Treaty without the ability to carry out lowlevel tests.

The general perception in India and Pakistan has been that nuclear weapons are not destabilising, and that the logic of deterrence and arms control will hold. This attitude has gained ground despite both countries' long tradition of calling for nuclear disarmament.

It was easier for India to test because of the precedent in 1974 and because of the institutional framework for testing had existed for decades: But, such a framework also existed in Pakistan which was able to follow India's lead without many problems.

There was a general sense that while China's nuclear weapons were not a cause for India's tests—although they are an excuse—the role and behaviour of China in the region have been a factor. Certainly, the conflict between China and India in 1962 was the trigger for the Indian nuclear programme and the close cooperation between China and Pakistan did not help (although China had previously offered civil nuclear cooperation to India). However, throughout years of bilateral talks between India and China, the threat from Chinese nuclear weapons was not raised as an issue for negotiation by India. There was strong agreement that India did not need to test for security reasons: its relationship with China was sound and through nuclear ambiguity, India could have maintained conventional and nuclear superiority over Pakistan.

In the case of Pakistan, the response to India's conventional, nuclear and missile programmes and the termination of military and nuclear cooperation with the USA has meant that since 1990, Pakistan has increased its emphasis on nuclear deterrence. Increasing feelings of vulnerability have led Pakistan to demonstrate that it could match India's capability. However, Pakistan's nuclear programme is not purely responsive. Nuclear weapons now have a clearly established role in Pakistan's defence policy. They are seen domestically as a vital part of Pakistan's force posture, given its weakness in conventional forces.

Consequences of the Tests

Regional Security

Relations between India and Pakistan and regional security had improved before the tests despite the ongoing tensions over Kashmir. The relationships between India, Pakistan and China are now complicated due to the shift from one to three countries with nuclear weapons capability. The risk of nuclear war cannot be ruled out particularly because the command and control structures are embryonic in both India and Pakistan and there is low-level conflict at the border of disputed territory. In addition, both India and Pakistan are increasing their military spending.

There was a strong sense in the meeting that no country had been made safer as a result of the nuclear tests and that the approach between states in the region should be one of building trust and confidence, not a Cold War-style approach. The position between the two could become very volatile with serious consequences.

The issue of weaponisation was discussed at length. What is actually meant by weaponisation was not agreed. There is a difference between overt and covert weaponisation. Overt weaponisation with nuclear warheads deployed on missiles could be a worse situation than covert weaponisation where nuclear warheads may be available to be delivered by aircraft. It is likely that both India and Pakistan will move towards missile-based weaponisation, which could result in a spiraling arms race between the two.

There was concern over Pakistan's statements on first-use. India has committed itself to no-first-use of nuclear weapons, whereas, because of conventional inferiority, Pakistan would be prepared to use nuclear weapons first—perhaps even early—in a conflict. Pakistan has made it quite clear that it will not sign on to a no-first-use agreement.

Consequences for Non-proliferation and Disarmament

The nuclear tests in South Asia have complicated the nonproliferation process. It may be however, that the disarmament process has had an injection of activity as a direct consequences of the teststhe fissile material negotiations have begun in Geneva, and it is possible that India and Pakistan could sign and ratify the Comprehensive Test Ban Treaty at some point in the next year. However, there was no suggestion that the tests may prove to be beneficial in the long term or that they actually furthered the cause of disarmament.

The attainment of universality of the Non-Proliferation Treaty seems increasingly unlikely. At the time of drafting the Treaty there were five nuclear weapon states and any provision allowing for an increase in the number of possessor states would have been a contradiction with the very purposes of the Treaty. Since 1995, a new coalition of like-minded states is emerging to push for nuclear disarmament. The suggestion now being made is that there be a parallel regime with India and Pakistan as part of the fissile materials agreement, the Comprehensive Test Ban Treaty and so on. There was consensus that there will be no simple solution, rather that there will be choices of options, some less unpleasant than others. The next few years will be decisive for such crucial issues as whether disarmament will gain the upper hand, whether some new nuclear order will emerge, or whether nuclear disorder rums-out to be a real danger.

Some debate centred on the implications for the Comprehensive Test Ban Treaty. In answering the question on whether the detection of the tests had implications for the verification of the Comprehensive Test Ban Treaty, if and when it enters into force, the general sense was that it was too difficult to say as yet. The international monitoring system is not yet fully developed or running. There are unanswered questions, posed by the scientific community, as to whether India and Pakistan actually carried out the number of tests they announced and whether the yields were as claimed. It was pointed out that if the tests were not as successful as hoped by the bomb designers in India and in Pakistan, there may be pressure to carry out further tests.

The failure of the Non-Proliferation Treaty PrepCom just prior to the tests was frequently mentioned. Whilst many experts stressed that the difficulties within the Non-Proliferation Treaty should not be over exaggerated, there were fears expressed over the possible long-term unraveling of the Treaty. Because a significant cause of the failure of the 1998 Non-Proliferation Treaty PrepCom was the inability to agree on language on the Middle East, much discussion focused on the situation in that region and the nuclear ambiguity question. Now, that India and Pakistan had made their nuclear weapons capabilities clear to all, the ability for Israel to retain its own nuclear ambiguity was called into question. The restraint shown by China over its positions within the Non-Proliferation Treaty and Comprehensive Test Ban Treaty was praised by many participants. Others drew attention to Chinese nuclear cooperation with Pakistan in the military realm. There was a general sense that neither India nor Pakistan will easily give up their nuclear capabilities, particularly considering India's aspirations to regional and global influence.

Damage Limitation

In 1995, it was presumed by many that the indefinite extension of the Non-Proliferation Treaty would somehow guarantee the (eventual) universality of the regime. Since May 1998 certain key countries have expressed concern over the validity of the Non-Proliferation Treaty for the future. They renounced nuclear weapons and joined the Treaty on the understanding that the number of nuclear weapons possessor states would not increase beyond five. They now argue that new realities will lead them to reassess the effectiveness of the Non-Proliferation Treaty and their role within it.

Despite such ominous statements, the positions of Brazil and Argentina gave cause for optimism. The fact that Brazil ratified the Non-Proliferation Treaty after the tests by India and Pakistan was strongly praised. The bilateral relations between Brazil and Argentina were seen as possible pointers to a future route for India and Pakistan and the giving up of the nuclear option by both Ukraine and South Africa were also reasons for hope. It was pointed out that the major problems in non-proliferation over recent years have been caused by states within the Treaty but not in compliance. The need for states to remain in compliance with the Non-Proliferation Treaty and not to consider leaving the regime was stressed.

There was concern that the tests will be used by other countries as reasons not to ratify the Comprehensive Test Ban Treaty and by the nuclear weapon states as reasons not to further efforts in nuclear disarmament. However, it was pointed out that the current global economic situation may well be far more damaging to regional and international security. It was also noted that 44 countries are required to ratify the Comprehensive Test Ban Treaty for entry into force, and whilst it may now be possible for India and Pakistan to ratify, other countries would also have to do so and some of them may refuse. There was some skepticism about the possibility of India joining the Comprehensive Test Ban Treaty, partly for technical reasons and partly for political reasons. The meeting considered the question of how best to influence the behaviours of India and Pakistan and discussed positive and negative incentives. There was concern that positive incentives could be viewed as rewards for the tests. Some participants were concerned about possible counter-productive effects of sanctions and negative incentives. The issue of what constituted rewards was a recurring theme in the discussions but there were worries that anything perceived as a reward to either country could be an incentive to other states to develop a nuclear weapon programme.

The opinion of some experts was that there is still scope for preventing full-scale weaponisation in India and Pakistan and perhaps even for a "rollback" to the previous position of nuclear ambiguity (by making statements on non-weaponisation) although that may require a high degree of transparency between the two states. Other experts felt that weaponisation is either now de facto or is on the cards in the short term and that it would be better to concentrate on how best to deal with that and what sort of weaponisation would be preferred. However, the point was made that once nuclear weapons are operational and integrated into the military forces, the security rationale for them becomes entrenched, whether or not the security reasons were originally justified. The issue of weaponisation and deployment needs to be addressed quickly.

There was wide agreement that India and Pakistan could accept the norms and obligations of nuclear powers by agreeing not to transfer nuclear technology or receive assistance in their nuclear programmes and to explicitly implement export controls.

The potential for war between India and Pakistan was the subject of many discussions as was the possibility of the economic collapse of Pakistan. It was felt by many that the issue of Kashmir had to be kept on the international agenda and resolution of the complex situation ought to be a priority. It was acknowledged that the security situation in South Asia affects more than just those countries and could have implications beyond the region. For that reason, and for basic humanitarian motives there was a sense that the international community could not remain inactive and had to focus attention on the region.

Many experts expressed the opinion that the treatment of countries that violate international norms ought to be more even-handed. For the rule of international law to be upheld, it needs to be applied impartially. In addition all states should comply with their obligations under international treaties, including the nuclear weapon states.

Developing the Non-proliferation and Disarmament Agenda

Whether or not agreements are in force, there is a system of international norms against nuclear, chemical and biological weapons proliferation and for nuclear, chemical and biological disarmament. There is also an international norm against nuclear testing. It is important that these norms are recognised and accepted.

Proposals were made concerning no-first-use agreements, security assurances, missile deployment limitations, missile defences limitations, fissile material production, confidence-building measures and nuclear disarmament.

The fissile material negotiations in the Conference on Disarmament were the subject of much discussion, particularly the issue of stocks. The participants recognised that this will be, politically and technically, a very difficult negotiation. It would be a treaty with universal pretensions and will require universal adherence. The treaty would establish a new international norm against nuclear weapons and has the potential to act as a policy driver. It was also recognised that India and Pakistan have very different needs and views on the issues of stocks and transparency and there is a replication of this complexity in the Middle East.

No-first-use was a hot topic for discussion, with particular reference to the difficulty that China now finds itself in vis-a-vis India. It was explained that China has a policy of no-first-use against nuclear weapons states and a policy of no-use against non-nuclear weapons states. Hitherto, China has always afforded India and Pakistan the policy of no-use as non-nuclear weapon states. The tests however, could put an end to such an approach because other non-nuclear weapon states could argue that India and Pakistan should no longer be granted such a favour by China. China's dilemma is that if it thus announces that India and Pakistan have lost their right to a guarantee of no-use by China and will henceforth be granted an assurance of no-first-use, this could be interpreted as implicitly granting some de jure nuclear weapon state status to India and Pakistan—a status to which China is adamantly opposed.

The possibility of "parallel tracks" on non-proliferation or "inner and outer circles" was the subject for wide discussion. The idea behind this thinking is to address proliferation outside the Non-Proliferation Treaty and thus involve states that are not parties to the treaty. The lack of a legal status in such parallel approaches could be an advantage rather than a disadvantage. This would not be a substitute for the Non-Proliferation Treaty, but it might serve—temporarily—as an acceptable second-best.

The difficulties over entry into force of the Comprehensive Test Ban Treaty were pointed out. The implementation costs of the Comprehensive Test Ban Treaty may well be higher than expected and few countries have ratified the Treaty. The international monitoring system could be running within the next two years and a great deal will depend on what happens in 1999.

Conclusions and Policy Options

The following was presented at the end of the two-day meeting in an attempt to provide as inclusive a summary of the findings and proposals as possible. Noteveryone present agreed with all of the points made in this summary and there may be points absent. It was felt, however, that the salient points were made and that participants at the meeting would benefit from receiving this summary soon after the meeting.

Main Summary

There was general agreement among participants that despite the intentions behind the tests on the part of India and Pakistan, neither had enhanced its own security or international status by conducting the tests. There was also agreement that the tests had amplified the dangers posed by the collapse of the Asian economies, the current crisis in the Russian Federation and the ongoing problems in the Middle East. It was also recognised that the international response to the nuclear tests in South Asia was inadequate in countering the effects of the tests on the regional and global security environment and nonproliferation regime, and participants agreed on the need for more coherent and collective action.

With this firmly in mind, participants then focused on practical ideas and proposals that could potentially provide options for policymakers attempting to minimise the effects of the tests in South Asia. Some of the proposals were contradictory, or at least not necessarily consistent—there were many differing views in the room. But, they were included in the summary because they offered interesting, challenging or useful ways of looking at this problem.

The proposals were grouped under three themes: prevention of war, in particular nuclear war; saving the non-proliferation and nuclear

arms control regimes; and coping with the effects on regional tensions, especially in the Middle East.

Prevention of Nuclear War

Participants concluded that as a result of the tests in South Asia there was an increased risk of nuclear war in that region, and participants felt they were not able to discount the possibility of a regional flashpoint escalating into the use of nuclear weapons. In reaching this assessment, participants were able to point to a number of considerations that had contributed to this greater danger of nuclear conflict in the region. The tension over Kashmir and other disputed territories was the most obvious consideration. It was felt that India, by nuclearising its relations with Pakistan, had reinforced the international dimension of the ethnic and territorial conflict in Kashmir and made it a potent threat to global security. As a result of this "nuclearisation", the issue of Kashmir had to be addressed with great urgency. Participants also pointed to the disparity in conventional arms in the region as a factor contributing to the increased risk of nuclear conflict, and recognised the role of other states in this disparity (e.g., the United States, United Kingdom, France, China, Israel and Russia) with their past and present supplies of nuclearrelated technologies and conventional arms. Participants noted the imbalance and destabilising effects of such military transfers, but also the complex and not necessarily constructive role of sanctions-based responses.

Participants developed a number of practical suggestions to counter the increased risk of nuclear war:

- Confidence-building measures: making current confidencebuilding measures work more effectively, including, for example, the hotline between Pakistan and India; and also consolidating current confidence-building measures;
- New security assurances (including non-nuclear positive security assurances);
- Enhanced security cooperation among countries in the region, including the neighbours of India and Pakistan. There was an emphasis in this respect on the importance of dialogue between India and Pakistan, and India and China where appropriate;
- Conflict resolution mechanisms, i.e., a political approach based on conflict resolution;

- Efforts by global powers, especially the United States, aimed at enabling Pakistan to de-link its strategic responses from its current heavy dependence on reactivity to India's decisions;
- Rolling back of weaponisation; non-deployment of ballistic missiles; non-weaponisation and no-first-use. There was a general feeling that while some of these should be encouraged bilaterally, others could best be fostered by initiatives and actions of the Non-Proliferation Treaty nuclear weapon states;
- Developing international initiatives on the de-alerting of nuclear weapons;
- The possibility of assistance with command and control safety features (e.g. permissive action links (PALS)). This option was strongly disliked by some on the grounds that it could be construed as recognising, rewarding and even encouraging the integration of nuclear weapons into the military force structures of India and Pakistan, thereby breaching Article I of the Non-Proliferation Treaty; and
- Emphasising to India the need to address regional security issues in a cooperative rather than adversarial manner.

Saving the Non-proliferation and Arms Control Regimes

Participants recognised that the Non-Proliferation Treaty and Comprehensive Test Ban Treaty were in difficulty prior to the tests in South Asia, as evinced, in the case of the Non-Proliferation Treaty, by the failure of the second Non-Proliferation Treaty PrepCom. Participants held the view that the Non-Proliferation Treaty regime was somewhat inelastic and not sufficiently responsive to the evolving strategic environment, and that this combined with the apparent and provocative complacency of the nuclear weapon states, had raised questions about the relevance of the current non-proliferation regime. However, despite the view that the Non-Proliferation Treaty regime was not in great shape, it was recognised that it is the best option available, and therefore remains of crucial importance. For that reason, it is worth preserving and reinforcing. Despite much talk about whether the tests in South Asia would tempt others to leave the Non-Proliferation Treaty regime, there was general agreement that there was in fact no immediate threat of collapse of the regime, or of departures from it. However, there was agreement that in order to prevent this in the future, there had to be a concerted effort to re-establish and strengthen the values the regime

represented, and ensure that the Non-Proliferation Treaty regime remains the best option for all countries, from both political and security perspectives.

The tests had revealed that the Non-Proliferation Treaty was turning a blind eye to de facto nuclear weapon possessors, but not doing so very effectively. Hence states were now being forced to deal with the situation in which the main proliferation problem was taking place outside the non-proliferation regime. There were three options considered in the context of reversing this damaging trend:

- Ignore the tests and accept the existence of India and Pakistan as de facto nuclear weapon states outside the Non-Proliferation Treaty regime;
- Change the regime to reflect this new situation;
- Bind India and Pakistan onto the objectives of the nonproliferation regime through mechanisms other than the Non-Proliferation Treaty—a parallel process.

It was agreed that the third option was the only viable one from the perspective of the international community. With that in mind, the participants raised a number of considerations that they believed should be taken into account in any attempt to bring India and Pakistan into the non-proliferation regime, without damaging the regime itself. These included the following:

- The need to resolve the status of India and Pakistan to provide a context in which they could be addressed as de facto nuclear weapon possessors, but without acceptance or rewards as such for their behaviour. Bearing in mind that the Non-Proliferation Treaty definition of nuclear weapon states was not intended to legitimise the possession of nuclear weapons, but rather, to identify differential obligations, it was suggested that India and Pakistan could be. encouraged to undertake some of the obligations of the nuclear weapon states (e.g. no transfer of nuclear material and technology, and joining nuclear arms control measures) and also some of the obligations of non nuclear weapon states (e.g. no receipt of nuclear material), in an attempt to incorporate them into the regime without recognising them as equivalent to the P-5 in status;
- The perceived failure of the nuclear weapon states to fulfil their obligations under Article VI of the Non-Proliferation Treaty as well as they ought, and the perceived failure to make systematic and effective progress on nuclear disarmament, was

recognised as an important factor that would require attention if the ongoing viability of the current regime was to be preserved, as was the importance of implementing the 1995 Non-Proliferation Treaty Principles and Objectives. The failure to make progress on the resolution on the Middle East was recognised as a factor which also had to be addressed. The uncertainty regarding the apparent redefinition of targeting policies to include, for example, biological and chemical weapons appeared to reinforce for the foreseeable future the possession of nuclear weapons by the P-5. This, and the widely acknowledged failure of the P-5 to meet the expectations of others on nuclear disarmament, played heavily in the justification by India and Pakistan of their nuclear tests. It was recognised that this was a self-serving argument on the part of India and Pakistan, but it also illustrated a real concern shared by many non-nuclear weapon states, including Japan, South Africa and most of the Non-Aligned Group. Ratification of the Comprehensive Test Ban Treaty by the nuclear weapon states that have not done so and the reactivation of the START process were seen as important and necessary measures in this regard;

- The forthcoming negotiations on fissile material were seen to be an important step and of long-term security value Stocks would be a central issue, and there were suggestions of a parallel process of transparency to deal with the issue of stocks if it proved too difficult to incorporate into the negotiations in the Conference on Disarmament;
- Participants pointed to the need to consider small steps, both reciprocal and unilateral, or arrangements that could be taken in the interim which could be used to reinforce the non-proliferation and nuclear arms control regime. In addition to those already mentioned, such as de-alerting and ballistic missile controls, there were suggestions regarding renewed security assurances; strengthened no-first-use arrangements, and the requirement that nuclear weapon free zones should be respected by all surrounding and relevant countries. In the context of a nuclear weapon free zone in Central Asia, for example, requesting all relevant and surrounding countries to respect its provisions could bring Pakistan and India into the security assurance structure of the zone without conferring special status on those two countries;

• There was significant support for the proposal to bring together a group of countries, including the nuclear weapon states, India, Pakistan and a few key non-nuclear weapon states to negotiate some complementary and parallel processes referred to above.

The Effects on Regional Tensions, Especially in the Middle East

A large number of participants made clear their absolute opposition to any preferential treatment being given to non-Non-Proliferation Treaty states. They were concerned that if the basis of the Non-Proliferation Treaty were to be eroded by the acceptance or the rewarding of a non-Non-Proliferation Treaty state with nuclear capability, this may cause some Treaty parties to reassess their membership. This concern referred not just to countries in the Middle East, but also to countries that had joined the Non-Proliferation Treaty on the basis that there were only five nuclear weapon states and those which had foregone the nuclear option on the understanding that an agreed status quo prevailed. Participants noted that while the threat of withdrawal was not regarded as immediate, the possibility of this threat needed to be taken seriously.

It was considered important that the regime should seek to compel members to adhere to their obligations, and deal with possible violations quickly and effectively (there were references made here to Iraq and the Democratic People's Republic of Korea). The importance of not tolerating double standards, and equal treatment of different non-Non-Proliferation Treaty states, was reiterated in the context of handling regional tensions. It was also felt that support should be offered to those countries in the Middle East that are firmly behind the Non-Proliferation Treaty regime. This would require that the 1995 decisions, especially the resolution on the Middle East, be taken seriously, and that genuine attempts be made regarding its implementation, including a zone free of weapons of mass destruction. In conjunction with this, participants agreed it would be essential to reinvigorate the Middle East peace process and return it to its original pace and spirit. Finally, there was concern about the implications of the delay in the full acceptance of the Conference on Disarmament mandate for the fissile material cut-off treaty negotiations, and the need for all states, in the Middle East, and elsewhere, to participate fully in the negotiations.

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2000 REVIEW CONFERENCE OF THE PARTIES TO THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS, FINAL DOCUMENT

PART I: REVIEW OF THE OPERATION OF THE TREATY, TAKING INTO ACCOUNT THE DECISIONS AND THE RESOLUTION ADOPTED BY THE 1995 REVIEW AND EXTENSION CONFERENCE

Articles I and II and First to Third Preambular Paragraphs

1. The Conference reaffirms that the full and effective implementation of the Treaty and the regime of non-proliferation in all its aspects has a vital role in promoting international peace and security. The Conference reaffirms that every effort should be made to implement the Treaty in all its aspects and to prevent the proliferation of nuclear weapons and other nuclear explosive devices, without hampering the peaceful uses of nuclear energy by States parties to the Treaty. The Conference remains convinced that universal adherence to the Treaty and full compliance of all parties with its provisions are the best way to prevent the spread of nuclear weapons and other nuclear explosive devices.

2. The Conference recalls that the overwhelming majority of States entered into legally binding commitments not to receive, manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices in the context, *inter alia*, of the corresponding legally binding commitments by the nuclear weapon States to nuclear disarmament in accordance with the Treaty.

3. The Conference notes that the nuclear weapon States reaffirmed their commitment 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; and not in any way to assist, encourage or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

4. The Conference notes that the non-nuclear weapon States parties to the Treaty reaffirmed their commitment not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly, not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

5. The Conference reaffirms that the strict observance of the provisions of the Treaty remains central to achieving the shared objectives of preventing, under any circumstances, the further proliferation of nuclear weapons and preserving the Treaty's vital contribution to peace and security.

6. The Conference expresses its concern with cases of non-compliance of the Treaty by States parties, and calls on those States non-compliant to move promptly to full compliance with their obligations.

7. The Conference welcomes the accessions of Andorra, Angola, Brazil, Chile, Comoros, Djibouti, Oman, the United Arab Emirates and Vanuatu to the Treaty since 1995, bringing the number of States parties to 187, and reaffirms the urgency and importance of achieving the universality of the Treaty.

8. The Conference urges all States not yet party to the Treaty, namely Cuba. India, Israel and Pakistan, to accede to the Treaty as non-nuclear weapon States, promptly and without condition, particularly those States that operate unsafe-guarded nuclear facilities.

9. The Conference deplores the nuclear test explosions carried out by India and then by Pakistan in 1998. The Conference declares that such actions do not in any way confer a nuclear weapon-State status or any special status whatsoever. The Conference calls upon both States to undertake the measures set out in United Nations Security Council resolution 1172 (1998).

10. The Conference also calls upon all State parties to refrain from any action that may contravene or undermine the objectives of the Treaty as well as of United Nations Security Council resolution 1172 (1998). 11. The Conference notes that the two States concerned have declared moratoriums on further testing and their willingness to enter into legal commitments not to conduct any further nuclear tests by signing and ratifying the Comprehensive Nuclear-Test-Ban Treaty. The Conference regrets that the signing and ratifying has not yet taken place despite their pledges to do so.

12. The Conference reiterates the call on those States that operate unsafe-guarded nuclear facilities and that have not yet acceded to the Treaty on the Non-Proliferation of Nuclear Weapons to reverse clearly and urgently any policies to pursue any nuclear weapon development or deployment and to refrain from any action which could undermine regional and international peace and security and the efforts of the international community towards nuclear disarmament and the prevention of nuclear weapons proliferation.

Article III and Fourth and fifth Preambular Paragraphs, Especially in Their Relationship to Article IV and the Sixth and Seventh Preambular Paragraphs

1. The Conference recalls and reaffirms the decision of the 1995 Review and Extension Conference entitled "Principles and objectives for nuclear non-proliferation and disarmament", noting paragraph 1 of the principles and objectives and the elements relevant to article III of the Treaty, in particular paragraphs 9 to 13 and 17 to 19, and to article VII of the Treaty, in particular paragraphs 5 to 7. It also recalls and reaffirms the Resolution on the Middle East adopted by that Conference.

2. The Conference notes that recommendations made at previous Conferences for the future implementation of article III provide a helpful basis for States parties to the Treaty on the Non-Proliferation of Nuclear Weapons and the International Atomic Energy Agency (IAEA) to strengthen the non-proliferation regime and provide assurance of compliance with non-proliferation undertakings.

3. The States parties urge the international community to enhance cooperation in the field of non-proliferation issues and to seek solutions to all concerns or issues related to non-proliferation in accordance with the obligations, procedures and mechanisms established by the relevant international legal instruments.

4. The Conference reaffirms that the Treaty on the Non-Proliferation of Nuclear Weapons is vital in preventing the proliferation of nuclear weapons and in providing significant security benefits. The Conference remains convinced that universal adherence to the Treaty can achieve this goal, and it urges all four States not parties to the Treaty, Cuba, India, Israel and Pakistan, to accede to it without delay and without conditions, and to bring into force the required comprehensive safeguards agreements, together with Additional Protocols consistent with the Model contained in INFCIRC/540.

5. The Conference reaffirms the fundamental importance of full compliance with the provisions of the Treaty and the relevant safeguards agreements.

6. The Conference recognises that IAEA safeguards are a fundamental pillar of the nuclear non-proliferation regime, play an indispensable role in the implementation of the Treaty and help to create an environment conducive to nuclear disarmament and to nuclear cooperation.

7. The Conference reaffirms that IAEA is the competent authority responsible for verifying and assuring, in accordance with the statute of IAEA and the IAEA safeguards system, compliance with its safeguards agreements with States parties undertaken in fulfilment of their obligations under article III, paragraph 1, of the Treaty, with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. It is the conviction of the Conference that nothing should be done to undermine the authority of IAEA in this regard. States parties that have concerns regarding noncompliance with the safeguards agreements of the Treaty by the States parties should direct such concerns, along with supporting evidence and information, to IAEA to consider, investigate, draw conclusions and decide on necessary actions in accordance with its mandate.

8. The Conference emphasises that measures should be taken to ensure that the rights of all States parties under the provisions of the preamble and the articles of the Treaty are fully protected and that no State party is limited in the exercise of these rights in accordance with the Treaty.

9. The Conference emphasises the importance of access to the Security Council and the General Assembly by IAEA, including its Director General, in accordance with article XII.C of the statute of IAEA and paragraph 19 of INFCIRC/153 (Corrected), and the role of the Security Council and the General Assembly, in accordance with the Charter of the United Nations, in upholding compliance with IAEA safeguards agreements and ensuring compliance with safeguards obligations by taking appropriate measures in the case of any violations notified to it by IAEA.

10. The Conference considers that IAEA safeguards provide assurance that States are complying with their undertakings under relevant safeguards agreements and assist States in demonstrating this compliance.

11. The Conference stresses that the non-proliferation and safeguards commitments in the Treaty are also essential for peaceful nuclear commerce and cooperation and that IAEA safeguards make a vital contribution to the environment for peaceful nuclear development and international cooperation in the peaceful uses of nuclear energy.

12. The Conference stresses that comprehensive safeguards and additional protocols should be universally applied once the complete elimination of nuclear weapons has been achieved. In the meantime, the Conference calls for the wider application of safeguards to peaceful nuclear facilities in the nuclear weapon States under the relevant voluntary-offer safeguards agreements in the most economic and practical way possible, taking into account the availability of IAEA resources.

13. The Conference reiterates the call by previous Conferences of the States parties for the application of IAEA safeguards to all source or special fissionable material in all peaceful nuclear activities in the States parties in accordance with the provisions of article III of the Treaty. The Conference notes with satisfaction that, since 1995, 28 States have concluded safeguards agreements with IAEA in compliance with article III, paragraph 4, of the Treaty, 25 of which have brought the agreements into force.¹

14. The Conference notes with concern that IAEA continues to be unable to verify the correctness and completeness of the initial declaration of nuclear material made by the Democratic People's Republic of Korea, and is therefore unable to conclude that there has been no diversion of nuclear material in that country.

15. The Conference looks forward to the fulfilment by the Democratic People's Republic of Korea of its stated intention to come into full compliance with its Treaty safeguards agreement with IAEA, which remains binding and in force. The Conference emphasises the importance of the Democratic People's Republic of Korea preserving and making available to IAEA all information needed to verify its initial declaration.

16. The Conference reaffirms that IAEA safeguards should be assessed and evaluated regularly. Decisions adopted by the IAEA Board of Governors aimed at further strengthening the effectiveness and improving the efficiency of IAEA safeguards should be supported and implemented.

17. The Conference reaffirms that the implementation of comprehensive safeguards agreements pursuant to article III, paragraph 1, of the Treaty should be designed to provide for verification by IAEA of the correctness and completeness of a State's declaration so that there is a credible assurance of the non-diversion of nuclear material from declared activities and of the absence of undeclared nuclear material and activities.

18; The Conference notes the measures endorsed by the IAEA Board of Governors in June 1995 for strengthening and making more efficient the safeguards system, and notes also that these measures are being implemented pursuant to the existing legal authority conferred upon IAEA by comprehensive safeguards agreements.

19. The Conference also fully endorses the measures contained in the Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards (INFCIRC/540(Corrected), which was approved by the IAEA Board of Governors in May 1997. The safeguards-strengthening measures contained in the Model Additional Protocol will provide IAEA with, *inter alia*, enhanced information about a State's nuclear activities and complementary access to locations within a State.

20. The Conference recognises that comprehensive safeguards agreements based on document INFCIRC/153 have been successful in their main focus of providing assurance regarding declared nuclear material and have also provided a limited level of assurance regarding the absence of undeclared nuclear material and activities. The Conference notes that implementation of the measures specified in the Model Additional Protocol will provide, in an effective and efficient manner, increased confidence about the absence of undeclared nuclear material and activities in a State as a whole and that those measures are now being introduced as an integral part of IAEA's safeguards system. *The* Conference notes, in particular, the relationship between the additional protocol and the safeguards agreement between IAEA and a State party as set out in article 1 of the Model Additional Protocol. In this regard, it recalls the interpretation provided by the IAEA secretariat

on 31 January 1997 and set out in document GOV/2914 of 10 April 1997 that, once concluded, the two agreements had to be read and interpreted as one agreement.

21. The Conference notes the high priority that IAEA attaches, in the context of furthering the development of the strengthened safeguards system, to integrating traditional nuclear-material verification activities with the new strengthening measures and looks forward to an expeditious conclusion of this work. It recognises that the aim of these efforts is to optimise the combination of all safeguards measures available to IAEA in order to meet the Agency's safeguards objectives with maximum effectiveness and efficiency within available resources. Furthermore, the Conference notes that credible assurance of the absence of undeclared nuclear material and activities, notably those related to enrichment and reprocessing, in a State as a whole could permit a corresponding reduction in the level of traditional verification efforts with respect to declared nuclear material in that State, which is less sensitive from the point of view of non-proliferation. The Conferencenotes the important work being undertaken by IAEA in the conceptualisation and development of integrated safeguards approaches, and encourages continuing work by IAEA in further developing and implementing these approaches on a high-priority basis.

22. The Conference recognises that measures to strengthen the effectiveness and improve the efficiency of the safeguards system with a view to providing credible assurance of the non-diversion of nuclear material from declared activities and of the absence of undeclared nuclear material and activities must be implemented by all States parties to the Non-Proliferation Treaty, including the nuclear weapon States. The Conference also recognises that the interests of nuclear non-proliferation will be effectively served by the acceptance of IAEA safeguards strengthening measures by States with item-specific safeguards agreements. The Conference welcomes the additional protocol concluded by Cuba and urges it also to bring the protocol into force as soon as possible.

23. The Conference notes that bilateral and regional safeguards play a key role in the promotion of transparency and mutual confidence between neighbouring States, and that they also provide assurances concerning, nuclear non-proliferation. The Conference considers that bilateral or regional safeguards could be useful in regions interested in building confidence among their member States and in contributing effectively to the non-proliferation regime. 24. The Conference stresses the need to respect the letter and the spirit of the Treaty with respect to technical cooperation with States not party to the treaty.

25. The Conference recognises that nuclear material supplied to the nuclear weapon States for peaceful purposes should not be diverted for the production of nuclear weapons or other nuclear explosive devices, and should be, as appropriate, subject to IAEA safeguards agreements.

26. The Conference notes that all nuclear weapon States have now concluded additional protocols to their voluntary-offer safeguards agreements incorporating those measures provided for in the Model Additional Protocol that each nuclear weapon State has identified as capable of contributing to the non-proliferation and efficiency aims of the Protocol, when implemented with regard to that State, and as consistent with that State's obligations under article I of the Treaty. The Conference invites such States to keep the scope of those additional protocols under review.

27. The Conference commands IAEA for making its experience in the verification of nuclear non-proliferation available to the Conference on Disarmament in connection with the negotiation of a nondiscriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.

28. The Conference takes note of the Declaration of the Moscow Nuclear Safety and Security Summit of April 1996, including in relation to the safe and effective management of weapons fissile material designated as no longer required for defence purposes, and the initiatives stemming from it.

29. The Conference underlines the importance of international verification of nuclear material designated by each nuclear weapon State as no longer required for military purposes that has been irreversibly transferred to peaceful purposes. The Conference supports recent unilateral offers and mutual initiatives to place excess material under appropriate IAEA verification arrangements. Nuclear materials designated by each of the nuclear weapon States as no longer required for military purposes should as soon as practicable be placed under IAEA or other relevant verification.

30. The Conference notes the considerable increase in the Agency's safe-guards responsibilities since 1995. It further notes the financial constraints under which the IAEA safeguards system is functioning

and calls upon all States parties, noting their common but differentiated responsibilities, to continue their political, technical and financial support of IAEA in order to ensure that the Agency is able to meet its safeguards responsibilities.

31. The Conference welcomes the significant contributions by States parties through their support programmes to the development of technology and techniques that facilitate and assist the application of safeguards.

32. The Conference considers that the strengthening of IAEA safeguards should not adversely affect the resources available for technical assistance and cooperation. The allocation of resources should take into account all of the Agency's statutory functions, including that of encouraging and assisting the development and practical application of atomic energy for peaceful uses with adequate technology transfer.

33. The Conference recognises that the transfer of nuclear-related equipment, information, material and facilities, resources or devices should be consistent with States' obligations under the Treaty.

34. The Conference, recalling the obligations of all States parties under articles I, II and III of the Treaty, calls upon all States parties not to cooperate or give assistance in the nuclear or nuclear-related field to States not party to the Treaty in a manner which assists them in manufacturing nuclear weapons or other nuclear explosive devices.

35. The Conference reaffirms that each State party to the Treaty has undertaken not to provide source or special fissionable material or equipment of material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to the safeguards required by article III of the Treaty.

36. The Conference reaffirms paragraph 12 of decision 2 (Principles and objectives for nuclear non-proliferation and disarmament), adopted on 11 May 1995 by the Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

37. The Conference recognises that there are nuclear-related dualuse items of equipment, technology and materials not identified in article III, paragraph 2, of the Treaty that are relevant to the proliferation of nuclear weapons and therefore to the Treaty as a whole. The Conference calls upon all States parties to ensure that their exports of nuclear-related dual-use items to States not party to the Treaty do not assist any nuclear weapons programme. The Conference reiterates that each State party should also ensure that any transfer of such items is in full conformity with the Treaty.

38. The Conference recognises the particular requirement for safeguards on unirradiated direct-use nuclear material, and notes the projections by IAEA — that the use of separated plutonium for peaceful purposes is expected to increase over the next several years. The Conference recognises the non-proliferation benefits of the conversion of civilian research reactors to low-enriched uranium fuel. The Conference notes with appreciation that many research reactors are discontinuing the use of highly enriched uranium fuel in favour of low-enriched uranium fuel as a result of the Reduced Enrichment for Research and Test Reactors Programme. The Conference expresses satisfaction at the considerable work undertaken to ensure the continuing effectiveness of IAEA safeguards in relation to reprocessing, to the storage of separated plutonium and to uranium enrichment.

39. The Conference welcomes the additional transparency on matters pertaining to the management of plutonium resulting from the establishment, in 1997, of Guidelines for the Management of Plutonium (see INFCIRC/549), setting out the policies that several States, including the nuclear weapon States, have decided to adopt.

40. The Conference welcomes the announcement made by some nuclear weapon States that they have ceased the production of fissile material for use in nuclear weapons or other nuclear explosive devices.

41. The Conference notes the conclusion drawn by the Board of Governors of IAEA that the proliferation risk with regard to neptunium is considerably tower than that with regard to uranium or plutonium and that at present there is practically no proliferation risk with regard to americium. The Conference expresses satisfaction at the recent decisions of the IAEA Board of Governors, which enabled IAEA to enter into exchanges of letters with States, on a voluntary basis, to ensure the regular and timely receipt of information as well as the application of measures required for efficient implementation of certain monitoring tasks regarding the production and transfer of separated neptunium, and which requested the Director General of IAEA to report to the Board when appropriate with respect to the availability of separated americium, using relevant information available through the conduct of regular IAEA activities and any additional information provided by States on a voluntary basis.

42. The Conference notes the paramount importance of effective physical protection of all nuclear material, and calls upon all States to maintain the highest possible standards of security and physical protection of nuclear materials. The Conference notes the need for strengthened international cooperation in physical protection. In this regard, the Conference notes that 63 States have become party to the Convention on the Physical Protection of Nuclear Material.

43. Expressing concern about the illicit trafficking of nuclear and other radioactive materials, the Conference urges all States to introduce and enforce appropriate measures and legislation to protect and ensure the security of such material. The Conference welcomes the activities in the fields of prevention, detection and response being undertaken by IAEA in support of efforts against illicit trafficking. The Conference acknowledges the Agency's efforts to assist member States in strengthening their regulatory control on the applications of radioactive materials, including its ongoing work on a registry of sealed sources. It also welcomes the Agency's activities undertaken to provide for the enhanced exchange of information among its member States, including the continued maintenance of the illicit trafficking database. The Conference recognises the importance of enhancing cooperation and coordination among States and among international organisations in preventing, detecting and responding to the illegal use of nuclear and other radioactive material.

44. The Conference notes that 51 States parties to the Treaty have yet to bring into force comprehensive safeguards agreements,² and urges them to do so as soon as possible. This includes States parties without substantial nuclear activities. The Conference notes that in the case of States without substantial nuclear activities, the conclusion of safeguards agreements involves simplified procedures. The Conference recommends that the Director General of IAEA continue his efforts to further facilitate and assist these States parties in the conclusion and the entry into force of such agreements.

45. The Conference welcomes the fact that since May 1997, the IAEA Board of Governors has approved additional protocols to comprehensive safeguards agreements with 43 States and that 12 of those additional protocols are currently being implemented. The Conference encourages all States parties, in particular those States parties

with substantial nuclear programmes, to conclude additional protocols as soon as possible and to bring them into force or provisionally apply them as soon as possible.

46. The Conference urges IAEA to continue implementing strengthened safe-guards measures as broadly as possible, and further urges all States with safeguards agreements to cooperate fully with IAEA in the implementation of these measures.

47. The Conference recommends that the Director General of IAEA and the IAEA member States consider ways and means, which could include a possible plan of action, to promote and facilitate the conclusion and entry into force of such safeguards agreements and additional protocols, including, for example, specific measures to assist States with less experience in nuclear activities to implement legal requirements.

48. The Conference calls upon all States parties to give their full and continuing support to the IAEA safeguards system.

49. The Conference notes the agreement between the Russian Federation and the United States of America to convert in the Russian Federation 500 tonnes of highly enriched uranium (HEU) from the Russian Federation's nuclear weapons to low enriched uranium for use in commercial reactors. It welcomes the conversion to date of over 80 tonnes of HEU in the framework of this agreement. The Conference also recognises the affirmation by the President of the Russian Federation and the President of the United States of America of the intention of each country to remove by stages approximately 50 tonnes of plutonium from their nuclear weapons programmes and to convert it so that it can never be used in nuclear weapons.

50. The Conference requests that IAEA continue to identify the financial and human resources needed to meet effectively and efficiently all of its responsibilities, including its safeguards verification responsibilities. It strongly urges all States to ensure that IAEA is provided with these resources.

51. The Conference recognises that national rules and regulations of States parties are necessary to ensure that the States parties are able to give effect to their commitments with respect to the transfer of nuclear and nuclear-related dual-use items to all States taking into account articles I, II and III of the Treaty, and, for States parties, also fully respecting article IV. In this context, the Conference urges States parties that have not yet done so to establish and implement appropriate national rules and regulations. 52. The Conference recommends that the list of items triggering IAEA safeguards and the procedures for implementation, in accordance with article III, paragraph 2, be reviewed from time to time to take into account advances in technology, the proliferation sensitivity and changes in procurement practices.

53. The Conference requests that any supplier arrangement should be transparent and should continue to take appropriate measures to ensure that the export guidelines formulated by them do not hamper the development of nuclear energy for peaceful uses by States parties, in conformity with articles I, II, III, and IV of the Treaty.

54. The Conference recommends that transparency in export controls should continue to be promoted within a framework of dialogue and cooperation among all interested States parties to the Treaty.

55. The Conference encourages all other States that separate, hold, process or use separated plutonium in their civil nuclear activities to adopt policies similar to those which have been adopted by the participants in the Guidelines for the Management of Plutonium (see INFCIRC/549). Furthermore, the Conference encourages the States concerned to consider similar policies for the management of highly enriched uranium used for peaceful purposes.

56. The Conference urges all States that have not yet done so to adhere to the Convention on the Physical Protection of Nuclear Material on the earliest possible date and to apply, as appropriate, the recommendations on the physical protection of nuclear material and facilities contained in IAEA document INFCIRC/225/Rev.4 (Corrected) and in other relevant guidelines. It welcomes the ongoing informal discussions among legal and technical experts, under the aegis of IAEA, to discuss whether there is a need to revise the Convention on the Physical Protection of Nuclear Material.

Article IV and Sixth and Seventh Preambular Paragraphs

Treaty on the Non-Proliferation of Nuclear Weapons and the Peaceful Uses of Nuclear Energy

1. The Conference affirms that the Treaty fosters the development of the peaceful uses of nuclear energy by providing a framework of confidence and cooperation within which those uses can take place.

2. The Conference reaffirms that nothing in the Treaty shall be interpreted as affecting the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I, II and III of the Treaty. The Conference recognises that this right constitutes one of the fundamental objectives of the Treaty. In this connection, the Conference confirms that each country's choices and decisions in the field of peaceful uses of nuclear energy should be respected without jeopardising its policies or international cooperation agreements and arrangements for peaceful uses of nuclear energy and its fuel-cycle policies.

3. The Conference also reaffirms the undertaking by all parties to the Treaty to facilitate, and have the right to participate in, the fullest possible exchange of equipment, material and scientific and technological information for the peaceful uses of nuclear energy among States parties to the Treaty. The Conference notes the contribution that such uses can make to progress in general and to helping to overcome the technological and economic disparities between developed and developing countries.

4. The Conference urges that in all activities designed to promote the peaceful uses of nuclear energy, preferential treatment be given to the non-nuclear weapon States parties to the Treaty, taking the needs of developing countries, in particular, into account.

5. Referring to paragraphs 14 to 20 of the decision on Principles and Objectives of 1995, the Conference reasserts the need to continue to enhance the peaceful uses of nuclear energy by all States parties and cooperation among them.

6. The Conference underlines the role of IAEA in assisting developing countries in the peaceful use of nuclear energy through the development of effective programmes aimed at improving their scientific, technological, and regulatory capabilities. In this context, the Conference takes note of the medium-term strategy of IAEA.

7. The Conference affirms that every effort should be made to ensure that IAEA has the financial and human resources necessary to effectively meet its responsibilities as foreseen in article III.A of the statute of IAEA.

8. The Conference recognises the importance of the concept of sustainable development as a guiding principle for the peaceful use of nuclear energy. The Conference endorses the role of IAEA in assisting member States, upon request, in formulating projects that meet the objective of protecting the global environment by applying sustainable development approaches. The Conference recommends that IAEA continue taking this objective into account when planning its future activities. It further notes that IAEA regularly reports to the General Assembly on progress made in these fields.

9. The Conference recognises the importance of safety and nonproliferation features, as well as aspects related to radioactive waste management being addressed in nuclear power development as well as other nuclear activities related to the nuclear fuel cycle at the technological level. The Conference recalls the role of IAEA in the assessment of prospective nuclear power technologies in this respect.

10. The Conference commands IAEA for its efforts to enhance the effectiveness and efficiency of the Agency's Technical Cooperation Programme and to ensure the continuing relevance of the programme to the changing circumstances and needs of recipient member States. In this context, the Conference welcomes the new strategy for technical cooperation, which seeks to promote socio-economic impact within its core competencies, by integrating its assistance into the national development programme of each country with a view to ensuring sustainability through expanding partnerships in development, model project standards and the use of country programme frameworks and thematic plans. The Conference recommends that IAEA continue taking this objective and the needs of developing countries, notably least developed countries, into account when planning its future activities.

11. The Conference acknowledges the need for the parties to the Treaty to discuss regularly and take specific steps towards the implementation of article IV of the Treaty.

Nuclear and Radiation Safety, Safe Transport of Radioactive Materials, Radioactive Waste and Liability

Nuclear and Radiation Safety

1. The Conference affirms that the Treaty on the Non-Proliferation of Nuclear Weapons can help to ensure that international cooperation in nuclear and radiation safety will take place within an appropriate non-proliferation framework. The Conference acknowledges the primary responsibility of individual States for maintaining the safety of nuclear installations within their territories, or under their jurisdiction, and the crucial importance of an adequate national technical, human and regulatory infrastructure in nuclear safety, radiological protection and radioactive waste management.

2. The Conference notes that a demonstrated global record of safety is a key element for the peaceful uses of nuclear energy and that continuous efforts are required to ensure that the technical and human requirements of safety are maintained at the optimal level. Although safety is a national responsibility, international cooperation on all safetyrelated matters is indispensable. The Conference encourages the efforts of IAEA in the promotion of safety in all its aspects, and encourages all States parties to take the appropriate national, regional and international steps to enhance and foster a safety culture. The Conference welcomes and underlines the intensification of national measures and international cooperation in order to strengthen nuclear safety, radiation protection, the safe transport of radioactive materials and radioactive waste management, including activities conducted in this area by IAEA. In this regard, the Conference recalls that special efforts should be made and sustained to increase the awareness in these fields, through appropriate training.

3. The Conference welcomes the activities of IAEA directed towards the strengthening of nuclear safety in operating power and research reactors. The Conference further endorses the work of IAEA in the organisation of international peer review services, the support to the regulatory bodies and other relevant areas of the infrastructure of member States through the Technical Cooperation Programme, the safety standards advisory commission and committees in the preparation of internationally recognised safety standards, the emergency response unit and the continuing work on transport safety matters.

4. The Conference welcomes the entry into force of the Convention on Nuclear Safety, and encourages all States, in particular those operating, constructing or planning nuclear power reactors that have not yet taken the necessary steps to become party to the Convention, to do so. It would also welcome a voluntary application of the related provisions of the Convention to other relevant nuclear installations dedicated to the peaceful uses of nuclear energy. The Conference also expresses its satisfaction with the outcome of the first review meeting under the Convention on Nuclear Safety, and looks forward to the report from the next review meeting, in particular with respect to those areas where the first review meeting found that there was room for safety improvements.

5.. The Conference encourages all States that have not yet done so to become parties to the Convention on Early Notification of a Nuclear Accident, the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency and the Convention on Physical Protection of Nuclear Material.

6. The Conference notes the bilateral and multilateral activities that have enhanced the capabilities of the international community to

study, minimise and mitigate the consequences of the accident at the Chernobyl nuclear power plant in support of the actions taken by the Governments concerned.

7. The Conference considers that attacks or threats of attack on nuclear facilities devoted to peaceful purposes jeopardize nuclear safety, have dangerous political, economic and, environmental implications and raise serious concerns regarding the application of international law on the use of force in such cases, which could warrant appropriate action in accordance with the provisions of the Charter of the United Nations.

8. The Conference notes the importance of openness, transparency and public information concerning the safety of nuclear facilities.

Safe Transport of Radioactive Materials

9. The Conference endorses the IAEA regulations for the safe transport of radioactive materials and urges States to ensure that these standards are maintained. The Conference notes the decision in 1997 by the International Maritime Organisation (IMO) to incorporate the Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-level Radioactive Wastes in Flasks on Board Ships (INF Code) into the International Convention for the Safety of Life at Sea.

10. The Conference underlines the importance of effective national and international regulations and standards for the protection of the States concerned from the risks of transportation of radioactive materials. The Conference affirms that it is in the interests of all States that any transportation of radioactive materials be conducted in compliance with the relevant international standards of nuclear safety and security and environmental protection, without prejudice to the freedoms, rights and obligations of navigation provided for in international law. The Conference takes note of the concerns of small island developing States and other coastal States with regard to the transportation of radioactive materials by sea.

11. Recalling resolution GC(43)/RES/11 of the General Conference of IAEA, adopted by consensus in 1999, the Conference invites States shipping radioactive materials to provide, as appropriate, assurances to concerned States, upon their request, that the national regulations of the shipping State take IAEA transport regulations into account and to provide them with relevant information relating to shipments of such materials. The information provided should is no case be contradictory to the measures of physical security and safety. 12. The Conference notes that States parties have been working bilaterally and through international organisations to improve cooperation and exchange of information among the States concerned. In this context, the Conference calls upon States parties to continue working bilaterally and through the relevant international organisations to examine and further improve measures and international regulations relevant to international maritime transportation of radioactive material and spent fuel.

Spent Fuel and Radioactive Waste

13. The Conference notes that a major issue in the debate over the use of nuclear technologies is the safety of the management of spent fuel and of radioactive waste. The Conference notes the conclusion of the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management and encourages States that have not yet taken the necessary steps to become party to the Convention, to do so. The Conference expresses the hope that this Convention will enter into force at the earliest possible date. The Conference underlines the importance of managing fuel and radioactive, waste that were excluded from this Convention because they are within military or defence programmes in accordance with the objectives stated in this Convention.

14. The Conference commands the efforts of IAEA in radioactive waste management, and calls upon the Agency, in view of the increasing importance of all aspects of radioactive waste management, to strengthen its efforts in this field as resources permit. The Conference recognises the activities of IAEA in the search for new approaches on radioactive waste management solutions that are both safe and publicly acceptable. It endorses IAEA programmes to assist member States in spent fuel and radioactive waste management through, *inter alia*, safety standards, peer reviews and Technical Cooperation activities.

15. The Conference also notes that the contracting parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) have urged all States that have not done so to accept the 1993 amendment of annex 1 to the London Convention, which prohibits contracting parties from dumping radioactive wastes or other radioactive matter at sea.

Liability

16. The Conference notes the adoption of the 1997 Protocol to Amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage and the Convention on Supplementary Compensation for Nuclear Damage. The Conference also notes the existence of various national and international liability mechanisms. Furthermore, the Conference stresses the importance of having effective liability mechanisms in place.

Technical Cooperation

1. The Conference reaffirms the undertaking of those parties to the Treaty in a position to do so to cooperate in contributing alone, or together with other States or international organisations, to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear weapon States parties to the Treaty, with due consideration for the needs of the developing areas of the world.

2. The Conference recognises the benefits of the peaceful applications of nuclear energy and nuclear techniques in the fields referred to in articles II and III of the statute of IAEA, and their contribution to achieving sustainable development in developing countries and for generally improving the well-being and the quality of life of the peoples of the world.

3. The Conference acknowledges the importance of the work of IAEA as the principal agent for technology transfer among the international organisations referred to in article IV, paragraph 2, of the Treaty, and affirms the importance of the Technical Cooperation activities of IAEA, as well as bilateral and Other multilateral cooperation, in fulfilling the obligations set forth in article IV of the Treaty.

4. The Conference recognises that voluntary resources provided to and received from States parties to the Treaty under the IAEA Technical Cooperation Fund represent the most important contribution to the implementation of the Agency's Technical Cooperation Programme, the major instrument for its cooperation with developing countries. The Conference expresses its appreciation to all IAEA member States party to the Treaty which respect their commitments to the Technical Cooperation Fund by pledging and paying in full their contributions.

5. The Conference notes, however, that there has been a growing gap between the approved target figures for the Technical Cooperation Fund and the actual payments.

6. The Conference stresses that every effort should be made to ensure that IAEA's financial and human resources necessary for Technical Cooperation activities are assured, predictable and sufficient to meet the objectives mandated in article IV, paragraph 2, of the Treaty and article II of the IAEA statute. The Conference notes IAEA General Conference resolutions GC(43)/RES/6 and GC(43)/RES/14, and urges States members of IAEA to make every effort to pay in full and on time their voluntary contributions to the Technical Cooperation Fund and reminds them of their obligation to pay their Assessed Programme Costs. It also encourages IAEA to continue to manage its Technical Cooperation activities in an effective and cost-efficient manner, and in accordance with article III.C of the IAEA statute.

7. The Conference notes the consultation among States members of IAEA on the target for the Technical Cooperation Fund for the coming years and encourages member States to reach agreement on the indicative planning figures (IPF).

8. The Conference notes that the special needs and priorities of the least developed countries parties to the Treaty should be taken into account in bilateral and multilateral nuclear technical assistance and cooperation programmes. The Conference recommends that IAEA continue, through its Technical Cooperation Programme, to give special attention to the needs and priorities of least developed countries.

9. The Conference recognises that regional cooperative arrangements for the promotion of the peaceful use of nuclear energy can be an effective means of providing assistance and facilitating technology transfer, complementing the Technical Cooperation activities of IAEA in individual countries. It notes the contributions of the African Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology (AFRA), the Regional Cooperative Agreement for the Advancement of Nuclear Science and Technology in Latin America and the Caribbean (ARCAL), the Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology for Asia and the Pacific (RCA), as well as the regional Technical Cooperation Programme in Central and Eastern Europe.

10. The Conference notes the significant level of bilateral cooperation between States parties in the peaceful uses of nuclear energy worldwide and welcomes the reports thereon. The Conference recognises that it is the responsibility of States parties to create the conditions to enable this cooperation, in which commercial entities play an important role in a manner that conforms with the States parties' obligations under articles I and II of the Treaty. The Conference urges States in a position to do so to continue and where possible increase their cooperation in this field, particularly to developing countries and parties to the Treaty with economies in transition. 11. The Conference calls upon all States parties, in acting in pursuance of the objectives of the Treaty, to observe the legitimate right of all States parties, in particular developing States, to full access to nuclear material, equipment and technological information for peaceful purposes. Transfers of nuclear technology and international cooperation in conformity with articles I, II and III of the Treaty are to be encouraged. They would be facilitated by eliminating undue constraints that might impede such cooperation.

Conversion of Nuclear Materials to Peaceful Uses

1. The Conference notes steps taken by nuclear weapon States to reduce their nuclear weapons arsenals and underlines the importance of international verification, as soon as practicable, of nuclear weapons material designated by each nuclear weapon State as no longer required for military programmes and that has been irreversibly transferred to peaceful purposes. This process requires strict procedures for the safe handling, storage and disposal of sensitive nuclear materials, as well as the safe management of radioactive contaminants in strict compliance with the highest possible standards of environmental protection and nuclear and radiation safety..

2. The Conference takes note of the Declaration of the Moscow Nuclear Safety and Security Summit of April 1996, including the measures in relation to the safe and effective management of weapons fissile material designated as no longer required for defence purposes, and the initiatives stemming therefrom.

3. The Conference also notes that there have been exceptional instances in which serious environmental consequences have resulted from uranium mining and associated nuclear fuel-cycle activities in the production of nuclear weapons.

4. The Conference calls upon all Governments and international organisations that have expertise in the field of cleanup and disposal of radioactive contaminants to consider giving appropriate assistance, as may be requested, for radiological assessment, and remedial purposes in these affected areas, while noting the efforts that have been made to date in this regard.

Article V

The Conference affirms that the provisions of article V of the Treaty as regards the peaceful applications of any nuclear explosions are to be interpreted in the light of the Comprehensive Nuclear-Test-Ban Treaty. 1. The Conference notes the reaffirmation by the States parties of their commitment to article VI and the eighth to twelfth preambular paragraphs of the Treaty.

2. The Conference notes that, despite the achievements in bilateral and unilateral arms reduction, the total number of nuclear weapons deployed and in stockpile still amounts to many thousands. The Conference expresses its deep concern at the continued risk for humanity represented by the possibility that these nuclear weapons could be used.

3. The Conference takes note of the proposal made by the Secretary-General of the United Nations that the convening of a major international conference that would help to identify ways of eliminating nuclear dangers be considered at the Millennium Summit.

4. The Conference reaffirms that the 'cessation of all nuclear weapontest explosions or any other nuclear explosions will contribute to the non-proliferation of nuclear weapons in all its aspects, to the process of nuclear disarmament leading to the complete elimination of nuclear weapons and, therefore, to the further enhancement of international peace and security.

5. The Conference welcomes the adoption by the General Assembly and subsequent opening for signature of the Comprehensive Nuclear-Test-Ban Treaty in New York on 24 September 1996, and notes that 155 States have signed it and that 56 of them, including 28 whose ratification is necessary for its entry into force, have deposited their instruments of ratification. The Conference welcomes the ratifications by France and the United Kingdom of Great Britain and Northern Ireland and the recent decision by the State Duma of the Russian Federation to ratify the Treaty. The Conference calls upon all States, in particular on those 16 States whose ratification is a prerequisite for the entry into force of the Comprehensive Nuclear-Test-Ban Treaty, to continue their efforts to ensure the early entry into force of the Treaty.

6. The Conference welcomes the final declaration adopted at the Conference on facilitating the entry into force of the Comprehensive Nuclear-Test-Ban Treaty, convened in Vienna in October 1999, in accordance with article XIV of the Treaty.

7. The Conference notes the International Court of Justice advisory opinion on the *Legality of the threat or use of nuclear weapons* issued at The Hague on 8 July 1996.

8. The Conference notes the establishment, in August 1998, by the Conference on Disarmament, of the Ad Hoc Committee under item 1 of its agenda entitled "Cessation of the nuclear arms race and nuclear disarmament" to negotiate, on the basis of the report of the Special Coordinator (CD/1299) and the mandate contained therein, a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices. The Conference regrets that negotiations have not been pursued on this issue as recommended in paragraph 4 (b) of the 1995 decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament".

9. The Conference welcomes the significant progress achieved in nuclear weapons reductions made unilaterally or bilaterally under the Strategic Arms Reduction Treaty (START) process, as steps towards nuclear disarmament. Ratification of START II by the Russian Federation is an important step in the efforts to reduce strategic offensive weapons and is welcomed. Completion of ratification of START II by the United States remains a priority.

10. The Conference also welcomes the significant unilateral reduction Measures taken by other nuclear weapon States, including the closedown and dismantling of nuclear weapon-related facilities.

11. The Conference welcomes the efforts of several States to cooperate in making nuclear disarmament measures irreversible, in particular, through initiative on the verification, management and disposition of fissile material declared excess to military purposes.

12. The Conference reiterates the important contribution made by Belarus, Kazakhstan and Ukraine to the implementation of article VI of the Treaty through their voluntary withdrawal of all tactical and strategic nuclear weapons from their territories.

13. The Conference welcomes the signing, in September 1997, by Belarus, Kazakhstan, the Russian Federation, Ukraine and the United States of America of significant agreements relating to the Treaty on the Limitation of Anti-Ballistic Missile Systems, including a Memorandum of Understanding. The Conference welcomes the ratification of these documents by the Russian Federation. Ratification of these documents by the other countries remains a priority.

14. The Conference notes the nuclear weapon States' declaration that none of their nuclear weapons are targeted at any State.

15. The Conference agrees on the following practical steps for the systematic and progressive efforts to implement article VI of the Treaty

on the Non-Proliferation of Nuclear Weapons and paragraphs 3 and 4 (c) of the 1995 Decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament":

- 1. The importance and urgency of signatures and ratifications, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban treaty.
- 2. A moratorium on nuclear weapon-test explosions or any other nuclear explosions pending entry into force of that Treaty.
- 3. The necessity of negotiations in the Conference on Disarmament on a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices in accordance with the statement of the Special Coordinator in 1995 and the mandate contained therein, taking into consideration both nuclear disarmament and nuclear nonproliferation objectives. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate commencement of negotiations on such a treaty with a view to their conclusion within five years.
- 4. The necessity of establishing in the Conference on Disarmament an appropriate subsidiary body with a mandate to deal with nuclear disarmament. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate establishment of such a body.
- 5. The principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures.
- 6. An unequivocal undertaking by the nuclear weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament, to which all States parties are committed under article VI.
- 7. The early entry into force and full implementation of START II and the conclusion of START III as soon as possible while preserving and strengthening the Treaty on the Limitation of Anti-Ballistic Missile Systems as a cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with its provisions.
- 8. The completion and implementation of the Trilateral Initiative between the United States of America, the Russian Federation and the International Atomic Energy Agency.

- 9. Steps by all the nuclear weapon States leading to nuclear disarmament in a way that promotes international stability, and based on the principle of undiminished security for all:
 - Further efforts by the nuclear weapon States to reduce their nuclear arsenals unilaterally;
 - Increased transparency by the nuclear weapon States with regard to the nuclear weapons capabilities and the implementation of agreements pursuant to article VI and as a voluntary confidence-building measure to support further progress on nuclear disarmament;
 - The further reduction of non-strategic nuclear weapons, based on unilateral initiatives and as an integral part of the nuclear arms reduction and disarmament process;
 - Concrete agreed measures to further reduce the operational status of nuclear weapons systems;
 - A diminishing role for nuclear weapons in security policies to minimise the risk that these weapons will ever be used and to facilitate the process of their total elimination;
 - The engagement as soon as appropriate of all the nuclear weapon States in the process leading to the total elimination of their nuclear weapons.
- 10. Arrangements by all nuclear weapon States to place, as soon as practicable, fissile material designated by each of them as no longer required for military purposes under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside military programmes.
- 11. Reaffirmation that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control.
- 12. Regular reports, within the framework of the strengthened review process for the Non-Proliferation Treaty, by all States parties on the implementation of article VI and paragraph 4 (c) of the 1995 Decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament", and recalling the advisory opinion of the International Court of Justice of 8 July 1996.
- 13. The further development of the verification capabilities that will be required to provide assurance of compliance with nuclear disarmament agreements for the achievement and maintenance of a nuclear weapon free world.

Article VII and the Security of Non-Nuclear weapon States

1. The Conference reaffirms that, in accordance with the Charter of the United Nations, States must refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any State or in any other manner inconsistent with the purposes of the United Nations.

2. The Conference reaffirms that the total elimination of nuclear weapons is the only absolute guarantee against the use or threat of use of nuclear weapons. The Conference agrees that legally binding security assurances by the five nuclear weapon States to the non-nuclear weapon State's parties to the Treaty on the Non-Proliferation of Nuclear Weapons strengthen the nuclear non-proliferation regime. The Conference calls upon the Preparatory Committee to make recommendations to the 2005 Review Conference on this issue.

3. The Conference notes the reaffirmation by the nuclear weapon States of their commitment to the United Nations Security Council resolution 984 (1995) on security assurances for non-nuclear weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons.

4. The Conference notes the establishment in March 1998 by the Conference on Disarmament of the Ad Hoc Committee on effective international arrangements to assure non-nuclear weapon States against the use, or threat of use, of nuclear weapons.

5. The Conference recognises the important role which the establishment of new nuclear weapon free zones and the signature to the protocols of new and previously existing zones by the nuclear weapon States has played in extending negative security assurances to non-nuclear weapon States parties to the Treaty on the Non-Proliferation of Nuclear Weapons in the zones concerned. The Conference underlines the importance of concerned States taking step to bring into effect the assurances provided by nuclear weapon free zone treaties and their protocols.

6. The Conference welcomes and supports the steps taken to conclude further nuclear weapon free zone treaties since 1995, and reaffirms the conviction that the establishment of internationally recognised nuclear weapon free zones on the basis of arrangements freely arrived at among the States of the region concerned enhances global and regional peace and security, strengthen the nuclear non-proliferation regime and contributes towards realising the objectives of nuclear disarmament. 7. The Conference supports proposals for the establishment of nuclear weapon free zones where they do not yet exist, such as in the Middle East and South Asia.

8. The Conference welcomes and supports the declaration by Mongolia of its nuclear weapon free status, and takes note of the recent adoption by the Mongolian parliament of legislation defining that status as a unilateral measure to ensure the total absence of nuclear weapons on its territory, bearing in mind its unique conditions, as a concrete contribution to promoting the aims of nuclear non-proliferation and a practical contribution to promoting political stability and predictability in the region.

9. The Conference further welcomes the Joint Declaration on the Denuclearisation of the Korean Peninsula between the Republic of Korea and the Democratic People's Republic of Korea and urges its rapid implementation.

10. The Conference recognises the continuing contributions that the Antarctic Treaty and the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba are making towards the achievement of nuclear nonproliferation and disarmament objectives, particularly in the southern hemisphere and adjacent areas and towards keeping the areas covered by those treaties free of nuclear weapons, in accordance with international law. In this context, the Conference welcomes the vigorous efforts being made among States parties and signatories to those treaties in order to promote their common objectives.

11. The Conference stresses the importance of the signature and ratification of the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba by all regional States, as well as the signature and ratification by the nuclear weapon States that have not yet done so of the relevant protocols to those treaties, recognising at security assurances are available to States parties to those Treaties. In this context, the Conference takes note of the statement of the five nuclear weapon states that the internal processes are under way to secure the few lacking ratifications to the treaties of Rarotonga and Pelindaba, and that consultations with the States parties to the Treaty of Bangkok have been accelerated, paving the way for adherence by the five nuclear weapon States to the protocol to that Treaty.

12. The Conference welcomes the consensus reached in the General Assembly since its thirty-fifth session that the establishment of a nuclear weapon free zone in the Middle East would greatly enhance international peace and security the Conference urges all parties directly concerned to consider seriously taking practical and urgent steps required for the implementation of the proposal to establish a nuclear weapon free zone in the region of the Middle East in Accordance with the relevant resolutions of the General Assembly, and as a Beans of promoting this objective, invites the countries concerned to adhere to the Treaty on the Non-Proliferation of Nuclear Weapons, and pending the establishment of the zone, to agree to place all their nuclear activities under IAEA safeguards.

13. The Conference further welcomes the report on the establishment of nuclear weapon free zones on the basis of arrangements freely arrived at among the States of the region concerned, adopted by consensus by the Disarmament Commission on 30 April 1999.

14. The Conference regards the establishment of additional nuclear weapon free zones as a matter of priority, and in this respect supports the intention and commitment of the five Central Asian States to establish a nuclear weapon free zone in their region, welcomes the practical steps they have taken towards implementation of their initiative and notes with satisfaction the substantial progress they have made in drawing up and agreeing on a draft treaty on the establishment of a nuclear weapon free zone in Central Asia.

15 The Conference, taking note of all initiatives by States parties, believes that the international community should continue to promote the establishment of new nuclear weapon free zones in accordance with the relevant guidelines of the United Nations Disarmament Commission and in that spirit welcomes the efforts and proposals that have been advanced by the States parties since 1995 in various regions of the world.

16. Regional issues

The Middle East, particularly implementation of the 1995 Resolution on the Middle East:

1. The Conference reaffirms the importance of the Resolution on the Middle East adopted by the 1995 Review and Extension Conference and recognises that the resolution remains valid until the goals and objectives are achieved. The Resolution, which was co-sponsored by the depositary States (Russian Federation, United Kingdom of Great Britain and Northern Ireland and United States of America), is an essential element of the outcome of the 1995 Conference and of the basis on which the Treaty on the Non-Proliferation of Nuclear Weapons was indefinitely extended without a vote in 1995.

- 2. The Conference reaffirms its endorsement of the aims and objectives of the Middle East peace process and recognises that efforts in this regard, as well as other efforts, contribute to, inter alia, a Middle East zone free of nuclear weapons as well as other weapons of mass destruction.
- 3. The Conference recalls that in paragraph 4 of the 1995 Resolution on the Middle East the Conference "calls upon all States in the Middle East that have not yet done so, without exception, to accede to the Treaty as soon as possible and to place their nuclear facilities under full-scope International Atomic Energy Agency safeguards". The Conference notes, in this connection, that the report of the United Nations Secretariat on the implementation of the 1995 Resolution on the Middle East (NPT/ CONF.2000/7) states that several States have acceded to the Treaty and that, with these accessions, all States of the region of the Middle East, with the exception of Israel, are States parties to the Treaty on the Non-Proliferation of Nuclear Weapons. The Conference welcomes the accession of these States and reaffirms the importance of Israel's accession to the Non-Proliferation Treaty and the placement of all its nuclear facilities under comprehensive IAEA safeguards, in realising the goal of universal adherence to the Treaty in the Middle East.
- 4. The Conference notes the requirement under article III of the Non-Proliferation Treaty for non-nuclear weapon States parties to conclude agreements with IAEA to meet the requirements of the statute of IAEA. In this regard, the Conference notes from paragraph 44 of the review of article III that nine States parties in the region have yet to conclude comprehensive safeguards agreements with IAEA and invites those States to negotiate such agreements and bring them into force as soon as possible. The Conference welcomes the conclusion of an Additional Protocol by Jordan and Invites all other States in the Middle East, whether or not party to the Treaty, to participate in IAEA's strengthened safeguards system.
- 5. The Conference notes the unanimous adoption by the United Nations Disarmament Commission, at its 1999 session, of guidelines on the establishment of nuclear weapon free zones on the basis of arrangements freely arrived at among the States of the region concerned.³ The Conference notes that, at that session, the Disarmament Commission encouraged the establishment of a nuclear weapon free zone in the Middle East, as well as the development of zones free from all weapons

of mass destruction. The Conference notes the adoption without a vote by the General Assembly, for the twentieth consecutive year, of a resolution proposing the establishment of a nuclear weapon free zone in the region of the Middle East.

- 6. The Conference invites all States, especially States of the Middle East, to reaffirm or declare their support for the objective of establishing an effectively verifiable Middle East zone free of nuclear weapons as well as other weapons of mass destruction, to transmit their declarations of support to the Secretary-General of the United Nations and to take practical steps towards that objective.
- 7. The Conference requests all States parties, particularly the nuclear weapon States, the States of the Middle East and other interested States, to report through the United Nations Secretariat to the President of the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, as well as to the Chairperson of the Preparatory Committee meetings to be held in advance of that Conference, on the steps that they have taken to promote the achievement of such a zone and the realisation of the goals and objectives of the 1995 Resolution on the Middle East. It requests that the Secretariat prepare a compilation of those reports in preparation for consideration of these matters at the Preparatory Committee meetings and the 2005 Review Conference.
- 8. The Conference requests the President of the 2000 Review Conference to convey the Final Document of the Conference, including its conclusions and recommendations, to the Governments of all States, including those States parties unable to attend the Conference and to States that are not party to the Treaty.
- 9. Recalling paragraph 6 of the 1995 Resolution on the Middle East, the Conference reiterates the appeal to all States parties to the Treaty on the Non-Proliferation of Nuclear Weapons to extend their cooperation and to exert their utmost efforts with a view to ensuring the early establishment by regional parties of a Middle East zone free of nuclear and all other weapons of mass destruction and their delivery systems. The Conference notes the statement by the five nuclear weapon States reaffirming their commitment to the 1995 Resolution on the Middle East.
- 10. Bearing in mind the importance of full compliance with the Non-Proliferation Treaty, the Conference notes the statement of 24 April 2000 by the IAEA Director General that, since the

cessation of IAEA inspections in Iraq on 16 December 1998, the Agency has not been in a position to provide any assurance of Iraq's compliance with its obligations under Security Council resolution 687 (1991). The Conference further notes that IAEA carried out an inspection in January 2000 pursuant to Iraq's safeguards agreement with IAEA during which the inspectors were able to verify the presence of the nuclear material subject to safeguards (low enriched, natural and depleted uranium). The Conference reaffirms the importance of Iraq's full continuous cooperation with IAEA and compliance with its obligations.

South Asia and Other Regional Issues

- 11. The Conference emphasises that nuclear disarmament and nuclear non-proliferation are mutually reinforcing.
- 12. With respect to the nuclear explosions carried out by India and then by Pakistan in May 1998, the Conference recalls Security Council resolution 1172 (1998), adopted unanimously on 6 June 1998, and calls upon both States to take all of the measures set out therein. Notwithstanding their nuclear tests, India and Pakistan do not have the status of nuclear weapon States.
- 13. The Conference urges India and Pakistan to accede to the Non-Proliferation Treaty as non-nuclear weapon States and to place all their nuclear facilities under comprehensive Agency safeguards. The Conference further urges both States to strengthen their non-proliferation export control measures over technologies, material and equipment that can be used for the production of nuclear weapons and their delivery systems.
- 14. The Conference notes that India and Pakistan have declared moratoriums on further testing and their willingness to enter into legal commitments not to conduct any further nuclear testing by signing and ratifying the Comprehensive Nuclear-Test-Ban Treaty. The Conference urges both States to sign the Treaty, in accordance with their pledges to do so.
- 15. The Conference notes the willingness expressed by India and Pakistan to participate in the negotiation in the Conference on Disarmament of a treaty banning the production of fissile material for nuclear weapons and other nuclear explosive devices. Pending the conclusion of a legal instrument, the Conference urges both countries to observe a moratorium on the production of such material. The Conference also urges both States to join other countries in actively seeking an early commencement of

negotiations on this issue, in a positive spirit and on the basis of the agreed mandate, with a view to reaching early agreement.

16. The Conference notes with concern that, while the Democratic People's Republic of Korea remains a party to the Non-Proliferation Treaty, IAEA continues to be unable to verify the correctness and completeness of the initial declaration of nuclear material made by the Democratic People's Republic of Korea and is therefore unable to conclude that there has been no diversion of nuclear material in the Democratic People's Republic of Korea, The Conference looks forward to the fulfilment by the Democratic People's Republic of Korea of its stated intention to come into full compliance with its safeguards agreement with IAEA, which remains binding and in force. The Conference emphasises the importance of action by the Democratic People's Republic of Korea to preserve and make available to IAEA all information needed to verify its initial inventory.

Article IX

1. The Conference reaffirms its conviction that the preservation of the integrity of the Treaty and its strict implementation are essential to international peace and security.

2. The Conference recognises the crucial role of the Treaty In nuclear non-proliferation, nuclear disarmament and the peaceful uses of nuclear energy.

3. The Conference reaffirms that in accordance with article IX, States not currently States parties may accede to the Treaty only as nonnuclear weapon States.

4. The Conference undertakes to make determined efforts towards the achievement of the goal of universality of the Treaty. These efforts should include the enhancement of regional security, particularly in areas of tension such as the Middle East and South Asia.

5. The Conference reaffirms the long-held commitment of parties to the Treaty to universal membership and notes that this goal has been advanced by the accession to the Treaty of several new States since the 1995 Review and Extension Conference, thereby bringing its membership to 187 States parties. The Conference reaffirms the importance of the Treaty in establishing a norm of international behaviour in the nuclear field.

6. The Conference therefore calls upon those remaining States not party to the Treaty to accede to it, thereby accepting an international legally binding commitment not to acquire nuclear weapons or nuclear explosive devices and to accept IAEA safeguards on all their nuclear activities. These States are Cuba, India, Israel and Pakistan. In this context, the Conference welcomes the signature by Cuba of the protocol additional to its safeguards agreements with IAEA.

7. The Conference particularly urges those non-parties to the Treaty that operate unsafeguarded nuclear facilities—India, Israel and Pakistan—to take similar action, and affirms the important contribution this would make to regional and global security.

8. The Conference also takes note that the widening of the entry into force of protocols additional to safeguards agreements with IAEA will strengthen the nuclear safeguards regime and facilitate the exchange of nuclear and nuclear-related material in peaceful nuclear cooperation.

9. In this connection, the Conference underlines the necessity of universal adherence to the Treaty and of strict compliance by all existing parties with their obligations under the Treaty.

10. The Conference requests the President of the Conference to convey formally the views of States parties on this issue to all nonparties and to report their responses to the parties. Such efforts should contribute to enhancing the universality of the Treaty and the adherence of non-parties to it.

Improving the effectiveness of the strengthened review process for the Treaty

1. The States parties reaffirmed the provisions in the Decision on "Strengthening the Review Process for the Treaty" adopted at the 1995 Review and Extension Conference.

2. The States parties stressed that three sessions of the Preparatory Committee, normally for a duration of 10 working days each, should be held in the years prior to the Review Conference. A fourth session, would, if necessary, be held in the year of the Review Conference.

3. The States parties recommended that specific time be allocated at sessions of the Preparatory Committee to address specific relevant issues.

4. Recalling the Decision on subsidiary bodies of the 2000 Review Conference (NPT/CONF.2000/DEC.1), subsidiary bodies can be established at the Review Conference to address specific relevant issues.

5. The States parties, recalling paragraph 4 of Decision 1 of the 1995 NPT Review and Extension Conference, agreed that the purpose of the first two sessions of the Preparatory Committee would be to "consider principles, objectives and ways in order to promote the full implementation of the Treaty, as well as its universality". To this end, each session of the Preparatory Committee should consider specific matters of substance relating to the implementation of the Treaty and Decisions 1 and 2, as well as the Resolution on the Middle East adopted in 1995, and the outcomes of subsequent Review Conferences, including developments affecting the operation and purpose of the Treaty.

6. The States parties also agreed that the Chairpersons of the sessions of the Preparatory Committee should carry out consultations with the States parties to prepare the ground for the outcome of the sessions as well as their agenda.

7. The consideration of the issues at each session of the Preparatory Committee should be factually summarized and its results transmitted in a report to the next session for further discussion. At its third and, as appropriate, fourth sessions, the Preparatory Committee, taking into account the deliberations and results of its previous sessions, should make every effort to produce a consensus report containing recommendations to the Review Conference.

8. The States parties agreed that the procedural arrangements for the Review Conference should be finalized at the last session of the Preparatory Committee.

9. The States parties also agreed that a meeting should be allocated to nongovernmental organisations to address each session of the Preparatory Committee and the Review Conference.

REFERENCES

- 1. Algeria, Antigua and Barbuda, Argentina, Azerbaijan, Bahamas, Barbados, Belarus, Belize, Brazil, Cambodia, Chile, Czech Republic, Dominica, Estonia, ' Ethiopia, Grenada, Guyana, Kazakhstan, Monaco, Namibia, St. Kitts and Nevis, San Marino, Slovenia, Ukraine and Zimbabwe.
- 2. Andorra, Angola, Bahrain, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Djibouti, Equatorial Guinea, Eritrea, Gabon, Georgia, Guinea, Guinea-Bissau, Haiti, Kenya, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Liberia, Mali, Marshall Islands, Mauritania, Micronesia (Federated States of), Mozambique, Niger, Oman, Palau, Qatar, Republic of Moldova, Rwanda, Sao Tome and Principe, Saudi Arabia, Seychelles, Sierra Leone, Somalia, Tajikistan, the former Yugoslav Republic of Macedonia, Togo, Turkmenistan, Uganda, United Arab Emirates, United Republic of Tanzania, Vanuatu and Yemen.
- 3. Official Records of the General Assembly, Fifty-fourth Session, Supplement No. 42 (A/54/42), annex I, sect. C.



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