THE EFFECTIVENESS OF INTERNATIONAL AGREEMENTS IN NUCLEAR ARMS CONTROL

by

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Thesis submitted for the degree of Doctor of Philosophy in the Australian National University

Canberra, May 1982
This thesis is my own original work.

Julie Dahlitz
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I am most grateful to the Professor of International Law in my Faculty, Professor D.W. Greig, for his many incisive comments on the manuscript. He also helped to make it possible for me to attend the first Special Session of the General Assembly devoted to disarmament, held in New York in 1978, shortly after I commenced this study. My consequent inclusion as an Observer with the Australian Delegation was invaluable because it gave me an insight into the practical problems faced by decision-makers when confronting issues of nuclear arms proliferation.
During five weeks spent in the United States on that occasion I took the opportunity to visit Washington. There I had the privilege of a number of interviews with Members of the United States Congress and with specialists in the field of nuclear arms control in the Department of Energy, as well as in the Department of State, notably in the Arms Control and Disarmament Agency. Those discussions with many legal and technical specialists, and some political representatives, impressed on me the awesome burden of responsibility that rests with the persons who formulate and who carry out the nuclear weapons policies of a Superpower. To a limited extent, I was able to balance those experiences with impressions gained during a few interviews granted to me by Delegates of the Soviet Union attending the Special Session.

Subsequently, on my return journey via Geneva, I was in a position to acquaint myself with the work at the International Law Commission. From there I travelled to Austria and the Federal Republic of Germany, where I had interviews with Departmental experts, as well as discussions with interested executive members of the Parties in Government. In Austria I also had extensive interviews with legal and technical experts in the International Atomic Energy Agency.
Towards the end of 1978 I accepted a position with the Department of International Economic and Social Affairs as a member of the United Nations Secretariat, in which capacity I was able to observe and to participate in the methods of work of the United Nations. Later I was transferred to a temporary post as a Political Affairs Officer in the Centre for Disarmament, where I spent the first half of 1980. It was a position that proved to be conducive to a many-sided study of the issues involved in nuclear arms control.

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ABSTRACT

After many years of failure to control the proliferation of nuclear weapons, numerous agreements have been concluded to inhibit their manufacture, transfer and combat use. The agreements are effective to the extent that they exercise a substantial influence on international conduct in this field. However, they are ineffective in the sense that there is an increasing discrepancy between the vertical and horizontal proliferation of nuclear weapons, and the restraint imposed by the agreements. Thus, with the continuation of present trends, the quantitative and qualitative growth of nuclear weapons and weapons systems is likely to become unmanageable, probably leading to world nuclear war.

Nuclear weapons have many novel attributes that put unprecedented strains on the international legal system with respect to the negotiation, verification, adjudication and enforcement of agreements to control them. Neither the theoretical basis of international law nor its application are appropriate for contemporary requirements. The international legal system is similarly deficient in facilitating the resolution of underlying conflicts that threaten international peace and security, which are the raison d'être of the nuclear arms race.

Regarding the prevention of horizontal proliferation, the major legal impediment is the result
of failure to distinguish clearly between explicit and implicit undertakings by States, and reluctance to make sufficient use of United Nations machinery for the formulation and application of unambiguous legal norms. Bilateral efforts by the Superpowers to utilise quasi-legal methods for halting vertical proliferation are chiefly hampered by an unwillingness to isolate subjects relating to the strategic balance from other contentious issues.

The modalities of agreement are not primarily responsible for the continuing nuclear arms race, especially between the Superpowers. That is the outcome of the overall inability of States, at many levels of interaction, to come to terms with the loss of *jus ad bellum*, despite the knowledge that all out nuclear war would put an end to human civilisation. Insufficient effort to reorient the theory and practice of international law so as to establish a system of accepted international justice is a symptom, but not the cause, of the general impasse. Nevertheless, the adoption of more appropriate theories and more precise rules of law, whether by United Nations forums, in the International Court of Justice, or during the course of international negotiation or mediation, would undoubtedly assist the process of accommodation that could make nuclear arms control ultimately and entirely effective.
INTRODUCTION

The primary objective of the study is to contribute to the contemporary decision-making process. It is essentially a feasibility study on nuclear arms control from a predominantly legal point of view. Central to the theme is the examination of international systems for the creation and observance of nuclear arms control agreements. Consideration is given to possible advances in the relevant methodologies, based on a review of current initiatives regarding the negotiation, implementation, verification and enforcement of international agreements.

Subject matter selected for examination is focused on short term variables in preference to an enumeration of all pertinent factors, including those that are not foreseeably amenable to change. Control of nuclear weapons is interpreted as denoting both their regulation and elimination, with the emphasis on stability as the criterion of success.

Assessment as to what constitutes stability is an underlying theme throughout. The basic assumptions are that stability increases with the discouragement of attempts to gain political or economic advantage by the acquisition, deployment, threat or use of nuclear weapons as a deliberate policy; by maximisation of the time available for making anti-nuclear-weapon choices; adoption of procedures to mitigate the consequences of nuclear accident; avoidance of action-reaction
compulsion; simplification of deterrence, whenever possible, as well as strengthening the survivability of some deterrent systems; provision of opportunities for compromise; and ongoing machinery facilitating universally acceptable resolution of every kind of international dispute. All of these measures are seen to have legal or quasi-legal connotations.

In the interests of cohesion and brevity, several subject areas have been examined only in a limited context. For example, the historical background is restricted to the observation of trends with direct relevance to current issues and institutions. Several nuclear strategies are noted only cursorily, in order to demonstrate the nature of the complexities entailed and the unpredictability of outcomes. Likewise, the imprecision of the distinctive terminology applied to the various strategies is mentioned merely to illustrate the nature of the problems faced by policy-makers and negotiators. The examination of general conflict resolution principles and techniques is also confined to those aspects that have a bearing on the negotiation and compliance enforcement phases of nuclear arms control agreements.

Not all relevant variables are examined but only those that can be embodied in international agreements for the control of nuclear arms and matters directly related to such existing or putative agreements. This demarcation requires the omission from detailed consideration of many issues that have a vital bearing on
the efficacy of nuclear arms control agreements, including the management of national bureaucracies and the internal politics of States; the local, regional and global interplay of ideological divisions and sectional interests; and the whole range of economic and territorial rivalries in all their myriad commutations.

The issues enumerated in the above paragraph are adverted to only in general terms as part of the genus of "primary" conflicts. The lack of distinctive treatment is felt to be permissible on the ground that the menace of nuclear devastation is indiscriminate, and because precepts for the peaceful settlement of international disputes have a similarly universal application. Therefore, it is felt that the line of demarcation should not be excessively distorting. Controversies about nuclear arms parity, and the equities of the competing security interests of States and groups of States, are regarded as "consequential" international disputes. The control of weapons of mass destruction other than nuclear weapons is excluded from consideration, except to illustrate homogeneous features where other examples are lacking.

Despite the simplifications invoked, the topic is an unwieldy one due to the many facets of nuclear arms control. In particular, it is overshadowed by Socialist-Free Enterprise enmity which, like other primary conflicts, is treated as a given fact. No attempt is made to adjudicate on its merits or even to probe the rationality of its motivation and pursuit. The
geopolitical background and the correlations between various aspects of the topic have been more fully examined in three published papers written during the course of the study, entitled Proliferation and Confrontation,\textsuperscript{1} Co-existence, Reciprocity and the Principle of Marginal Restraint,\textsuperscript{2} and Arms Control in Outer Space.\textsuperscript{3}

The feasibility of avoiding, by means of nuclear arms control agreements, the untoward consequences of the nuclear arms race, including the disaster of nuclear devastation, would not warrant study if it took the form of a probability calculation. Clearly, if it were found that there is only a modest chance of escaping the direct or indirect deleterious consequences of the nuclear arms race with nuclear arms control agreements, the recommendation would have to be that the chance be taken. The sole contra-indication would be if a higher probability were found to favour the avoidance of nuclear war with the attainment of a disarming first strike capability by stealth. A conclusive evaluation of that possibility is beyond the scope of this study, which rests on the assumption that the probability of avoiding nuclear war by that means is negligible.

\begin{itemize}
\item \textsuperscript{1} \textit{Australian Outlook}, April 1979, Vol.33 No.1 p.27.
\item \textsuperscript{2} \textit{Australian Outlook}, April 1981, Vol.35 No.1 p.78.
\item \textsuperscript{3} \textit{The World Today}, April 1982, Vol.38 No.4 p.154.
\end{itemize}
Thus, the question is not whether agreements should be sought in the pursuit of nuclear arms control, but what measures are likely to produce the best results in the light of experience and informed conjecture. That, in turn, entails the selection of priority issues and the designation of collateral measures to be taken. In addition, it becomes necessary to assess existing principles, forms and institutions facilitating international concurrence, with a view to identifying such changes as may be prerequisite to the attainment of the objective.
CHAPTER I

THE FEASIBILITY OF INTERNATIONAL AGREEMENT
TO CONTROL NUCLEAR ARMS

First Initiatives

Among the many onerous and pressing concerns of the international community since World War II, none has been more demanding than the problem of nuclear arms control (NAC). The devastation caused by the two nuclear bombs detonated over Hiroshima and Nagasaki, on the 6th and 9th of August 1945, left no doubt that nuclear weapons heralded unprecedented dangers for mankind.

When the Treaty setting up the United Nations came into force on 24 October 1945, only the United States had a nuclear capability, nuclear weapons were small by current standards, no missile systems existed for their delivery, and relatively little was known about the dangers of radioactive fallout. Nevertheless, from then onward the eradication, or at least the control of nuclear weapons became a major, if not the prime international preoccupation. Accordingly, the first Resolution of the United Nations General Assembly was directed toward the solution of that issue. Resolution 1(1) was adopted unanimously on 24 January 1946, establishing an Atomic Energy Commission. The Commission was to report to the Security Council and to make specific proposals -

(a) for extending between all nations the exchange of basic scientific information for peaceful ends
(b) for control of atomic energy to the extent necessary to ensure its use only for peaceful purposes

(c) for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction

(d) for effective safeguards by way of inspection and other means to protect complying States against the hazards of violations and evasions.

The fate of the Atomic Energy Commission was typical of many later attempts to control nuclear arms, even to the present day. Despite its high status and unanimous mandate, the Commission eventually lapsed into a two year stalemate and had to be dissolved on 11 January 1952, without achieving any of its objectives.

Like many of its successor negotiating bodies for NAC, the Commission was hamstrung by the overriding rivalry between the United States and the Soviet Union and paralysed by obstinate efforts to devise international institutions modelled on national law enforcement prototypes. The attempt by some members of the Commission to set up an International Atomic Development Authority, to be in charge of all nuclear activities in the world, was the first of many over-ambitious attempts, in the interests of disarmament, to wrest a greater abrogation of sovereignty from States than they have been prepared to concede.

The first manifestation of Superpower rivalry and distrust in the field of NAC was the move by the United States to forestall the development of nuclear weapons by the Soviet Union. It began with the proposed imposition of strict inspection and control procedures concerning
the utilisation of nuclear materials for weapons, for
peaceful uses and for research.4

Understandably, the United States was not ready to
give up its nuclear advantage until a system of
verification and sanctions was in place. The proposal
was advanced by the United States delegate to the Atomic
Energy Commission, Mr. Bernard Baruch, and it became
known as the Baruch Plan. For its part, the Soviet Union
was evidently concerned about its position and sought to
eliminate the American nuclear advantage. It demanded
that the destruction of all atomic weapons should occur
prior to the imposition of a system of international
controls for prohibiting their ongoing manufacture.

The impasse continued until 23 September 1949, when
the Soviet Union exploded its first atomic bomb. A few
months later the Soviet Union withdrew from the
Commission in protest against the failure to seat the
representative of the newly formed de facto Government of
the People's Republic of China.5

The next attempt to attain international agreement
regarding NAC, and to create effective institutions and
procedures for doing so, was prejudiced at its inception
by growing antagonism between Socialist and Western
States and by the outbreak of the Korean War. In 1950
the General Assembly established a Committee of Twelve,6
composed of the same nations as the membership of the
Security Council at that time, together with
representation from Canada, to report on the feasibility
of merging the Atomic Energy Commission and another existing Commission dealing with the control of conventional armaments. On the basis of the Committee's report, a Disarmament Commission was set up, consolidating the two previous Commissions. The Soviet Union voted against the General Assembly Resolution which established the Disarmament Commission, on 11 January 1952. Within the year of the new Commission's inauspicious beginnings, the United Kingdom exploded its first atomic bomb, on the 3rd of October, and the United States exploded its first hydrogen bomb, on the 1st of November.

The mandate of the Disarmament Commission required it to prepare proposals, inter alia, "for the effective international control of atomic energy to ensure the prohibition of atomic weapons and the use of atomic energy for peaceful purposes only". As with previous and subsequent initiatives, the recommendations put forward by Western States emphasised the need for disclosure, verification, inspection and international control of both nuclear and conventional arms. The Soviet Union, on the other hand, stressed the preliminary requirement to eliminate and prohibit all atomic weapons, justifying its stance by drawing attention to the alleged great preponderance of combined Western military might in relation to that of the Soviet Union and its allies.

The year 1953 marked the beginning of a more conciliatory and businesslike attitude to NAC. The change can be attributed to accumulated negotiating
experience concerning the subject and to several significant international events affecting the two emerging Superpowers, including the election of General Eisenhower to the Presidency of the United States, and the death of the Soviet leader, Marshal Stalin. The year also witnessed the end of the Korean War and the first explosion of a hydrogen bomb by the Soviet Union, on the 12th of August. For the first time there arose the worldwide recognition that war would not only continue to be "the scourge" of mankind, as stated in the United Nations Charter, but that it could destroy civilisation altogether. The preamble of a unanimous General Assembly Resolution of 28 November 1953, expressed the prevailing attitude in the following terms -

Believing that the continued development of weapons of mass destruction such as atomic and hydrogen bombs has given additional urgency to efforts to bring about effectively controlled disarmament throughout the world as the existence of civilisation itself may be at stake...

It was in this atmosphere, eleven days later, that President Eisenhower made his famous "atoms for peace" proposal in the General Assembly, recommending the establishment of the International Atomic Energy Agency (IAEA). Another four years passed before the Agency came into being, as the first breakthrough in the international regulation of the utilisation and disposal of radioactive materials.

During the intervening period, the Disarmament Commission formed a Sub-Committee, composed of Canada, France, the Soviet Union, the United Kingdom and the
United States, which held 157 meetings. In 1954 a French and British plan was discussed for verified nuclear disarmament in stages. The Soviet Union countered with amendments to the disarmament schedule and with a proposal for an international Control Commission under the auspices of the Security Council, to ensure that the veto would be available to the Council's permanent members.12

In 1955, in the course of negotiations on compromise solutions, both the Western Powers and the Soviet Union put forward additional, far-reaching amendments to the plan. The issues were again raised at a Summit Conference convened in Geneva, in July 1955, between France, the Soviet Union, the United Kingdom and the United States. Again the main issue was that of precedence between nuclear disarmament and international inspection. Stressing the latter, the United States suggested an agreement among the nuclear Powers to permit reciprocal aerial photography as a means of verifying NAC agreements.13 The Soviet Union preferred ground control posts. At this time the Soviet Union also advanced a proposal for undertakings by the nuclear Powers not to be the first to use nuclear weapons.14

Gradually international opinion was swinging to the view that halting the nuclear arms race among the existing nuclear-weapon States, and preventing the use of nuclear technology for military purposes by additional States, would have to be sought through step by step agreements with limited goals. At no time was the
concept abandoned of "general and complete disarmament under effective international control",\textsuperscript{15} as the ultimate objective. The above, and similar wording, has been used on innumerable occasions in the preamble of NAC treaties and in UN resolutions. Nevertheless, ten years of total failure in NAC, served as an irrefutable argument for the adoption of new tactics to reach that objective. In 1956, despite a rise in international tension due to unrest in Eastern Europe and the Suez crisis, negotiations were successfully concluded for the establishment of the IAEA. The Statute of the Agency came into force on 29 July 1957, just a couple of months after the United Kingdom exploded its first hydrogen bomb on the 15th of May.

The establishment of the Agency in Vienna, with a large expert bureaucracy, has remained the most tangible NAC achievement. Over the years, the Agency's influence continued to increase. It has acted as the executive agency for subsequent NAC agreements, most notably, the Non-Proliferation Treaty\textsuperscript{16} and the Treaty of Tlatelolco.\textsuperscript{17} In addition the IAEA became a catalyst for the emergence of more NAC agreements, including the Partial Test-Ban Treaty\textsuperscript{18} and the moratoriums that preceded it.

For example, the Agency, which was also given the responsibility for establishing health and safety standards relating to the use of nuclear energy, helped to focus attention on the dangers of radioactive contamination of the environment. When moves to ban all nuclear testing had failed, concerted efforts were made
to prohibit the testing of nuclear weapons at least in environments where fallout was thought to be most dangerous.

Simultaneously, the obligation, through the IAEA, to promote nuclear technology for industrial uses, raised the spectre of more rapid horizontal proliferation than had been anticipated previously. The expected inhibiting effect of a nuclear test-ban on the spread of nuclear weapons capability, added a further strong impetus to test-ban efforts. From 1958 onward, a series of conferences and unilateral moratoriums on testing were undertaken by the three nuclear-weapon States. The first explosion of an atomic bomb by France, on 13 February 1960, threatened to undermine that initiative but the pressure of world public opinion intervened, culminating in the signing of the Partial Test-Ban Treaty, on 5 August 1963, by the Soviet Union, the United Kingdom and the United States.20

At the time of the establishment of the IAEA in 1957, the Soviet Union proposed the transformation of the Disarmament Commission into a permanent body of the United Nations with the participation of all Member States. After the defeat of that proposal on 6 November 1957,21 the Soviet Union withdrew from the Commission, despite the addition of 14 States to that body by the General Assembly.22 With the refusal of the Soviet Union and its allies to participate in the work of the Disarmament Commission, it became unsuited to remain a negotiating forum for disarmament, and it consequently failed to
reconvene in 1958.

The issue of representation at multilateral disarmament negotiations was soon to be resolved by other developments. Acceleration of the decolonisation process led to the emergence, in the early sixties, of a Third World political force. In acknowledgement of the new distribution of power, the General Assembly, on 13 December 1961, created the Eighteen Nation Disarmament Committee (ENDC) comprising eight Non-aligned States, five Western States and five Socialist States. It was the direct predecessor of the present Committee on Disarmament (CD).

The ENDC changed its name in 1969, when its membership was enlarged to 26. It became known as the Conference of the Committee on Disarmament (CCD), and its representation was further increased to 31 in 1974, so as to keep pace with the growing membership of the United Nations. After the first Special Session of the General Assembly devoted to disarmament (SSD I) in 1978, it was renamed the Committee on Disarmament and its membership increased to 40 including, for the first time, all five permanent members of the Security Council. By that time both France and China had become thermonuclear Powers, China exploding its first atomic bomb on 16 October 1964, and its first hydrogen bomb on 17 June 1967. France exploded its first hydrogen bomb on 24 August 1968. It is significant that since China became a nuclear power, no additional State has admitted testing a nuclear weapon. In 1974 India exploded a nuclear device stated
to be for peaceful purposes,24 and in 1979 there was some evidence that a nuclear explosion had occurred in the atmosphere off the coast of South Africa.25

Two prominent theoretical issues hindered NAC negotiations during the early postwar years.26 One involved questions of national security, such as whether total disarmament was possible or desirable in the short term. The other contentious issue had a more legal and administrative orientation and concerned the institutional management of disarmament, notably NAC. The most vexed question that arose in that context was whether any type of veto power should be retained, especially by nations also members of the Security Council. The Western States, which had a majority in the United Nations at the time, were adamant that no exercise of the veto should be permitted with respect to the functions of any of the proposed supra-national disarmament or arms control bodies.

In addition to those contentious issues, from the earliest agreements to the present, including debates about the unratified SALT II Treaty, NAC has been the subject of criticism especially from within the United States. Some critics have contended that the agreements merely handicap a too honest and trusting United States in an inevitable nuclear arms contest which it could otherwise win. This contention relies on the argument that inadequate verification and compliance enforcement provisions enable other States, notably the Soviet Union, to breach NAC agreements to America's detriment.27
A more belligerent version of the theory advocates deliberate confrontation, described in the following terms by the first head of the policy planning staff of the United States Arms Control and Disarmament Agency, Barry M. Blechman:

To many Americans these postures are wrong, both morally and in terms of U.S. security interest. They believe that the United States must seek to change Soviet society and, that to do so, it must remain in a state of tension with the Soviet government. They argue that if it is isolated, the Soviet state eventually will crack of its own internal contradictions—nationalities problems, economic failures, corruption, the natural yearnings of individuals for freedom, and so forth. This means that the United States should seek to construct a wall of implacable hostility around the U.S.S.R., a political-cum-military alliance among the nations of Western Europe, Japan, China and others in the Third World. Only America can galvanize such an alliance, it is argued, and to do so the United States must avoid bilateral agreements or even bilateral negotiations, as these imply permanent acceptance of the Soviet regime and accord legitimacy to it. The ABM treaty, the SALT II treaty, and the SALT process itself— to say nothing of other arms negotiations—are thus seen to undermine the long-run objective of causing fundamental change in Soviet society.

Other critics have maintained that NAC agreements only restrain armaments production in growth areas thought to be useless or of marginal military value. This objection to NAC agreements encompasses the notion that they merely "institutionalise" the nuclear arms race. For example, in the case of the IAEA and the NPT, acquiescence in the existence of nuclear Powers and the sharp dichotomy between the rights and duties of nuclear-weapon and non-nuclear-weapon States, has been characterised as an entrenchment of the spurious principle that might is right. With respect to the Partial Test-Ban Treaty, it has been claimed that the
agreement gives tacit approval to the underground detonation of nuclear weapons. As recently as the signing of the SALT II Treaty in 1979, a similar genre of criticism has been levelled, contending that the Treaty gives a certain legitimacy to the nuclear arms race by sanctioning the retention and further production of most nuclear weapons.

Another objection to NAC agreements has been less a criticism of the nature of the agreements than of the whole process of attempting to reach agreement in view of sharply conflicting national interests. These critics believe that, whether desirable or not, and even if adequately verified, NAC is not going to be effective because technological advances will soon outstrip all conceivable formulas for control. The emphasis here is on the expectation of the circumvention and eventual repudiation of the agreements rather than of their breach.

By contrast, the list of NAC agreements bears witness to the views of those, both within and beyond the United States, who have favoured NAC agreements. Their position has been that half a loaf is better than none. Chastened by the long initial period of arduous but fruitless negotiations, they seek to utilise to the best advantage the maximum degree of co-operation that States may be prepared to contribute to NAC at any given time. Apart from coming to terms with the limits of co-operation, supporters of less than ideal NAC agreements have tended to adopt a more optimistic view of the
willingness of States to abide by their undertakings. They also tend to place greater reliance on the feasibility of holding States to their NAC agreements, even in the absence of ironclad verification, adjudication and enforcement provisions.

Supporters of NAC cover a wide ideological spectrum. For instance, some advocates dismiss the likelihood of circumvention with the argument that additional agreements can be devised to accommodate technological advances as they arise. European disarmament specialists frequently stress the importance of confidence building measures and often adopt the position that consensus acted upon begets further consensus. There are those who go so far as to expect that in time, with increasing manifestations of global interdependence, military rivalry itself will decline. Others, at the lower levels of confidence in NAC, regard it as a holding operation aimed only at decreasing the pace of nuclear armament and the chances of inadvertent conflagration.31

Renewed concern about the issues involved in NAC has been expressed, by both Governments and professionally involved individuals, apropos to SSD I held at United Nations Headquarters in New York, during May-June 1978. Preparations for the second Special Session of the General Assembly devoted to disarmament (SSD II), to be held in June-July 1982, at the same venue, have also generated worldwide interest in NAC agreements already concluded, as well as in nuclear-weapon issues proposed to form the subject of future agreements.
Existing Multilateral NAC Agreements

The NAC treaties referred to in Table I, were no doubt negotiated with a variety of expectations as to their future effectiveness. While those original assessments cannot be established with any certainty, it is evident from the terms of the treaties that they were formulated so as to achieve a universal consensus, even at the expense of restricted goals and range of application. Of the NAC related agreements concluded during approximately the past two decades, eight were substantive multilateral treaties that are still in force today. Without exception, they were the subject of intensive and prolonged negotiation before agreement was reached.

The main thrust of the treaties is to prevent the spread of nuclear weapons and to preserve the status quo, but no attempt is made to dismantle existing nuclear arms and facilities. The objectives of the treaties are modest in other respects also, when compared with the ambitious goals espoused during the first fifteen years of unsuccessful NAC negotiations. For example, repudiation of the treaties is usually available on three months' notice. Those provisions can be attributed to a realistic appraisal of the difficulties involved in attempting to coerce a State to adhere to a treaty after a decision has been made by it to withdraw. It is also a device for maintaining the status of treaties, by permitting States to assert their sovereignty without having to transgress obligations solemnly entered into
under international law.

In a similarly pragmatic vein, the treaties have avoided setting up any institutions, except in the case of the IAEA and OPANAL. Apart from the operation of those Agencies, administrative functions are restricted to measures required for accession, review, consultation, amendment and repudiation, to be performed by the depositary States. In practice, whenever necessary, especially in the organisation of review conferences, the administrative facilities of the United Nations have been successfully invoked.

While it is clearly intended that the treaties should be endowed with the full force of international law, punitive provisions for breach are either minimal or omitted altogether. Such as there are, largely consist of notifying the other Parties and the United Nations of the facts constituting the breach. The provisions also require the non-complying Party, and any aggrieved or particularly interested Parties, to engage in consultations or to refer the matter to arbitration by consent. Failing those methods the treaties, either explicitly or implicitly, refer the Parties to the International Court of Justice, again by consent only.

None of the treaties requires acceptance of compulsory jurisdiction by the Court with respect to the observance of its terms. Specific references to the Court do not appear to alter whatever general rights the
Parties may have to invoke the Court's jurisdiction, but treaty provisions regarding the obligation to engage in consultations and other conciliatory measures would no doubt have to be discharged as conditions precedent. This would be necessary so as to fulfil the agreed undertakings and in order to demonstrate that all alternative avenues of redress have been exhausted.

Having largely refrained from imposing sanctions with teeth, the treaties appear to rely on fear of discovery as the main inducement for compliance by reluctant States. To this end, emphasis is given to verification methods, and also adjudication procedures to the extent necessary to establish the acts and circumstances of non-compliance. Verification relies to some extent on notification by each Party of its own records and planned activities relevant to the terms of the treaty. Thus, the IAEA, and the treaties that rely on its safeguards methods for verification, utilise the records of national systems of accounting. The Antarctic Treaty and the Outer Space Treaty require notification of intention to proceed with certain designated activities.

No treaty could exclude verification by national technical means (NTM) which are, by definition, within the ambit of a State's sovereign rights. In addition to remote observance, most multilateral NAC treaties specifically authorise on site inspection by the Parties, by their designated observers, by experts or, as in the case of the IAEA, by inspectors who are not under the guidance of any individual Party in the performance of
their tasks.

Provision for consultations is also an integral part of the verification and assessment process, devised for the supervision of compliance. Consultations avoid misunderstandings and can, on occasion, facilitate face-saving explanations and adjustments. They also provide opportunities for last minute avoidance or rectification of outright breaches, when discovery becomes imminent. Such eleventh hour reprieves are permitted because the emphasis is not on the exposure of non-complying acts but on their avoidance.

Despite the dearth of coercive provisions and institutional support, the record of implementation of the multilateral NAC treaties has been remarkably good. For the time being, at least, the objectives set out by the treaties have been largely attained. The record can be summarised as follows:

- Since the Statute of the IAEA came into force, no State receiving assistance in the use of nuclear power for peaceful purposes has utilised that assistance so as to become a nuclear-weapon State.

- Since the Antarctic Treaty came into force, no establishment of nuclear bases, detonation of nuclear explosions, or disposal of nuclear wastes has taken place on that Continent.

- Since the Partial Test-Ban Treaty came into force, the three major nuclear Powers have confined their
testing of nuclear weapons to underground detonations, as prescribed. They have refrained from conducting any nuclear explosions, even of a purportedly peaceful nature not subject to the treaty, in any of the environments forbidden for military testing. The other two nuclear-weapon States, France and China, are not parties to the Partial Test-Ban Treaty. France, which for a period persisted with atmospheric testing, has ceased to do so since 1975, and now only China continues to conduct nuclear tests in the atmosphere, at the rate of about one a year.37

- Since the Outer Space Treaty came into force, no evidence has become publicly available to suggest that any weapons have been installed on celestial bodies or that any nuclear weapons have been placed in orbit around the earth.

- While the extent to which the Treaty of Tlatelolco is presently in force could become a matter of contention,38 Latin America is apparently totally free of nuclear weapons and all peaceful nuclear facilities there are subject to IAEA safeguards inspections.

- Since the Non-Proliferation Treaty came into force, there has been no addition to the number of declared and/or demonstrated nuclear-weapon States beyond the then existing five, being all of the permanent Members of the Security Council.
Since the Sea-Bed Treaty came into force, no nuclear weapons or related facilities have been deployed at the bottom of the seas and oceans.

Since the ENMOD Convention came into force, no hostile modification of the environment has occurred with the aid of nuclear forces or otherwise.

The level of participation in the treaties has also been encouraging. In assessing the significance of the number of ratifications, it should be borne in mind that the subject matter of the treaties has scant relevance to States that are not technologically advanced. In many cases these States apparently regard accession to the treaties to be superfluous. Two of the treaties, the Antarctic Treaty and the Treaty of Tlatelolco, contain geographical limitations on participation.

Significantly, the United States, the Soviet Union and the United Kingdom have ratified all of the multilateral treaties containing NAC provisions, with the exception that the United States has only signed, but has not ratified, Protocol I of the Treaty of Tlatelolco. France is in the same position with respect to that Treaty. In addition, France has ratified the Antarctic Treaty and the Outer Space Treaty, as well as undertaking to abide by the prohibitions of the Non-Proliferation Treaty and, in fact, observing the substantive terms of the Partial Test-Ban Treaty. China has only ratified Protocol II of the Treaty of Tlatelolco.

Although the hope of attaining universal accession to
<table>
<thead>
<tr>
<th>Name of Treaty and Abbreviated Name of Treaty</th>
<th>First Date</th>
<th>Last Date</th>
<th>Special for</th>
<th>Signature Form</th>
<th>Major UN Provisions</th>
<th>Review</th>
<th>Verification Provisions</th>
<th>Application of Sanctions</th>
<th>Maintenance Provisions</th>
<th>Amendment</th>
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<td>Additional Protocols (Including Additional Protocols under the Charter)</td>
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the treaties by all eligible States has not been realised, it is noteworthy that State Parties are not withdrawing from the treaties. In round figures, the treaties are in force for the following number of States: IAEA - c 100; Antarctic Treaty - c 20; Partial Test-Ban Treaty - c 110; Outer Space Treaty - c 80; Treaty of Tlatelolco - c 25; Non-Proliferation Treaty - c 110; Sea-Bed Treaty - c 70; ENMOD - c 30.

Existing Bilateral NAC Agreements

The bilateral NAC agreements in Table II are, in some aspects, complementary to the multilateral agreements in Table I. The multilateral agreements, for the most part, aim to prevent the spread of nuclear weapons to non-nuclear-weapon States, zones and environments. This process is referred to as the prevention of "horizontal proliferation". On the other hand, the bilateral agreements chiefly seek to curtail qualitative improvements of nuclear weapons systems between existing nuclear powers, notably the two Superpowers. This process is referred to as the prevention of "vertical proliferation".39

The Non-Proliferation Treaty goes so far as to require "negotiations in good faith" on measures to halt the nuclear arms race, which has been interpreted as a direct plea to the Superpowers to cease vertical proliferation as a quid pro quo to non-nuclear-weapon States for their renunciation of nuclear weapons. This
interpretation is incorporated into the preamble of the SALT II Treaty. It is perhaps the most obvious juxtaposition of the two kinds of nuclear proliferation, one pursued via multilateral agreements and the other by way of bilateral agreements.

The nuclear Powers, especially the Superpowers, are clearly the most influential Parties in all of the multilateral NAC agreements, so much so, that without the concurrence of the "Big Three", most of them could not have been seriously contemplated. At present, at least two of the multilateral NAC treaties, the Outer Space Treaty and the ENMOD Treaty only have relevance for the Superpowers. Non-nuclear-weapon States, and nuclear-weapon States not Parties, have no formal role whatever in the bilateral NAC treaties.

Unlike the multilateral NAC agreements, not all of the bilateral NAC agreements are registered with the United Nations as formal, current treaties. For instance, the most concrete NAC measures between the Superpowers, contained in the two Strategic Arms Limitation Treaties, SALT I and II, do not exist in the most binding form available in international law. SALT I which had been duly ratified by both Parties expired, according to its terms, on 3 October 1977, although the Parties had indicated some weeks before that date that they did not intend to contravene its terms for a further unspecified period of time. The SALT II Treaty was duly signed on 18 June 1979, after a seven year negotiation, but has still not been ratified by an
exchange of documents of ratification.

Likewise, the Threshold Test-Ban Treaty and the Peaceful Nuclear Explosions Treaty, signed by the Superpowers on 3 July 1974 and 28 May 1976 respectively, have not been ratified, yet both Parties have abided by their substantive terms. The Agreement on Basic Principles of Relations between the Soviet Union and the United States, signed on 29 May 1972, and the Vladivostok Accord, signed on 24 November 1974, have also remained unratified. However, the two last named agreements are of lesser significance, as they are predominantly general statements of intention and guidelines for further negotiations that have already taken place in other contexts. Similarly, the simultaneous Statement by the Soviet Union and the United States on the Reduction of Fissionable Materials Production, made on 20 April 1964, which has not been given the form of a treaty, has now been superseded and would have to be entirely renegotiated to become currently relevant.

All of the bilateral, formally correct NAC treaties in force between the Superpowers, relate to the immediate, day to day prevention of nuclear war. These are the "Hot Line" communications agreements; the Nuclear Accidents Agreement; the Agreement on the Prevention of Incidents on and over the High Seas; the SALT ABM Treaty; the Standing Consultative Commission Agreement; and the Agreement on the Prevention of Nuclear War.
Verification of the agreements is almost entirely by NTM. None of the agreements contains any provisions for verification, adjudication or administration of sanctions by any third party, neither State, individual nor international entity. Only bilateral consultations are held out as the means of resolving disputes. Consequently, the operation of the treaties is largely unknown by non-Parties. Not only are they excluded from any formal participation, but the Superpowers have kept the details of disputes confidential. Published records of queries regarding performance indicate mutually thorough verification of the agreements and an excellent record of compliance by both Parties.41

At present, assessment of compliance by non-Parties by means of NTM are mostly out of the question because they lack the necessary sophisticated satellite observation systems. However, this situation could change in time with the establishment of an International Satellite Monitoring Agency42 or with improved NTM by additional States.

Notes*

* Unless otherwise specified all document references relate to the United Nations, the Specialised Agencies or records of the IAEA.


2 Res. 502 (VI).


4 Id. p.7.

5 The Soviet Union withdrew from the negotiations on 19 January 1950, see A/1253 and A/1254.
6 Res. 496 (V).
7 Res. 502 (V).
8 Ibid.
9 Res. 715 (VIII).
10 Treaty establishing the International Atomic Energy Agency came into force on 29 July 1957.
12 In the General Assembly on 30 September 1954.
14 Id. Annex 18 (DC/SC.1/29/Rev.1)
15 E.g. Final Document of SSD I, A/RES/S-10/2 "Declaration" para.19, "Programme of Action" para.43; For an early approach see the Draft Treaty on General and Complete Disarmament Under Strict International Control, submitted to the ENDC at its first Session in 1962 by the USSR, Official Records of the Disarmament Commission, Supp. for January 1961 – December 1962, DC/203, Annex 1, Section C (ENDC/2); First Official recognition of the objective was in G.A. Res. 1378 (XIV) of 1959, expressing the hope that "measures leading to the goal of general and complete disarmament under effective international control will be worked out in detail and agreed upon in the shortest possible time".
16 TABLE I.
17 Ibid.
18 Ibid.
19 The acquisition of nuclear weapons capability by additional States.
21 At the 893rd meeting of the First Committee.
22 On 19 November 1957, by Res. 1150 (XII).
For a procedural account of the evolution of the CD, see The United Nations and Disarmament: 1945-1970 (U.N. Publication, Sales No. 70. IX.1); The United Nations and Disarmament: 1970-1975 (U.N. Publication, Sales No. E. 76 IX.1); Final Document op.cit para. 120.


The issues were a recurring theme, as recounted in the resume published by the Dept. of Political and Security Council Affairs of the United Nations in The United Nations and Disarmament 1945-1970, loc.cit.

Shortly after the election of President Reagan an opinion poll conducted by Louis Harris & Associates (The Harris Poll) found that while 90% favoured NAC negotiations with the Soviet Union, 50% of those opposed signing any agreement "because the chances are that we will keep our end of the bargain and the Russians will not...".

Blechman, Barry M., "Do Negotiated Arms Limitations Have a Future?", Foreign Affairs, Fall 1980, Vol.59 No.1 p.110.

Conclusions of the Panel on the Strategic Arms Limitation Talks and the Comprehensive Test Ban Treaty, Committee on Armed Services, House of Representatives (U.S. Govt. Printing Office, Washington, December 1978) p.23 - "The hope has also been expressed that arms control agreements such as SALT could prevent a nation from acquiring a technological capability that would be destabilizing to the strategic balance. Unfortunately, most such technological developments are not verifiable and thus not amenable to arms control, if monitoring of compliance is considered critical and denying the emergence of a breakout threat is the objective. The ABM treaty illustrates this point. Despite the 1972 treaty to limit ABM deployment, the Soviet Union continues to devote a significant amount of resources to ABM development and, in fact, according to the Under Secretary of Defence for Research and Engineering, Dr. William J. Perry the Soviets are acquiring the capability to develop a rapidly deployable ABM system".
Andrews, Walter, "Soviet Military Space Threat Bared", Army Times, 8 March 1982, p.7. - claims that U.S. Defence Department's "top scientists" expects the U.S.S.R. to install weapons in space circumventing the Outer Space Treaty. Provided the weapons were not weapons of mass destruction, or stationed on celestial bodies, they would not be in breach of the Treaty as presently interpreted, infra Chapter IX.


For concise accounts of the operation of the IAEA and OPANAL see Disarmament: A Periodic Review by the United Nations, July 1980, Vol.III No.2 p.35 and p.43 respectively.

Review Conferences of the Non-Proliferation Treaty, the Sea-Bed Treaty and the ENMOD Convention.

See Table I.

Infra Chapter X.


Data on Nuclear Explosions

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<tr>
<th>Year</th>
<th>USA</th>
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Due to required additional ratification of Protocols, as well as extensive reservations by some Parties.
39 For a more detailed analysis of the relationship between horizontal proliferation and vertical proliferation see Dahlitz, J., "Proliferation and Confrontation", Australian Outlook, April 1979, Vol.33 No.1 p.27.

40 Infra Chapter IX.


42 Infra Chapter X.
<table>
<thead>
<tr>
<th>Name of Agreement and Abbreviated Name</th>
<th>Signed</th>
<th>Entered Into Force</th>
<th>Major NAC Provisions</th>
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<tr>
<td>Agreement on Measures to Improve the US-USSR Direct Communications Link <em>(Hot Line) Modernisation Agreement</em></td>
<td>30 September 1971</td>
<td>30 September 1971 (Amended 29 April 1975)</td>
<td>Treaty adds satellite communications to earlier communications links between the Parties.</td>
</tr>
<tr>
<td>Statements by the US and USSR on the Reduction of Fissionable Materials Production.</td>
<td>(Made on 20 April 1964)</td>
<td></td>
<td>Simultaneous formal statements undertaking to limit the production of fissionable materials for weapons purposes by substantial, specific amounts.</td>
</tr>
<tr>
<td>Agreement In Measures to Reduce the Risk of Outbreak of Nuclear War Between the US and the USSR Nuclear Accidents Agreement</td>
<td>30 September 1971</td>
<td>30 September 1971</td>
<td>Treaty requires each Party to give: 1. Immediate notification and to take preventive action re. any unauthorized incident involving possible detonation of a nuclear weapon. 2. Immediate notification of the detection of an unidentifiable object by their respective missile warning systems, or of interference with the warning systems. Advance notification of planned missile launches beyond borders in the direction of the other Party.</td>
</tr>
<tr>
<td>US-USSR Agreement on the Prevention of Incidents on and Over the High Seas</td>
<td>25 May 1972</td>
<td>25 May 1972</td>
<td>Treaty establishes rules of conduct between the Parties with respect to military ships and aircraft in international waters and airspace. Requires notification of situa-tional danger and the exchange of factual information re. incidents or damage suffered by ships and aircraft involving the other Party.</td>
</tr>
<tr>
<td>Protocol (As above)</td>
<td>22 May 1973</td>
<td>22 May 1973</td>
<td>Treaty forbids simultaneous attacks on non-military ships of other Party so as to constitute a hazard.</td>
</tr>
<tr>
<td>US-USSR Treaty on the Limitation of Anti-Ballistic Missile Systems</td>
<td>26 May 1972</td>
<td>3 October 1972</td>
<td>Treaty limits permissible ABM systems to the defence of the capital of each Party and one other site housing ICBM. Also limits numbers of launchers, interceptor missiles and ABM radars, as well as radar performance.</td>
</tr>
<tr>
<td>SALT I Interim Agreement</td>
<td>3 July 1974</td>
<td>25 May 1976</td>
<td>Treaty reduces the two permissible sites for deployment of ABM systems to one site for each Party and provides for possible choice of alternative site.</td>
</tr>
<tr>
<td>Statement regarding conduct of Parties on expiration of the Treaty (as above)</td>
<td>September 1977</td>
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<td>Formal reciprocal statements by the US and USSR that they would refrain from actions incompatible with the SALT I Interim Agreement and the goals of ongoing SALT negotiations.</td>
</tr>
<tr>
<td>Agreement on Basic Principles of Relations Between the US and USSR</td>
<td>29 May 1972</td>
<td></td>
<td>Agreement establishes principles for the conduct of the Parties towards each other, including: avoidance of military confrontation and nuclear war; co-existence on the basis of equality; limitation of strategic arms, preferably in the form of concrete agreements; the ultimate objective of general and complete disarmament.</td>
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<tr>
<td>US-USSR Memorandum of Understanding Regarding the Establishment of a Standing Consultative Commission</td>
<td>21 December 1972</td>
<td>21 December 1972</td>
<td>Treaty establishes a Standing Consultative Commission composed of a Commissioner, Deputy Commissioner and additional staff representing each Party, to promote the implementation of the Nuclear Accidents Agreement, the SALT ABM Treaty and the SALT I Interim Agreement.</td>
</tr>
<tr>
<td>US-USSR Agreement on Basic Principles of Negotiations on the Further Limitation of Strategic Offensive Arms</td>
<td>21 June 1973</td>
<td></td>
<td>Agreement recognises that attempts by either Party, directly or indirectly, to gain unilateral advantage over the other would prejudice their peaceful relations. Envisages further SALT negotiations and acknowledges the need for verification of strategic arms limitation measures by NTM.</td>
</tr>
<tr>
<td>US-USSR Agreement on the Prevention of Nuclear War</td>
<td>22 June 1973</td>
<td>22 June 1973</td>
<td>Treaty enjoins each Party to refrain from the threat or use of force against the other Party or its allies in circumstances endangering international peace, and to hold urgent consultations in situations involving risk of nuclear war.</td>
</tr>
<tr>
<td>US-USSR Treaty on the Limitation of Underground Nuclear Weapon Tests Threshold Test Ban Treaty (TTBT)</td>
<td>3 July 1974</td>
<td></td>
<td>Treaty prohibits underground nuclear weapon tests producing yield in excess of 150 kt and Parties pledge to keep number of underground tests to a minimum. Provides for exchange of data to assist verification of NTM. Tests for peaceful purposes excluded from consideration.</td>
</tr>
<tr>
<td>US-USSR Treaty on Underground Nuclear Explosions for Peaceful Purposes (PNET)</td>
<td>28 May 1976</td>
<td></td>
<td>Treaty limits permissible energy yields of underground nuclear explosions for peaceful purposes. It also provides for exchange of information and on-site inspection in certain cases, to supplement verification by NTM. A protocol prescribes that air-launched nuclear explosions over the oceans may only be used for peaceful purposes under the relevant treaty.</td>
</tr>
<tr>
<td>US-USSR Treaty on the Limitation of Strategic Offensive Arms (With Protocol; Memorandum of Understanding; and Joint Statement)</td>
<td>18 June 1979</td>
<td>31 December 1985</td>
<td>Treaty sets ceilings on ten categories of strategic offensive weapons including: launchers of ICBM, SLBM and ABM, with sublimits for land-based ICBM, sea-based missiles and ICBM. The treaty also prohibits the deployment of ballistic missile and anti-ballistic systems. A data base is declared on the numbers of strategic offensive arms of each Party. Guidelines are provided for subsequent negotiations.</td>
</tr>
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</table>

**SALT II Treaty**
CHAPTER II

THE CHANGING SCOPE OF NUCLEAR ARMS CONTROL

The Subject Matter of the Agreements

Negotiation and supervision of the implementation of NAC agreements have become substantially more difficult in the 1980s than in the '60s and '70s, when most of the agreements in Tables I and II were concluded. The change is the outcome of vast technological advances in the field of nuclear weapons. As the result of better techniques and simplified methods, non-nuclear-weapon States have become more susceptible to horizontal proliferation. At the same time, NAC among nuclear-weapon States has vastly increased in complexity, as designs and performance of weapons have undergone successive refinements. The trend continues while a substantial portion of the world’s most able physical scientists is constantly engaged in further extending and perfecting the weapons.¹

Nuclear weapons today can release 4,000 times the energy released by the atomic bomb that was detonated over Hiroshima.² Today there is no limit to the attainable levels of energy released by a single weapon. The explosive yield of present nuclear arsenals is about 13,000 million tons of TNT, which has been estimated to be the equivalent of about 1 million Hiroshima bombs.³

Since SSD I in 1978, it has been universally acknowledged that a full scale exchange of nuclear
weapons between the Superpowers could put an end to all human life, and would, at the least, threaten the survival of civilisation. However, it is not the destructive power of nuclear weapons that makes them a technologically difficult subject for international agreement, but rather the diversity of the systems involved and the rate of change to which they are subject.

Delivery systems are acquiring greater range, speed, accuracy, and mobility. Intercontinental ballistic missiles (ICBM) now have a range of about 13,000 km and can reach their target within 30 minutes. Intermediate range missiles can deliver their nuclear payload within 5-7 minutes. Over the 13,000 km range, targeting accuracy has increased about a hundred-fold during the past 25 years, bringing ICBM to an approximate accuracy of 50 metres using terminal guidance systems. No sooner were the necessarily large missiles fitted with intricate guidance mechanisms than it became possible to use satellite navigation systems to guide smaller missiles with the aid of computer links, which are now being installed. Technology is believed to exist for manoeuvring re-entry vehicles (MARV), designed to evade missile defences such as anti-ballistic missiles (ABM). Both Superpowers have already deployed multiple independently targetable re-entry vehicles (MIRV), which can be released and targeted one by one, over an area of approximately 150 km by 500 km.
There are submarine launched ballistic missiles (SLBM) and air to surface ballistic missiles (ASBM). The aircraft can be based on land as well as on aircraft carriers. Technology is also available for the immediate deployment of cruise missiles, which, after launching from land, ship or aeroplane, are internally guided winged or wingless craft, using stellar automatic data link, or terrestrial mapping systems. They can take the form of high speed missiles or of low flying miniature aircraft.\textsuperscript{11}

In some cases the destructiveness, range and blast, of nuclear weapons has been deliberately curtailed. Arsenals of nuclear weapons exist that have been miniaturised to the point where their destructiveness is similar to that of powerful conventional weapons. Another favoured modification is a low blast weapon with enhanced radiation (ER), in which residual radiation is increased by the use of special casings around the warhead.\textsuperscript{12}

Some of the most far reaching innovations are being made with respect to the command, control and communications (C\textsuperscript{3}) networks of the Superpowers. These networks, inter alia, form the nerve centre of nuclear weapons systems, by positioning potential targets, transmitting military commands, and performing weapons guidance functions. As these systems are greatly dependent on satellite transmissions, the vulnerability of military satellites and their status in international law are directly involved.\textsuperscript{13}
The variety of functions to be performed by the present generation of nuclear weapons, makes calculation of equivalence possible only as a rough approximation, or not at all. Demarcation between the various systems of weapons is also difficult due to interlocking, overlapping and backup systems. As demonstrated at the United States Senate hearings concerning the operation of the SALT II Treaty, substantial differences of opinion about equivalence can arise, not merely between adversary States, but also among leading experts within a State.\(^\text{14}\) While policy differences have always existed, uncertainties on technical grounds are a growing problem.\(^\text{15}\)

New time scales are also presenting difficulties. As noted above, the delivery speed of ICBM is down to about 30 minutes, with medium and short range strikes commensurately faster, while launch times are down to a few seconds. Such speeds have made reaction times to false alarms, miscalculations and technical faults so brief that, increasingly, only automatic and pre-programmed responses could be utilised. For instance, it has been said that -

Soviet defence specialists viewed the ground-hugging Cruise missiles and the Pershing II, with its short delivery time, as so threatening that their deployment would cause the Soviets to set their SS-20 medium-range missile force for a hair-trigger response to an attack...\(^\text{16}\)

Under these circumstances, the usefulness of the various Hot Line Agreements is greatly reduced or, in the worst case, entirely eliminated.

By contrast, the lead time for research and
development, manufacture and deployment of improved nuclear arms systems has increased to several years, and is estimated as more than a decade regarding some anticipated developments. This means that NAC agreements have to be made in anticipation of those possible additions to arsenals, so as to forestall them or, at least, to take them into account when striking a bargain.

Changing Nuclear Strategies

A growing body of world opinion holds that nuclear weapons have no utility whatever. The view was cogently stated by the delegate of Sri Lanka to the Committee on Disarmament, Ambassador H.M.G.S. Palihakkara, when he said -

We are up against an absolute weapon, the unleashing of which, however limited that may appear to those who advocate it, will leave neither the victor nor the vanquished and therefore does not serve any realistic political or military purpose."

If this were a universally held opinion, then all nuclear weapons would be dismantled. Although there is an overwhelming convergence of expert opinion about the destructiveness of nuclear weapons, it does not follow that all share the view that nuclear preparedness "does not serve any realistic political or military purpose". It is necessary, therefore, to take note of the military strategies in accordance with which it has been envisaged that nuclear weapons may be employed, as well as the political objectives that might be served by the use, or merely the threatening presence, of nuclear weapons.
The only time when the strategy for the use of nuclear weapons was clear-cut, was when the United States had a monopoly of the weapon. With the growing threat of retaliation to any use of nuclear weapons, the possibility of translating their destructive potential into political advantage has become increasingly obscure. As Ambassador B.A. Nzengeya of Zaire has said -

"Twenty years ago, the desire of the nuclear Powers following the cold war, to acquire a deterrent or striking force, was understandable to the peoples of the world as being aimed at the maintenance of international peace and security. Now, however, the capacity of the new nuclear weapons to destroy all life on earth several times over no longer makes them a deterrent force and consequently no longer corresponds to the original aims of these States."  

It compounds the difficulty of assessing acceptable terms in NAC agreements when the usefulness of the various weapons systems, in policy terms, is not at all clear.  

The confusion is exacerbated by the adoption of imprecise, interchangeable, and often deliberately euphemistic terminology. For example, a strategic attack has been defined as one aiming to eliminate the adversary as a war fighting unit. At the same time, long range, high yield nuclear weapons are usually referred to as strategic weapons. There is no clear distinction between these and intermediate-range weapons, also known as medium-range or theatre weapons, for use over a more limited range, as well as long-range theatre nuclear forces.  

Another meaning of the terms is to refer to strategic weapons in relation to a possible exchange between the
Superpowers, and theatre weapons in the context of a regional, such as a European, conflict. Miniaturised, namely tactical nuclear weapons are also regarded as relevant to a European war, or they are envisaged in a Third World setting. Nuclear weapons suited for both strategic and theatre purposes are referred to as grey area weapons.\textsuperscript{21} And yet, all of these weapons could be used in any nuclear war situation.

However, nuclear strategies can be categorized not only with respect to the location of military conflict but also regarding the targets to be sought out and the sequence of strikes to be made. Whether over intercontinental distances or within a region, nuclear weapons could be used for \textit{counter-value} strikes against troops, industrial centres and/or population centres. This could be a first strike or in retaliation. \textit{Counterforce} targeting, meaning a strike against the nuclear missile launching and communications systems of an adversary nuclear power, is another contemplated utilisation of nuclear weapons. Despite the misleading terminology, \textit{counterforce}, like \textit{counter-value}, could be used in a first strike, as well as in retaliation. If counterforce were used to cripple an adversary only partially then, like any of the other aforementioned uses of the weapons, it would invite further incalculable retaliation.

The efficacy of a counterforce strike as a manoeuvre to disarm the enemy depends on the timing of the retaliatory strike. If the other side were to launch on
warning, namely before the counterforce missiles reached their targets, then only a third strike could be prevented, while the second strike aimed at the instigator State could be a counter-value strike. In the view of Henry Trofimenko, Head of the Institute of United States and Canada Studies, Moscow, it would be immaterial whether the first strike were targeted as a counterforce or a counter-value strike because, in either event, it would elicit a retaliatory counter-value launch. He describes the situation in the form of a question -

The Pentagon has estimated that such a disarming strike would require the launch of more than 2,000 warheads against the enemy targets. Tell me, who, with the exception of God himself, in the few minutes available could determine that this vast number of warheads already in mid-flight is a "limited" counterforce rather than an all-out countervalue attack and, accordingly, give the command for an appropriate limited retaliation?

The variety of ways in which nuclear weapons may be employed is said to facilitate a flexible response to threats. Public approval of the policy was sought pursuant to United States Directive 59 of 1980, issued by President Carter. In accordance with this policy, the development of many new types of nuclear weapons is justified on the ground that, otherwise, the only option would be an all out strike, which would not be a credible deterrent because of the corresponding full scale retaliation it would predictably elicit. This strategy contains two ambiguities. Firstly, it is not predictable that a relatively low level nuclear exchange could be prevented from escalating to total nuclear war. Secondly, it has not been adequately explained why many varieties of nuclear weapons are essential to nuclear
flexibility. It would seem that flexibility could be achieved, if this were desired, by curtailing the number of weapons launched and restricting the targets chosen.

Estimation of the outcome of the abovementioned nuclear strategies is largely guesswork. The only use of nuclear weapons with reasonable predictability of outcome, other than total disaster, would be their use in a counterforce operation, provided the enemy could be reliably disarmed at one strike and prevented from effecting a launch on warning. This is referred to as a first strike capability, when a State has acquired the capacity to deliver a nuclear strike against the other without risking an intolerable reprisal. Although no nuclear Power has attained this capability at present, improved positioning techniques of enemy mobile craft, combined with the present speed of launching and accuracy of targeting, the growing ability to disrupt C\(^3\) systems, together with the theoretical feasibility of effective ballistic missile defence, could perhaps make a disarming first strike capability a technical possibility for the Superpowers in the foreseeable future.\(^{23}\)

Again, the terminology is misleading, because a nuclear disarming capability could be exercised either at a first strike or in retaliation to a lesser nuclear attack. Further confusion results from the concept of a pre-emptive strike, which would consist of launching nuclear weapons in anticipation of nuclear attack, before the enemy weapons have been launched. To speak of such a pre-emptive first strike does not necessarily denote the
capability of a disarming strike. It could refer to a desperate measure, despite the anticipation of crippling retaliation.

A further obstruction in NAC dialogue has been the confusion between the concept of nuclear parity and that of the strategic balance. As the result of geographical differences, the diverse performance of nuclear weapons, and other variables, the concept of asymmetrical parity or essential equivalence in strategic arsenals has been accepted. However, this is not the same as the balance of terror, which continues to exist between nuclear Powers, especially the Superpowers, irrespective of parity, so long as neither side acquires a first strike capability.

Imprecise Motives

The difficulty of achieving agreement on limiting the proliferation and perfection of nuclear weapons does not only lie in the novelty of those weapons, nor the complexity of the strategies relating to their use. The primary problem is the perceived advantage to be derived from the possession of nuclear weapons or, stated another way, the disadvantage that could flow from abjuring, abandoning or curtailing nuclear weapons preparedness. Neither the uncertain nature of the advantage, nor its altered applicability in a new technological environment has, so far, led to a unilateral renunciation by any of the five nuclear Powers. Even if the precise utility of the weapons cannot be demonstrated, the image of military might they are thought to project has been sufficient to
justify their retention and rapid build-up.

The offensive use of nuclear weapons would be contrary to the provisions of the United Nations Charter, as is the offensive use of any weapon. While this provision of the Charter is often flouted by thinly disguised aggression with conventional weapons, the provision has been observed in the case of nuclear weapons. In some Third World conflict situations it has not been clear that the only inhibition to the use of nuclear force was fear of retaliation in kind. It would seem that the use of nuclear weapons for attack has been deemed to be inadvisable, at least in part, because of the probable reaction of world public opinion, which could lead to a broad international alliance against the aggressor. For the last-mentioned reason, nuclear weapons are not only impractical as offensive weapons, but also as threatening offensive weapons, which makes them unsatisfactory instruments for aggressive political leverage.

There could be some exceptions to the above considerations. One would be the offensive use of nuclear weapons against a State held in universal disfavour by the world community, such as South Africa might become if deprived of all Western support. Aggressive use of nuclear weapons could also occur in a disarming first strike by one Superpower against the other, after which world public opinion would have diminished relevance. In that case, the problems arising within the aggressor State itself could be the
The attainment of a disarming first strike capability would require overcoming political obstacles as well as technological ones. The mere striving for a first strike capability would undoubtedly be perceived as an aggressive act, which is the reason why both Superpowers periodically reiterate that their objective is the retention of strategic parity. If, nevertheless, one Superpower were to approach outright prominence, this could result either in the universal acceptance of the dominant Superpower as omnipotent, or it could invite a pre-emptive strike from the other Superpower. The type of response by the other Superpower, as well as the political realignments that would occur in the world as a consequence of the changed threats and expectations, are quite unpredictable.

It is widely acknowledged that the extreme stress on decision-makers in charge of conducting a nuclear war would be likely to result in inefficient and erratic behaviour. The contention was advanced in its most unequivocal form by Ambassador A. Salah-Rey of Algeria, during nuclear arms control negotiations in the Committee on Disarmament. He said -

The idea entertained in certain quarters that a new nuclear war, whether limited or not, can be waged and won is not only extraordinarily dangerous because of the risks it imposes on mankind but also logically unacceptable because it is based on the assumption that the adversary's response will remain within rational limits. There is no need to be a great theoretician to foresee that, when that stage has been reached, the behaviour of the opposing camps will defy all the laws of rationality that we are today in a position to identify.
By contrast, the literature still does not acknowledge the probability of similarly erratic behaviour under conditions when the exercise of a first strike capability may become imminent. More specific international attitudes can be expected to emerge in opposition to strivings for nuclear-weapons pre-eminence, as soon as technical obstacles cease to be effective barriers to the option.

The threat of use of nuclear weapons for genuinely defensive purposes may be another matter. Such threats could be effective even if the State making the threat were not an overtly nuclear Power but only suspected of possessing a few nuclear weapons. It could be cogently argued, for example, that India has discouraged Chinese incursions across its borders and that Israel has kept its Arab antagonists at bay by having acquired the reputation of possessing nuclear weapons.31

Threat of defence with nuclear weapons against attack by conventional weapons is less acceptable when it is an overt threat by nuclear-weapon States. Increasingly during the past few years, non-nuclear-weapon States have been insisting on assurances by nuclear-weapon States that the weapons would not be used against them, even in defence. The unstated theoretical basis of the demand is, that the only legitimate use of nuclear weapons would be in retaliation against another State that has used them or, perhaps, in retaliation against a nuclear-weapon State that had launched an attack with conventional weapons with the threat of escalating to nuclear weapons.
When giving the requested assurances of non-use of nuclear weapons, the nuclear-weapon States, with the exception of France, described in some detail the circumstances under which they would be prepared to use the weapons. While China has always ruled out the first use of nuclear weapons under any circumstances, the United States and the United Kingdom did not reject their possible first use in support of an ally on foreign soil, even against a non-nuclear-weapon State, if it were acting in collusion with a nuclear-weapon State. In accordance with this doctrine, the use of nuclear weapons against North Korea and North Vietnam during the recent wars there could have been justified. The policy statement of the United States is consistent with the view that the non-use of the weapons on those occasions was in deference to world opinion, and not because such an act would have been categorically ruled out against non-nuclear-weapon States.

The heavily qualified negative security assurances given by nuclear-weapon States, which could be read as threats to use nuclear weapons in given circumstances, have been justified by the respective Governments with the argument that they are designed to forestall aggression, not only by nuclear forces, but also by superior conventional forces.

In a statement to the United States Foreign Relations Committee, in November 1981, the Secretary of State, Alexander Haig, listed the enduring functions of nuclear weapons as assisting "deterrence, crisis management, and
day to day diplomacy". Although he claimed it to be common ground between the Superpowers that strategic nuclear forces are "central instruments of foreign policy", he failed to show how these functions are performed by the weapons. Illustrations to support his argument referred to supposed perceptions of the weapons' efficacy. For example -

The nuclear balance inevitably affects the political and psychological environment within which deep international crises must be managed.

Similarly -

...the strategic nuclear balance casts a shadow which affects every geopolitical decision of significance. The image of U.S. strength and the perception of U.S. commitment permeates into every region of the world.

It is not intended here to explore in depth what advantages may be derived from the possession of nuclear weapons and their delivery systems, at the various levels of sophistication of those systems, and in the diverse situations applying to the particular States. The intention is merely to demonstrate that in the eyes of influential world leaders there are persuasive incentives for both horizontal and vertical proliferation. It is also sought to show that the indeterminate character of those advantages prevents the formulation of clear-cut priorities. This makes it unavoidable to introduce subjective criteria into the evaluation of the relative benefits and disadvantages of provisions in relevant NAC agreements.

The aims ascribed to NAC are the prevention of nuclear war; the halting of the vertical and horizontal
nuclear arms race; the reversal of the nuclear arms race; and eventually, the total elimination of nuclear weapons and their delivery systems. The first priority is well nigh universally shared, although the subsequent priorities appear to enjoy less wholehearted adherence. The strongest support for NAC relates to the prevention of the imminent outbreak of nuclear war by regulating events that could lead to miscalculation, error, or any confrontation liable to rapid escalation.

By contrast, the assessment as to what levels of armaments are likely to lead to nuclear war in the longer term is highly subjective, so that while some see a vigorous programme of NAC as the best protection, others hold the view that additional armaments are necessary. Both Superpowers claim that they seek no more than parity with each other, yet both maintain that they are obliged to continue the extension of their nuclear armaments in order to maintain that parity.

A committed lobby of support for NAC comes from States which believe that they would benefit economically from any curtailment of the nuclear arms race. Those are mainly the developing countries, most belonging to the so-called Group of 77, and advocating the establishment of a New International Economic Order. The annual financial cost of the nuclear arms race being approximately one thousand million US dollars, it is estimated by the States concerned that a rich source of economic aid would become available if the material and human resources used in the nuclear arms race were to be
diverted to assist in economic development. 39

The possibilities for NAC are predicated on the attainment of a number of objectives external to the content of NAC agreements. Some of these have been repeatedly identified at international forums. They include the availability of means for the peaceful settlement of international disputes and the adoption of a number of confidence building measures designed to reassure States regarding their security which, in combination, would result in the relaxation of international tension.

Prevention of horizontal proliferation is believed to require an adequate assurance by nuclear-weapon States, to non-nuclear-weapon States, that nuclear weapons, or the threat of their use, will not be turned against them. Likewise, adequate safeguards on all nuclear activities of non-nuclear-weapon States have been widely accepted as essential for the prevention of horizontal proliferation. Developing nations tend to stress the importance of the non-discriminate application of safeguards, while the developed nations place emphasis on the need for full scope safeguards to be universally adopted by all non-nuclear-weapon States. 40

Various principles of international conduct have also been noted as prerequisites for arms control, in particular NAC. These include the principle of the inviolability of international frontiers; the recognition of the sovereign equality of States; the prevention of
the use of force or the threat of force against the sovereignty, territorial integrity or political independence of any State; the right to exercise self-determination and independence from foreign domination; and non-interference in the internal affairs of other States.41

Guidelines for the conduct of NAC negotiations pinpoint the need for mutual responsibilities between nuclear-weapon and non-nuclear-weapon States; the requirement of undiminished security for all States at each stage of the disarmament process, to be achieved at the lowest possible level of military forces; and the requirement for verification measures satisfactory to all parties to the proposed agreement. The desirability of universal participation in appropriate NAC agreements has also been stressed at international forums from time to time.

It may be more appropriate to regard NAC not as a series of separate objectives, in turn dependent on the attainment of certain prerequisites, but as part of an integrated process. The aim of that process is to prevent a chain of events that could one day lead to wholesale nuclear devastation, either in the course of limited wars or in a universal holocaust.

Examined in this light, the objective of NAC has not changed over the years. As stated by Ambassador Yoshio Okawa, the Japanese delegate to the Committee on Disarmament, during a press conference in November 1981,
the danger of nuclear war has not abated. Japan, at present "the only country" to have experienced bombardment with nuclear weapons could become, he said, "the first of many". 42

Variable Standards of Success

If the objective of NAC is seen as the prevention, rather than the postponement of nuclear war, then it is not sufficient merely to persevere with the process leading towards the elimination of nuclear weapons. Eventual nuclear war could only be prevented with the maintenance of the required momentum of the NAC process, whereby the forces promoting nuclear weapons build-up would be outweighed by the forces inhibiting such steps.

It is inevitable that at any given time, some facets of the NAC process are more successful than other facets. A purported comprehensive balance sheet of progress and regression towards effective NAC would be inconclusive, because weighting the various indicators of success and failure would have to rely on a large measure of subjective assessment. For example, the same technological developments that give rise to new systems of nuclear weapons, can also produce techniques to improve the verification of performance of NAC agreements. Similarly, sectional alliances motivated by the desire of protection by the "umbrella" of a nuclear-weapon State, thus dividing the world, may simplify methods of international accommodation, by reducing the diversity of policy alternatives under consideration during negotiations. Attempts to evaluate the positive
and negative features of these developments would be futile.

Nevertheless, it is possible to identify some clear-cut indicators of current tendencies. One way to measure the progress being achieved, is to examine the NAC process with respect to the initiatives believed to be most urgent, as well as those issues that appear to be the most amenable to short term resolution. The proposed Comprehensive Test-Ban Treaty (CTB), satisfies both the criteria of urgency and relative ease of implementation.

All relevant United Nations bodies have currently designated a CTB Treaty to be the first priority in NAC efforts. The matter has been given precedence for several reasons. One reason is that it would be a relatively simple, straightforward step. The view that explosions above a yield of 5 kilotons can be reliably detected is virtually unanimous, while much eminent expert opinion suggests that today there are no genuine problems of verification at all with respect to a CTB.

The Treaty would not affect the balance of power between the Superpowers and it would be a move towards equalizing the sacrifices demanded of the nuclear-weapon and non-nuclear-weapon States. It is not disputed from any quarter that a CTB would have a strong inhibiting influence on both vertical and horizontal proliferation. A less readily acknowledged, but nevertheless foreseeable consequence of a CTB is the pressure it would exert on China and France to acquiesce in an NAC regime and to
relinquish their efforts to maintain a relativity with the major nuclear Powers. Another cogent reason for supporting a CTB at the present time is that it could help to build confidence in NAC, and therefore, that it could act as a prelude to other urgent agreements, such as a SALT III Treaty and an Outer Space II Treaty.

Attempts to reach a CTB are not new, nor have the long negotiations been without success. The whole process has been an excellent example of the persistence and determination required to achieve agreement on NAC issues. It also illustrates that, although the anticipated result may not be achieved exactly as planned, negotiating efforts are usually rewarded with some measure of progress.

The desirability of concluding a CTB was first raised in the General Assembly in 1957. After six years of effort the attempt to conclude a comprehensive treaty was abandoned in favour of the Partial Test-Ban Treaty of 1963. Nevertheless, negotiations continued for the conclusion of a Treaty to ban underground nuclear tests in the Eighteen Nation Disarmament Committee, (ENDC) and later in the Conference of the Committee on Disarmament, (CCD) until the Special Session in 1978. Sweden took an important initiative in 1965, when it proposed verification of a CTB by an international exchange of seismic data, to be supplemented by on-site inspections in order to resolve the occasional uncertainties that may arise.
Despite the Swedish and other initiatives, the Superpowers still failed to agree on a CTB verification formula when the Non-Proliferation Treaty was concluded in 1968. The preamble to that Treaty expressed disappointment that a CTB had not been concluded, inferring that such a Treaty was expected to be concluded in the near future, in fulfilment of the obligation of the nuclear Powers vis-à-vis the renunciation of nuclear weapons by the non-nuclear-weapon States. The ENDC, and its successor the CCD, continued to make no appreciable headway, but in 1974 the two Superpowers agreed on a Threshold Test-Ban Treaty. The Treaty prohibited underground nuclear tests with a yield of more than 150 kilotons and prescribed specific testing sites for the permitted explosions. In 1976 the Superpowers reached agreement on the Peaceful Nuclear Explosions Treaty, to supplement the Threshold Test-Ban Treaty.

In that year, also, the CCD established an ad hoc Group of Scientific Experts to consider international co-operative measures to detect and identify seismic events. After SSD I, the Group of Scientific Experts continued to meet under the aegis of the Committee on Disarmament. By 1980, the Group had collated a programme for a seismological verification system, to consist of about 50 teleseismic stations situated around the globe and exchanging data by way of the telecommunication system of the World Meteorological Organisation. Methods for the
collection, analysis and distribution of the data were largely agreed upon by the scientists during 1980, and they proposed a practical test of the seismic network. This would have required the co-operation of the relevant States, and at that point the programme lost momentum. In the meantime, during 1977, bilateral negotiations on a CTB were commenced by the Superpowers, with the United Kingdom joining later in the year. The trilateral negotiations are still in progress at the time of writing, and the matter has also been discussed by the Committee on Disarmament.49

With the entry into force of the Partial Test-Ban Treaty, the Treaty of Tlatelolco50 and the Non-Proliferation Treaty, as well as the Superpower agreements on the Threshold Test-Ban Treaty and the Peaceful Nuclear Explosions Treaty, many objectives of a CTB, as originally envisaged, have already been realised. The Partial Test-Ban Treaty forbids all nuclear tests with the exception of those conducted underground; the Treaty of Tlatelolco and the Non-Proliferation Treaty, inter alia, debar all non-nuclear-weapon States from the right to conduct nuclear tests; the Threshold Test-Ban Treaty prohibits the two Superpowers from testing nuclear weapons with a yield exceeding 150 kilotons, while the Peaceful Nuclear Explosions Treaty, in effect, extends the Threshold Test-Ban Treaty to include purportedly "peaceful" nuclear explosions. While the aforementioned Treaties have not attracted accession by all eligible States, and the two last-mentioned Treaties remain
unratified, in essence the terms of all the Treaties are being universally observed.

Thus, although there has been a failure to secure the outlawing of all nuclear explosions with military potential, a large measure of success has been attained towards that end. Had the technological environment remained static, the rate of progress towards a CTB would also be very satisfactory, when compared with previous international efforts to put legal curbs on military competition.

Yet, in present circumstances, a different yardstick of success may be appropriate. Since a CTB was first mooted, NAC-related problems have snowballed. The avoidance of accidental nuclear war, in a world saturated with complex, high speed nuclear weapons, is more perilous; maintenance of an increasingly intricate nuclear balance between the Superpowers is more tenuous; prevention of the spread of nuclear confrontation into space and the emergence of new weapons of mass destruction are more pressing; and it is increasingly difficult to restrain horizontal proliferation at a time when the manufacture of nuclear weapons and delivery systems is within the technological and financial reach of a growing number of States. In this overall situation, with an ever increasing number of more and more complicated treaties to be concluded, the failure to negotiate a simple CTB could be regarded as a sign that the NAC process is faltering because the requisite momentum of progress is not being maintained.
Notes


3 Ibid.

4 Final Document SSD I, A/RES/S-10/2, pp.4-5 - "Existing arsenals of nuclear weapons alone are more than sufficient to destroy all life on earth."

5 A/35/392, p.12.

6 Id. p.43; Also, Whence the Threat to Peace, USSR Ministry of Defense (Military Publishing House, Moscow) 1982, p.60 - "In Pentagon thinking, surprise attacks with high-accuracy Pershing II missiles (flight time of 5-6 minutes) on the Soviet Union's strategic weapons would reduce the impact of a retaliatory blow against the USA in the event of aggression against the USSR."

7 A/35/392, p.43; For imminent developments, Whence the Threat to Peace, op.cit. p.29 - "The program launched in 1979 for rearming 300 Minuteman III ICBMs with the highly accurate new Mk12A 350-kiloton warheads (circular error probable (CEP)-180 meters) is in the stage of completion."


9 A/35/392 p.46 para.106.

10 Id. p.14.

11 Huiskens, Ron, The Cruise Missile and Arms Control (The Strategic and Defence Studies Centre, Australian National University, Canberra 1980).

12 A/35/392, p.36.


16 The Age, newspaper, Melbourne, 14 January 1982, p.7. quoting Randell Forsberg, Director of the Institute for Defence and Disarmament Studies, Boston, United States, following her discussions with Soviet arms control specialists.


20 A further complication is that in the Soviet literature, military plans are referred to as tactics to distinguish them from overall political strategy, in accordance with Leninist terminology, e.g. see Trofimenko, Henry, "The 'Theology' of Strategy", Arms and Control and Security: Current Issues (Westview Press, Boulder, Colorado 1979) esp. p.109.

21 The performances of two of the most controversial grey area weapons, the Pershing-2 missile and the Tomahawk cruise missile have been described in the following terms by - Mazing Valery "Dialogue, Not Missile Build-up", New Times, 1981, Vol.18 p.10 - "The Pershing-2 has a radius of about 2,000 kilometres, nearly three times that of the Pershings now deployed. Consequently, it can be used for entirely different purposes since it is able to hit targets deep in the Soviet Union. The Pershing-2 can reach its target within 4-5 minutes, which increases the U.S. first-strike armoury. The cruise missiles are a fundamentally new weapon. By flying at low altitudes (50-60 metres) they can avoid enemy air defences and hit targets, with great accuracy, at a distance of 2,600 kilometres." C.f. SS-20 missiles which are claimed to have a range of 5,000 km. Soviet Military Power (U.S. Govt. Printing Office, Washington) p.26. However, these weapons are deployed in areas from which they could not reach the other Superpower, ibid.

22 Trofimenko, Henry, "The 'Theology' of Strategy", Arms Control and Security: Current Issues, op.cit. p.110; Also see infra Chapter IX.

23 There is an important distinction between a first strike capability, and the attainment of such a capability by stealth. Concealment of weapons systems developed towards that goal does not seem possible - infra Chapter IX; See also Comprehensive
Study on Nuclear Weapons, A/35/392 p.14 para.20 - "With increasing missile accuracy and many RVs per missile, MIRV has raised the spectre that a fraction of one side's ICBM forces may in a "first strike" destroy the opponent's ICBMs still housed in their hardened silos. This would be possible with sufficient accuracy and reliability of the attacking RVs, and if the ICBMs to be attacked were not launched before they were destroyed. This situation is therefore considered to be potentially unstable, since in time of crisis each side may consider launching its missiles rather than risk their destruction."; For estimate of timing, Whence the Threat to Peace, op.cit. p.36 - "The agreed schedule of the Pentagon plans for building up strategic offensive armaments and deploying anti-missile and space defense systems is timed to complete the development of a so-called first-strike potential in the 1980s."

24 Art. 2(4) "All Members shall 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."

25 An indication can be gleaned from the international furore following a remark by U.S. President Reagan, which fell far short of a deliberate threat - "I don't know. I could see where you could have an exchange of tactical weapons against troops in the field without it bringing either one of the major powers into pushing the button."

26 C.f. problems with disaffection of youth in the U.S. and other Western States resulting from the Viet Nam war.

27 E.g. President Reagan's statement in October 1981 - "Our strategy remains, as it has been one of flexible response: maintaining an assured military capability to deter the use of force - conventional or nuclear - by the Warsaw Pact at the lowest possible level ...As all presidents have acknowledged any use of nuclear weapons would have the most profound consequences. In a nuclear war, all mankind would lose. Indeed, the awful and incalculable risk associated with any use of nuclear weapons themselves serve to deter their use." Also Leonid Brezhnev's statement during the exchange between the two leaders - "Only he who has decided to commit suicide can start a nuclear war in the hope of emerging a victor from it." Both statements quoted in the International Herald Tribune newspaper, 22 October 1981, p.1 col.8. Referring to the U.S. publication Soviet Military Power, a further Soviet denial as follows - "Soviet military doctrine, too, is presented in a distorted light."
Referring to non-existent 'Soviet publications' and 'statements of Soviet leaders', the authors of the pamphlet and, for that matter, also certain officials of the US Administration, allege that Soviet military doctrine is of an aggressively offensive nature, and that the Soviet Union counts on winning a nuclear war by means of a pre-emptive strike. These allegations are entirely groundless, as are the references to the Soviet leadership. None of the Soviet Party leaders or statesmen has ever stated, nor could have stated, anything of the sort. The very opposite is true."

Whence the Threat to Peace (Military Publishing House, Moscow 1982) p.11.

28 An unanswered question is, what amounts to "outright prominence"? Even the early monopoly of nuclear weapons and later supremacy in delivery systems only gave the U.S. marginal political leverage. See n.36.

29 Karas, Thomas H., "Implications of Space Technology for Strategic Nuclear Competition:; Occasional Paper 25, publication of The Stanley Foundation (Iowa July 1981) p.10 - Referring to the proposed installation of bhangmeters viz nuclear explosion detectors on GPS satellites as part of an Integrated Operational Nuclear Detection System to establish instantly where US nuclear weapons have detonated, the author observes that - "The new systems may also arouse Soviet suspicions of US intent to acquire a strategic first-strike capability. Such suspicions may in turn increase Soviet incentives to consider preemptive strikes more seriously."


31 Infra Chapter VIII.

32 Infra Chapter III.

33 "The American doctrine governing use of nuclear weapons has always had a central core of ambiguity, and properly so... The first line requires Washington to communicate a deadly intent and the second a sense of restraint. This is the heart of the nuclear paradox. It is unavoidable, and it lends itself to confusion in the best of times."


E.g. "...on the strategic side, there are two dangers. One is the danger to our land-based missiles. I do not believe that the Soviets will exercise that capability against our land-based missiles, except that it will give them greater confidence in the handling of regional crises, some sought by them, some developing out of revolutionary situations.

So, even if a strategic equivalence were achieved, we would still have the serious problem of how to remedy the various regional balances around the world that have arisen." Testimony of Henry Kissinger, then Secretary of State, The SALT II Treaty, Hearings Before the Senate Foreign Relations Committee, July-August 1979 (U.S. Govt. Printing Office, Washington, 1979) p.196.

E.g. "We had a huge advantage in strategic weaponry for a long time, and we found ourselves unable to discover any kind of doctrinal foundation for using it to advance American national goals. It turned out to be a posture that gave us superiority but did not really give us the basis for dealing with threats to our interest that we perceived around the world."

Id. September 1979, testimony of Prof. Richard A. Falk, p.228.


A caucus of more than a hundred developing nations in the UN with a varying membership, largely overlapping with the Group of 21.


Infra. Chapter VIII.


See the study on a Comprehensive Nuclear Test Ban, A/35/257 of 23 May 1980.

Ibid. p.40 para.154; Also infra Chapter III.
Ibid.; At about the same time a Latin American regional non-proliferation treaty was also concluded, the Treaty of Tlatelolco.

Ibid.

Infra. Chapter III.

The number of nuclear tests conducted underground remains high. Supra Chapter I, n.37.
CHAPTER III

NORM CREATION BY NEGOTIATION FOR THE CONTROL OF NUCLEAR ARMS

Methods of Multilateral Norm Creation for NAC

The creation of authoritative standards for NAC is in the forefront of international endeavour. Its aim is to devise, and to oversee the implementation of specific arms control measures, which is a deliberate and painstaking process. The method used, based on initially achieving widespread consensus regarding the principles involved, has a bearing on the effectiveness of the agreements ultimately reached. Similar negotiating methods have been used at other times and in relation to other issues, but with less collective persistence.¹

Generally the process involves three successive phases, although the second phase is often regarded as an end in itself. In the first phase, initiatives for major new NAC measures are usually proposed by Governments to their allies in NATO, The Warsaw Pact, or the Non-aligned Movement, before presentation to the appropriate United Nations body. Proposals for the elaboration of international norms relating to NAC are also made by a variety of non-governmental organisations and peace research institutes. Often these are Government supported at the national level and at the international level they have consultative status with the United
Nations. In addition, emerging NAC proposals are sometimes considered at ad hoc international conferences on topics having a bearing on the subject; NAC treaty review conferences; expert study groups commissioned by the United Nations; and through an exchange of initiatives devised at the academic, scientific or other professional level.

During the second phase, debates are conducted at the United Nations with a view to reaching consensus on the basic elements of the subject matter. The chief organisational vehicles for the establishment of NAC norms in the United Nations are: the Committee on Disarmament, with its formal and informal Working Groups; the Disarmament Commission; the First Committee; and the General Assembly. Within the United Nations Secretariat there is the Centre for Disarmament; the United Nations Institute for Training and Research and its offshoot, the newly constituted United Nations Institute for Disarmament Research. Legal problems may be referred to the International Law Commission\(^2\) or to the Sixth Committee.

Upon reaching general consensus, the third phase consists of a plenipotentiary conference where the final text of the treaty is drafted by intending State Parties, for adoption by signature and subsequent ratification in conformity with traditional diplomatic practice. In the past, bilateral NAC treaties were almost exclusively negotiated between the Parties themselves at all stages. However, the current trend is to involve the whole
international community, on the ground that all States are affected by the outcome.

Since the commencement of the first NAC negotiations, some negotiators have spent most of their working lives engaged in this task. Irrespective of the particular forum, they continue to confront each other in a global village atmosphere. The personal element ensures a thorough understanding of negotiating positions adopted by the various States, as well as the negotiating style of colleagues. It also enhances considerations of national honour, credibility and a degree of personal trust. Hence, the diversity of subjects considered and the varied locations of meetings give a misleading impression of fragmentation. Existing NAC agreements, ongoing negotiations and emerging initiatives are unified, not only by the interrelationship of the subject matter, but also by the continuing participation of a number of outstanding national representatives.

The State most involved in the process of NAC, the United States, is the one that has tended to be denied the benefits of continuity. Due to wholesale changes of both delegates and senior policy makers with each new Administration, there has been a repeated loss of expertise and adjustment. This is not only a periodic disadvantage for the United States. It is a continuous and cumulative global impediment to the evolution of an international arms control ethos. The problem was squarely faced by the United States delegate to the Committee on Disarmament, Ambassador C.C. Flowerree.
Himself a mid-term appointee under the Carter Administration, he admitted during his address in August 1981 -

It will not have escaped the notice of members of the Committee that the United States delegation has been relatively silent during our 1981 session. Apart from my April 7 intervention and a recent brief discussion of chemical weapons last month, my delegation has spoken only when spoken to — that is, when it has been necessary to put our position on an issue on the record. We have thought this to be an appropriate posture, given the fact that the review of United States arms control policy is still continuing.

Existing processes of norm creation for NAC employed by United Nations organs are indicative of prevailing opportunities and limitations. An examination of the issues that are under consideration, and the working procedures of the various bodies, reveals the discrepancy between the concerns of legal theorists and those of international lawyers directly engaged in NAC negotiations. The Under-Secretary-General for Legal Affairs of the United Nations, Professor Erik Suy, has urged that, "Contemporary international law must deal with these new 'prescriptive norms'." He advanced the view that it has become necessary to decide "to what extent" the decisions of intergovernmental organisations are creating new norms. In the course of his remarks he posed the following questions -

Are they legal norms? Are they generally binding legal norms, or are some of them binding and some not? How are the binding norms determined?

A reluctance by States to enter into NAC treaties has already been noted in the previous chapters. Reasons for this are not uniform. In some cases States apparently prefer to continue with a phase of the arms race in the
belief that they can outdistance other States in nuclear arms. On other occasions, there are grounds why one State may deliberately attempt to obstruct other States from reaching accommodation. Alternatively, the conclusion of NAC agreements is inhibited by genuine concerns about, inter alia, the precision, universality, verifiability or enforceability of a contemplated treaty. There is a positive aspect to the caution displayed in assuming NAC undertakings. It demonstrates that the utmost weight is attached to treaty obligations in this field. Apparently there is a belief that any public relations advantage that may accrue from acceding to an NAC treaty precipitously, would be outweighed by the possibility that responsibilities undertaken might have to be dishonoured or repudiated.

By contrast, non-binding expressions of opinion by States on NAC issues are given somewhat more readily, although generally care is exercised to convey a responsible attitude. While the voting patterns of States on these issues tend to be fairly consistent, no great loss of face is entailed in a vote change at the United Nations, provided that cogent reasons can be adduced to justify the altered position. The relevant negotiations and deliberations being undertaken in the forums of the United Nations are to be examined below. It will be seen that despite many positive developments the rate at which NAC agreements are reached, whether by treaty, by resolution or otherwise, falls far short of what the agendas of those bodies have designated to be
No doubt with such concerns in mind, Professor Suy has put forward six proposals for assisting the conclusion of international agreements to satisfy the requirements of contemporary international life. While the proposals refer to all types of agreements, they also have great relevance to NAC agreements. The following is a summary of the proposals: Firstly, that there should be more rapid and extensive codification of international law at international conventions; Secondly, that steps ought to be taken to further encourage universal participation during the elaboration of international instruments; Thirdly, that the timing and venue of international law-making gatherings should be arranged so as to enable States with limited manpower resources to participate effectively; Fourthly, that non-participating delegations at diplomatic conferences be entitled to submit texts for the consideration of delegates; Fifthly, that the importance of the speed with which treaties are concluded and ratified should be recognised; and Sixthly, that more attention be given to the implementation provisions contained in international agreements.

A consideration of the subject matter of proposed NAC agreements is undertaken partly in order to throw light on the reasons why the rate of progress does not meet stated expectations. This involves many subsidiary questions as to the significance of the issues that have been agreed upon so far, the reasons for differing progress in the establishment of NAC norms relating to
the various subject areas, and why advice of the kind offered by Professor Suy is not sufficiently put into practice. A central question to emerge is, whether the content of the sought after agreements is insuperably difficult to negotiate and to deliberate upon, or whether the methodology of international negotiation and deliberation is merely inappropriate and out of date for the task at hand.

Multilateral NAC Negotiations in the Committee on Disarmament

The Committee was reconstituted following SSD I, to be the only "multilateral disarmament negotiating forum" on arms control of the United Nations. It is the successor to the Eighteen Nation Disarmament Committee, established in 1961, and the subsequent Conference of the Committee on Disarmament. During SSD I, it acquired its present format of delegations from 35 United Nations Member States, on the basis of equitable geographical distribution, together with the five permanent Members of the Security Council. 7 In accordance with its mandate, the Committee is required to formulate all recommendations by consensus. At its first session, in 1979, the requirement was incorporated into the Committee's Rules of Procedure.

Issues are referred to the Committee for consideration on the basis of international agreement in principle about the desirability of elaborating each topic into more specific commitments, if not binding treaties. Regarding nearly all of the themes that appear
on the annual agendas it could be fairly said that, at the least, they constitute agreements to formulate agreements. They are an endorsement of the desirability that international norms should prescribe the rights and duties of States in the matters concerned.

During 1980 and 1981, the Committee had four formal **ad hoc** Working Groups on the following topics -

- Effective international assurances to non-nuclear-weapon States against the use or threat of use of nuclear weapons
- A comprehensive programme of disarmament
- Radiological weapons
- Chemical weapons.

This format of negotiation has continued to be acceptable. In a Statement evaluating the work of the Committee in 1981, the Group of 21 comprising the Non-aligned States, expressed the view that -

> ...ad hoc working groups have proved to be the best available machinery for the effective conduct of all substantive disarmament negotiations in the Committee on Disarmament.\(^8\)

In 1979 much of the Committee's time was set aside for drawing up its Rules, but in 1980 and 1981, it had full agendas of substantive items largely oriented towards reaching agreements on NAC issues. The following have been the major NAC topics discussed, as initiated in 1980\(^9\) and 1981\(^10\) -

A. A Comprehensive Test-Ban Treaty

B. New Types of Weapons of Mass Destruction Including Radiological Weapons

C. Cessation of the Nuclear Arms Race and Nuclear
Disarmament

D. Assurances to Non-Nuclear-Weapon States

E. Comprehensive Programme of Disarmament.

While no NAC treaty has emerged, so far, as the outcome of any part of the Committee's work, significant progress has been made on a number of items and many issues have been clarified. In its reports, the Committee has enumerated all of the pertinent recommendations and other sources on which negotiations were based. As well as summarising the conclusions reached where agreement was possible, it has also collated the various arguments put forward regarding those issues that did not produce a consensus.

Assessments of the Committee's achievements, by the Chinese delegation, for example, attribute considerable value to those functions, even if they fall short of constituting concrete agreements. As observed by the Chinese delegation in August 1981—

...the statements made by the various delegations during the general debate in the Committee and in the discussion on specific items in the working groups have made clearer the points in common as well as the points of divergence on various issues of disagreements and increased delegations' understanding of each other's positions, which will undoubtedly help the future consultations and considerations... 11

In order to study the effectiveness of this method of norm creation, and to examine the validity of the above assessment, each major NAC issue negotiated by the Committee on Disarmament since its inception will be considered separately.
A. A Comprehensive Test-Ban Treaty:

Apart from various proposals by States and groups of States, in 1980 the Committee had before it a report on the subject by a Group of Experts, submitted by the Secretary-General, presenting the background to the negotiations as well as making numerous recommendations. Other notable documents were the progress report by the 9th and 10th Sessions of an ad hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events.

During the debates, there was a confirmation of the view, long held in the United Nations, that the conclusion of a treaty banning nuclear tests in all environments was the first priority of all contemplated disarmament measures. Previous negotiations on this subject, discussed in Chapter II, had spanned a quarter of a century. By 1980, the opinion was overwhelmingly endorsed that all scientific and technical problems relating to the verification of the proposed Treaty had been substantially solved and that only political commitment was outstanding. However, a few notable delegations, including those of the United Kingdom and the United States, maintained that some of the vital verification issues were still unresolved.

From the beginning of the discussions, many delegates claimed that the Soviet Union, the United Kingdom and the United States were not making sufficient effort to
promote the conclusion of a Treaty. These three nuclear Powers had been engaged in trilateral negotiation of the subject for over three years without reaching agreement. Committee Members requested that, at the least, the Committee should be given a full report concerning the state of the negotiations. Towards the end of the Committee's 1980 Session this was done\(^1\) and Committee Members had the opportunity to discuss the report. Among several criticisms and proposals, the suggestion was made that the three negotiating nuclear Powers should immediately stop all testing of nuclear weapons, either by way of individual moratoria undertaken by each of them or by a trilaterally negotiated moratorium, pending the conclusion of a multilateral Treaty on the subject.

In the course of 1981, it became further apparent that some States had made only half-hearted efforts towards establishing a global network that could verify a CTB with indisputable accuracy. The Progress Report of the Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events, made to the Committee and hence to the Working Group, regarding their 11th\(^1\) and 12th\(^1\) Sessions held in February and August 1981, left no doubt that the scientists engaged in the task failed to receive high priority assistance. At the latter meeting, the scientists noted the following areas in which additional scientific and technical progress was needed -

(a) studies on the use of seismographs and hydro-acoustic instruments on the ocean bottom to improve the detection and identification capability for seismic events
in the southern hemisphere;

(b) widespread digital recording of data from seismographs;

(c) automation of the extraction of parameters from seismograph data;

(d) automation of the data processing at international data centres. Organisation and co-ordination of the work at these centres;

(e) methods to accommodate reporting of large earth-quake sequences and swarms.

Apart from security considerations, there is a major legal disincentive for the conclusion of a Comprehensive Test-Ban Treaty, being the known intention of two nuclear Powers, France and China, to remain aloof from such a Treaty and their consistent non-participation in substantive negotiations on the subject. As noted previously, there is at present not even theoretical justification, let alone formal enforcement machinery that could be brought to bear on these two States to ensure their compliance, even if an overwhelming international consensus were achieved. The attitude of the great majority of States, in favour of the Treaty, has been expressed in resolutions of the General Assembly, notably in the Final Document of SSD I, albeit qualified by some disclaimers in the form of "explanation of vote".

The Chinese and French position is not in breach of any recognised principle of international law, nor would it be if those States failed to accede to an existing Treaty on the issue. For example, it has not been alleged that those two States are acting contrary to international law for non-accession to the almost
universally adopted Treaty for the prevention of horizontal proliferation, the Non-Proliferation Treaty. Yet, it is very significant that the two States have complied with the applicable provisions of that Treaty, and that China has gone so far as to accede to Protocol II of the Treaty of Tlatelolco.

The international expectation appears to be that, with the success of the Trilateral Negotiations and endorsement by the Committee on Disarmament of the elements of a Treaty, the resulting Comprehensive Test-Ban Treaty would be adopted by most States. China and France might then decide to conform to the extent of abiding by its provisions. However, the military plans of those States would be directly affected by a ban on nuclear testing. Therefore, in this instance, France and China might decide to defy international consensus in the form of an almost universally adopted Treaty, not only by failing to become Parties but also by refusing to comply with its provisions. The concern of the Soviet Union and its allies on this issue was expressed in a Statement to the Committee on Disarmament in the following terms -

The socialist States...expect that those two nuclear-weapon States which do not take part in the above negotiations determine more clearly their attitudes to the creation of an ad hoc working group on a nuclear test ban and express their readiness to take part in the preparation of a treaty on the complete and general prohibition of nuclearweapon tests and to take over corresponding obligations under that treaty.21

To what extent a decision along those lines would depend on the prevailing legal position is difficult to estimate with any degree of confidence. This aspect of
the question will be explored in the following Chapters.

There it will be suggested that, if a clearly defined legal obligation existed imposing at least a theoretical duty to comply with internationally adopted standards of State conduct, it could substantially influence decision-making by States contemplating defiance of international opinion in such circumstances.

Apart from problems of verification and universal accession by nuclear-weapon States, the two Superpowers and the United Kingdom may be reluctant to conclude a CTB because they wish to continue perfecting nuclear weapons, requiring test explosions to do so. Another weighty consideration is that a treaty would prohibit even the occasional testing of existing nuclear arsenals, so as to establish their persisting efficacy, against the possibility of deterioration or sabotage.

In the opinion of Non-aligned States, even this genre of fundamental objections could be overcome if the Committee on Disarmament were able to assume a greater role in the negotiations. As they see it, the procedure would entail the setting up of a Working Group to deal specifically with the subject, and the exercise of concerted pressures on the trilateral negotiators to report fully and frankly all outstanding differences between them. Contrary to some measure of reporting in 1980, at the conclusion of the 1981 session of the Committee, many delegates felt it was -

...regrettable that the parties which had been engaged in trilateral negotiations on this subject did not respond, either jointly or individually, to
the question posed to them... on issues which are of
vital concern to both nuclear-weapon States and
non-nuclear-weapon States alike.22

During a debate on the issue, the delegate of Nigeria,
Ambassador O. Adeniji, went so far as to question the good
faith of the three nuclear-weapon States concerned, by
saying that —
When a commitment to negotiate is coupled with refusal to
accept the basic machinery for effectively undertaking the
negotiations, we are bound to doubt if good faith is
present.23

Their inability to obtain the necessary universal
consent for additional ad hoc Working Groups in 1981,
including one on a CTB, led to bitter recriminations during
plenary sessions by the States belonging to the Group of 21.
They pointed out that the rule of consensus had its
limitations. For example, Rule 25 of the Committee's Rules
of Procedure, qualifies the consensus method as follows —

The approval by consensus of reports shall not be
interpreted as affecting in any manner the essential
requirement that such reports must reflect faithfully
the positions of all the members of the respective
organs.

In a Working Paper on the establishment of subsidiary
organs of the Committee, the Group of 21 recommended,
unsuccesfully, the following additions to Rule 25 —

The rule of consensus shall not be used either in
such a way as to prevent the establishment of
subsidiary organs for the effective performance of
the functions of the Committee, in conformity with
the provisions of rule 23.24

This instance of the inability of the great majority of
States to exert their influence, even to the extent of
determining negotiating procedure, is a telling
illustration of the negative aspects of negotiation by
universal consensus.

B. New Types of Weapons of Mass Destruction

Including Radiological Weapons:

An ad hoc Working Group was established by the Committee to deal with that portion of the topic relating to the negotiation of a Convention Prohibiting the Development, Production, Stockpiling and Use of Radiological Weapons. As radiological weapons are only at the research and development stage, they are still the subject of argument regarding definition. The weapons being developed could cause destruction, damage or injury by means of radiation produced by the decay of radioactive material that would be disseminated by means other than a nuclear explosive device. The definition, as presently envisaged, would not include particle-beam weapons, which produce radiation in ways other than through radioactive decay. Although by definition, the contemplated weapons are not "nuclear" weapons, they are in practice akin to those weapons, being non-explosive radioactive weapons.

From the point of view of norm creation by the Committee on Disarmament, it is an interesting case because, by mid-1979, the Soviet Union and the United States had already submitted an agreed Joint Proposal on a treaty prohibiting the development, production, stockpiling and use of radiological weapons. The agreement was in a form that could have been readily endorsed and
recommended for plenipotentiary negotiations to conclude a final draft for multilateral signature. The Committee's attention was repeatedly drawn to this fact and a reference to it was eventually included in the end-of-session Statement by the Socialist States, in August 1981, as follows -

The delegations of the socialist countries believe that in 1981 the Committee on Disarmament could have completed the drafting of a treaty on the prohibition of radiological weapons.26

This Working Group's approach to its task conclusively demonstrated that it is not only Superpower rivalry or problems of verification, adjudication or enforcement of NAC agreements that inhibit their timely conclusion.27 The reluctance to commitment in this instance suggests that procrastination may have become endemic in NAC negotiations. Unlike the negotiation of other issues, where the Committee has been faced with irreconcilable positions adopted by the two major Power Blocks, or where overwhelming and imminent security issues were at stake, in this case failure to reach agreement was the result of many diverse and contradictory amendments of marginal significance regarding the definition of terms and the scope of the proposed Treaty.

Uncharacteristically, the most persistent obstruction came from Sweden, which, for no apparent international reason, attempted to link the proposed Treaty with the inviolability of commercial nuclear reactors. The unexceptionable response from Ambassador P. Lukes, of Czechoslovakia, was as follows -
We share the concern of the Swedish delegation as regards the importance of the protection of civilian nuclear facilities. This problem is not new, and the concern of many countries has already been reflected in the 1977 Additional Protocol to the Geneva Conventions of 12 August 1949, as well as in several other documents of international law. With all this in mind we tend, like several other delegations, to be in favour of finding a way of dealing with this very complicated and very specific problem of the enforcement of the existing rules for the protection of nuclear facilities separately from the radiological weapons treaty.

Ambassador de Souza E Silva, of Brazil, objected to the proposed complaints procedure, despite its conformity with complaints provisions in a number of NAC treaties, on the ground that it was discriminatory. It would "confer a privileged status on some of the parties", he said, "if the complaints procedure made use of the Security Council of the United Nations", and added -

We fail to see the merit of establishing a procedure that can easily be blocked by a handful of nations, among which, incidentally, are included those that possess the technological means to contemplate the production of radiological weapons.

For its part, Romania gave great weight to two issues that had been raised in discussion, of very doubtful relevance to a Treaty on radiological weapons, being "the peaceful application of nuclear energy" and "the relationship between the convention and the nuclear disarmament process". Ambassador M. Malita referred to those issues as "fundamental problems on which the success of the convention depends".

Criticism of the Treaty by the Yugoslav delegate, Ambassador M. Vrhunec, concentrated on the definition of radiological weapons. Because the description adopted by
the Superpowers excluded nuclear weapons from the
definition of radiological weapons, Yugoslavia feared
that this would "imply the direct or indirect
legitimation of nuclear weapons". 31 It was an approach
to treaty interpretation, periodically echoed by other
States at the United Nations, that would make nonsense of
all arms control treaties, because each limitation placed
on a weapon could be taken as a licence for the unlimited
deployment and use of all other weapons. However, the
opposite opinion was also presented to the Working Group,
as noted in its 1981 Report. 32

On any consistent interpretation of the definition,
as originally proposed, of radiological weapons, it must
be self-evident that the differentiation between the two
weapons merely states that weapons having the additional
properties possessed by explosive "nuclear weapons" are
to be excluded from the operation of the particular
Treaty, not that their use is thereby sanctioned.
Further, if there were any doubt about that, it could be
stated in a simple explanatory clause.

Notwithstanding the patently pinpricking nature of
the objections, Yugoslavia, like the other Non-aligned
States, persisted in stalling the conclusion of a Treaty
on radiological weapons. Ambassador Vrhunec continued
with the assertion that, "A very important circumstance
is that radiological weapons in a concrete, operative and
physical form are unknown." He then proceeded, in the
next sentence, to assert that, "This was the reason why
we focused our definition on specific characteristics of radiological weapons", followed by the further contention, regarding the non-existent weapons, that, "Numerous scientifically-founded facts indisputably confirm that the basic characteristic of a radiological weapon is that it inflicts injury on living beings by its ionizing radiation."  

However, the coup de grace was administered by Brazil, with the complaint that -

It should not be difficult to imagine the dismay of the membership of the United Nations if the Committee on Disarmament cannot go beyond presenting the international community, at the forthcoming General Assembly, with a draft text on weapons that do not exist, and which according to some expert opinion do not stand even the chance of ever existing, and reporting at the same time that no progress has been accomplished on measures deemed vitally urgent by the higher forum on repeated occasions.  

It will be noted below, in connection with anti-satellite weapons and exoatmospheric anti-ballistic missile systems, that radiological weapons do exist, albeit in a form that is still not sufficiently destructive to warrant their deployment in preference to alternative weapons.  

During the negotiations in the Working Group, the assessment by Sweden of the impracticality of radiological weapons appears to have carried much weight. The view denigrating the topicality of the subject was restated by Swedish Ambassador C. Lidgard, who declared that -

Studies which have been undertaken by the competent scientific and technical institutions in Sweden since the early 1950s, and which have now again been
carefully examined, show that the development of specific radiological weapons, as defined by the drafters, is a very remote possibility. They could hardly become practical weapons of mass destruction or have any effective use in the battlefield. A radiological weapon of sufficient strength for denying an enemy access to significant areas of terrain would be almost impossible to fabricate, handle or deliver.\(^{36}\)

The stance adopted by Sweden and the other Non-aligned States overlooked the consideration that, should the weapons remain impractical for a lengthy period, no harm could result from banning them, whereas the converse error of assessment about the "remote possibility" of their utility, could clearly have the gravest consequences.

In any event, the point which the Non-aligned States had made in the Committee on innumerable occasions was, that the Superpowers should be encouraged to reach whatever specific items of arms control they could agree to, bearing in mind the adverse political relations between them. Yet, in the case of the agreement on banning radiological weapons the process of accommodation was hindered, above all, by several of the States usually pressing for more NAC measures to be adopted.

The Committee on Disarmament in plenary session considered other types of new weapons of mass destruction (NWMD). It attempted, unsuccessfully, to define "weapons of mass destruction" and to decide whether an expert study should be commissioned on the subject. It was proposed that a Group of Experts be requested to prepare a draft comprehensive agreement on individual types of weapons of mass destruction and new systems of such
weapons, and it was further proposed that the Experts be requested to keep the Committee constantly informed of developments in this field.

In contrast to the negotiations on radiological weapons, where Committee Members failed to adopt a practically ready made agreement, supported by both the United States and the Soviet Union, in the matter of new weapons of mass destruction, there was no draft, no outline of the topic or programme of work before the Committee, and even the ambit of the subject matter was in doubt.

In a Working Paper on the subject, Hungary suggested that, pending the establishment of a formal Group of Experts, there should be informal meetings between experts to explore suitable methods of approach. The following headings were proposed as the basis of preliminary expert discussions -

- Review of questions related to the definition of new types of weapons of mass destruction as well as the criteria on the basis of which particular weapons fall under certain categories of NWMD on the basis of the formula of 1948 taking also into account the advance reached in the field of science and technology.

- Review of the trends of the development of technology especially in the military field, identifying particular areas where the progress may contemplate emergence of NWMD.

- Recommendations to the Committee on Disarmament as to the methods of further work and negotiations,
including the setting up of an ad hoc group of experts. Other relevant aspects, experts may deem necessary to bring to the consideration of the Committee.37

The scope of the subject matter of new types of weapons of mass destruction is, by definition, limitless, both in terms of possible weapons to be controlled and the duration of the danger posed by the introduction of the weapons. The issues to be addressed under this heading go to the core of the problem of the circumvention of existing NAC agreements, adverted to in Chapter I. In view of these considerations, the proposal to set up a Group of Experts to monitor the emergence of, inter alia, new types of nuclear weapons and systems of weapons, was significant. Had an agreement been reached and implemented on this point in the Committee on Disarmament, it could have had a more far reaching effect on NAC than a formal NAC treaty, duly signed and ratified, on a less significant matter. Concerning the issue of new weapons of mass destruction, agreement on a method of approach could be expected to establish fundamental new principles regarding circumvention.

In the absence of agreement on the establishment of a Group of Experts, the functions envisaged have been fulfilled, to some extent, by several highly respected peace research organisations. Independent assessments regarding the development of nuclear weapons systems, especially those made by the Stockholm International Peace Research Institute, are frequently quoted by States at
the United Nations during NAC debates. In September 1980 another expert body was established outside the United Nations, which could fulfil some of the functions contemplated to be addressed by an Expert Group to the Committee on Disarmament on the subject.

Although that body, the Independent Commission on Disarmament and Security Issues, has no formal connection with the United Nations, many of its members and advisers have represented their respective countries at the United Nations in recent times. Commission members from all five regional groupings, recognised by the United Nations for the application of the principle of equitable geographical distribution, take part in the deliberations. The Commission makes periodic recommendations on NAC issues like the SALT process, the verification of proposed new NAC treaties, and the operation of the ABM Treaty. Regarding the identification of new weapons of mass destruction and appropriate agreements for their control, the Commission has met a need brought to light during the deliberations of the Committee on Disarmament.38

When weighting the relative effectiveness of various approaches to the creation of NAC agreements, it is appropriate to take into account all of the threads that constitute the fabric of accommodation. Interaction between the Committee and the Commission, especially in relation to forestalling a new spiral in the nuclear arms race, is a particularly revealing example of the intertwining sub-structure of emerging international
C. Cessation of the Nuclear Arms Race and Nuclear Disarmament:

This topic has been a catch-all, especially useful for the introduction of NAC issues not being considered by ad hoc Working Groups. Apart from proposed treaties for a CTB and the prohibition of radiological weapons, as well as recommendations for the ratification of the SALT II Treaty, the NAC issues discussed by the Committee on Disarmament have presented no immediate prospect of agreement on specific measures. That is not to deny that NAC issues exist that would be amenable to rapid negotiation. For instance, the Indian delegate to the Committee, Ambassador A.P. Venkateswaran, regarded the following items as falling within that category -

(i) a complete and immediate freeze on the deployment of new types of nuclear weapons and their means of delivery, (ii) a complete and immediate halt to the replacement of existing missiles, aircraft and other nuclear delivery vehicles by new and modernized versions, (iii) a ban on the increase of the megatonnage of existing nuclear warheads, irrespective of the delivery vehicle on which they are mounted.  

Negotiating stages usually proceed from the general to the particular, and each stage is of importance towards the achievement of the ultimate goal. However, the greatest political resistance tends to occur towards the final steps, including agreement on all of the elements of a treaty and their incorporation into a binding instrument. There can be input from sources outside the United Nations regarding acceptable opinion.
formulations at all stages of the NAC negotiating process, from the identification of the general concepts to concurrence about blanket obligations and, finally, the elaboration of specific measures.

The sequence of such negotiations consists of:

(a) Agreement on the scope of the subject matter and the need to take international action with respect to it; among the crucial NAC topics still at the stage of general principle was the suggestion for an agreement to prohibit the further flight-testing of strategic delivery vehicles. While agreement was not even reached on the desirability of imposing a prohibition of this activity, it was pinpointed as an issue worthy of intensive negotiation.

(b) The identification of conflicting interests and outlooks; for example the negotiation on affective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons revealed eight distinctive stand points.

(c) The elaboration, in increasingly more detail, of the scope and consequences of the proposed NAC agreement; for example the negotiation on the prohibition of radiological weapons examined the detailed implications of the proposed Treaty.

(d) Resolution of the areas of disagreement by compromise, the introduction of new machinery provisions, and narrowing of the topic to exclude irreconcilable clauses; for example, negotiations to overcome the
outstanding impediments to the conclusion of on a CTB.

Negotiations in the Committee confirmed that the NATO and Warsaw Pact countries persist in their different approaches to the measures to be adopted for the halting of the nuclear arms competition, although the positions are not diametrically opposed. For instance, the Western States favour an agreement for the cessation of production of fissionable material for weapons purposes. The Soviet Union and other Socialist States would prefer wide-ranging negotiations on ending the production of all types of nuclear weapons and gradually reducing their stockpiles until they have been completely destroyed. The Non-aligned States pressed the Committee to establish a further ad hoc Working Group to undertake intensive negotiations on those specific topics, as well as on additional subjects, such as concrete measures for the prevention of nuclear war and an examination of the doctrines of nuclear deterrence.

A major problem confronting the international community on the subject of the cessation of the nuclear arms race, including the prevention of nuclear war breaking out in the short term, and doctrines of nuclear deterrence delineating long term R and D policies, is that these matters are effectively in the hands of the Superpowers. Irrespective of the theoretical equality of States, it is universally acknowledged that, in practice, the choices lie with the United States and the Soviet Union.
The immutability of this situation in the foreseeable future has given rise to two theoretical corollaries; firstly, it is asserted that the greater potential to cause nuclear war by the Superpowers has to be accompanied by their commensurately greater responsibility towards mankind; and secondly, that bilateral processes to this end are the legitimate concern of all other States, because third parties are affected by those processes. During the debate it was emphasized by delegates that, while bilateral and NAC issues were primarily the responsibility of the States concerned, the nuclear arms race has universal implications and is therefore an appropriate subject for multilateral negotiation in all its aspects. Ambassador Venkateswaran of India put it this way –

Today the worsening state of confrontation among the major Powers makes it even more necessary for the non-aligned and neutral countries to play an active role in the prevention of a nuclear war and the negotiation of urgent measures of nuclear disarmament. This would be in the obvious interest of the major Powers and their allies themselves just as it would be in the interest of the non-aligned and neutral countries.  

Contribution by other States to the process for NAC between the Superpowers in the SALT related negotiations has not been excluded from the area of competence claimed by the Non-aligned States for themselves. It is noteworthy that the subject matter of the SALT-related treaties in Table II, concerns only weapons possessed by the Soviet Union and the United States, and does not name or directly involve any third State. Therefore, with reference to the principles of international law, the proposition that third parties have an interest in the
negotiations, merely because they could be incidentally affected, is a novel one. It is an area where theory may have to yield to the exigencies of technological change. As the Group of 21 commented in a Statement to the Committee -

...all nations, nuclear and non-nuclear alike, have a vital interest in measures of nuclear disarmament, because the existence of nuclear weapons in the arsenals of a handful of Powers directly and fundamentally jeopardizes the security of the whole world.43

The Statement further asserted that, "a nuclear war would affect belligerents and non-belligerents alike".44

Finally, the Non-aligned States making up the Group rejected as "politically and morally unjustifiable that the security of the whole world should be made to depend on the state of relations existing among nuclear-weapon States". It was therefore recommended that the Committee set up an ad hoc Working Group to commence "multilateral negotiations on questions of vital interest to nuclear and non-nuclear-weapon States alike", as follows -

(i) the elaboration and clarification of the stages of nuclear disarmament envisaged in paragraph 150 of the Final Document including identification of the responsibilities of the nuclear-weapon States and the role of the non-nuclear-weapon States in the process of achieving nuclear disarmament;

(ii) clarification of the issues involved in prohibiting the use or threat of use of nuclear weapons, pending nuclear disarmament, and in the prevention of nuclear war;

(iii) clarification of the issues involved in eliminating reliance on doctrines of nuclear deterrence;

(iv) measures to ensure an effective discharge by the CD of its role as the single multilateral negotiating body in the field of disarmament and in this context its relationship with negotiations relating to nuclear disarmament conducted in bilateral, regional and other
Nevertheless, the substantive issues of the SALT negotiations were not canvassed, nor was there a move to apportion culpability between the Superpowers for the arrest of the SALT process. The declaration of the principle of a universal right to involvement in the limitation of strategic arms seemed to be intended more as an intimation of positions to be adopted in the future, should the negotiating hiatus continue, than as a signal of imminent international intervention in the bilateral process.

D. Assurances to Non-nuclear-weapon States:

The ad hoc Working Group on effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons, has made only modest headway towards its goal of attaining agreement on a common formula that could be included in an "international instrument of a legally binding character." 47

In Chapter II it was suggested that, in the absence of a first strike capability, the practical assurances against first use of nuclear weapons are a fear of retaliation by a nuclear power and/or a universal coalition against the culprit Government, possibly including some of its own citizens. It was also suggested that condemnation could only be avoided if the weapons were used defensively, to escape from an
overwhelmingly adverse situation not brought about by the user's own actions.

Although it is not stated in these frankly pragmatic terms, the objective of assurances to non-nuclear-weapon States is to circumscribe, with the greatest possible accuracy, those extraordinary situations when the use of nuclear weapons may be excused and, by a process of elimination, to declare all other possible uses of the weapons to be heinous crimes against humanity. Hence, even the defensive use of nuclear weapons is to be outlawed in most situations.

Both positive and negative security assurances are contemplated. Globally, the most significant positive security assurance was given by the Soviet Union, the United Kingdom and the United States, in Resolution 255(1968), jointly sponsored by them in the Security Council, whereby they undertook to extend immediate aid to any non-nuclear-weapon State attacked or threatened with nuclear weapons. Negative security assurances to the non-nuclear-weapon States have been given by all of the nuclear-weapon States during SSD I and again presented to the Committee on Disarmament in 1980 as follows—

**China:** Complete prohibition and total destruction of nuclear weapons are essential for the elimination of nuclear war and nuclear threats. We are aware that its realization is no easy matter. This being the case, we hold that the nuclear-weapon States should at least undertake not to use or threaten to use nuclear weapons against the non-nuclear-weapon States and nuclear-free-zones. On its own initiative and unilaterally, China long ago declared that at no time and in no circumstances would it be the first to use nuclear weapons.
France: To negotiate with nuclear-free zones participants in order to contract effective and binding commitments, as appropriate, precluding any use or threat of use of nuclear weapons against the States of these zones.

Soviet Union: To offer a binding commitment in a new international convention not to use or threaten to use nuclear weapons against non-nuclear States parties to such a convention which renounce the production and acquisition of nuclear weapons and which have no nuclear weapons in their territory or under their jurisdiction or control, and to consult whenever any party to the convention has reason to believe that the actions of any other party are in violation of this commitment.

The Soviet Union, for its part, wishes to state as emphatically as it can that we are against the use of nuclear weapons, that only extraordinary circumstances, only aggression against our country or its allies by another nuclear Power, could compel us to have recourse to that extreme means of self-defence. The Soviet Union is doing and will do all in its power to prevent the outbreak of a nuclear war and to protect the peoples from becoming the victims of nuclear strikes, whether initial or retaliatory. This is our steadfast policy, and we shall act in accordance with it.

I wish also solemnly to declare that the Soviet Union will never use nuclear weapons against those States which renounce the production and acquisition of such weapons and do not have them on their territory.

United Kingdom: Not to use nuclear weapons against States which are parties to the Non-Proliferation Treaty or other internationally binding commitments not to manufacture or acquire nuclear explosive devices except in the case of an attack on the United Kingdom, its dependent territories, its armed forces or its allies by such State in association or alliance with a nuclear-weapon State.

United States: Not to use nuclear weapons against any non-nuclear-weapon State party to the Non-Proliferation Treaty or any comparable internationally binding commitment not to acquire nuclear explosive devices, except in the case of an attack on the United States, its territories or armed forces or its allies by such a State allied to a nuclear-weapon State or associated with a nuclear-weapon State in carrying out or sustaining the attack.

The diversity and imprecision of the undertakings should be noted. For example, not being "the first to
use nuclear weapons", as undertaken by China, is ambiguous. It could relate to a conflict at a particular time and place with a specific enemy, or to a region, or the whole world. Would China's undertaking preclude the use of nuclear weapons by that country after such weapons had been used in a broad conflict beyond China's borders? Strictly speaking, having been used on Hiroshima and Nagasaki, "first use" of nuclear weapons is no longer possible.

The undertaking by the Soviet Union is also ambiguous in several ways, for example, by the failure to enumerate or to define that country's allies, and by referring to countries that do not have nuclear weapons "on their territory", without elaboration. It is not clear whether the latter exception refers only to countries with permanent nuclear bases or also to those with communications centres or providing refuelling or other temporary facilities to craft armed with nuclear weapons.

Notwithstanding some uncertainties, the Chinese and Soviet negative security assurances regarding the use of nuclear weapons are more extensive and definite than those given by the other nuclear-weapon States. The large land areas and commensurate conventionally armed military forces possessed by the Soviet Union and China, could be contributing factories making the more stringent undertakings feasible.

By comparison, the undertakings given by the United
Kingdom and the United States are even less predictable because they countenance the use of nuclear weapons, not only in defence of undefined allies, but also of the armed forces of those nuclear-weapon States wherever they may be in whatever capacity. Furthermore, that right is reserved irrespective of the entirely non-nuclear status of the adversaries against whom the weapon is to be used, provided they are "associated" with a nuclear-weapon State. In accordance with the terms of these undertakings, the use of nuclear weapons would have been permissible during the Korean and Vietnam wars while United States troops were engaged in military action on the territories of those countries.

The statement made by France does not amount to any kind of undertaking to exercise restraint in the use of nuclear weapons. It is merely an indication of willingness to conduct negotiations with members of nuclear-free-zones. At present these only exist in Latin America and Antarctica, the two continents in respect of which France has already entered into treaty obligations to refrain from the deployment or use of nuclear weapons.

Nuclear-weapon States have, in effect, undertaken to refrain from the use of nuclear weapons aggressively and, by implication, in some situations of self-defence. As the distinction between aggressive and defensive situations is not always obvious, an explicit undertaking not to use nuclear weapons defensively, except in clearly defined extreme circumstances, could have a genuinely restraining
effect, especially on the use of tactical nuclear weapons.

Prohibition of aggression and permission for self-defence are already provided for in the Charter of the United Nations. Article 2, requires States to abjure "the threat or use of force against the territorial integrity or political independence of any State", while Article 51, guarantees "the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations".

The Committee on Disarmament established an ad hoc Working Group in 1979, to consider security assurances to non-nuclear-weapon States. Since SSD I, three basic attitudes to the issue have emerged. The first was put forward by the Soviet Union in a draft Convention, with operative provisions in Articles I and II, as follows -

Article I

The nuclear-weapon States Parties to this Convention pledge themselves not to use or threaten to use nuclear weapons against non-nuclear States Parties to this Convention which renounce the production and acquisition of nuclear weapons and which have no nuclear weapons in their territory or anywhere under their jurisdiction or control, on land, on the sea, in the air or in outer space.

Article II

The obligations set forth in Article I of this Convention shall extend not only to the territory of non-nuclear States Parties, but also the armed forces and installations under the jurisdiction and control of such States wherever they may be, on land, on the sea, in the air or in outer space.

An alternative formulation of the draft Convention was proposed by Pakistan in the following terms -
Article I

The nuclear-weapon States Parties to this Convention, as a first step towards the complete ban on the use or threat of use of nuclear weapons, pledge themselves not to use or threaten to use nuclear weapons against non-nuclear-weapon States not parties to the nuclear security arrangements of some nuclear-weapon States.

This undertaking is without prejudice to the obligation of States Parties to this Convention arising from treaties establishing nuclear-weapon-free zones.

Article II

The nuclear-weapon States Parties to this Convention also undertake to avoid the possibility of the use or threat of use of nuclear weapons in any contingency and to achieve nuclear disarmament, resulting in the complete elimination of nuclear weapons, in the shortest possible time.

As in the individual security assurances given by the five nuclear-weapon States, restraint in defensive use is tacitly implied in both drafts, but neither draft acknowledges this explicitly. It is noteworthy that similarly non-specific formulations are used in other existing and proposed treaties to ban the use of certain weapons, including biological, chemical, radiological, and excessively harmful conventional weapons. The difference is that, in those instances, the destruction of all militarily significant stockpiles of weapons is contemplated, guaranteeing their non-use in any circumstances, whereas that is not the case with respect to nuclear weapons.

During negotiations, Western States did not favour a multilateral convention of any kind, on the ground that the diversity of the security requirements of the various nuclear and non-nuclear-weapon States would make the
operation of any convention inequitable. Concurrently with that position, the Western view has been that the solemn undertakings by States as unilateral declarations carry a genuine, if undefined, element of binding force. In the words of the United States, the individual pledges made at SSD I, "represent an immediately effective measure of security for the non-nuclear-weapon States".55 A Working Paper presented by the United Kingdom in April 1981, claimed that its undertaking, as confirmed at the second NPT Review Conference, was "fully in force". The submission of the United Kingdom added that -

Much of the discussion about security assurances has been concerned with the possibility of making them "legally binding"... In these circumstances attention has focussed on the possibility of enhancing the political status of the various assurances given by Nuclear-Weapon States. The United Kingdom doubts the need for any such enhancement of its own assurance since it already regards it as a solemn undertaking.56

Ruling out the possibility of a generally acceptable world-wide treaty, the Western States proposed as a gesture of compromise, that the pledges made by the nuclear-weapon States in the course of SSD I should be incorporated into a General Assembly resolution, in order to formalise them in an internationally recognised manner. As this approach to internationally binding agreements was not acceptable to the Non-aligned and Socialist States, the issues remained unresolved.

A strictly legal evaluation of this dispute would be misleading. The point of contention was not the principles of law as to what constitutes a binding international agreement, or whether States genuinely
regarded themselves, as they claimed, to be obligated to observe an undertaking given in one or other form. The essence of the difference of opinion concerned the establishment of a common formula that would greatly alter, in favour of the non-nuclear-weapon States, the substance of the undertakings already given. It may be unfortunate with respect to the development of international law, that the motivations for the dispute were not spelled out and separated from the legal principle that was casually invoked.

During negotiations it was agreed, in general terms, that non-nuclear-weapon States should be assured against the use or threat of use of nuclear weapons. Significant headway was made with the identification of two main questions regarding the application of the proposed arrangements:

(1) the criteria for extending the undertakings; and
(2) the exceptions in the undertakings associated with the right of self-defence.

The Group made significant progress, from general to particular concepts, when it differentiated between the basic elements of several negotiating positions. The analysis highlights the fundamental differences, as well as the many uncertainties, contained in the security assurances offered individually by the nuclear-weapon States. The alternative elements extracted from the undertakings in 1980 were -

- pending nuclear disarmament, a complete prohibition on the use of nuclear weapons;
- the extension of arrangements, pending a complete
prohibition on the use of nuclear weapons, to all non-nuclear-weapon States without any condition or limitations;

- the extension of arrangements to all non-nuclear-weapon States which were not parties to the nuclear security arrangements of some nuclear Powers;

- the extension of arrangements to States which renounce the production and acquisition of nuclear weapons and which have no nuclear weapons on their territories or under their jurisdiction or control;

- the extension of arrangements to non-nuclear-weapon States parties to the Non-Proliferation Treaty or any other comparable internationally binding commitment not to acquire nuclear explosive devices;

- the extension of arrangements to non-nuclear-weapon States parties to a nuclear-weapon-free zone.  

During 1981 another two elements were differentiated and the formulations were expanded. In view of the demonstrably incompatible positions that emerged, it became necessary to consider the possibility of interim arrangements. An effort to narrow the gap between the varying positions led to a proposal for the Security Council, on the recommendation of the General Assembly, to adopt concrete measures for the assurance of non-nuclear-weapon States. Neither this, nor any other compromise suggestion has been acceptable to all power blocks. The most favourable assessment of the negotiation was made by Ambassador Saw Hlaing of Burma, who stated that -

In an effort to find [such] a common formula or approach, the Ad Hoc Working Group, under the chairmanship of Minister Ciarrapico of Italy, has mobilized all its negotiating power to reconcile different formulations into a cohesive one that would be acceptable to all.

By the end of 1981, although important progress had been made in identifying the points of agreement and disagreement, the terms of a universally acceptable
convention could not be formulated, nor could the several unilateral undertakings be given a universally acknowledged legal character.

E. A Comprehensive Programme of Disarmament:

When first formulated, this topic was envisaged as a long term agenda for the negotiation of arms control issues. It consisted of the restatement of NAC priorities that had already been identified in the Final Document and had been re-evaluated, without any substantial changes, by the Disarmament Commission during its 1979 Session. The substantive issues had also been elaborated, once more, in a Draft Declaration designating the 1980s as the Second United Nations Decade on Disarmament. Nevertheless, the Committee on Disarmament set up an ad hoc Working Group to prepare a text.

Subsequently, it was decided by the Preparatory Committee for SSD II, that adoption of the Comprehensive Programme was to be the cornerstone of deliberations at the Special Session. As a consequence, during 1981, the subject was addressed with renewed vigour, as indicated by the 41 working papers submitted on the Comprehensive Programme of Disarmament to the Committee on Disarmament during 1981, in addition to the official documents presented to the Committee. 60

While the submissions contain many variations of the general theme, there was no change in the consensus, repeatedly reiterated in 1980 and 1981, that the Final
Document agreed to at SSD I should form the basis of the Comprehensive Programme, and that there should be no departure from its terms. For example, in the draft submitted by Australia, Belgium, Federal Republic of Germany, Japan and the United Kingdom, it was noted that -

The present draft is based on the Final Document of the First Special Session of the General Assembly devoted to Disarmament, in which the Comprehensive Programme was outlined as encompassing all measures thought to be advisable in order to ensure that the goal of general and complete disarmament under effective international control becomes a reality, and on the Elements of a Comprehensive Programme of Disarmament which have been adopted by the Disarmament Commission. The draft reflects in particular the discussions and negotiations held so far in the Committee on Disarmament and the report of the Ad Hoc Working Group on the Comprehensive Programme.

The submission of the Group of 21 on the principles to be embodied in the Comprehensive Programme, assumed as axiomatic that all the principles contained in the Final Document would be included, adding that, "even those that are not to be found in the Final Document but which may be found appropriate", should be included.

The Socialist States have also maintained a similar position, as stated at the inception of negotiations on the Comprehensive Programme in the Committee by the delegate of the Soviet Union, Ambassador V.L. Issraelyan. He said -

The Soviet delegation considers, as previously, that in the elaboration of a comprehensive programme of disarmament, States must above all adhere unswervingly to the provisions contained in the Final Document of the special session of the General Assembly devoted to Disarmament and in the Commission's report, and must strictly comply with the balanced formulations which, as we all recall, were arrived at with such great difficulty.
As the Comprehensive Programme, by definition, encompasses all NAC programmes, the discrepancy in proposed formulations of the document under consideration was to be expected. However, the area of most acute contention has been the binding character of the undertaking to be attributed to every State prepared to adopt the text. Many of the States that consented to the Final Document at the conclusion of SSD I, advised the Working Group that they regarded more concrete undertakings, as to the treaties into which they would be prepared to enter in the future, to be impractical. In particular, they objected to the proposal put forward by developing States, that rigid time frames should be set for the completion of the various phases of arms control.

The arguments presented had not persuaded the States belonging to the Group of 21, by the time the Committee rose prior to the commencement of the 36th regular Session of the General Assembly, when the original demands were restated in the following terms -

The Group of 21 attaches considerable importance to the adoption of the Comprehensive Programme of Disarmament at the second special session of the United Nations General Assembly devoted to disarmament. To be meaningful, the Programme must contain concrete disarmament measures in defined stages leading to the ultimate [goal] of general and complete disarmament within an agreed time frame. In accordance with provisions of paragraph 38 of the Final Document which refers, inter alia, to the negotiation of a treaty on general and complete disarmament, a Comprehensive Programme of Disarmament should create obligations on the part of all States to implement the measures included in the Programme. 64

There is no possibility of the Western States
entering into a treaty, or even consenting to a declaration, which requires them to undertake international obligations the terms of which have not been settled. In the domestic jurisdictions of those States, a contract to enter into further contracts that are only vaguely defined in character, would be adjudged void or voidable on account of uncertainty. Indeed the proposition to impose rigid time frames on negotiations runs counter to every known principle of law, domestic and international, because it seeks to make legal entities responsible for events that are, at least in part, beyond their control.

Evaluation of the Committee's Norm Creating Role

Despite frequent references in the Committee to the legal nature of its undertaking to create internationally binding agreements, the formulation of relevant legal principles has been invariably vague, and often subordinated to the exigencies of a particular advantage sought.

The problem has arisen with each major topic discussed. For instance, during negotiations on radiological weapons, the rules of treaty interpretation with respect to the definition of the weapons were disregarded. Concerning the cessation of the nuclear arms race and nuclear disarmament, the existence of any rights of non-nuclear-weapon States to become involved in treaties only applicable to nuclear-weapon States, remained unresolved. In the case of assurances to non-nuclear-weapon States, the "binding" nature of
unilateral undertakings - made at international conferences, in Security Council resolutions, or incorporated into General Assembly declarations - was not determined. In connection with a comprehensive programme of disarmament, the Committee failed to face up to the legal implications of attempting to impose time frames on negotiations.

With respect to a CTB, a legal approach to a non-legal matter could have been beneficial. As it was, no attempt was made to determine the degree of certainty required to amount to an "adequate" level of verification, although this was the issue said to prevent agreement. There can be little substance in an agreement if there is no possibility of discerning whether or not its terms are implemented. Yet, if the certainty of instant discovery of every possible breach is to be the criterion of adequate verification, then the possibility of further NAC agreements can be dismissed. It would be appropriate, therefore, to delineate the approximate requirements of adequate verification of an agreement.

It is worth noting that the above issues have not been widely discussed by international lawyers beyond the United Nations, which indicates a dichotomy between the theory and practice of international law regarding NAC. Lack of concern to pursue a consistent approach to international law by NAC negotiators, is matched by a corresponding absence of interest by international lawyers to enquire into the legal implications of ongoing NAC negotiations. There are no doubt substantial justifications for this tendency. One reason could be
the fragile quality of international discourse on military matters, and the resulting need to put civility and tact ahead of precise formulations that could expose questionable motives too pointedly.

Being the only multilateral negotiating body on arms control, the Committee is a microcosm, burdened with all the problems associated with NAC in the context of a divided world. The prevailing ethos in the Committee is predicated on the interests of power blocks, primarily those of NATO, the Warsaw Pact States and Non-aligned. Negotiating patterns reveal the presumption by each power block that any negotiating position acceptable to the others is likely to be disadvantageous to itself. Whatever sense there may be of common purpose, to escape the physical danger and economic and social burdens posed by the nuclear arms race, appears to be outweighed by the presumption of implacable hostility. This could be the paramount reason why the rate of negotiations is so slow.

The distrust between States is compounded by the technical complexity of the issues being negotiated. Neither concessions nor demands can be readily evaluated in their true colours. Even relatively simple issues, such as the proposal for the cessation of the manufacture of fissionable materials for weapons purposes, can be interpreted by the adversary block to be an excuse for gathering military intelligence under the guise of verification. Alternately, sweeping proposals for halting and reversing the nuclear arms race are looked
upon as mere propaganda, designed to weaken the resolve of other peoples to defend themselves.

Concurrently with the above difficulties, cooperation between the Superpowers, as in their joint attempts to inhibit horizontal proliferation, or to conclude a treaty on radiological weapons, is immediately under suspicion by the Non-aligned, who fear a conspiracy against themselves by the militarily and economically powerful North.

Many difficulties can also be traced to internal communications problems shared by legal and technical experts in their contacts with policy-makers within their own countries. Legal analysis of international problems tends not to probe beyond the persona of the State. It is assumed that States conduct themselves in their own best interests vis-a-vis other States, on the basis of adequate knowledge and foresight. While not necessarily acting for the benefit of all their citizens, it is also taken for granted that at least the welfare of Governments in power and their supporters are well served. These assumptions are not invariably correct with respect to nuclear arms policies. In reality, the inflexibility of the one party system, preoccupation with domestic politics in the Western democracies, and the absence of stable government prevalent among developing States, prevent administrations from fully utilising expert advice available on NAC issues that could best serve their long term interests.
The most difficult stance for any State to adopt in the long term interests of its people, is to make a magnanimous gesture in its day to day relations with other States. On the other hand, if all of the abovementioned problems were to be overcome and one of the power blocks, or individual States, were to make an unequivocally generous NAC gesture, it could well be interpreted by all other States as a sign of fear and weakness, to be exploited with more stringent demands, or even covert threats.

Concerning a somewhat analogous case already adverted to, when concessions were repeatedly made by one side, each concession was greeted by a further objection. In that case, for a period of many years, a Comprehensive Test-Ban was ruled out by the United States on the grounds that the Soviet Union refused to permit on site inspections; to include peaceful nuclear explosions in the proposed treaty; to co-operate in a seismological network to monitor nuclear explosions; and because the Soviet Union required that all nuclear-weapon States take part in the agreement from the outset. Having conceded all of those issues, albeit gradually, to the satisfaction of Western arms control experts, the United States and the United Kingdom are still unwilling to end nuclear weapons tests on the ground that verification procedures are not absolutely foolproof.

Conversely, States often adopt extreme negotiating positions with the intention of subsequently making apparent concessions regarding matters that should have
been conceded at the outset. Apropos to the abovementioned case, the United States and the United Kingdom could assert that objections to its various demands over the years were unjustified from the outset.

These difficult circumstances, reinforce the short term interests of States to equivocate and to delay decisions. Although the postponement of NAC decisions may be inimical to the long term interests of States, the short term interests usually prevail. It was probably in recognition of the lack of short term incentives for NAC that prompted Ireland, in a submission to SSD I, to propose that such incentives be deliberately devised.65

Based on the analogy of the manner in which societies maintain cohesion within the State, Ireland's approach was very apt. The measure of success in any area of endeavour tends to correlate with the extent to which long term interests can be equated with short term satisfactions. For instance, within States, rewards are given to young people long before they are able to contribute productive work. Incentives are given to industry to establish export outlets, and honours are awarded to those who perform tasks that are especially valued by society. The perpetuation of national entities is not only the result of sanctions and commands administered by the sovereign, as Austin postulated,66 nor imposed by the rest of society. On the contrary, most importantly, the State offers its citizens a series of immediate benefits.
It could well be, that all of the formidable problems associated with speedy conclusion of NAC agreements would be overcome if adequate short term rewards for doing so could be devised. The proposal for direct diversion of a proportion of funds earmarked for armaments to the needy people of the world, especially in the developing countries, which was the cornerstone of the Irish proposal, has the disadvantage that the benefit would go to those who have the least influence in halting the nuclear arms race. Thus, the persuasive influence of the scheme, which has been reiterated many times by other States, has proved to be insufficient.

While there are immediate benefits to be derived from the promotion of friendly relations between States within each of the power blocks, at the inter-block level the stigma of being lenient with a perceived enemy evidently outweighs other considerations from the individual statesman's point of view - at least in most countries. States that have been active in NAC endeavours, in keeping with long term rather than short term interests, like Austria, Mexico, Nigeria, Romania, Sweden and Yugoslavia, have been given the honour of frequently having their nationals elected to sensitive posts in the NAC negotiating process, such as chairmen of working groups, conference preparatory committees, ad hoc committees etc. But these distinctions are clearly not sufficiently rewarding to induce the overwhelming majority of States to make greater efforts in the NAC field.
Although, judged by historical standards, the Committee on Disarmament has made a notable impact, it has failed to live up to the high expectations that accompanied its foundation, even if the intangible benefits to be derived from its mere existence are taken into account. For instance, the contribution of the Committee cannot be adequately assessed on the basis of its formal meetings alone, because that gives no credit to initiatives taken at informal, exploratory negotiations. During 1980, for example, the Committee held 45 informal meetings regarding which no formal records are publicly available.

Another intangible function performed by the Committee is to consolidate world opinion for the retention of NAC agreements already in existence. This was pointed out by the delegate of Australia, Ambassador R.A. Walker, who, while acknowledging the limitations imposed on the Committee resulting from "the current international situation", asserted that the work of the Committee was "more important than ever". He regarded it as a positive achievement of the arms control process that, despite international stresses -

\[\text{The edifice of international disarmament agreements built up over the previous decade survived and there was, moreover, a widespread reaffirmation of these existing agreements.}\]

All of the above factors have to be taken into account when evaluating the Committee's performance. They can also throw light on why, for example, the size of delegations and supportive staff accorded to the
Committee are disproportionately small compared with the gigantic task they are required to perform, and why blatant obstruction by some States has been tolerated.

During 1980 obstruction and delay in the work of the Committee mainly took the form of extended procedural interventions. The adverse consequences of this have been partly countered by delegating most of the substantive work of the Committee to ad hoc Working Groups. The additional delegation of most procedural matters to a further working group, or to a subcommittee, could go a long way towards making the Committee more effective than it is. As the delegate of Mexico, Ambassador A. Garcia Robles, pointed out -

The lengthy discussions in the Committee this year, on the question of requests for participation received from States not members of the Committee have resulted in a deplorable loss of time which has had a very harmful effect on the substantive negotiations which should constitute the principal function of this multilateral negotiating body on disarmament.

Of course, improved staffing and better machinery provisions could not, in themselves, improve the Committee's performance in the face of widespread determination to stall its work. However, at a time of mere hesitation and vacillation, the prevailing conditions and procedures of work could have a strong influence on the rate and content of NAC negotiations. In those circumstances, under sound procedural conditions, any deliberate obstruction would have to be in blatant opposition to the great majority, which is a stance that States generally try to avoid at the United Nations.
Probably as the result of loss of face by the States mainly responsible for the administrative delays in 1980, this problem was largely overcome in the course of the following year. However, it has been widely acknowledged that during 1981, the Committee's work was seriously impaired by what was referred to as "the adverse trends in the international situation", which prevented significant progress in negotiations on most items on the agenda, "especially the items to which the United Nations General Assembly has accorded the highest priority".

At the commencement of the Committee's 1981 session, the approach by Western medium Powers was to advocate modest but readily achievable goals. The Canadian delegate, Ambassador D.S. McPhail, observed that...

...the Committee on Disarmament does not work in a vacuum, but is influenced by the international environment... We should therefore limit our objectives to realistic proposals lending themselves to items where prospects of agreement are high or where we have reasonable chances of achieving consensus. Only through registering progress can we be confident that the credibility of the CD will be strengthened.

The Socialist view coincided with those sentiments, as advanced by the delegate of the German Democratic Republic, Ambassador G. Herder, saying...

Mr Chairman, never before has the responsibility that rests with the Committee on Disarmament, as the single multilateral forum for disarmament negotiations, been so apparent as now in view of the complicated and aggravated international situation. The delegation of the German Democratic Republic believes that the Committee should make more vigorous efforts now to achieve tangible progress at least on the most important issues on its agenda.

Yet, by the end of 1981, failure to reach agreement on the contents of any NAC treaty or protocol, demonstrated the limitations of the Committee's influence.
Notes

1 The International Law Commission has not been directly involved in norm creation for NAC. Regarding international norm creation in other (some related) subject areas, see Review of the Multilateral Treaty-Making Process A/35/312/Add.2 of 28 August 1980.

2 Refer to n.1.

3 E.g. Ohlin, Göran, "Can World Order be Negotiated?" The Spirit of Uppsala (JUS 81) Manuscript No. 42 p.10 - "It is undeniable that personal qualities matter greatly in international negotiation. In postwar development cooperation the vitality, determination, and charisma of some outstanding personalities is recognized to have been of decisive importance in overcoming the inertia of governments and rallying them to greater commitments in the joint interest."


6 Id. pp.12-15.


12 A/35/257.


15 Conclusion reached in the study on a Comprehensive Nuclear Test-Ban A/35/257 para.154, endorsed by many States including Sweden, as stated by delegate to the Committee on Disarmament, Ambassador I. Thorsson - "We are convinced, however, that the means of verification in relation to nuclear tests that exist now are fully adequate to police a three-year moratorium." CD/PV.101 of 3 February 1981, p.26.

16 Tripartite Report to the Committee on Disarmament CD/130 of 1980.
17 CD/150 of 12 February 1981.
18 CD/210 of 12 August 1981.
19 Id. p.3.
20 As a preliminary step, the Canadian delegate to the CD suggested that China and France might sign the Partial Test-Ban Treaty, CD/PV.156 p.11 of 1982.
30 Id. p.18.
31 Id. p.13.
33 Id. p.13.
34 Id. p.19.
37 CD/174 of 7 April 1981.
38 The attention of the CD was drawn to the work of the ICDSI by Mexico, in CD/143 of 11 February 1981 and CD/188 of 17 June 1981.
40 CD/90 of 1980.
The resolution was adopted by 10 votes to none, with 5 abstentions - with operative paragraphs as follows:

"1. Recognizes 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 weapons are used;

3. Reaffirms in particular the inherent right, recognized 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."

Infra Chapter VII, "Generally Accepted Principles of International Law".
60 CD/217 of 17 August 1981.
61 CD/205 of 31 July 1981, p.2. (CD/CPD/WP.52)
64 CD/222 of 19 August 1981, p.3.
70 Ibid.
CHAPTER IV

NORM CREATION BY DELIBERATION FOR THE
CONTROL OF NUCLEAR ARMS

Multilateral Norm Creation for NAC by Deliberation

The distinction between seeking international agreement by negotiation, on the one hand, and deliberation, on the other, is rather fluid. The term "negotiation" carries a stronger inference of exploration to find common interests and of bargaining to reach a compromise, whereas the term "deliberation" connotes decision making with greater reliance on the force of numbers, or other authority, to overcome differences. Yet each function contains elements of the other.

In the course of establishing norms for NAC at the United Nations, the two functions are divided between the Committee on Disarmament, being the negotiating forum, and a number of other bodies, all of which are said to have deliberative functions. A submission by the United Kingdom to a United Nations Study on institutional arrangements relating to the process of disarmament, referred to the relationship between the two functions. The submission stated:

Deliberation on the political and security aspects of disarmament should be carried out in the established United Nations institutions: the First Committee of the General Assembly and the Disarmament Commission. In the view of the United Kingdom, discussions in the First Committee would be assisted by the introduction of a properly structured agenda; every effort could then be made to concentrate on achieving resolutions which would be directly helpful to the disarmament negotiations, and not merely declaratory statements.
There is also a demarcation of significance within the deliberative function. One type of NAC deliberation (a) is concerned with the establishment of international standards regarding the testing, deployment and use of given nuclear weapons. The other type of NAC deliberation (b) deals with the implementation of those standards in a way that can have exhortative, administrative or adjudicative overtones. Deliberative function (a) usually culminates in a resolution approving the elements of a proposed NAC agreement, say, a CTB Treaty. Deliberative function (b) could take several forms such as a resolution or declaration, calling on States to conclude a treaty in accordance with the agreed elements. Alternatively, it could involve setting up a subsidiary body to assist with NAC verification, for example an International Satellite Monitoring Agency. Or it could entail the adoption of an expert report apportioning the blame for a nuclear explosion contrary to the principles stated in the standard setting resolution (a).

Deliberative NAC functions for standard establishment and implementation overlap in the various United Nations bodies, and several, or all deliberative functions may be accomplished within the scope of one resolution. However, with the streamlining of United Nations activity, it could become necessary to formalise the distinctions, at least between (a) the standard establishing tasks in arms control, and (b) the standard adherence tasks. The United Nations bodies most involved
in norm creation by deliberation for NAC are the Disarmament Commission, the First Committee and the General Assembly.

The Disarmament Commission

Like the Committee on Disarmament, the Disarmament Commission was also reconstituted at SSD I, after its suspension as an active forum in 1965. In its earlier capacity it had the hybrid functions of negotiating and planning. On reconstitution, it has retained only its overall planning role, with representation from all State Members of the United Nations. While the Commission may utilise voting procedures for the resolution of differences among delegates, in conformity with the rules of procedure relating to the Committees of the General Assembly, in the words of the Final Document of SSD I, it was requested to make "every effort" to achieve consensus in its deliberations.

The Commission has the task, inter alia, of overall planning for NAC, yet it has marked time with repeated reiteration of disarmament priorities. During 1979 the Commission considered priorities under the heading of the "Elements of a Comprehensive Programme of Disarmament". In 1980 it did so, pursuant to a General Assembly directive, in the context of the elements of the Declaration of the 1980s as the Second Disarmament Decade.

In 1981 the Commission at last abandoned its regurgitation of the disarmament priorities already
successfully established during the course of SSD I, and concentrated on three other items largely unrelated to NAC. These were, the elaboration of a general approach to negotiations on conventional disarmament; the reduction of military budgets; and the general approach to the study on disarmament relating to conventional weapons. By the end of 1981, the Commission produced a Background Paper on principles and ideas with respect to the freezing and reduction of military expenditures. The Disarmament Commission Chairman also presented two Working Papers to the General Assembly, both in the form of guidelines relating to conventional disarmament.5

In its position of a disarmament norm creating body, so thoroughly overhauled as to be virtually a new organ, the Disarmament Commission has yet to find a useful niche. Its formal mandate is that of a deliberative body, subsidiary to the General Assembly, required to "consider and make recommendations on various problems in the field of disarmament".

Since its reconstitution, the Commission has laboured under a fourfold inhibition. It has been obliged to avoid infringing the domain of three United Nations bodies with similar but more specific mandates than its own. These were the Committee on Disarmament, the First Committee and the Preparatory Committee for SSD II. The Committee on Disarmament is charged with the conduct of all specific arms control and disarmament negotiations on a continuing basis. The first Committee debates
disarmament and arms control draft resolutions in preparation for their endorsement by the General Assembly. The Preparatory Committee for SSD II, a temporary body functioning during 1981-2, has had the task of collating the agenda for the Session, involving an overview of arms control and disarmament issues. Finally, the Commission had to avoid reopening controversies successfully settled at SSD I, which were negotiated at the time with extraordinary diplomatic skill, to the satisfaction of all concerned.

The reconstitution of the Disarmament Commission had been the result of pressure from the Third World for a disarmament forum where all States would be represented. States that did not expect to participate in the Committee on Disarmament were particularly adamant about the need for the Commission. At present, it is in reality an arms control forum in reserve. An NAC issue could arise at any time, ideally suited for preliminary investigation by the Commission before referral to the overburdened Committee on Disarmament.

The First Committee

This is one of the seven Main Committees serving the General Assembly. The First Committee is the most authoritative recommendatory body on NAC matters, preparing draft resolutions in the form of direct recommendations for consideration by the General Assembly. It does so on the basis of reports referred to it by the Committee on Disarmament, the Disarmament Commission, as well as several expert and procedural
reports of the Secretary-General, drawn up or processed by his Secretariat. The recommendations are almost invariably accepted by the General Assembly.

Many of the diplomats who participate in the work of the Committee on Disarmament, also attend the Sessions of the First Committee and the relevant General Assembly debates. Unlike the Committee on Disarmament, the First Committee is not restricted to agreement by consensus. However, the range of subjects discussed is very similar because, since 1978, the First Committee has been required to restrict the range of its deliberations to "questions of disarmament and related international security questions". Within the context of that mandate NAC is the Committee's chief preoccupation.

As part of its standard establishing functions, the First Committee prepared many recommendations during 1980 for the General Assembly on topics relating to NAC, including the following significant items -

- **Non-stationing of nuclear weapons on the territories of States where there are no such weapons at present** - requesting the Committee on Disarmament to elaborate an international agreement on the subject.

- **Study on all aspects of regional disarmament** - deciding to transmit a recent Expert Study on the subject to the Disarmament Commission and requesting the Secretary-General to refer the Study to the Committee on Disarmament.
Study on nuclear weapons - inviting regional intergovernmental organisations, the Specialised Agencies of the United Nations and the International Atomic Energy Agency, as well as national and international organisations, to make the report widely known.

Conclusion of an international convention prohibiting the development, production, stockpiling and use of radiological weapons - calling on the Committee on Disarmament to continue negotiations with a view to elaborating a treaty.

Prohibition of the production of fissionable material for weapons purposes - requesting the Committee on Disarmament to pursue its consideration and prohibition of the production of fissionable material for nuclear weapons and other nuclear explosive devices.

Strategic arms limitation talks - urging the two signatory States to ratify the SALT II Treaty and, in the meantime, to refrain from any act which would defeat the object and purpose of the Treaty, in conformity with the provisions of the Vienna Convention on the Law of Treaties; and expressing satisfaction that agreement had been reached on basic guidelines for subsequent negotiations on the limitation of strategic arms.

Further to the requirement, in Article 13 of the Charter, for the General Assembly to "initiate studies", the First Committee has increasingly devoted more attention to the commissioning of expert reports on NAC related issues. Generally that is done pursuant to the
recommendations of the Advisory Board on Disarmament Studies. This has become an effective aspect of the process of norm creation, by helping to overcome difficulties resulting from the complex and technical nature of NAC. From the time that the studies are first contemplated, the choice of the particular issues to be investigated, the formulation and presentation of the terms of reference, and the selection of representative and universally respected experts, all entail a high level of consensus with respect to the goals of NAC.

The reports themselves enjoy an excellent reputation, making both the factual and evaluative findings acceptable as common ground. Exceptionally influential expert reports on NAC in recent years have been the Study on a Comprehensive Nuclear Test-Ban, and the Comprehensive Study on Nuclear Weapons, both submitted to the 35th Session of the General Assembly. For example, the latter report was endorsed by the General Assembly as -

... a highly significant statement on present nuclear arsenals, the trends in their technological development and the effects of their use, as well as on the various doctrines of deterrence and the security implications of the continued quantitative and qualitative development of nuclear-weapon systems and also a reminder of the need for efforts to increase the political will necessary for effective disarmament measures.10

Such highly prized evaluations have proved to be effective launching pads for further agreement on NAC principles. The tendency was very pronounced at SSD I, where background papers, prepared largely by disarmament experts and co-ordinated by the Centre for Disarmament,
formed the basis for much of the ultimate consensus reached. The groundwork provided by the experts helps to make resolutions on NAC factually non-controversial and sound. Hence, the resulting consensus tends to be based on realistic expectations and is therefore more likely to have long term effectiveness.

As well as preparing the final drafts of resolutions containing NAC initiatives for approval by the General Assembly, standard adherence tasks are sometimes referred to the First Committee regarding the application and enforcement of NAC measures. The Committee's functions have not been prominent, in this regard, with respect to either vertical or horizontal proliferation. In the former case, compliance issues have been negotiated by the Superpowers directly or via the Standing Consultative Commission established for that purpose, while in the latter case, the two Review Conferences of the Non-Proliferation Treaty have been the major forums for compliance issues.

The potential of the First Committee for the initiation of measures to ensure compliance with NAC agreements was reinforced by a prolonged debate in the Committee, in December 1980. It concerned an arms control matter not associated with nuclear weapons, namely, compliance with the 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, which entered into force on 8 February 1928.
The debate concerned the appropriate methods to be employed for the verification of compliance with arms control agreements, in a manner equally relevant to all forms of arms control measures. The debate helped to circumscribe the parameters of United Nations competence for verification and enforcement, as well as to examine the modalities of any actions to be taken.

Positions adopted by the various States are particularly relevant to compliance measures for NAC, as four of the eight multilateral treaties listed in Table I specifically refer to United Nations assistance with compliance problems, while the other four treaties do not exclude United Nations involvement. Further, Non-aligned States assert, with increasing conviction, that even the bilateral treaties between the nuclear-weapon States are not immune from oversight by the United Nations, although neither the theoretical nor the practical implications of the principle have been examined beyond the proposition that anything that directly affects the peace and security of third countries is their rightful concern.

The Protocol under discussion relates to the use of chemical and bacteriological weapons, to be distinguished from the Draft Convention on Chemical Weapons, which refers not only to the use of such weapons but also to the research, development, manufacture, stockpiling and transfer of the weapons. The operative paragraphs of the Protocol provide that -
Whereas the use in war of asphyxiating, poisonous or other gases and all analogous liquids, materials or devices has been justly condemned by the general opinion of the civilized world,

Whereas the prohibition of such use has been declared in Treaties to which the majority of Powers in the world are parties,

And to the end that this prohibition shall be universally accepted as a part of international law, binding alike the conscience and the practice of nations,

The undersigned Plenipotentiaries, in the name of their Governments, declare that the high contracting parties, so far as they are not already parties to Treaties prohibiting such use, accept their prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration.

No provision is made in the Protocol for the establishment of machinery to investigate reports about the activities prohibited by it. In November 1980, Canada, France, the Federal Republic of Germany, the Netherlands, New Zealand, Norway, Turkey and Spain, sponsored a draft resolution in the First Committee requesting the Secretary-General to carry out an investigation, concerning "the alleged use of chemical weapons and to assess the extent of the damage caused by the use of chemical weapons".  

The allegations were referred to as "recent reports" of use of the weapons "in recent years", "in various parts of the world". It was contended in a preambular paragraph of the resolution that, "the continued authority of the Protocol and relevant rules of customary international law" required that all reports regarding alleged breach should be properly investigated,
notwithstanding the absence of verification clauses in the Protocol.\textsuperscript{14}

The investigation was to be carried out by the Secretary-General, a procedure that in practice means the United Nations Secretariat, to be aided by medical and technical experts. By the terms of the draft resolution, the Secretary-General was to collect and examine evidence, including on-site evidence, but only with the consent of the countries concerned. Information was to be sought from Governments, international organisations, and any other sources deemed "necessary" after consulting "the States on whose territories the use of chemical weapons has been reported", with reference to their proposals on how the investigation should be carried out. The precise aim of the investigation was to be the ascertainment of the facts regarding the allegations and the assessment of the extent of the damage caused. The Secretary-General was called on to submit a report on the matter at the following Session of the General Assembly.\textsuperscript{15}

The draft resolution was adopted with some amendments after a week-long debate, by 62 votes to 17, with 32 abstentions, the remaining States having refrained from participation in the vote. However, while the particular issue was thus settled, several important questions have remained undecided. The debate had been acrimonious and highly politicised, with much more attention devoted to scoring debating points than to constructing an enduring framework for promoting compliance with arms control agreements. In this connection the Mexican
representative, Ambassador A. Garcia Robles, remarked that "I do not believe we have had any topic which has been as controversial in all our deliberations and has given rise to such strong statements as this one".¹⁶

Nevertheless, some significant principles were advanced regarding, for instance, the circumstances in which alleged breach of arms control agreements should be investigated by the United Nations, and the most desirable form that such investigations should take.

The United States put forward the view that all "reports that cast doubt on solemn international agreements" should be investigated "to make certain that no accusations are made without solid foundation in fact and to clarify ambiguous situations..."¹⁷ Other Western States largely concurred with that point of view. For example, the United Kingdom supported the investigation of "numerous reports" of breach, in circumstances "where the facts cannot be ascertained through generally available information".¹⁸

France concurred that it was appropriate and necessary to conduct an investigation, because information existed "from various sources regarding the possible use of chemical weapons".¹⁹ Sweden also supported the investigation on the ground that, "in principle, every request from a State Member of the United Nations for clarification of the reality behind allegations of such a serious character" deserved support.²⁰ New Zealand, which introduced the proposal for an enquiry, similarly
took the position that it is necessary "to look into all reports of alleged use" of the prohibited weapons, and to conduct a "speedy" and "impartial" investigation by a "respected body".21

States that opposed the resolution contended that it would constitute a dangerous precedent to initiate an enquiry based on "so-called information of a more than dubious character",22 as stated by the German Democratic Republic. Even more scathingly, Viet-Nam referred to the evidence prompting the investigation to be "fables invented by the radio broadcasting service of the so-called Democratic Kampuchea..."23 In a similar vein, the representative of the Lao People's Democratic Republic accused the resolution's sponsors of seeking to set up the enquiry merely as an excuse for intervening in the internal affairs of States by the use of "unreliable information". He further contended that -

If they have been unable to name or identify the countries which are contravening the Geneva Protocol, with solid proof in support of the allegation, it would be entirely futile to spend any length of time on this draft resolution.24

Legal arguments opposed to the draft resolution were presented mainly by Non-aligned and Socialist States, stated in their most succinct form by Madagascar. The delegate of Madagascar claimed that "any violation of the Protocol should be referred to a conference of the contracting parties".25 It was argued that State participation in any treaty, more particularly a disarmament treaty, is substantially influenced by procedures to ensure compliance, and that therefore it is
unfair to change those procedures. Furthermore, even if the United Nations were to substitute new methods for the verification of complaints, Madagascar claimed that referral to a committee of enquiry would not be an appropriate method.

Elaborating this point further, the delegate referred to the verification and adjudication of complaints pursuant to the provisions of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, which was opened for signature in 1977. Madagascar found that to be a preferable method of investigation. In addition to the other disadvantages of the verification procedure proposed in the draft, Madagascar asserted that the "independence of the functions of the Secretary-General" would be placed in jeopardy if the Secretariat were required to conduct the enquiry, and that the procedure would establish an unfortunate precedent.

The representative of the Byelorussian Soviet Socialist Republic presented the main objection raised by Madagascar in the form of a general principle, stating that, "any question connected with the status of an international legal instrument is exclusively a matter for the parties to that instrument". That outlook, which is consistent with the Vienna Convention on the Law of Treaties, would exclude United Nations involvement altogether. However, the provisions of NAC treaties, as well as the predominant view presented at the debate, favour a United Nations role at some stages in promoting
arms control compliance, although there is no accepted procedure as to which organs should initiate or carry out the function.

In practical terms, an investigation by the Secretary-General with the aid of experts, at the request of the General Assembly, would not be very different from an investigation by the Security Council, having overcome the veto provisions of that body. The personnel engaged to conduct the investigation are likely to be the same and a report back to the General Assembly, instead of the Security Council, would not preclude the Security Council from taking any action flowing from the report.

Article 11(2) requires the General Assembly to refer any question on which action is needed to the Security Council. The meaning of "action", in this context, has been interpreted by the International Court of Justice to refer only to issues where enforcement is contemplated. In accordance with that Opinion of the Court, the General Assembly may set up "commissions or other bodies" in connection with the implementation of its recommendations on peace and security issues. The Court qualified the Assembly's competence to do so only to the following extent -

The functions of the General Assembly for which it may establish such subsidiary organs include, for example, investigation, observation and supervision, but the way in which such subsidiary organs are utilized depends on the consent of the State or States concerned.

While in accordance with Article 10, the General Assembly may discuss any issues, Article 11(3) especially
empowers the Assembly to "call the attention of the Security Council to situations which are likely to endanger international peace and security". The parallel provision with respect to the Security Council, in Article 34, empowers that body to investigate any dispute and to evaluate whether it poses a threat to peace and security.

Several Non-aligned States, among them both those that voted for the resolution, like Sweden, and those that abstained, like Mexico, voiced deep concern regarding the dearth of agreed principles, as well as machinery provisions, to cope with issues of the kind confronted in the debate. The representative of Sweden maintained, regarding the exchange that had just taken place in the First Committee that it was -

...shown beyond any doubt how well founded is the demand of the neutral and non-aligned countries for a strengthened complaints procedure in matters of this kind, so that what we have experienced here this year can be avoided in the future. 30

It may indeed be preferable that the mode of establishing any investigatory group on compliance matters should be predetermined by national vote, rather than left to decisions within the Secretariat, although such decisions are also made on the basis of international consensus. The ultimate discretion for all decisions of the Secretariat, which in theory rests with the Secretary-General, is usually not exercised by him personally. Decision-making bodies of the Secretariat are selected on the basis of equitable geographical distribution, taking into account major political
alignments. Due to their composition, those bodies tend to reflect national attitudes, notwithstanding the provisions of Article 100 of the Charter, prohibiting Governments from seeking to influence persons employed in the Secretariat.

Thus, the most important factor is not which body sets up the enquiry, but the existence of machinery provisions, and the acceptance of operating principles, on a permanent basis. If those provisions were to apply to appropriate NAC issues, it would preclude the exacerbation of disputes with conflicts over implementation procedures, whether they be the task of the Secretariat or of other organs of the United Nations.

The General Assembly

At its normal Sessions, the General Assembly predominantly acts as a rubber stamp to approve the NAC and other disarmament related recommendations of the First Committee. Its vast agenda, encompassing all the areas of endeavour of the United Nations, leaves little opportunity for substantive input with respect to NAC. However, the Assembly has an important role as publicist for the dissemination of information and advocacy of NAC related problems.

Resolutions of the General Assembly, as the apex of the United Nations norm creating system, have often laid the groundwork for NAC agreements. For example, the Partial Test-Ban Treaty was preceded by many General
Assembly resolutions on the subject, including resolutions 1648 (XVI) and 1762A (XVII). The Outer Space Treaty closely followed the principles laid down in the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, in resolution 1962 (XVIII), together with associated principles laid down in resolution 1884 (XVIII). The Treaty of Tlatelolco relied on United Nations consensus as expressed in resolution 1911 (XVIII), while both that Treaty, and the Non-Proliferation Treaty, were founded on United Nations deliberations as expressed in resolution 808 (IX), advocating "the total prohibition of the use and manufacture of nuclear weapons and weapons of mass destruction of every type". International opinion demanding limitation of the vertical nuclear arms race, which eventually led to the SALT Treaties, was expressed long before in resolution 2028 (XX), establishing the principle of balanced responsibilities between nuclear and non-nuclear-weapon States for the implementation of NAC.

The General Assembly assumes a more significant initiating role in the creation of norms during its Special Sessions. So far, only one of those has concerned NAC, under the general aegis of disarmament. The world-wide consensus arrived at in the course of the five weeks of SSD I, held in May-June of 1978, has restructured both the theoretical approach and the organizational machinery of NAC negotiation.
The Special Session was preceded by protracted negotiations of the agenda and of draft documents. These preliminary negotiations were conducted by a Preparatory Committee, composed of a globally representative group of States, which considered proposals and draft formulations from all Member States of the United Nations wishing to contribute. The intractable nature of the issues that had to be resolved was demonstrated by extensive disagreements, many of which remained contentious at the beginning of the Special Session, evident from the large number of bracketed alternative formulations in the draft documents.31

Ultimate resolution of all controversies by the General Assembly on that occasion, in the form of a consensus Final Document,32 was an extraordinary achievement. At the time, the dilution of substance for the sake of consensus was regarded by many statesmen and commentators as a failing, but the passage of time has demonstrated the paramount importance of universal endorsement of fundamental arms control precepts.

The document consists of 126 paragraphs, being in the format of an Introduction, a Declaration, the Programme of Action, and a collation of Machinery Provisions. While it is directed to arms control issues in all their aspects, attention is predominantly focused on the solution of NAC problems including general principles, accepted negotiating positions, priorities, and guiding precepts. Interrelationships are noted and steps to be taken for the attainment of solutions are indicated. The
document concludes with 33 arms control proposals submitted by Member States, which could not be debated at the Session due to insufficient time, but which are gradually being more fully elaborated.

The most notable aspect of this concise document is the Programme of Action, which, in the terms of Article 44 -

... enumerates the specific measures of disarmament which should be implemented over the next few years, as well as other measures and studies to prepare the way for future negotiations and for progress towards general and complete disarmament. The Programme of Action designates the following priorities for negotiation: nuclear weapons; other weapons of mass destruction, including chemical weapons; conventional weapons, including any which may be deemed to be excessively injurious or to have indiscriminate effects; and reduction of armed forces.

The achievement of having reached universal agreement in favour of the document can be measured less in terms of the arms control achievements that have flown from it, than in the fervent adherence to its provisions over the years. In the period between the two Special Sessions on disarmament there has been no substantial departure, in any negotiating or deliberating organ of the United Nations, from the objectives, priorities and methods designated in the Final Document.

The Final Document is the best demonstration of both the strengths and the weaknesses of the General Assembly in its approach to NAC. To acknowledge that the document
contains a fundamental and irreconcilable theoretical flaw, is not tantamount to a denial of its pioneering and overwhelming significance. In 1978 no higher consensus could have been reached regarding the theoretical-legal basis of disarmament. Yet, for the achievement of positive NAC measures greater commitment would be required, generally referred to as "political will". The General Assembly has, so far, failed to acknowledge that the measure of political will is the extent of the sacrifices that a State is prepared to incur in the short term, in order to attain the long term benefits of arms control and disarmament.

Consequently, an erroneous juxtaposition of objectives and possibilities permeates the Final Document, which was not queried by any State at the Special Session or since but which, nevertheless, excludes the possibility of substantial progress in NAC if the defective principle is to set the standard of international conduct. The defect lies in the concept of disarmament, in particular NAC, without sacrifice in the short term. The various manifestations of the erroneous principle in the Final Document will be examined in turn.

Firstly, arms control and disarmament conducted on "the principle of undiminished security of the parties", in paragraphs 22, 29, 49 and 83, is often not possible. At the least, there is usually an element of uncertainty about the operation of an NAC agreement. The equivalent
operation of arms control measures can virtually never be ascertained with accuracy, while the difficulty of so doing is exacerbated by inevitable partisan assessments of security interests by potential enemies. As a theoretical concept, the aim of minimising security imbalance that may be temporarily, and unavoidably, caused by arms control measures, would be far more constructive. Simultaneously, and most importantly, there should be an expression of accolade for States prepared to proceed with arms control measures despite their possible short term drawbacks. This is not possible while the fiction of "undiminished security" persists.

Secondly, the Final Document lays down the theoretical requirement, in paragraph 31, of "adequate measures of verification satisfactory to all parties concerned". Such measures of verification have not been found in practice, nor are they likely to become possible in the future. Again, the formulation should have been to strive for those objectives not to make their non-attainment an excuse for delays in arms control measures, especially in the control of nuclear arms.

Thirdly, paragraphs 36, 68, 69 and 70, advocate the principle of the "inalienable right of all States" to the acquisition of all levels of nuclear technology and proclaim this to be consistent with non-proliferation goals. The "appropriate" safeguards, referred to in those paragraphs, do not exist and will become even less appropriate when the more sophisticated reactors come
into operation, to be described in Chapter VIII.

Fourthly, paragraph 40 states the self-evident principle that universality of multilateral disarmament agreements would make those agreements more effective. It would seem necessary to take that concept one step further by proclaiming that it is the duty of each State to make whatever concessions it can, without flagrantly jeopardising its own security, to comply with applicable multilateral arms control agreements.

Fifthly, as a corollary to the concept of undiminished security and strictly equivalent obligations in arms control, the Final Document belittles the importance of unilateral measures, especially relevant in the field of NAC. Paragraphs 41 and 114 merely refer in passing to that method of arms control. However, as confidence builder, as a means of overcoming an impasse, and as a method of shaming other States into emulating the initiative, unilateral steps in arms control warrant greater emphasis.

Sixthly, the document offers no satisfactory formula, even in theory, for measuring the equitable rate of NAC or any type of arms control, while acknowledging, in paragraph 49, the various stages of armament attained by different States. It is merely observed in paragraphs 48 and 81, that the most heavily armed States have the greatest responsibility in that regard. The imprecision countenanced has resulted in a variety of arms control formulae, with all States contending that the others
should be first to practice arms limitation. China and France, in particular, have explained their refusal to accede to multilateral NAC agreements on the grounds that they are entitled to maintain a relativity with the Superpowers.

Since the acquisition of nuclear weapons capability by the United States, to the present day, the Soviet Union has asserted that it feels threatened unless it can attain and maintain approximate parity with the forces of the United States and the nuclear prowess of other nuclear-weapon States. The United Kingdom has not claimed a right to parity, but the constant upgrading of that State's nuclear forces, including the replacement of the existing Polaris with Trident missiles, is in itself an assertion that the nexus between the strength of its nuclear forces and those of other States is to be retained.

The two subsequent nuclear Powers, France and China, have persistently asserted that they have a right to maintain a nuclear weapons capability proportionate to that of the two Superpowers. In the case of France, it is sought merely not to fall behind the rate of development pursued by the other Powers, as stated during SSD I by the French Minister for Foreign Affairs -

As for France, it would take appropriate action on the basis of such reductions only if there were a change in the extent of the disparity persisting between those two arsenals and its own arsenal, which France keeps at its disposal to ensure the security and creditibility of its deterrent.36
China, on the other hand, does not only assert the right to ensure that the gap between its own nuclear prowess and those of other nuclear-weapon States is not increased but claims the right to close the gap.

The proposition that all States have an equal right to weapons, including nuclear weapons for defence, is theoretically unassailable. Fortunately, non-nuclear-weapon States have so far refrained from giving it practical application, no doubt in appreciation of the appalling practical consequences that it would have. The Chinese position in mid-1981 was explained in Beijing Review by Mu Youlin, the International Editor, as follows -

...we demand that the two super powers, the Soviet Union and the United States, should be the first to reduce their armaments. When the huge gap between them and the other nuclear states and militarily significant states is closed, the latter should then join them in reducing armaments proportionately. This is fair and reasonable.

In this exposition only the militarily significant were designated as having the right to nuclear-weapons parity with the Superpowers, with no attempt to define which States may be included in that category.

Nothing would be gained from re-writing every clause of the Final Document which reflects the notion that disarmament and, in particular, the NAC component of disarmament, can be accomplished without risks and generous gestures. Nor does acknowledgement of the unavoidability of short term imbalances in the NAC process have to be presented in the form of amendments. The appropriate changes could be adopted in the course
of applying the various arms control measures, by making the necessary additions to and elaborations of the concepts contained in the Final Document.

The General Assembly can contribute to such developments at SSD II, and subsequent Special Sessions on disarmament, when time is provided and world leaders are available to discuss the issues in some depth. Otherwise, the General Assembly is in a position to collaborate with other United Nations bodies, like the Committee on Disarmament, the Disarmament Commission, the First Committee, and other bodies referred to at the commencement of Chapter III, by putting the stamp of approval on proposals emanating from them.

Notes

1 A/36/392 of 11 September 1981, p.70.
3 Pursuant to A/RES/33/91A.
4 Pursuant to A/RES/34/75.
5 These were only interim reports, see A/36/752 p.19.
7 Reports of the reconstituted disarmament Commission, Supplement No.42.
8 Final Document of SSD I, op.cit. Art.117.
9 Since SSD I the following studies on NAC or relating to it have been completed -
   - All the Aspects of Regional Disarmament, A/35/416.
   - Comprehensive Study on Confidence Building Measures, A/36/474.
   - Comprehensive Nuclear Test-Ban, A/35/257.
   - Comprehensive Study on Nuclear Weapons, A/35/392.
- Israeli Nuclear Armament - A/36/431.
- Relationship Between Disarmament and Development, A/36/356.

10 In accordance with the Report of the First Committee A/35/699 para.IIf.II.


13 A/C.1/35/L.43, Rev.2.

14 Ibid.

15 Ibid.

16 A/C.1/35/PV.44, p.31.

17 Id. PV.49, P.2.

18 Id. PV.48, p.56.

19 Id. PV.45, p.26.

20 Id. PV.48, p.56.

21 Id. PV.43, pp.5-6.

22 Id. PV.47, p.40.

23 Id. PV.43, p.11.

24 Id. PV.43, p.26.

25 Id. PV.47, p.35.

26 As appears in Table I, the Treaty, inter alia, empowers the Security Council to investigate the evidence supporting a complaint of breach.


29 Ibid. emphasis added.

30 A/C.1/35/PV.48, p.56.

31 E.g. see A/S/10/AC.1/37 adopted on 23 June 1978 by the Ad Hoc Committee of SSD I, only one week prior to the end of the Session when the Final Document was adopted.
C.f. the view of Finland in a submission to the Preparatory Committee for SSD II A/AC.206/12 of 12 May 1981, pp.2-3 - "Irrespective of the type of approach and extent of measures envisaged, i.e., whether comprehensive or sectorial, regional or universal, bilateral or global, the fundamental principles for negotiations incorporated and elaborated in the Final Document of the first special session retain their validity. They include, inter alia, the following:
- All States have the obligation to contribute to efforts in the field of disarmament, and all States should benefit from them;
- They have the right to participate on an equal footing in the multilateral negotiations which have a direct bearing on their security;
- Disarmament measures should ensure, in an equitable and balanced manner, the right of all States to security; all States and groups of States should obtain equal advantage at every stage;
- Success of disarmament efforts presupposes a balance and a strict observance of mutual obligations;
- Adequate measures for verification satisfactory to all parties should be provided for in order to attain the confidence of all parties in the implementation of agreements.


Beijing Review, 20 July 1981, No.29, p.3.
CHAPTER V

THE INTERNATIONAL LEGAL SYSTEM
AND NUCLEAR ARMS CONTROL

International Law in a Changing World

The practice of negotiating, entering into, and adhering to the NAC agreements in Tables I and II, has been undertaken by all parties at all times on the understanding that those actions were within the framework of a system of international law. It is the existence of international law which induces the expectation that an agreement between States will be adhered to, together with other shared expectations regarding the consequences that will flow from its adoption, such as the predictable interpretation of forms and expressions used.

Changes in the international legal system can therefore affect international agreements, as can the responsiveness or lack of responsiveness of international law to economic, political, social and technological changes throughout the world. The interrelationship between individual international agreements, and the milieu in which they operate, has been noted by the General Assembly. For example, the influence of changing social, economic and political conditions on the development of international law has been considered by the General Assembly in relation to drawing up the programme of the International Law Commission.¹
In practice, international law has responded more or less adequately to the needs of many of the growth areas of interaction at an international level,\(^2\) as, for example, in maritime law, civil aviation, diplomatic law, communications, and a variety of commercial transactions. As a result, the theoretical basis of international law is rarely examined with respect to agreements between States regarding these and many other areas of activity. By contrast, the nature and domain of international law become matters of concern and analysis in relation to those aspects of international life which have so far eluded regulation by adequate and predictable rules,\(^3\) including issues of international security, peace and war. As NAC is among the least satisfactory areas of contemporary international endeavour, it is appropriate that the difficulties encountered in the negotiation of NAC agreements should lead to reappraisals of the precepts of international law applying to them.

The advent of nuclear weapons and other weapons of mass destruction has introduced a fundamental new element into international law, namely, the exclusion of all-out war as the ultimate method for resolving intractable hostilities between States. The traditional maxim of *jus ad bellum*, the right to resort to war, was already seriously challenged during the period between the world wars, but it was only after World War II that it was abandoned altogether.\(^4\) Elaborating on provisions in the Covenant of the League of Nations, the General Treaty for the Renunciation of War, known as the Briand-Kellog Pact,
was signed in 1928. Article I of the Treaty states -

The High Contracting Parties solemnly declare in the names of their respective peoples that they condemn recourse to war for the solution of international controversies, and renounce it as an instrument of national policy in their relations with one another.

The 63 States, currently Parties to the Treaty in 1939, included the belligerents in the war which broke out at that time. Clear words of the Treaty had been interpreted only five years previously, by the International Law Association, to mean that -

A signatory State which threatens to resort to armed force for the solution of an international dispute or conflict is guilty of a violation of the Pact.

The United Nations Charter of 1945, in Article 2, paragraphs (3) and (4), requires all Members, being Parties to the Treaty of the Charter of the United Nations, to "settle their international disputes by peaceful means" and to "refrain in their international relations from the threat or use of force". Article 2, by itself, could be interpreted to outlaw armaments other than those required for the maintenance of internal order. However, Article 51, which gives Members the right of individual or collective self-defence until such time as the Security Council may be able to protect them from armed attack, has been relied upon as justification for the maintenance and unprecedented growth of armed forces, and the stockpiling of armaments, including nuclear arms.

One of the four stated aims of the United Nations Charter is -
... to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained ...

Since the Charter was signed in San Francisco, on 26 June 1945, the avoidance of world war has been generally attributed to the fear of "unacceptable damage" from enemy nuclear weapons, rather than obedience to the undertakings pledged at the inception of the United Nations and subsequently. Foreseeably, States will continue, in the main, to be motivated by considerations of self-preservation and self-advancement until a condition of much greater international cohesion is attained than at present.

International law merely facilitates methods to be devised for the attainment of those national objectives that are shared by States at the international level. As the avoidance of nuclear war is the most ardently shared objective of the current era, the appropriate utilisation of the international legal system in that endeavour becomes uniquely relevant. Existing NAC treaties, and innumerable General Assembly resolutions, bear witness to the expectation that the elaboration and observance of international law will be able to prevent nuclear confrontation in the short term, and facilitate the conversion of a fragile balance of terror into a secure system of assurances in the long term.

Traditional Approaches to International Law

Due to the ossification of the basic tenets of *jus gentium*, the Greek, Roman and mediaeval approach to
international law still carry definitive influence. The age and continuity of the system are regarded as virtues by many contemporary jurists, one of whom expressed this widely held sentiment with the observation that, "the structure of the international system ... appears to be still tremendously solid since its distant origins back in the Middle Ages".6

While there are countless divergencies regarding the finer points of international legal theory, it is generally assumed that international law is an entity with inevitable characteristics and that it only remains to establish what those characteristics are. For example, Professor Eric Suy, Legal Counsel of the United Nations, asks some of the most fundamental questions confronting international law today, but he asks them as if the answers merely had to be discovered and not invented. In 1981, speaking of the status of resolutions adopted by the United Nations and its specialised agencies, he said -

Contemporary international law must deal with these new "prescriptive norms". There are a number of questions that must be examined. For example, to what extent are the decisions of those various intergovernmental organizations creating new norms? Are they legal norms? Are they generally binding legal norms, or are some of them binding and some not? How are the binding norms determined?

The attributes of international law are enumerated and analysed as if they were the properties of a specific object known to exist, whose chemical and physical composition have not yet been adequately identified and measured. Consequently, questions about reconciling contemporary needs with persisting traditions are
invariably posed within a static framework.

It is asked, "How can resolutions of the General Assembly become rules of customary international law in order that they may be incorporated into the international legal system?" It is not asked, "How could international legal theory be recast so as to accommodate recommendations of the General Assembly in a way that would attribute to those resolutions a normative influence on international conduct commensurate with their de facto authority?" and "How could this be achieved without ascribing to the States that voted for those resolutions an intention to create positive law which they patently did not envisage?" In other words, the possibility of remoulding the basic principles of international law, in order to make it a convenient tool for the attainment of current objectives, has not been adequately confronted.

The conduct between States in their dealings with each other at the time of the Greek and Roman Empires, and later, in the Middle Ages, consisted of rules that were so obvious and elementary as to be identifiable with the rules of nature jus naturale. With the spread of religious concepts during the Middle Ages, the law of nature was equated with the Divine Law in the writings of theologians such as Saint Thomas of Aquinas. Christian and Moslem religious writers and naturalists as they came to be called, shared the view that law, including international law, was part of an immutable body of precepts waiting to be discovered. European scholars,
who developed and refined this concept, included Thomas Rutherford, Jean Jacques Burlemaqui and De Rayneval.

As international contacts became more frequent and increasingly complex, subjective evaluations of what the natural or Divine Law was, inevitably conflicted with different evaluations made by other individuals. Telling examples can be found among the views propounded by Samuel Pufendorf, Professor of Law at the University of Heidelberg, Germany, in the mid-Seventeenth Century. The reputed foremost exponent of the naturalist school, Pufendorf claimed, for instance, that no mercy should be shown in war, as this would merely delay a return to a condition of peace, being the natural state of existence. Predictably, the proposition did not meet with universal concurrence.

In response to the untenable conflicts arising from the naturalist interpretation, there emerged an approach to international law which, after theoretical elaboration, became known as the positivist school. Cornelius Van Bynkershock, Johann Jacob Moser and George Friedrich von Martens are regarded as the founders of the positivist school, which maintained that the sources of international law are international obligations explicitly undertaken by sovereign States. This view proved to be much less tenable in the Eighteenth Century than it would be today, due to the sparseness of treaties and other overt undertakings. Technical difficulties, including rudimentary communications and the absence of efficient bureaucratic structures, made the conclusion of
treaties and the ascertainment of other agreements very
difficult. Hence, it was not possible to adhere to the
positivist principle because often no agreements existed
to guide the resolution of new international conflicts as
they arose.

The theory that best suited the requirements of
Euro-centred international life from the Seventeenth
Century to modern times, made a pragmatic compromise
between naturalists and positivists, without
acknowledging its pragmatic origins. The compromise
approach relied on the obscure language of treaties;
whatever scant evidence there was of international
customs; together with naturally fertile imaginations,
to adduce the rules and principles of international law.
The followers of this compromise approach were the first
to state their views in detail. They became known as the
Grotians, after Hugo Grotius who is regarded as the
"father" of international law. The theory on which the
Grotian school was based differentiated between what was
believed to be necessary law, and merely voluntary
law. The former was believed to be the law of nature and God,
while the latter consisted of treaties and customs made
by men to suit the exigencies of given situations. These
views were further elaborated by Christian Wolff and
Emmerich de Vattel.

Seventeenth and Eighteenth Century doctrines still
form the basis of international law as it is known today.
These vague and jumbled concepts, with generations of
elaborations and qualifications haphazardly appended,
provided the basis of the jurisdiction of the Permanent Court of International Justice. In 1945 they were incorporated into the Statute of the International Court of Justice which, in Article 38 (1) designates the terms of reference of international law to be -

a. international conventions, whether general or particular, establishing rules expressly recognized by the contesting States;

b. international custom, as evidence of a general practice accepted as law;

c. the general principles of law recognized by civilized nations;

d. subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.

The drafters of the Court's Statute deliberately chose to establish no hierarchy of precedence to be attributed to paragraphs a, b and c of Article 38 (1), on the ground that this would be self-evident to international lawyers.

The aforementioned exposition of sources, in the light of the meanings that those concepts have acquired over the centuries, is the only guide to the nature and content of international law to be applied under the Statute, which enjoys the concurrence of 157 Member States of the United Nations pledged by Treaty. In practice, relevant treaties are usually given precedence over other sources as the best evidence of State consent in any matter, while as between treaties, obligations under the Charter are claimed, by Article 103, to prevail in case of conflict with "any other international agreement". However, the Statute does not recognise the
theoretical supremacy of treaties.

According to the West European tradition of international law, enshrined in the Statute, the most highly respected source of international law is custom.\textsuperscript{19} Therefore, when Professor Bo Johnson, legal adviser of the Ministry for Foreign Affairs of Sweden, claimed in 1981 that "the first and most important source of this 'international law' is the custom of states",\textsuperscript{20} he was describing the contemporary factual situation consistent with the provisions of the Charter.

**International Custom and Nuclear Arms**

We have seen that international agreements for NAC are an integral part of the international legal system, and that the international legal system is inextricably bound up with "international custom as evidence of a general practice accepted as law". It is not immaterial, therefore, that both the applicability of custom and the theoretical basis of the whole international legal system of which custom is a part, are in disarray. As Professor Grahl-Madsen said when opening the Joint UNITAR-Uppsala University Seminar on International Law -

> I cannot see that we have any alternative to attempting to develop new and more efficient machinery for the progressive development of international law.\textsuperscript{21}

Later in the Seminar, Professor Grahl-Madsen observed that -

> Like the old Law of Nature, a customary law and legal principles developed in Europe can no longer serve as a solid basis for international law.\textsuperscript{22}

Much of the criticism of international custom as applied by the International Court of Justice, is not of the concept of custom, but its affinity to West European
values and approach to legality. While this is no doubt the case, criticism of this kind, emanating from the Socialist and recently independent States, has somewhat obscured more fundamental problems. When some of this criticism surfaced in 1974, during a debate in the Sixth Committee on the efficacy of the International Court of Justice, the United States, Canada, and Italy complained that -

...the uncertainty of the content and scope of the rules which were applicable in the international sphere was a weakness; the Court's role and the law it applied should be clarified and strengthened.22

Uncertainty regarding the content of the rules of international custom, unless they are interpreted by a Court, can lead to difficulties. There is also uncertainty, inter alia, about how custom comes into being, its relevance to United Nations resolutions, how it can be renounced, and what States are bound by it.

It is well established that, in order to determine the existence of a rule of international custom, it is necessary to prove that States have acted in conformity with the rule, and that they have done this in the belief that they were legally obliged to do so.

There are several uncertainties, however, concerning what constitutes the required acts of States. For instance, it would be necessary to have a clear understanding as to what is regarded a sufficient number of States applying the rule. In the Fisheries Jurisdiction case, the Court declared that -

States are on record as not supporting in fact and by their conduct the alleged maximum obligatory 12-
mille rule. In these circumstances, the limited State practice confined to some 24 maritime countries cited by the Applicant in favour of such a rule cannot be considered to meet the requirement of generality demanded by Article 38 of the Court's Statute.24

Yet, in the Anglo-Norwegian Fisheries case, the Court relied largely on the practice of one State, the United Kingdom, stating -

The notoriety of the facts, the general toleration of the international community, Great Britain's position in the North Sea, her own interest in the question, and her prolonged abstention would in any case warrant Norway's enforcement of her system against the United Kingdom.25

Another uncertainty is whether pronouncements of States accompanying custom creating acts should be taken into account.

As the Court put it -

There is at the moment great uncertainty as to the existing customary law on account of the conflicting and discordant practice of States. Once the uncertainty of such a practice is admitted, the impact of the afore said official pronouncements, declarations and proposals must undoubtedly have an unsettling effect on the crystallization of a still evolving customary law on the subject.26

In the circumstances it was thought unreasonable to discard official statements as to "what States are prepared to claim and to acquiesce in ..."27

In the Asylum case, the Court entertained the possibility of a rule of customary law developing in a region. The Court did not disapprove that -

The Colombian Government has finally invoked "American International Law in General". In addition to the rules arising from agreements which have already been considered, it has relied on an alleged regional or local custom peculiar to Latin-American States.28
Provided that other necessary conditions were met, the Court took the view that recognition of a regional custom falls within the provisions of Article 38 of the Statute of the Court.\textsuperscript{29}

The required duration of the State practice establishing the rule is also subject to wide variations. Whereas the original fiction was that the rules had been observed from time immemorial, contemporary writers speak of the possibility of "instant custom" arising from United Nations resolutions, while in the dissenting Opinion of Judge Tanaka it was suggested in the South West Africa cases that -

\[ \ldots \text{the establishment of such a custom would require no more than one generation or even far less than that.}\textsuperscript{30} \]

Requirements regarding proof of the belief that a legal obligation exists are even more subject to doubt. The tortuous reasoning of the Permanent Court of International Justice in the \textit{Lotus} case, is a pertinent illustration -

Even if the rarity of the judicial decisions to be found among the reported cases were sufficient to prove in point of fact the circumstance alleged by the Agent for the French Government, it would merely show that States had often, in practice, abstained from instituting criminal proceedings, and not that they recognized themselves as being obliged to do so; for only if such abstention were based on their being conscious of having a duty to abstain would it be possible to speak of an international custom.\textsuperscript{31}

A modern statement of the requirement appears in the judgment of the International Court of Justice in the North Sea Continental Shelf cases. There it was laid down that -
Not only must the acts concerned amount to a settled practice, but they must also be such, or be carried out in such a way, as to be evidence of a belief that this practice is rendered obligatory by the existence of a rule of law requiring it. The need for such a belief, i.e. the existence of a subjective element, is implicit in the very notion of the opinio juris sive necessitatis. The States concerned must therefore feel that they are conforming to what amounts to a legal obligation.  

There are numerous further refinements and distinctions in relation to international custom, with a variety of views as to their exact application. In one instance, it has been remarked with some exasperation that -

The complexity of the question of customary law is not diminished by the tension which exists between the application and interpretation of general principles and rules versus the creation and subsequent application of detailed rules. Indeed, the labyrinth of uncertainty that surrounds the concept of "international custom, as evidence of a general practice accepted as law" is endless.

The above illustrations demonstrate that international law, as it relates to the notion of custom, is not suited for the establishment of the rights and duties of States in relation to NAC, or any other vital issue of international peace and security. Perhaps international custom is a useful concept with respect to subject areas where agreements are sparse and any definitive ruling is more important than the detailed content of a rule, as in demarcation and border disputes. In these and similar instances of moderate concern to States, where there is scant evidence of the law, customary rules may be helpful.

In regard to NAC, the most insidious aspect of
international custom, as presently understood, is its possible admixture with treaty law. There have been suggestions that, providing a State does not expressly object to a "norm creating" treaty in force among other States, and does not act in contravention of that treaty, it may be bound by the rules established in the treaty in the form of a rule of international customary law. Such an interpretation could be given, for example, to the States that have abided by the terms of the Non-Proliferation Treaty but which have not acceded to it.

Discussing the question as to what constitutes "consent" and "opposition" to an international custom, Professor Allan Rosas contended that -

It seems pertinent to speak of presumed consent, which means that a state can become bound by a rule the creation of which it has not participated in as long as it has not clearly voiced its opposition. Perhaps this is better terminology than the often used expression "tacit agreement", which despite the word "tacit" seems to connote the idea of specific "understandings" between the parties to a customary norm, something which might not correspond to reality.5

In modern national administrations, contemporary treaties that are relevant to a State, especially treaties relating to peace and security like NAC treaties, are continuously and carefully assessed. If they are not acceded to, that is positive proof that the State concerned does not wish to be bound. However, that State may agree with some aspects of the treaty and therefore comply with some or all of the provisions of the treaty, or it may be persuaded by one means or another to comply, despite fundamental reservations.

Although perhaps indistinguishable in terms of acts
performed, there is a profound difference in principle between a State acting as if it were bound by an NAC treaty, and giving its explicit consent to be bound. Any legal fiction that may blur that distinction must be counterproductive in the longer period. That is so because, unless the theory reflects reality, it cannot change that reality constructively when the time for change has arrived. Even in the short term, all that the fiction of notional consent to NAC agreements could achieve, would be to add to the scepticism about the relevance of international law.

To assert the above is not to deny the beneficial influence that treaties can exert on third parties in standardising State conduct. The problem would only arise if it were sought to bind States to a course of action with a ruling of the Court. For example, Professor Franck pointed out -

Also, when treaty provisions or law-declaring resolutions are adopted by consensus, these may so affect national conduct as to create 'instant' customary law. An example is the concept of the 200-mile economic zone, adopted by consensus at the Law of the Sea Conference, which immediately entered into the repertory of practice of enough states to raise the question whether, quite aside from the treaty, it does not thereby become universally sanctioned as customary law. 36

While ineffective in its positive tenets to come to terms with the realities of contemporary inter-State relations, the general theory of international law, as far as it can be ascertained, also suffers from several important omissions. For example, it contains no coherent principles to distinguish between emerging norms
and existing norms. Further, not only is no legal status accorded to non-procedural United Nations resolutions, but the current and potential adjudicative functions of the Security Council and General Assembly are ignored. It is little wonder then that Professor de Nascimento e Silva thought it appropriate, in 1981, to describe the present time as being —

.. a period when international law is being subjected to challenge from so many quarters, when its very existence is being questioned not only by laymen but even by some lawyers, and when its relevance to international relations and to the regulation of concrete problems between States is constantly belittled. 37

The anachronisms and uncertainties of international legal theory prejudice attempts to control nuclear arms. They detract from the authority of the International Court of Justice 38 and respect for the whole system of international law. Not surprisingly, only a small percentage of States has accepted the compulsory jurisdiction of the Court, and that percentage is shrinking. Today there are only 47 States that have made declarations under Article 36, paragraph (2) the Court's Statute, or made declarations under Article 36, paragraph (2), of the Statute of the Permanent Court of International Justice that are currently operative. It is about 30% of the present membership of the United Nations, whereas in 1950, 60% of United Nations Members had accepted the compulsory jurisdiction of the Court. Moreover, States that have done so, have mostly attached such rigorous conditions to their acceptances that they have little practical import.
A statement touching on these issues by Judge Robert Ago of the International Court of Justice, made in the course of an address to the International Law Commission in mid-1981, has been reported as follows -

He said it would in particular, be very dangerous to lose sight of the fact that, following the profound changes that had occurred in the composition of the community of States, it had become both essential and urgent to define anew and with the participation of all concerned, the old customary law, to redefine it, to supplement it, and to invest it with the clarity characteristic of written, conventional law. 39

The imprecision of the international legal system leaves the judges of the Court, as well as any arbitrators or negotiators who may wish to rely on the principles of international law, with vast areas of personal discretion. Few contemporary treaties, and none of the NAC treaties now in existence, require disputes to be adjudicated by the International Court of Justice. On the contrary, several of the multilateral NAC treaties specifically indicate that recourse to the Court is to be by mutual consent, while many NAC treaties designate alternative modes of settling disputes.

Notes

1 Res.1505 (XV) of 12 December 1960.

2 C.f. Stone, Julius, Of Law and Nations: Between Power Politics and Human Hopes (William S. Hein and Co. Inc., Buffalo, New York 1974) p.211 - "I may recall here the astonishing observation of the late Sir Hersch Lauterpacht (with which I venture to agree) that 'once we approach at close quarters practically any branch of international law we are driven, amidst some feeling of incredulity, to the conclusion that although there is as a rule a consensus of opinion on broad principle - even this
may be an over-estimate in some cases - there is no semblance of agreement in relation to specific rules and problems'.

3 Schachter, Oscar, "Towards a Theory of International Obligation", The Effectiveness of International Decisions: Proceedings of the Conference of the American Society of International Law (Oceana Publications, Inc. N.Y. 1971) p.11. The author argues that the theory of international law has great relevance. With reference to "conceptions as to the basis of obligation" he states - "They come up in concrete controversies as to whether a rule of law has emerged or has been terminated; whether an event is a violation or a precedent; and whether practice under a treaty is accepted as law. They are involved in dealing with situations in which solemn declarations, couched in legal terminology, are adopted by official bodies which have no formal authority to lay down prescriptive rules. They come up when there is substantial variance between what is preached and what is practiced; or when consensus (or expectations) are limited in geographical terms or in duration. These are not, of course, new problems and over the years they have been the subject of much jurisprudential writing. But in the last few years the general problem has assumed a new dimension. The peculiar features of contemporary international society have generated considerable normative activity without at the same time involving commensurate use of the formal procedures for international legislation and adjudication."

4 Arangio-Ruiz, Gaetano, The United Nations Declaration on Friendly Relations and the System of the Sources of International Law (Sijthoff & Nordhoff, Maryland, 1979) p.106. The author considers it an open question whether the loss of the right occurred between World War I and II or only as a consequence of the UN Charter.


6 Arangio-Ruiz, op.cit. p.301.

7 Suy, Erik, "A New International Law for a New World Order", The Spirit of Uppsala (JUS 81) Manuscript No.43 p.7., emphasis added.


Author of *Principes de Droit de la Nature et des Gens*, Switzerland.

Author of *Institutions de Droit de la Nature et de Gens*, France.

Author of *De Jure Naturae et Gentium*, 1672, Germany.

Holland 1973-1943.

Germany 1701-1785.

Germany 1756-1821.


Holland 1583-1645.

For an examination of the relationship between formal and material sources of law and the foundation of international obligation see Schachter, Oscar, "Towards a Theory of International Obligation", *The Effectiveness of International Decisions: Proceedings of the Conference of The American Society of International Law* (Oceana Publications, Inc. N.Y. 1971). The author lists the concepts that have been advanced as constituting the foundation of international obligation thus - Consent of states; Customary practice; A sense of "rightness" - the juridical conscience; Natural law or natural reason; Social necessity; The will of the international community (the "consensus" of the international community); Direct (or "stigmatic") intuition; Common purposes of the participants; Effectiveness; Sanctions; "Systemic" goals; Shared expectations as to authority; Rules of recognition.


22 Id. Background Paper on "International Law and Organization for a New World Order", p.1.


27 Ibid.


29 Id. p.276-7.


31 The Lotus case (the Case of the S.S. "Lotus") P.C.I.J. Ser.A. Judgment No.9 (1927) p.28.


35 Id. pp.5-6.

36 Franck, Thomas M., "Growth of the International Community and Qualitative Shift in International Legal Relations", The Spirit of Uppsala (JUS 81) Manuscript No.54 p.3.

Gross, Leo, *The Future of the International Court of Justice* (Oceana, Dobbs Ferry, New York 1976), for an overview of the problems besetting the Court.

CHAPTER VI

THE ADJUDICATION OF NUCLEAR ARMS CONTROL AGREEMENTS

Settlement of NAC Disputes by the International Court

Two recent cases have been brought before the International Court of Justice, with attributes that indicate the extent of the Court's ability to settle international disputes involving NAC type issues. Although Article 59 of the Court's Statute provides that, "The decision of the Court has no binding force except between the parties and in respect of that particular case", in practice the decisions and reasoning of the Court have been accorded high authority in subsequent cases. In Opinions handed down, judges have referred to passages from previous Opinions much more frequently than warranted by the tentative wording of Article 38(1)(d) of the Court's Statute.¹

The cases to be examined are relevant to the adjudication of NAC disputes, not only on account of the persuasive influence likely to be exerted by the decisions reached and the principles enunciated, but also because the Court's evasion of substantive issues demonstrates the limits of its genuine competence.

The issue of nuclear testing in the atmosphere, in Nuclear Tests (Australia v. France)² and Nuclear Tests (New Zealand v. France)³ (the Nuclear Tests case), concerned similar facts, relating to the detonation of nuclear devices in the South Pacific area by France. The other case was United States of America v. Iran (the
Hostages case), which concerned the capture of United States diplomatic and consular staff in Tehran. The last mentioned case was not related to nuclear arms in any way but it involved the interpretation of significant contemporary treaties under circumstances likely to prevail in relation to the breach of an NAC agreement.

The Nuclear Tests Case

In the Nuclear Tests case, Australia and New Zealand instituted proceedings against France, on 9 May 1973, alleging that the carrying out of atmospheric nuclear weapons tests in the South Pacific Ocean was not consistent with applicable rules of international law. The two States sought orders prohibiting the French Republic from carrying out any further nuclear tests of that nature. The Court's jurisdiction was invoked by the Applicants on the basis of the General Act for the Pacific Settlement of International Disputes, and Articles 36 and 37 of the Statute of the International Court of Justice.

France failed to file a Counter-Memorial and did not appear at the hearing, informing the Court by letter that it did not intend to submit to the Court's jurisdiction. France asked for the summary removal of the case on the basis that the Parties were not in conflict as to their legal rights and that nuclear tests did not violate any rules of international law.

Refusing to accede to the request by France, the Court made a Provisional Order, on 22 June 1973,
requesting France to avoid nuclear tests that could deposit radioactive fallout on Australian and New Zealand territories. In defiance of the Provisional Order, France continued to conduct nuclear tests in the atmosphere in the prohibited area. The gesture could only be interpreted as a severe blow to the Court's prestige and it underlined the precarious nature of the Court's authority. However a measure of lost ground was retrieved when, in mid-1974, a series of verbal and written statements were made by the President of the French Republic, French delegates at the United Nations and French Embassy officials to the effect that France was about to conclude its tests of nuclear weapons in the atmosphere. None of the statements by France indicated that the cessation of the tests was to be in response to the cases before the Court. On the contrary, it was pointed out that the change to underground nuclear tests was to be undertaken "in the normal course of events". Nor did the statements give any undertaking that atmospheric tests would not be resumed at some future date.

By a majority of nine votes to six, the Court decided to attribute to the equivocal statements of intention by France the status of existing commitments to be recognised by international law and asserted, on that basis, that the alleged dispute did not exist. In this way the Court avoided the necessity to adjudicate upon its own jurisdiction; the legal standing of the Applicants as members of a much wider class of States
that may have incurred damage; and an assessment of the merits of the case.

In a closely argued and eminently logical joint dissenting Opinion, Judges Onyeama, Dillard, Jimenez de Arechaga and Sir Humphrey Waldock, argued that the Court had jurisdiction—both as to the legal nature of the dispute, and the legal standing of Australia and New Zealand to present their case in accordance with the practice of actio popularis. Further, the joint dissenting Opinion contended that the statements made by French officials, although accepted by the four judges as "the French Government's unilateral undertaking", were not capable of "affording the Applicant legal security of the same kind or degree as would result from a declaration by the Court specifying that such tests contravened general rules of international law applicable..." 8 Most importantly, the dissenting judges held that no undertaking could dispose of the dispute as to the general issue of the legality of nuclear testing in the Pacific region. The Applicants were therefore still entitled to a judgment. Hence, the judges who delivered the joint dissenting Opinion formed the view that the Court should have proceeded to hear and to adjudicate upon the merits of the case.

The majority of the Court put expediency before logic. Had the Court proceeded to adjudicate on the merits it would have been faced with an untenable situation. The Court would have been required to make pronouncements on various aspects of the applicability of
customary international law to an NAC issue. This would have entailed the evaluation of several multilateral NAC treaties, a large number of General Assembly resolutions, the decisions of a World Conference of the United Nations, as well as the findings of national and international scientific bodies. There is no disrespect for judicial integrity in the proposition that the above, unstated but weighty considerations, may have prompted the decision reached by the majority of the Court.

The evidence presented in the written Pleadings referred to the large majority of eligible States Parties to the Partial Test-Ban Treaty, the Treaty of Tlatelolco and the Non-Proliferation Treaty, as well as to General Assembly resolutions 1148 (XII) 1957, 1252 (XIII) 1958, 1379, 1402 (XVI) 1959, 1578 (XV) 1960, 1632 (XVI) 1961, 1948 (XVI) 1961, 1762A (XVII) 1962, 1910 (XVIII) 1963, 2032 (XX) 1965, 2163 (XXI) 1966, 2343 (XXII) 1967, 2455 (XXIII) 1968, 2604B (XXIV) 1969, 2661A (XXV) 1970, 2663B (XXV) 1970, 2828 (XXVI) 1971, and 2934A to C (XXVII) 1972, all of which, in one way or another, condemned atmospheric nuclear tests. A resolution and a declaration were also cited from the United Nations sponsored Stockholm World Conference on the Human Environment, which deplored the tests on the grounds of environmental damage allegedly caused by them. In addition, references were made to the findings of the International Commission on Radiological Protection and the United Nations Scientific Committee on the Effects of
Atomic Radiation. However, with respect to none of the Treaties, resolutions or evaluations just referred to, had France committed herself to the views expressed by the overwhelming majority of mankind.

If the concept of customary international law is to have any practical meaning as an expression of international opinion and commitment, then the conclusiveness of the evidence prepared by the Applicants, that customary international law prohibited the testing of nuclear devices in the atmosphere, was unassailable. The evidence could have withstood any reasonable test, irrespective of the precise view taken regarding the mode of creation and the applicability of international custom. Therefore, had the case been decided on the merits, the Court would have been obliged to make a clear-cut ruling on whether or not a State had the right to withhold its consent to be bound by a general rule of customary law. The only way to avoid the issue with a substantive argument, would have been to maintain the untenable assertion that the existence of the rule had not been established. Faced with such a dilemma, the majority of judges chose to evade the substantive issues.12

The prudence of that decision can be demonstrated by exploring in greater detail the problems that would have confronted the Court had it proceeded to consider those substantive issues. For the Court to do so, would have entailed a determination as to whether France was bound
by treaty, by custom, or otherwise to observe the putative rule of general customary international law prohibiting the detonation of a nuclear device in the atmosphere. Had the Court decided that France was not bound, it would have done so in defiance of the overwhelming weight of world opinion. On the other hand, had the Court decided that France was bound, the decision, while favoured by world opinion on the particular issue, would have rested on contentious legal grounds. Further, at the time it seemed uncertain whether France could be persuaded to desist permanently from atmospheric testing of its nuclear weapons, in obedience to the Court or otherwise, while the possibility of persuading China to conform to such a ruling was remote. Finally, there was no realistic prospect of compensating States that may have suffered damage as a result of the tests, to be designated by the Court as having been in breach of the rule.

The first issue for the Court to consider would have been whether France could be required to adhere to the terms of the Partial Test-Ban Treaty, a Treaty to which it had not acceded. A decision that an almost universal treaty, like the Partial Test-Ban Treaty, is ipso facto binding on non-Parties would be counter to the rule of international law that treaties confer no rights or duties on States not parties to them. That rule has been recently confirmed with its incorporation into the Vienna Convention on the Law of Treaties, in Articles 34-37. Nevertheless, the Convention leaves the supremacy of
custom untramelled by providing, in Article 38, that "Nothing in articles 34 to 37 precludes a rule set forth in a treaty from becoming binding upon a third State as a customary rule of international law, recognised as such."

Continuing to assess the merits, the Court would have been required to make a decision on whether the testing of nuclear devices in the atmosphere had become unacceptable as the result of a rule of customary law. The Court's Opinion in the North Sea Continental Shelf cases would have been directly in point. In that Opinion, the elements of a putative customary rule were assessed in the light of various criteria and were found, in the main, to lack the attributes required. However, the putative rule in the Nuclear Tests case would satisfy all of the following five criteria advanced by the Court in its earlier Opinion. Although not stated in precisely these terms, the criteria invoked can be identified as follows -

(i) The rule must be sufficiently significant to be of a fundamentally norm creating character.
(ii) The rule must be of a potentially norm creating character with respect to precision as to its meaning and scope.
(iii) State practice constituting the subject matter of the rule should be extensive and virtually uniform.
(iv) The passage of a considerable period of time is not necessary, provided there is widespread and
representative participation in the observance of the rule, particularly among States having a direct interest in the issue.\textsuperscript{19}

(v) The States that adopt the practice constituting the rule must do so because they feel legally compelled to comply.\textsuperscript{20}

A rule prohibiting atmospheric nuclear explosions would patently satisfy criteria (i) and (ii). Criteria (iii) and (iv) would also have been satisfied because, apart from France, with the only exception of the then minor nuclear-weapon State of China, all nuclear-weapon States had observed the rule, as had all non-nuclear-weapon States. In confirmation of their commitment, by 1973 more than a hundred States were Parties to the Partial Test-Ban Treaty, including the three original nuclear-weapon States. Further, as the States observing the ban were predominantly bound to do so by treaty, there can be no doubt that they believed themselves to be under legal compulsion to comply, thus satisfying criterion (v).

Yet the putative rule in the \textit{Nuclear Tests} case would have failed to satisfy the further two criteria posed by the Court in the \textit{North Sea Continental Shelf} cases, nor could any foreseeable NAC rule satisfy those criteria. They can be stated as -

(vi) The States that observe the rule because they feel legally compelled to do so, must believe themselves to be bound by a custom as representing law, not merely by treaty obligation.\textsuperscript{21}
(vii) The treaty embodying the rule in question must have been, at its inception, declaratory of a then existing rule of customary international law.22

Regarding the application of *opinio juris sive necessitatis* in (vi), it is not only "extremely difficult" to obtain evidence of its existence, as stated in the dissenting Opinion of Judge Tanaka,23 but it is entirely impossible with respect to NAC issues. It would be reasonable to suppose, however, that States obeyed the test-ban so as to comply with the Treaty, to which they acceded probably because they approved of its terms as being in their own national interest.

Prior to the Partial Test-Ban Treaty, all nuclear-weapon States conducted nuclear tests in the atmosphere, except for periodic suspensions in pursuance of agreed moratoria. Thus, there was conclusive evidence that criterion (vii) was not satisfied, as there had been no existing mandatory rule prior to the Treaty.

On reaching agreement for a test-ban, or any other NAC related issue, States do not enter into a treaty because it gives expression to an existing custom but because they believe it to be imperative to prescribe future conduct in the light of new technological advances in armaments. States parties to NAC treaties make every effort to persuade all eligible States to accede to the treaties or, at least, to abide by their terms. Had the Court been prepared to state explicitly that an NAC treaty, embodying a novel breakthrough in arms control
was, by reason only of its acceptability in the form of a treaty, and its originality, precluded from engendering a customary rule, it would not have been possible to conceal the absurdity of the proposition.

However, the Court could have concluded that a rule of customary international law existed, by giving a different interpretation to the seven criteria advanced in the North Sea Continental Shelf cases, and by invoking so much of the contradictory theories of international custom as might have been regarded sufficient to attribute a legally binding quality to the rule in question.

With respect to (vi) and (vii), regarding the requirement to comply with the putative norm for legal reasons other than treaty obligation, a contrary point of view has been expressed from time to time. For example in his dissenting Opinion Judge Lachs, in the North Sea Continental Shelf cases, said that not only could provisional international instruments, like unratified treaties, give rise to general rules of international law, but that -

Treaties binding many States are, a fortiori capable of producing this effect, a phenomenon not unknown in international relations.24

Adjudication on the merits of the Nuclear Tests case would have required that the Court, as well as examining treaty provisions and customary rules, to take into account any applicable general principles of law. In that connection, the Court would have been obliged to assess the principle-creating function of the numerous
General Assembly resolutions and other expressions of international opinion exhorting States, with a cumulative authority, to refrain from nuclear testing in the atmosphere.

Conclusively to dismiss these pervasive expressions of international opinion as not indicative of principles of law recognised by civilised nations, would have been difficult to justify with the usual arguments. In academic analysis the most frequently advanced reason for not accepting General Assembly resolutions as capable of establishing binding principles and rules, beyond the very limited express rule making powers ascribed to them by the Charter, is that the States voting for the resolutions do not make institutional arrangements confirming their commitment. However, with respect to the testing of nuclear weapons in the atmosphere, the large number of accessions to the Partial Test-Ban Treaty, as well as the actual cessation of the testing of nuclear weapons in the atmosphere by the United Kingdom, the United States and the Soviet Union, demonstrated the determination to abide by the rule on the part of the vast majority of States.

However, in order to justify a finding that Assembly resolutions were relevant to the outcome, would have required at least some indication as to the legal status of those resolutions. Did they establish custom? Were they to be regarded as quasi-legislative? In what ways and by whose authority were they to be so regarded? To answer those questions would have disposed of many of the
major controversies presently confronting the whole
discipline of international law. Recent Opinions handed
down by the judges suggest that the Court has not been
sufficiently united in its views to make pronouncements
on those fundamental questions in a credible manner.

Yet, if despite all obstacles, the putative rule had
been accepted as law, the Court, on the discretion of a
handful of individuals, would have challenged the
perceived vital security interests of several States,
notably those of both France and China. The judges who
handed down the majority Opinion were no doubt aware that
this would not have been an acceptable solution in the
eyes of the international community.

Finally, the Court may have been required subsequently
to adjudicate on the issue of *actio popularis* with far
reaching consequences.26 If Australia, New Zealand and
other South Pacific States had been found to have a legal
interest based on damage suffered, this would have given
them a right to compensation. Consequently all States in
the world, especially those in the Northern hemisphere
which have received far larger amounts of radioactive
fallout from nuclear testing than Southern hemisphere
States, would have been given the right, by inference, to
receive compensation for damage sustained during the
previous series of nuclear tests in the atmosphere.
Alternatively, the Court would have been required to
pinpoint a time when the international custom forbidding
tests in the atmosphere came into being.
It is difficult to envisage any contravention of international law relating to NAC which would not affect all States in the world, or at least in a region. This would be equally true regarding the breach of bilateral agreements between the Superpowers. For that reason uncertainty about the applicability of *actio popularis* and rules for the apportionment of damages, if any, could be serious obstacles to the predictable outcome of any litigation.

The dilemma faced by the International Court of Justice in the *Nuclear Tests* case was not one that arose as the result of the particular facts involved, nor was it related to the individual judges who happened to constitute the Court. It was a dilemma that would foreseeably arise with every NAC related case to be brought before the Court, unless the applicable law were entirely unambiguous. Moreover, the situation is likely to apply equally to cases brought before any independent court or arbitrator, not only to the International Court of Justice.

The case discussed here, highlights the discrepancy between the significance of the disputes in terms of contemporary world politics and human survival, and the anachronistic and vague notions to be invoked in any judicial attempt to settle those disputes.

With respect to the case in question as in possible future NAC related cases, the weight of international opinion as expressed in United Nations forums, perhaps
translated into overt or thinly disguised sanctions by member States, can put pressure on recalcitrant States to conform to the accepted norms of international conduct. Since the Nuclear Tests case, France has in fact ceased to conduct nuclear tests in the environments prohibited by the Partial Test-Ban Treaty and condemned by the various General Assembly resolutions. What appears to be unacceptable is to entrust issues of such magnitude to the unpredictable discretion of individuals, however highly regarded they may be as to their personal integrity. A recognition of such attitudes by States was implicit in the Court's unobtrusive stance on this occasion.

It has been contended from time to time, that predictable outcome in international law is not necessary because, if it existed, there would be no point in referring cases for adjudication. The argument is erroneous, firstly, because the objective is not to increase the number of cases but to settle or prevent international disputes. Secondly, States may refer predictable cases to the Court so as to obtain judicial confirmation of their rights, just as they present such issues to a General Assembly vote, in order to attract more determined enforcement procedures. With each case brought before the Court, no matter how unambiguous, the Court would have an opportunity to further clarify and confirm the principles of international law.
The Hostages Case

The Hostages case presented the Court of International Justice with somewhat different problems. In this case the Court's jurisdiction, as well as the substantive issues to be decided, were essentially based on two Treaties clearly in force at the relevant time between the United States of America and the Islamic Republic of Iran. These were the Vienna Convention on Diplomatic Relations of 1961, and the Vienna Convention on Consular Relations of 1963, together with the Optional Protocols of each Convention concerning the compulsory settlement of disputes. The Treaty of Amity, Economic Relations and Consular Rights of 1955, was also invoked in relation to a side issue regarding two hostages who were not members of the Consular staff of the United States of America.

In this case, the problems arose from an element of Superpower rivalry due to the strategic implications of Iran's political affiliations, leading to the intense involvement of the Security Council in mediating efforts to settle the dispute. These, as well as several other major issues in the case, are likely to be features of any NAC dispute that may be referred to the Court.

The Hostages case resulted from an incident on 4 November 1979, when several hundred citizens of Iran invaded the United States Embassy compound in Tehran, taking diplomatic personnel and other persons present hostage by detaining them in the Embassy. The United States sought the release and repatriation of all United
States hostages and reparations from Iran for the alleged violations of her international legal obligations. It was claimed that the breach of obligations by the Iranian State consisted of "tolerating, encouraging, and failing to prevent and punish the conduct described", relating to the capture and detention of the hostages.

It was alleged that the breach of obligations had been compounded by specific undertakings by the Government of Iran that the United States Embassy staff would be defended by Iranian Security Forces against the frequent demonstrations that were taking place throughout the country. The undertaking was to apply despite any adverse political developments between the respective countries, notably the permission given by the United States for the entry into its territory of the deposed Shah of Iran for medical treatment.

The issue of State responsibility for the unauthorised acts of individuals could well arise in a dispute involving an NAC agreement. It could relate to illegal modes of production of nuclear energy. Or it could arise in connection with the manufacture of certain types of nuclear weapons by a company engaged in armaments manufacture, where the particular weapons are in breach of international obligation.

The reasoning of the Court in the Hostages case gives cause for concern in this regard. While the judges were unanimous in the view that, in all the circumstances, the
State of Iran was responsible for the actions of the captors, the many arguments adduced in the majority Opinion to support this proposition indicates that, in a less factually clear-cut case, problems could be encountered. However, in NAC, State responsibility for the acts of individuals or entities within the State has to be absolute in order to make agreements appropriately reliable.

Like the Hostages case, NAC cases are likely to create international crisis situations. The United States instituted proceedings in the Court on 29 November 1979, a little over three weeks after the events complained of took place in Iran. However, many decisive international actions concerning the dispute had been taken in the interim. On 9 November 1979, the President of the Security Council was requested by a letter addressed to him from the Permanent Representative of the United States to the United Nations, to secure the release of the hostages. Before the end of that day, the President of the Security Council had already made a public statement asking Iran to release the hostages. Still on the same day, the President of the General Assembly was able to announce that he was sending a personal message to the Ayatollah Khomeini, making a like appeal. On 25 November, the Secretary-General of the United Nations requested the President of the Security Council to call an urgent meeting of that body in order to seek a peaceful solution to the dispute.

After the institution of proceedings, but before the
case was heard, the Security Council on 4 December and 31 December, respectively, adopted resolutions 457 and 461 of 1979, calling on the Iranian Government to release the hostages. At the instigation of the Security Council, the Secretary-General visited Tehran on 1-3 January 1980, and he established a fact-finding mission to Iran on 20 February 1980. In the meantime the United States imposed a number of economic sanctions against Iran on a unilateral basis.

On 13 January 1980, a draft resolution introduced into the Security Council by the United States, calling for economic sanctions against Iran by the International community, received ten votes in favour, two against, and two abstentions, with one Member not participating in the voting. The negative vote of a permanent Member, the Soviet Union, having had the effect of a veto, the resolution was defeated. Despite the veto, the United States and some other States continued with the economic sanctions directed against Iran, and the United States Government broke off diplomatic relations with the Government of Iran on 7 April 1980.

Hence, by the time the Court delivered its judgment in May 1980, all the issues of the case had been explored in other forums, negotiating initiatives and sanctions had been implemented, and international opinion had crystallized regarding the merits of the case.

It is foreseeable that if a breach of a treaty occurred involving NAC, a similar sequence of events
would follow. In 1978, in the Aegean Sea Continental Shelf case, the Court had already found that "the fact that negotiations are being actively pursued during the present proceedings is not, legally, any obstacle to the exercise by the Court of its judicial function". The unanimous confirmation by the Court that intensive involvement by the Security Council is no bar to legal proceedings, could be a valuable guide to the decision-makers of Governments involved in an NAC dispute.

The Court demonstrated its ability to respond with some speed, by having made an Interim Order concerning the return of the hostages as early as 15 December 1979, barely two weeks after proceedings were instituted. This was undoubtedly largely the result of the existence of "multilateral conventions codifying the international law governing diplomatic and consular relations".

Despite the indisputable breach of treaty obligations, and accession by both States to the Optional Protocols, Iran failed to submit to the jurisdiction of the Court on the grounds that: (a) the issue was an internal matter for the State of Iran, and (b) the existence of alleged breaches of international obligations by the United States, being of overwhelming weight and consequence, were not before the Court in its deliberations on the matter.

The failure of Iran to acknowledge the jurisdiction of the Court was not given the opprobrium in the judgment that might have been expected to result from so
clear a breach of treaty obligations. Iran's absence from the proceedings was noted chiefly in the context of rebutting the contention that the Court should have examined alleged political actions in Iran by the United States during the preceding quarter century. The Court claimed that it would not be in a position to investigate those issues unless Iran appeared to present its case. Taken as a whole, the judgment conveyed the impression that little significance attaches to the acceptance of compulsory jurisdiction and that the only sanction for failure to appear formally before the Court is the inability to fully present an alternative argument. This would suggest that the absence of clauses requiring submission to the compulsory jurisdiction of the Court in NAC treaties is of no practical importance. However, the case has no bearing on the situation regarding those NAC treaties which specify that recourse to the Court is to be by consent of the parties. The plain words in those treaties indicate that, unless all concerned parties agree, the Court has no jurisdiction in relation to claims arising from obligations under the treaty in question.

In the Hostages case it was fortuitous that Iran refused to take its counter-complaints to the Court, as the issues raised in its informal communications with the Court by letter, telegram and telex, would have presented insurmountable difficulties. Iran alleged "more than twenty-five years of continual interference by the United States in the internal affairs of Iran". The Court
would not have been in a position to examine the merits of that claim due to the nature of the evidence required, the breadth of the value judgments involved, and the gravity of the allegations at issue. No matter how ideally impartial the judges might be, a pronouncement by the Court on such matters would be regarded by most, if not all States, as a political evaluation either in favour or opposed to their particular point of view.

Although the Opinion handed down made reference to the wide jurisdiction of the Court notwithstanding the political implications of cases brought before it, had the Court felt obliged to examine Iran's claims in greater detail, it may well have found that it did not have jurisdiction with respect to those matters. Similarly, in an NAC dispute, the Court would not be a suitable organ to adjudicate upon the relevance of any overriding political consideration that may have prompted a party to an NAC treaty to act in breach of its treaty obligations.

In the Hostgages case, even presuming that Iran had presented its arguments before the Court in a defence Memorial or by way of a counter-claim, the Court would have avoided adjudicating upon the substance of those arguments. In passing, the Court adverted to the grounds that would have been adduced, namely, that the State of Iran could have invoked other means of countering unwarranted United States diplomatic influence with the use of appropriate sanctions against illicit activities by any member of a diplomatic mission. While adeptly
avoiding to consider the substance of major political issues, the Court still claimed competence to deal with issues involving significant political overtones, stating –

Yet never has the view been put forward before that, because a legal dispute submitted to the Court is only one aspect of a political dispute, the Court should decline to resolve for the parties the legal questions at issue between them. Nor can any basis for such a view of the Court's functions or jurisdictions be found in the Charter or the Statute of the Court; if the Court were, contrary to its settled jurisprudence, to adopt such a view, it would impose a far-reaching and unwarranted restriction upon the role of the Court in the peaceful solution of international disputes.  

With this observation, the designation of "a legal dispute" as distinct from "a political dispute" was avoided.

Perhaps the most important principle enunciated in the judgment was the decisive weight given, by all judges, to the express words contained in the relevant Treaties, resulting in a unanimous decision for the immediate return of the hostages. Although the Court did not base its conclusions exclusively on the binding force of the Treaties involved, but on the more general "imperative character of the legal obligation", the ultimate importance of treaty commitments is conveyed by the overall import of the judgment.

The inference to be drawn is that unequivocal treaty commitment are justiciable even in politically complex and strategically sensitive situations. These are the conditions likely to prevail in disputes involving NAC.
Eventually, the Applicants in the Nuclear-Tests case, as well as in the Hostages case, were all successful in that the matters they had complained of were resolved largely to their satisfaction. Furthermore, contrary to fears prevalent at the time that each case was heard, the conduct complained of has not been repeated. With respect to the testing of nuclear weapons in the atmosphere since the judgment, these have only been conducted by China, with a negligible average of one weapon per year on that State's own territory. Likewise, contrary to predictions, the capturing of diplomatic hostages by States has not become a favoured method of extracting concessions from other States. The nations of the world did succeed in imposing their common will on the deviating States. They defined their purpose primarily through resolutions and negotiations undertaken via the Security Council and the General Assembly, and, in the Hostages case, with the aid of the provisions of treaties in force, upheld by the International Court of Justice.

Nevertheless, there are some negative conclusions to be drawn from the conduct of the two cases. These relate to the cumbersome nature of the international machinery for determining and imposing justice at the international level, and the haphazard decisions that are entailed in activating the process. Central to the dilemma is that the theoretical ambit of the Court's competence to deal with matters of the kind that would be involved in NAC disputes, greatly exceeds the authority
that the Court actually enjoys in practice. The discrepancy tends to lead to the mistaken perception that the Court, and the system of international law identified with it, are not very relevant. Therefore, in order to make the international legal system effective in ways that promote respect for NAC agreements, leading to their observance and the more expeditious negotiation of new agreements, it would be advantageous if the Court's ostensible functions could be brought into line with its actual authority to prescribe the conduct of States inter se.

A corollary of the Court's inflated jurisdiction, is a corresponding lack of legal recognition for the vast normative and mediating potential of the Security Council and the General Assembly. Yet it is only these bodies with their subordinate committees and backup facilities which have, by virtue of their constituent nationally accredited representatives, de facto authority and power to modify international conduct on the most vital issues such as NAC.

Notes

1 This is not to say that the Opinions handed down by the Court have been consistent. For example, in the view of Georg Schwarzenberger - "To attempt to harmonize the judgment of the International Court of Justice in the South West Africa (Preliminary Objection) cases (1962) with that in the Second Phase of the same case (1966) and both with the advisory opinion on Namibia (South West Africa) (1971) would be evading the real issue; to understand the ideological significance of the break that has occurred in the Court's practice" - Schwarzenberger, Georg, International Law as Applied by International Courts and Tribunals (London, Stevens, 1976) p.168.

3 Id. p.457.


5 Geneva, 1928.

6 On 10 June 1974 the French Embassy in Wellington sent a Note to the New Zealand Ministry of Foreign Affairs, including the following passage - "France, at the point which has been reached in the execution of its programme of defence by nuclear means, will be in a position to move to the stage of underground tests, as soon as the test series planned for this summer is completed. Thus the atmospheric tests which are soon to be carried out will, in the normal course of events, be the last of this type." I.C.J. Rep. 1974, pp. 265-6.

7 The Opinion expressed by the majority of judges goes so far as to give unilateral declarations the same status as treaties. Hence it was stated by the Court that "Just as the very rule of pacta sunt servanda in the law of treaties is based on good faith, so also is the binding character of an international obligation assumed by unilateral declaration. Thus interested States may take cognizance of unilateral declarations and place confidence in them, and are entitled to require that the obligation thus created be respected." I.C.J. Rep. 1974, p. 268. The Court advanced this view despite its acknowledgement of the statement by "the French Ambassador in Canberra to the Prime Minister and Minister for Foreign Affairs of Australia, that it has the conviction that its nuclear experiments have not violated any rule of international law, nor did France recognize that it was bound by any rule of international law to terminate its tests..." p.270.


10 Inter alia, the U.N. Scientific Committee on the Effects of Atomic Radiation, and the International Commission on Radiological Protection.

11 See annual records of Resolutions and Decisions Adopted by the General Assembly.

12 Contra: comment on the case has concentrated on the issue of the binding force in international law of unilateral declarations, not on the practical
considerations that may have motivated the Court. Nevertheless, the Court's Opinion has been viewed as inconsistent with precedent. E.g. Rubin, Alfred P., "The International Legal Effects of Unilateral Declarations", American Journal of International Law, January 1977, Vol. 71 No. 1 p. 24 - "It may be concluded from this review of doctrine, that as of the time the ICJ produced its Judgment in the Nuclear Tests cases there was no real support in theory for the proposition that a unilateral declaration, not made in a negotiating context and provoking no reaction from second states, created an obligation or, to the extent that it created legal effects, put them beyond reach of cancellation by the declarant state."

13 This was the ruling sought. See para. 19 of the Application of Australia which stated that, "The Australian Government will seek a declaration that the holding of further atmospheric tests by the French Government in the Pacific Ocean is not in accordance with international law..."

14 As pointed out in the Joint Dissenting Opinion, I.C.J. Rep. 1974, p.318 para. 16 - "It is true that the Applicant has not asked for compensation for damage in the proceedings which are now before the Court. However, the Australian Government has not waived its right to claim them in the future."


16 Ibid. Judgment of the Court, p.41 para. 72.

17 Id. p.42.

18 Id. p.43 para. 74.

19 Id. p.42 para. 73.

20 Id. p.44 para. 77.

21 Id. pp.44-5 para. 78.

22 Id. p.45 para. 81.

23 North Sea Continental Shelf cases, I.C.J. Rep. 1969, p.176. Regarding "the factors required for the formulation of customary law" in the case, Judge Tanaka added, "The appraisal of factors must be relative to the circumstances and therefore elastic; it requires the teleological approach."

24 Id. p.225.
E.g. Arangio-Ruiz, Gaetano, The United Nations Declaration on Friendly Relations and the System of the Sources of International Law (Sijthoff & Nordhoff, Maryland, 1979). The author repeatedly claims that there is a tendency for States not to act in conformity with U.N. resolutions. Therefore, he describes the resolutions as only "skin deep", p.109 - "What would matter...is not whether Assembly members felt legally bound to vote for the declaratory resolution but, rather, whether they felt legally bound by the rules they proclaimed", p.48.


E.g. "[If] the outcome of litigation were predictable, there would be no cases at all for any court lacking compulsory jurisdiction, save where one party had by chance been uncommonly badly advised." Jennings, R.Y., "The Discipline of International Law", Lord McNair Memorial Lecture, International Law Association, 57th Conference, 1976, p.12.


Resolutions and Decisions of the Security Council.


Ibid.

Id. p.41 para. 88.

From 1970 onward, concerted efforts have been made in the United Nations to increase the utility of the International Court of Justice in the settlement of international disputes. In 1974 exhaustive debate on the subject in the Sixth Committee, culminating in a General Assembly resolution on "Review of the Role of the International Court of Justice" (Res. 3232 (XXIX), failed to make a noticeable impact on the rate of utilisation of the Court; See also U.N. Yearbook 1974 p.833.
Generally Accepted Principles of International Law

The endeavour to reach agreement so as to control the spread and perfection of nuclear arms is one of the most recent international endeavours, without traditions of its own and with no history of contribution to the basis, nature, and methodology of international law during its formative period. The rules that govern NAC were not founded on natural law, customary law or existing international norms.

International law applying to NAC is in the form of treaties or other specific written agreements, or is embodied in declarations and resolutions of the United Nations. Whenever discussing the negotiation of NAC agreements at the United Nations, States continually emphasize the distinction between non-binding and binding agreements, the latter being in the form of treaties duly signed and ratified. Since the beginning of the nuclear era, vigilant, streamlined bureaucracies have regularly and meticulously weighed the advantages and disadvantages of signing or ratifying NAC treaties, and they have prepared elaborate reservations to qualify the extent of their commitment. Deliberateness and precision are the hallmarks of undertakings relating to NAC.

By contrast, in traditional approaches to fundamental issues, like aggressive and defensive
military postures, the principles of international law tend to be diffuse and contradictory, deliberations are usually ponderous in style, and ad hoc methods are often invoked. The inappropriateness of the principles and methods of international law to satisfy many of the contemporary requirements of interaction among States in several subject areas is universally recognised. It has led to many serious efforts to rectify the position, especially by international lawyers themselves.

The most extensive endeavour for improvement is conducted by the International Law Commission, which was established by the General Assembly in 1949, with the express objective of promoting the progressive development of international law and its codification. A number of very significant treaties have been concluded on the basis of Draft Articles prepared by the Commission. However, its recommendations concerning fundamental rationalisations of the principles and basic tenets of international law have failed to gain acceptance.

The recommendations have consisted of a Draft Declaration on the Rights and Duties of States, prepared in 1949; a formulation of the principles of international law contained in the Charter and in the Judgment of the Nuremberg Tribunal, in 1950; and a Draft Code of Offenses Against the Peace and Security of Mankind, in 1954. All three drafts were prepared by the Commission at the request of the General Assembly but none has been adopted. At the time, the orientation of
the Commission was still focused on the problems of the international situation prevailing prior to and during World War II, as revealed at the Nuremberg Tribunal. Nevertheless, some contemporary issues were addressed, notably, the Draft Code in Article 2 (7) lists the following offences against the peace and security of mankind -

Acts by the authorities of a State in violation of its obligations under a treaty which is designed to ensure international peace and security by means of restrictions or limitations on armaments, or on military training, or on fortifications, or of other restrictions of the same character.

Personal responsibility for the acts is proclaimed by Article 4, which states -

The fact that a person charged with an offence defined in this code acted pursuant to an order of his Government or of a superior does not relieve him of responsibility in international law if, in the circumstances at the time, it was possible for him not to comply with that order.

Believing that the International Law Commission was at fault for the unacceptability of its recommendations, the General Assembly set up a Special Committee on Principles of International Law, to draft a "Declaration on Principles of International Law Concerning Friendly Relations and Co-operation Among States in Accordance with the Charter of the United Nations", to be submitted for adoption on the twenty-fifth anniversary of the Organisation. The Declaration was duly adopted on 24 October 1970.

The seven principles of international law embodied in the Declaration are still referred to with favour as
representing "a generally accepted interpretation of the provisions of the Charter". They were cited, for example, in the New Delhi Appeal and Declaration, issued at the 1981 Conference of Non-aligned foreign ministers condemning the Iraq-Iran war for being in contravention of those principles, yet failing to name the aggressor.

No doubt due to the vagueness of their terms, neither the New Delhi statement, nor the United Nations Declaration which it invoked, has made an appreciable impact. The 1970 Declaration added nothing new to existing principles and procedures while disregarding practical considerations. For example, with respect to arms control the Declaration lays down that -

All States shall pursue in good faith negotiations for the early conclusion of a universal treaty on general and complete disarmament under effective international control and strive to adopt appropriate measures to reduce international tensions and strengthen confidence among States.

With respect to the fulfilment of State obligations, the Declaration merely reiterates that -

Every State has the duty to fulfil in good faith its obligations under the generally recognized principles and rules of international Law.

No attempt is made to identify the so called "generally recognized principles and rules". Ten years later, but no nearer to identifying the relevant principles of international law, the Disarmament Commission in its Report to the 35th Session of the General Assembly, obliquely links the generally accepted principles of international law with certain objectives.
often reiterated in the United Nations, in the following terms:

All States Members of the United Nations have, in the Final Document, reaffirmed their full commitment to the purposes of the Charter of the United Nations and their obligation strictly to observe its principles as well as other relevant and generally accepted principles of international law relating to the maintenance of international peace and security. Disarmament, relaxation of international tension, respect for the right to self-determination and national independence, sovereignty and territorial integrity of States, the peaceful settlement of disputes in accordance with the Charter and the strengthening of international peace and security are directly related to each other. Progress in any of these spheres has a beneficial effect on all of them; in turn, failure in one sphere has negative effects on others.

In the light of that construction, it is perhaps opportune to examine the nexus between the various principles of international law as they impinge on the above-listed interrelated issues.

The facility for reaching agreements under the prevailing international legal system affects NAC not only as regards agreements for the qualitative and quantitative limitation of nuclear weapons, but also as it relates to the prevention and settlement of all major international disputes. Agreements concerning the development, stockpiling, transfer and deployment of weapons, especially nuclear weapons, at all stages of their negotiation, conclusion and implementation, share all of the shortcomings which also result in the failure to settle other vital international disputes.

At the same time, in so far as there are stronger inducements for the elimination of genocidal force than
lesser types of force, it has been possible to conclude NAC agreements, amounting to the resolution of international disputes as to the disposition or equivalence of nuclear forces, perhaps more readily than the settlement of less immediately threatening disputes. Yet the two processes interact, so that failure of the international legal system to resolve disputes involving geopolitical conflicts, seriously inhibits the process of NAC.

In its legal context, the utilisation of nuclear armaments is generically an aspect of war, pertaining to the threat or use of force, while the control of nuclear armaments is part of the maintenance of international peace and security. Although there are plausible theories that the threat and use of force, at all levels, often has bio-psychological origins of an irrational nature, the direction into which that belligerence is channelled in the international arena usually relates to genuine conflicts of interests. The conflicts take the form of international disputes involving the territorial, economic and social aspirations adopted by States, or reflecting the interests of influential groups within States.6

Hence, the efficacy of settlement of the international disputes is an important factor in the process of eliminating the threat or use of force, including the most extreme force entailing weapons of mass destruction. International disputes caused by the clash of territorial, economic and social interests could be
termed primary disputes. Increasingly, there are conflicts about the manner in which conflicts should be resolved, including the principles and procedures of peaceful settlement, as well as the legitimate methods of self-defence and the assertion of international rights. Disputes concerning these matters, which could be termed consequential disputes, include all outstanding NAC issues. Failure to differentiate between primary and consequential disputes can give rise to negotiating postures inconsistent with a State's fundamental objectives.

Three basic methods are utilised for the settlement of both primary and consequential disputes. There is a judicial method, a direct method and an institutional method, all of which contain legal elements.

Judicial settlement of both primary and consequential disputes threatening international peace and security rests with the International Court of Justice, as presently provided by the Charter of the United Nations. With respect to issues other than NAC, arbitration could be classified as a judicial function. In regard to NAC matters it is not foreseeable that settlement of a substantial NAC dispute would be entrusted to any arbitrator. Possibly an arbitrator may be empowered at some time to determine a point that is minor, by NAC standards, perhaps in conjunction with a wider mediating role.
The direct method includes negotiation, mediation and conciliation. In accordance with the variants of this method, the parties arrive at an accommodation among themselves, with or without the assistance of third parties selected by them. It is an essentially *ad hoc* procedure, whereby the rules governing the mode of settlement can be varied on each occasion in conformity with the agreed wishes of the parties.

The institutional method of resolving disputes relies on the facilities and authority of an institution, other than a Court, enjoying international confidence. Foremost among these are the General Assembly and the Security Council, representing world opinion. The Security Council has the primary responsibility in this regard, as provided in Chapters VI and VII of the Charter. Both the General Assembly and the Security Council are empowered to set up subsidiary bodies to assist them in these tasks, on a permanent or *ad hoc* basis.

Attempts to create permanent bodies to help with institutional dispute settlement have not succeeded so far. In 1947 the General Assembly established an Interim Committee with a view to organising ongoing machinery for enquiry tasks. The Committee adjourned *sine die* in 1952. In 1949 the General Assembly set up a Panel of Inquiry and Conciliation, whereby Member States were invited to nominate suitable persons for appointment to enquiry and conciliation work, at the request of organs of the United Nations or individual States. No use was made of the Panels, which were abandoned after 1961.
However, several important United Nations quasi-legal enquiries have been conducted on an ad hoc basis. Some examples of General Assembly enquiries were the United Nations Special Committee on Hungary, of 1957, and the Commission of Investigation into the death of Patrice Lumumba of 1961.

It is common knowledge that attempts to settle disputes involving international peace and security by the three methods, judicial, direct, and institutional, have often failed, leading to many instances of hostility and armed conflict between States. Therefore, especially since the end of the Second World War and the advent of nuclear weapons, persistent efforts have been made by international lawyers to improve the theoretical basis, as well as mechanisms, for the prevention and settlement of international disputes impinging on the security interests of States. By Western States, these efforts consisted largely of theories for the stimulated growth of customary international law, while the other States frequently reaffirmed and attempted to expand the relevant provisions of the Charter by means of declarations of the General Assembly.

As has been already noted, three unsuccessful attempts were made by the International Law Commission, within the first decade after World War II, to strengthen the principles of international law for the maintenance of peace, in accordance with the experience of the 1930s and 1940s. During the next quarter century, the General Assembly made numerous recommendations on the subject,
the following eight being the most comprehensive. They were mostly initiated by the Non-aligned and Socialist States. Despite the more lengthy description of the issues, the content of these documents does not, in essence, go beyond the provisions of the Charter.

Western States predominantly opposed or abstained from voting in five out of the eight resolutions, while three resolutions were carried by consensus. These were the Resolution approving the Declaration on Principles of International Law Concerning Friendly Relations and Co-operation Among States in Accordance with the Charter of the United Nations, of 24 October 1970, referred to above; the Resolution on the Definition of Aggression, of 14 December 1974; and a Declaration on the Deepening and Consolidation of International Detente, of 19 December 1977.

The Resolution on the Definition of Aggression does enlarge on the description of aggression as laid down in Article 2(4) of the Charter, by citing self-evident instances of aggression, such as bombardment, blockade, etc. However, also listed are less straight-forward forms of aggression, including "the use of armed forces, such as a State permitting another State to use its territory for the perpetration of an act of aggression against a third State", which would apply to aggression via foreign bases. Another prohibition listed is the incursion of armed bands from one State into another, which would apply to infiltration by guerilla forces, referred to in Article 3(f) and (g) of the Resolution.
Article 5 also introduces a new element by proclaiming that "no consideration of whatever nature, whether political, economic, military or otherwise, may serve as a justification for aggression." Nevertheless, the Resolution does not attempt to derogate from the right of individual and collective self-defence provided by Article 51 of the Charter.

The Declaration on the Deepening and Consolidation of International Detente, disclaims any intention to "detract from" the provisions of the Charter and the existing principles of international law, and does not claim in any way to "alter" those provisions. Yet, without adding to the obligations of member States, the Resolution does encourage Members to permit freer international travel and to promote cultural exchanges.

The non-consensus declarations are even less significant in elaborating the general principles of international law, as they may apply to NAC or to other areas of interaction that could affect NAC. The Declaration on the Inadmissibility of Intervention in the Domestic Affairs of States and the Protection of their Independence and Sovereignty, of 21 December 1965, reiterates that no State may intervene either directly or indirectly into the affairs of another State and that no type of coercion is permissible including economic, political, subversive, etc.
The Declaration on the Strengthening of International Security, of 16 December 1970, lists several provisions of the Charter, including the primacy of obligations assumed under the Charter, and "the principle that States shall settle their international disputes by peaceful means in such a manner that international peace and security and justice are not endangered". The Declaration also seeks to enhance the authority of decisions reached by the Security Council and urges the establishment of subsidiary organs of the Council in conformity with Article 29 of the Charter.

The Resolution on the Non-Use of Force in International Relations and Permanent Prohibition of the Use of Nuclear Weapons, of 29 November 1972, enunciates "the permanent prohibition of the use of nuclear weapons". The Resolution on the Conclusion of a World Treaty on the Non-Use of Force in International Relations, of 8 November 1976, calls on States Members to give consideration to a Draft Treaty on the subject, submitted by the Soviet Union; while the Resolution on the Inadmissibility of the Policy of Hegemonism in International Relations, of 14 December 1979, describes the concept of hegemonism and condemns "the creation of spheres of influence and the division of the world into antagonistic political and military blocks".

The most recent international effort in this field, the draft Manila Declaration on the Peaceful Settlement of Disputes, shows no more promise of effectiveness than its predecessor resolutions in the General Assembly. It re-states the relevant principles already contained in the Charter and draws attention to various Chapters and Articles
Articles of that document, as if they were likely to be overlooked in the absence of reiteration. Perhaps the only sentence that comes to grips with a concrete issue is the proposed item stating—

It is recalled that whenever States have accepted a binding means of settlement of disputes, they are obliged to comply strictly with the decision taken.21

Principles embodied in the above United nations resolutions are still too vague to cover many contingencies. For instance, no appreciable headway has been made to define and outlaw quasi-aggression, posing as defence assistance to allies, hot pursuit or forward defence, as the case may be. Thus, while overt aggression has been clearly outlawed, there are no guidelines for the designation and condemnation of that type of military activity whereby one Government gives assistance to another Government in order to resist so called "aggression", in cases when civil disaffection within the besieged State is a factor in the unrest. Yet it is this type of activity, or the threat thereof, involving both Superpowers, that has precipitated the most bitter primary international disputes in recent years,22 and which presents the scenario for nuclear conflict at any time.

So long as existing disputes and potential conflicts of such magnitude remain unsolved, and apparently insoluble, the temptation to settle them by force is overwhelming, leading to the acceptance of extreme risks in the escalation of the nuclear arms race, with a corresponding reluctance to enter into NAC agreements.
International Agreement by Resolution

In the attempt to formulate adequate rules of conduct for the avoidance or settlement of primary international disputes, the international community faces a dilemma. The possibilities of advance by way of treaty law are limited. Unlike arms control agreements, treaties for the designation of specific rights and duties related to the avoidance of primary disputes would be necessarily too limited in scope for the ongoing maintenance of international security. On the other hand, existing principles are insufficient. Yet, while the broad objectives for peace and justice contained in the Charter have stood the test of time and fundamentally changed circumstances, any attempt to elaborate them further would amount to a quasi-legislative function.

Nevertheless, it is evident that the resolutions of the General Assembly have to be incorporated into the international legal system, especially as they relate to principles for the maintenance of peace and security, because agreement in the form of those resolutions is the only process capable of sufficiently rapid development to make a timely impact over a wide range of major issues. For instance, the Legal Counsel of the United Nations, Professor Erik Suy, has noted the norm creating authority of General Assembly resolutions, claiming that -

It is therefore no exaggeration to say that the general will of the international community has acquired a certain legislative status when manifested through formal actions of international institutions. In this sense the General Assembly resolution is becoming a useful modern tool for
standard-setting and rule-creation in an expanded international society that requires more rapid formulations of standards governing the conduct of its members.\textsuperscript{23} However, Professor Suy did not indicate the jurisprudential nature of the process. Failure to resolve this impasse in international norm creation and conflict resolution, involving matters vital to State interests, has a strong indirect influence on the success of NAC. It also has a direct bearing on NAC, to the extent that States do not avail themselves of the opportunities to conclude the appropriate NAC treaties.

Unable to devise a solution, international lawyers from the Socialist States tend to ignore that a theoretical dilemma exists beyond acknowledging that the principles of international law need to be further elaborated by agreement, based on the concept of co-existence. Lawyers from the newly independent States of the Third World are understandably uneasy that West European oriented international law is dominant, drawing attention to its weaknesses, while refraining from advancing comprehensive alternatives. They take the pragmatic stance of attaching great importance to Assembly resolutions without feeling the need to explain their position in terms of a general theory.

By contrast, many international lawyers of the West, although showing no marked enthusiasm for the content of General Assembly resolutions, have suggested that, in one way or another, Assembly resolutions should be accorded a theoretically consistent status. Basically two modes of achieving this aim have been envisaged by them.
According to one school of thought, the Assembly's recommendatory powers are quasi-legislative, or should be transformed into explicitly legislative powers; while others believe that Assembly recommendations can form part of the evolutionary process of the law.

The legislative school of thought has several variants. Professor Richard Falk asks in this context, "How can there be legislative change without a legislature?" He answers the question by proposing that Assembly resolutions should be regarded as creating "weak" legislative norms. However, he does not elaborate in detail how these weak norms are to influence international conduct, except to observe that -

... the resolution joins, admittedly to an imperceptible degree, with other tendencies that together create some legal basis for the argument that an obligation exists...

It then becomes necessary to determine how "weak" a norm may be without altogether losing its normative character. Professor Falk suggests the minimum support required to be a two-thirds majority in the General Assembly, including the Superpowers. A different assessment is made by Rosalyn Higgins, who postulates the possibility of a General Assembly resolution emerging more or less intact as a norm of general international law, without the support of any of the permanent Members of the Security Council, although she recognises that, "... exclusion of all the Big Powers may in present circumstances render the new custom ineffective". The suggestion may possibly have validity in a regional context.
Similarly indeterminate qualities have been attributed to Assembly resolutions by Gaetano Arangio-Ruiz. Using somewhat different terminology, he claims that -

The Assembly has a law determining, interpreting and developing function in a 'non-technical' sense.\(^{27}\)

Taking a somewhat stronger stand, B.V.A. Röling claims that, "National sovereignty must give way to international co-operate action..."\(^{28}\) without specifying the modus operandi for its attainment. Taking the extreme position on the legislative spectrum are those who see a need for overt legislation by the General Assembly under a system of world government, advocating world peace through world law, world federalism etc.\(^{29}\)

Academic writers who support what could be termed the evolutionary school, envisage the metamorphosis of General Assembly resolutions into customary international law by a gradual transformation. It has been already concluded above that international law relating to NAC is not amenable to evolution by means of customary international law. Hence, it remains to consider whether the principles and rules of international law, especially as they may affect the settlement of international disputes pertaining to the basic security interests of States, could be advanced by some variant of the evolution of resolutions into custom.

The first prerequisite of the evolution of Assembly resolutions into customary international law would be the frequent interpretation of the law by the International
Court of Justice, or like judicial body, in order to indicate in what manner development is taking place. Yet, as noted in the previous Chapter, very few cases are referred to the Court even by States with a West European tradition. It has been frequently observed that the most prevalent reason for avoiding the Court is the unreliability of the law which it applies. Hans Blix put it in these words -

What are the reasons for this reluctance to submit to the Court's jurisdiction? One reason, applying generally, is that the rules of customary international law are often so uncertain, that states may be inclined in their disputes to rely rather upon their bargaining position than upon what they believe is - but cannot be quite sure is - their right.30

If the International Court of Justice were at fault, rather than the law it dispenses, then States could be expected to use arbitration facilities. However, with the exception of commercial transactions, relying on quasi-contractual agreements involving States,31 international arbitration has not gained favour.

During the early 1950s a concerted effort was made to encourage arbitration. In pursuit of that aim the International Law Commission drafted a Convention on international arbitration and agreed on a set of model rules. These were considered by the General Assembly which decided to circulate the model rules to Member States for their comments.32 Governments showed their disinterest in arbitration by their failure to comment on the draft rules, leading to their abandonment.
Therefore, the formulation used by M.K. Nawaz in describing the situation is more apt in this context because it emphasizes the reluctance of States to submit to any judicial ruling that would rely on imprecise concepts of international law. He said -

Time and again states have expressed a view that in the absence of agreement on the precise scope and content of international law, they cannot submit their disputes to compulsory judicial settlement. 33

Yet, if the principles of the evolutionary school were adopted, there would have to be constant uncertainty as to which Assembly resolutions were evolving into law and, if so, to what extent they had evolved. Without constant Court rulings it would be impossible to determine the rights and duties of a given State at a particular time. Therefore, whenever a judicial body were called upon to adjudicate on any issue involved, the judges or arbitrators concerned would have to take upon themselves a wide personal discretion similar to that necessitated by the imprecision of the general principles and rules of international customary law.

Further, as has been noted with respect to NAC issues, the Charter, with the exception of a few subject areas, only gives the General Assembly power to make recommendations. Therefore, States must be assumed to rely on the express provisions of the Charter. Hence, far from the possibility of assuming their intention to be bound, the opposite presumption must prevail short of clear evidence to the contrary. Nevertheless, several
academic writers have expressed a contrary view. For example, Professor Arangio-Ruiz states that -

... the resolutions of international bodies are certainly among the elements of states' practice that may contribute to the creation of rules of customary law or of contractual rules.\(^{34}\)

The widely held view is also presented by Dr Higgins, in these words -

Resolutions of the Assembly are not per se binding: though those rules of general international law which they may embody are binding on member states, with or without the help of the resolution. But the body of resolutions as a whole, taken as indications of a general customary law, undoubtedly provide a rich source of evidence.\(^{35}\)

Apart from the theoretical difficulties of the evolutionary school, it should be observed that its adherents would find it difficult to produce recent examples of the development of international law by these means, especially involving issues that concern the vital security interests of States. This is not to deny that some aspects of the above cited formulations are both valid and significant, but merely to observe that they are so vague as to be impractical in their present form.

As the International Law Association concluded at its Workshop on the Theory and Methodology of International Law, "The fact that international law is in a state of incoherence and confusion needs no further elaboration."\(^{36}\) The conclusion which emerges from that fact, notwithstanding persistent efforts to make improvements is, that the traditional framework of the theory of international law can no longer accommodate the necessary changes.
Restructuring the International Legal System

In previous Chapters, and the earlier part of this Chapter, an examination was undertaken of the shortcomings of the international legal system in relation to agreements for NAC. Subsequently it was noted that the international legal system is similarly deficient in the prevention and resolution of primary conflicts of interest which constitute the major plausible inducements fuelling the nuclear arms race. Whether or not those apparent inducements are valid grounds for nuclear armament is immaterial, so long as they are perceived to be so by decision makers. It has also been noted that the operation of NAC agreements cannot be separated from the general principles of international law imparting their particular status, and prescribing all other relationships between States. Further, it was asserted that, in several ways, those general principles have proved to be inadequate for present needs and for the tasks ahead.

It follows that NAC is inhibited by the present structure and content of the international legal system and, implicitly, that if that system were to be improved NAC agreements would become more effective. Therefore it is pertinent to advert to the type of improvements that might take place, and to propose an outline for a restructured international legal system. The conclusions reached by the United Nations Study on the Relationship Between Disarmament and International Security present the issues thus -
Even in a climate of co-operation and detente, some basic political and other differences among States will remain. It is important to contain these by developing and utilizing more effectively procedures for the peaceful settlement of disputes in accordance with the Charter of the United Nations, and by the establishment and faithful respect for principles of international conduct in relations among States. In the long run, only consistent adherence by all States to such principles would provide a solid basis for lasting detente, far-reaching disarmament and sustained international security. Over the years, the United Nations General Assembly has been elaborating such principles in relevant expressions of the political will of States to act accordingly in international relations. However, their full potential as means for developing an international legal order is not realized unless they are developed, as appropriate, into recognized norms of international law. Such norms should, wherever possible, include procedures for the settlement of disputes that may arise out of the implementation of the terms of such agreements and treaties.

There are also non-legal impediments to the NAC process, briefly adverted to in the Introduction and previous Chapters, which could become so inhibiting as to make the adequacy of the international legal system irrelevant to the inevitable loss of control over the nuclear arms race. Proceeding on the assumption that other obstacles to NAC are not insurmountable, the following changes are required in the international legal system to create a climate in which NAC can become more effective —

Firstly: in order to win the confidence of the great majority of States to an acceptance of third party adjudication of international disputes, the law applied by the International Court of Justice would have to be so unambiguous that the outcome of cases presented to it would be largely predictable. In order to achieve this, the obligations recognised by the Court of Justice would
have to be restricted to those that had been unequivocally undertaken by the parties to the dispute under consideration.

Likewise, the methods of interpretation of those undertakings would have to enjoy the widest possible acceptance, and such discretion as remained with the judges would have to be exercised with reference to norms approved by the various forums of the United Nations. The inevitable consequence of such changes would be that the Court would have to abandon any pretention of being able to adjudicate all international conflicts hitherto regarded as legal disputes. Therefore, it would be necessary to have the means for transferring all inappropriate cases, or aspects of cases, from the ambit of the Court's jurisdiction to organs more suited for dealing with them.

Secondly: major international disputes not amenable to speedy negotiated settlement by the parties themselves, with or without mutually accepted third party assistance, and excluded from the Court's jurisdiction, would have to be automatically referred to the Security Council as the only world body with the theoretical right to take action, and the practical capacity to do so. However, the Security Council could not assume the administrative burden of this task without backup facilities. Further, it would be of paramount importance for the whole membership of the United Nations to participate in the adjudicative process, but only in a recommendatory
capacity, in keeping with the spirit of the Charter and the contemporary alignment of power and influence which it represents.

The procedure would not have to entail the abandonment of the legal process or the sacrifice of the expertise contributed by international lawyers. It would merely require the institution of a system whereby lawyers could exercise their competence as accredited delegates of States, instead of sitting in their individual capacities. Nor would the change have to entail the diminution of impartiality. The standard of adjudication would be predicated on whether States wish to conduct a system of consistent international justice or whether they do not. If not, it would be futile to attempt to foist justice on them surreptitiously by any means whatever. All that can be done is to devise an administrative system for the dispensation of justice that is seen to be the nearest possible approximation, under present circumstances, to the impartial application of international norms. Viewed in that light, the relevant comparison is not between the operation of the Court and an ideal Court, but between the marginal impact on major international disputes that has been exerted by the Court, juxtaposed against the relatively successful day to day functioning of the General Assembly and the Security Council.

Thirdly: so as to foster the development of international law as a universally accepted standard of conduct, all States must have the opportunity to
participate in the establishment of its norms, as well as in determining the manner of their observance. Likewise, possibilities should be created for States to have a direct input with respect to the legal principles and rules governing their relationship inter se in keeping with the changing requirements of international life, including the designation of the legal consequences that are to flow from their deliberations and agreements at the various levels of formality.

As some of these functions do not lend themselves to decision by deliberations of the General Assembly, a more flexible system should be instituted. At the same time, in keeping with the balance of powers inherent in the United Nations system, the Security Council, with the concurrence of its permanent Members, must remain the final arbiter. Where appropriate, of course, the method of approval by resolution, based on recommendations of the International Law Commission and/or the Sixth Committee, as the case may be, would be utilised.

Fourthly: in all but the most pedantic sense, the provisions of the Charter are the embodiment of customary international law at this time. If there exists a State that does not believe itself bound by the principles and rules of the Charter, it can be confidently asserted that none of that State's accredited representatives would be prepared to acknowledge that perception. Also, the charter is a Treaty in force, duly ratified by nearly all sovereign States in the world. Its rules are sufficiently detailed to create contractual relations.
Its principles are broad enough to encompass all the significant endeavours of the international community.

Albeit technically a part of the Charter, Article 38 of the Statute of the International Court of Justice is not consonant with the principles of the Charter and the division of powers created by it. It has already been argued in the previous Chapter that the provisions of Article 38 lead to consequences out of step with contemporary State practice; that they enshrine a Eurocentric orientation; and that they imply the willingness of States to entrust their most vital interests to a few individuals with legal qualifications acquired in other, sometimes potentially hostile, States.

The aforementioned inappropriate attributes of Article 38 are reminiscent of the failed League of Nations regime of international law. The provisions transposed in their entirety from the Statute of the Permanent Court of International Justice are the heritage of an alien era, that not only hinders the settlement of current disputes but also stands in the way of the development of viable alternative modes of settlement.

For the above reasons, in order to achieve the requisite improvement in the international legal system, it would be imperative to devise a general theory of international law in harmony with the outlook prevalent in the main groups of States, that would be acceptable to
all. Such a general theory would have to differentiate between legal consequences flowing from matters to which States have given their explicit consent, and legal consequences flowing from those matters to which they have given only tacit or implied consent.

Code of General Principles of International Law

The Code would be adopted by consensus in the General Assembly on the basis of a draft prepared by the International Law Commission, and revised by the Sixth Committee, or a Legal Revision Committee appointed by the Assembly in accordance with the principles of equitable geographical distribution. Subsequently the draft could be incorporated into the Charter in the form of an amendment. Alternatively, an Assembly Resolution or Declaration could form the basis of a separate Convention. Another solution would be for States to act in accordance with a consensus Declaration of the subject without other formal endorsement. The following elements might be considered when preparing the Code:

1. Affirmation of the supremacy of the United Nations Charter as the ultimate source of international law for the foreseeable future.

2. Declaration that two kinds of international law exist -

   a. treaty law, being international agreement by explicit consent of the parties, to be created, observed and interpreted in accordance with the Vienna Convention on the Law of Treaties, and
b. precept law, being precepts of international co-operative conduct, to be defined and applied in accordance with the Code.

3. Definition of precept law as being those principles and rules of international co-operative conduct to which Member States of the United Nations have implicitly given their consent.

4. Confirmation that the International Court of Justice be retained as provided in the Court's Statute, including the scope of the Court's jurisdiction as laid down in Article 36, provided that the sources of law to be invoked in the Court's ordinary jurisdiction shall be as follows -

   a. treaties in force that were concluded or confirmed after the Charter was adopted
   
   b. to the extent necessary for the interpretation of treaties -
   
       i. precept law
   
       ii. in the absence of relevant precept law, such international norms, hitherto called customary rules of international law, as have already been cited in cases decided by the International Court of Justice or by the Permanent Court of International Justice.

5. Identification of -

   a. the sources of precept law, as being principles and rules of international co-operative conduct
contained in —

i. widely accepted treaties in force

ii. resolutions of United Nations bodies

iii. in the absence of i and ii, such international norms, hitherto called customary rules of international law, as have already been cited in cases decided by the International Court of Justice or by the Permanent Court of International Justice.

b. the content of precept law, as being those principles and rules of law that can be deduced from i, ii and iii, having been implicitly recognised as constituting international co-operative conduct required of Members of the United Nations.

6. Exposition of the operation of precept law, can establishing that it can only be applied by —

a. the Security Council

b. the International Court of Justice in its treaty interpreting capacity.

7. The designation of *jus cogens* as being the body of principles contained in the Charter.

8. Provision that —

a. legal issues referred to the Secretary-General by the Security Council, the General Assembly or the International Court of Justice, not
being adjudicable by the Court in its amended jurisdiction in accordance with paragraph 4., are to be transferred for assessment to Legal Panels;

b. States entitled to nominate delegates to the Legal Panels are to be selected by the General Assembly on the basis of equitable geographical distribution, provided that, if the issue relates predominantly to the observance of treaty provisions, the Legal Panel to assess it shall be composed of representatives of States parties to the relevant treaty, or those of them that wish to avail themselves of the opportunity to participate;

c. in the event that the participation of States representatives exceeds a given number, being representatives of the parties to a treaty under consideration, then those representatives are to be empowered, by decision among themselves, to appoint an appropriate lesser number to sit on the Panel.

9. Pronouncement that the mandate of the Legal Panels is to be the submission of recommendations to the Security Council, in accordance with the assessment of Panel members as to whether a State has acted contrary to treaty law or precept law or both, as the case may be. Further, that in accordance with paragraph 6., the Panel be required not to determine the content of precept law by reliance on any individual resolution of the United
Nations, but only on an overall appraisal of the relevant treaties, resolutions, and their observance by States, indicating the creation of an accepted standard of international co-operative conduct.

10. Indications of the procedure to be followed by the Legal Panels, requiring them to -

a. Receive submissions from the parties and, when appropriate, from the Sixth Committee;

b. At any stage of the proceedings to recommend interim action by the Security Council;

c. Recommend referral of any issue of treaty interpretation to the International Court of Justice, provided that in the opinion of the Panel the Court has jurisdiction to hear the case;

d. Specify the relevant treaty law, and establish the nature and extent of the consensus that allegedly constitutes the precept law to be invoked, (for example that there shall be no testing of nuclear weapons in the atmosphere) citing evidence of the consensus;

e. Investigate the facts complained of, allegedly constituting the breach of precept law;

f. Assess whether the breach has occurred and its significance in all of the circumstances, including -

i. whether specific damage has resulted or could result from the breach

ii. the existence of any aggravating or mitigating circumstances;

g. Report its findings or interim recommendations, made jointly or severally and presented
in a public document to the Security Council, preferably not in a discursive style but concisely, under the various headings.

11. Reaffirmation that the Legal Panels are to be entirely subordinate to the Security Council and that their creation is not to be interpreted as establishing a practice requiring the Security Council to desist from debating and deciding upon issues concurrently under consideration by a Legal Panel.

Notes

E.g. see G.A. Res. on the Peaceful Settlement of International Disputes 3283 (XXIX) of 12 December 1974, in operative paragraphs as follows -

1. Draws the attention of States to established machinery under the Charter of the United Nations for the peaceful settlement of international disputes;

2. Urges Member States not already parties to instruments establishing the various facilities and machinery available for the peaceful settlement of disputes to consider becoming parties to such instruments and, in the case of the International Court of Justice, recognizes the desirability that States study the possibility of accepting, with as few reservations as possible, the compulsory jurisdiction of the Court in accordance with Article 36 of the Statue of the Court;

3. Calls upon Member States to make full use and seek improved implementation of the means and methods provided for in the Charter of the United Nations and elsewhere for the exclusively peaceful settlement of any dispute or any situation, the continuance of which is likely to endanger the maintenance of international peace and security, including negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, good offices including those of the Secretary-General, or other peaceful means of their own choice;

4. Requests the Secretary-General to prepare an up-to-date report concerning the machinery established under the Charter relating to the peaceful settlement of international disputes, inviting his attention in particular to the following resolutions of the General Assembly:

(a) Resolution 268 D (III) of 28 April 1949, in which the Assembly established the Panel of Inquiry and conciliation;
(b) Resolution 337 A (V) of 3 November 1950, Section D. in which the Assembly established the Peace Observation Commission;

(c) Resolution 1262 (XIII) of 14 November 1958, in which the Assembly considered the question of establishing arbitral procedure for settling disputes;

(d) Resolution 2329 (XXII) of 18 December 1967, in which the Assembly established a United Nations register of experts for fact-finding;

(e) Resolution 2625 (XXV) of 24 October 1970, in which the Assembly approved the Declaration on Principles of International Law concerning Friendly Relations and co-operation among States in accordance with the Charter of the United Nations...


Res. 2625 (XXV).


A/35/42 para.18, emphasis added.

International instruments for the peaceful settlement of international disputes concluded prior to the nuclear arms race included - the First Hague Convention on the Peaceful Settlement of International Disputes (18 October 1907), the General Act for the Pacific Settlement of International Disputes (26 September 1928), the Revised General Act (28 April 1949); and regional treaties concluded among Western European States (29 April 1957).

Res. 111 (II).

Res. 268 (III).

By Res. 1132 (XI).

By Res. 1601 (XV).
11 Res. 2625 (XXV).
12 Res. 3314 (XXIX).
13 Res. 32/155.
14 Res. 2131 (XX).
15 Res. 2734 (XXV).
16 Res. 2936 (XXVII).
17 Res. 31/9.
19 Res. 34/103.
22 E.g. in Afghanistan, Angola, Chile, El Salvador, Ethiopia, Kampuchea, Korea, Viet Nam.
23 Suy, Erik, "A New International Law for a New World Order", The Spirit of Uppsala (JUS 81) Manuscript No.43 p.11.
25 Id. p.180.
27 Arangio-Ruiz, Gaetano, The United Nations Declaration on Friendly Relations and the System of the Sources of International Law (Sijthoff and Nordhoff, Maryland, 1979) p.77.
Constitution on the Settlement of Investment Disputes between States and Nationals of Other States, of 14 October 1966. There were 79 contracting States at 30 June 1980.

By Res. 1262 (XIII).


Arangio-Ruiz. op.cit. p.36.

Higgins, op.cit. p.5.


CHAPTER VIII

PREVENTING AN INCREASE IN NUCLEAR ARMED STATES

The Horizontal Non-Proliferation Regime

Horizontal proliferation is the acquisition of nuclear weapons capability by additional States. Nuclear weapons capability could be a few crude bombs manufactured or obtained by clandestine means, or the declared stockpiling of several hundred weapons, with correspondingly sophisticated delivery systems, or any other level of nuclear weapons preparedness between those extremes. The stationing of nuclear weapons, owned and controlled by one State, into the territory of another State, is regarded as a part of vertical proliferation as between States that have control over nuclear weapons.

The horizontal non-proliferation regime has been created by the international community to prevent or inhibit the spread of nuclear weapons to additional countries. It is based on the operation of three treaties: the Statute of the International Atomic Energy Agency (IAEA), the Treaty of Tlatelolco, and the Non-Proliferation Treaty.\(^1\) The last named Treaty sets out the measures to be adopted for the prevention of horizontal proliferation as follows -

Article I

Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; 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 II

Each non-nuclear-weapon State Party to the Treaty undertakes 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.

The corresponding Article 1 of the Treaty of Tlatelolco only refers to the obligations of non-nuclear-weapon States in the maintenance of the horizontal non-proliferation regime, in the following terms -

Article 1

1. The Contracting Parties hereby undertake to use exclusively for peaceful purposes the nuclear material and facilities which are under their jurisdiction, and to prohibit and prevent in their respective territories:

(a) The testing, use, manufacture, production or acquisition by any means whatsoever of any nuclear weapons, by the Parties themselves, directly or indirectly, on behalf of anyone else or in any other way, and

(b) The receipt, storage, installation, deployment and any form of possession of any nuclear weapons, directly or indirectly, by the Parties themselves, by anyone on their behalf or in any other way

2. The Contracting Parties also undertake to refrain from engaging in, encouraging or authorising, directly or indirectly, or in any way participating in the testing, use, manufacture, production, possession or control of any nuclear weapon.

Both Treaties require extensive verification procedures to be undertaken in co-operation with the
IAEA. Such verification primarily consists of entering into safeguards agreements with the IAEA, whereby the Agency is supplied by the relevant non-nuclear-weapon State with the necessary information concerning nuclear activities to be safeguarded, including the disposal of all special fissionable material. The agreements to be concluded with the Agency also require the contracting State to permit periodic inspection of all of its nuclear materials and facilities (full scope safeguards) by designated inspectors employed by the Agency.²

The Treaty of Tlatelolco, which preceded the Non-Proliferation Treaty, does not rely entirely on the operation of the safeguards system with the Agency. That Treaty contains provisions for additional controls, requiring States Parties to submit biannual reports confirming that no activity prohibited by the Treaty has occurred within their borders, and permitting special inspections in given circumstances.³ Another notable difference is that the Treaty of Tlatelolco, unlike the Non-Proliferation Treaty, permits nuclear explosions for peaceful purposes under its Article 18. If the Article is to be observed to the letter, it is not likely to have any practical application because it requires a peaceful nuclear explosion to be in accordance with prior Articles 1 and 5. The relevant portion of Article 5 defines a nuclear weapon as –

..any device which is capable of releasing nuclear energy in an uncontrolled manner and which has a group of characteristics that are appropriate for use for warlike purposes.
Since there is no known or contemplated method whereby peaceful nuclear explosions can be differentiated from explosions suited to warlike purposes, the provisions of Article 18 appear to be redundant. This does not exclude the possibility of tortuous interpretations to suit the purposes of some Latin American States not Parties to the Non-Proliferation Treaty, which may be determined to explode nuclear devices without acknowledging nuclear-weapon status. However, world public opinion could not be deceived by such a ruse, least of all in Latin America itself where the issue has been the subject of some concern.

The second Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, during August-September 1980, afforded a good opportunity to evaluate the effectiveness of the IAEA safeguards system in relation to the entire horizontal non-proliferation regime. While the Review Conference naturally concentrated on issues directly bearing on the conduct of the Parties to the Treaty, the operation of the safeguards system in relation to the Treaty of Tlatelolco, and also in connection with safeguards agreements entered into with States not members of either Treaty, came under scrutiny. Although the Conference concluded without reaching agreement on any substantive issue, due to the dissatisfaction of Parties with the lack of progress by nuclear-weapon States in halting vertical proliferation, many important assessments were made by individual States and groups of States.
The caucus of developing nations, known as the Group of 77, submitted their assessment in the form of two Working Papers. Relying on the report of the IAEA, as well as their own evaluations, these States maintained that in the past five years there had been no diversion of nuclear material subject to the IAEA safeguards system. Yet, in the same context, they pointed out that there have been reports alleging "significant quantities of special nuclear material unaccounted for in a non-nuclear-weapon State party to the Treaty". However, it was felt that in broad terms, the verification procedures undertaken in co-operation with the IAEA, and implemented in accordance with the Agency's Statute, were quite adequate. IAEA provisions were found to be satisfactory, not only to the extent that they verified the non-division of sensitive materials, but also with respect to the manner in which they were applied, so as not to hamper "economic, scientific or technological development of the parties to the Treaty".

The Group of 77 also drew attention to serious flaws in the horizontal non-proliferation regime. While it was conceded that there had been no direct transfer of nuclear weapons to non-nuclear-weapon States in breach of Article I, it was implied that the spirit of the Treaty had not been altogether complied with. The Group noted the loophole in the Treaty whereby non-nuclear-weapon States Parties are not expressly forbidden to export nuclear material, equipment and technology to other non-nuclear-weapon States, in a manner that could lead to
their utilisation for the acquisition of nuclear weapons capability by the recipient. The members of the Group did not recommend an amendment of the Treaty to rectify this omission. Instead, they called on the Parties to the Treaty to interpret its provisions so as to infer an extension of the obligations of nuclear-weapon States to non-nuclear-weapon States, wherever applicable.

The Group was particularly concerned about the transfer of nuclear materials and skills to States not Parties to the Treaty whose nuclear-weapon status has been in doubt, in particular South Africa and Israel. They referred to these two States by name but omitted to mention some other similarly ambivalent importing States, as well as all of the exporting States so implicated.

Mexico and Yugoslavia were critical of the alleged deficient implementation of Article V of the Treaty. They claimed that there had been insufficient effort, on the part of the IAEA, to inform non-nuclear-weapon States Parties about the potential benefits to be derived from the peaceful application of nuclear explosions allegedly obtainable from the nuclear-weapon States. Efforts to keep open the lines of communication for passing on information of this kind might be intended to forestall any moves among the Parties to the Treaty of Tlatelolco from insisting on the right to detonate nuclear explosions of an ostensibly peaceful kind.

The United States drew attention to a very significant problem, arising from the vast increase in
the volume and type of safeguarding activities that the IAEA will have to undertake in order to keep pace with the growing nuclear industry and with changed methods of operation among sections of that industry. The United States cautioned that, unless additional human and financial resources were made available for the refurbishment of the Agency's safeguards procedures, they could become inadequate in the near future. It was also suggested that States planning new commercial nuclear installations should design and construct them in such a manner as to facilitate safeguards measures.

The Implications of Horizontal Proliferation

The consequences of horizontal proliferation would undoubtedly vary depending on the sequence in which States acquired the capability, the overt or clandestine nature of the capability, and the degree of sophistication attained by the various States. None of these variables are foreseeable with any certainty, although the level of nuclear technology for industrial energy production is acknowledged to be the best guide of a State's ability to produce nuclear weapons, if it so wished.

Taking into account both technological development and a possible political motivation, the following States have come into contemplation as likely Nth States in the foreseeable future: Algeria, Argentina, Australia, Brazil, Egypt, (Federal Republic of) Germany, India, Indonesia, Iran, Iraq, Israel, Japan, (South) Korea, Libya, Nigeria, Pakistan, South Africa, Sweden, Syria,
Taiwan and Zaire.\textsuperscript{11}

While several of these States are Parties to the Non-Proliferation Treaty or the Treaty of Tlatelolco, their renunciation or breach of those Treaties cannot be ruled out in the event of the breakdown of the non-proliferation regime. Such an eventuality must be contemplated in any prediction about the likely consequences of horizontal proliferation.

Bearing in mind the difficulty of foreseeing what any one State may do in an altered international environment or as the consequence of an internal change of Government, it is evident that across-the-board prediction about the consequences of a cataclysmic upheaval, such as horizontal proliferation might produce, can only qualify as guess-work. Nevertheless, many predictions of this kind are being confidently made.\textsuperscript{12}

Soviet commentators have said little about the expected consequences of horizontal proliferation, but the actions of the Soviet Union indicate that it is committed to a stringent policy of preventing the emergence of more nuclear-weapon States. The Soviet Union has been extremely reticent about the transfer of nuclear technology,\textsuperscript{13} even at the expense of serious political disadvantage in its relations with the States friendly towards it.\textsuperscript{14} Further, it has foregone the very considerable political advantages to be attained from offering nuclear technology and materials to countries
rebuffed in their efforts to obtain these from the United States and other Western States. Whenever supplying special fissionable materials, the Soviet Union insists on the return of all spent fuel, thus preventing any possibility of its misuse.15

Although not as commercially stringent as the Soviet Union, the United States has so far followed a determined policy opposed to horizontal proliferation. This policy coincided with Government and academic assessments concerning the dangerously destabilising consequences that the emergence of additional nuclear-weapon States would produce. The introduction of the Nuclear Weapon Non-Proliferation Act in 1977 by President Carter, and its subsequent adoption in 1978, marked the zenith of that policy and that outlook.

When attempting to apply the legislation by renegotiating supply agreements with countries like India and Japan, the United States encountered much stronger opposition than it had anticipated. In addition, Western allies like France and Germany did not close ranks on the issue. Instead, they permitted commercial interests in their States to take advantage of the strict supply conditions imposed by the United States, by offering more favourable terms.16 Naturally this was received with disfavour by the United States nuclear industry, which has resulted, since 1978, in a powerful backlash opposed to strict anti-proliferation measures.
Since that time there has been a number of assessments in the United States predicting that an increase in nuclear-weapon States is (a) inevitable, (b) manageable, and (c) decidedly advantageous. There is a notable contrast between the attitudes that prompted the introduction of the 1977 Act, and subsequent official attitudes to horizontal non-proliferation. For instance, a Nuclear Proliferation Fact-book, prepared in 1977 by the Congressional Research Service of the Library of Congress, took the objective of non-proliferation for granted and concentrated on methods for achieving this purpose. By 1979, however, a collation of assessments by the Central Intelligence Agency and the Department of Defence assumed large-scale proliferation within a decade or so to be unavoidable.

Without over-estimating the significance of the 1979 collation, it is interesting to note that all of the assessments in that study tend to be optimistic and no grossly destabilising consequences of horizontal proliferation are predicted. On the contrary, it is postulated that the known possibility of possession of nuclear weapons by sub-national groups would tend to stabilise otherwise unstable regimes; that horizontal proliferation could undermine Third World solidarity in its economic confrontation with the North; that acquisition of the weapons is not likely to result in their use; that, alternatively, the use of nuclear weapons by the newly emerged nuclear-weapon States could have a salutory effect by bringing about a code of good
behaviour regarding nuclear weapons; and, above all, that horizontal proliferation would disadvantage the Soviet Union vis-à-vis the United States. The last-mentioned assessment is the most significant from a policy point of view, and is presented in the following unequivocal terms:

To recapitulate, nuclear proliferation would have adverse effects on the Soviet Union, increasing the threat to its national security, diminishing its ability to project power and influence through military means, and reducing its stature as a global power. To counteract these effects and remain as actively competitive in world affairs as possible, the Soviet Union would modify some of its traditional strategies and tactics which would tend to become increasingly counterproductive in an era of nuclear proliferation, replacing them with others, more suitable to cope with the tasks at hand. The style and method of Soviet foreign policy would become less abrasive. The content of Soviet foreign policies would be less confrontationally oriented, emphasizing co-operation and accommodation instead. Moderation, reasonableness, a high sense of responsibility, and, perhaps, even responsiveness to the sensitivities of others would characterize Soviet behaviour. In sum, under the impact of nuclear proliferation the Soviet Union would become a more sensible member of the global community and play a more constructive role in it.

In all of the assessments, the possible adverse consequences in the West of uncertainty, social disillusionment, rapid political realignments, and perhaps public fear verging on panic if nuclear weapons were used by anyone, have been omitted from calculation. Neither is it apparent, for example, why Soviet leaders should react so positively in a situation of unprecedented complexity and stress, unless they are expected to be endowed with superhuman qualities. As there is no suggestion of confidence in the Soviet leadership in other connections anywhere in the collation, there appears to be no
reasonable explanation for this expectation of extraordinary prudence. Similar criticisms could be levelled at other highly optimistic conclusions reached by the study, which derives its significance from the fact that the views presented coincided with United States policy changes indicating diminished commitment to non-proliferation.

One example of the change was the acceptance, within the framework of the International Fuel Cycle Evaluation (INFCE), of the arguments supporting the construction of fast breeder reactors on a commercial scale, despite the well known proliferation risks involved. Other examples of relaxation could be found in the easing of uranium supply conditions, as in the case of continuing supplies to India, notwithstanding that country's non-compliance with United States export conditions. There has also been a slackening of United States diplomatic and economic pressures to compel all States to submit their nuclear facilities to full scope IAEA safeguards.  

Interestingly, the diminished concern shown by the United States in non-proliferation, spurred many Third World countries to adopt the non-proliferation cause. Since SSD I, there has been a growing appreciation of the likely security and economic consequence to the Third World of the acquisition of nuclear weapons capability by some of them. While longer term destabilisation in Superpower relations is anticipated, it has not been overlooked that the first casualties of horizontal proliferation could be the political rivals within the
Non-aligned group of nations.

At the Second Review Conference of the Non-Proliferation Treaty, had the participating members of the Group of 77 decided to end the non-proliferation regime, they had an excellent opportunity to do so. With political divisions and economic competitiveness holding sway among the nuclear-weapon States, the re-emergence of cold war attitudes between the Superpowers, and adequate justification provided by the clear breach of their obligations under Article VI by the nuclear-weapons States, especially the Superpowers, the Non-Proliferation Treaty could have been repudiated there and then.

There was no repudiation. On the contrary, the nations of the Group of 77 affirmed their adherence to the principles of the Treaty in the strongest terms used to date. They did so by quoting from the conclusions reached by SSD I in the Final Document, which warned of "the threat to the very survival of mankind posed by the existence of nuclear weapons and the continuing arms race", and cautioned that "mankind today is confronted with an unprecedented threat of self-extinction arising from the massive and competitive accumulation of the most destructive weapons ever produced."

The upshot was that, although the Review Conference ended without agreement on any substantive issue, commitment to the Treaty and the principles it embodies remained intact - no longer primarily in response to
active persuasion by the West but rather as an expression of the autonomous evaluation of the Third World, including would-be Nth countries.

Since the end of the Conference, there has been a partial swing back of the pendulum in the United States towards a reassertion of the non-proliferation commitment. The reappraisal has been at the behest of long-standing opponents of horizontal proliferation, like Senator John Glenn, who was a sponsor of the 1978 Nuclear Non-Proliferation Act, and who continues to warn about the propensity of peaceful nuclear technology to diversion for the production of nuclear weapons. Other traditional advocates of anti-proliferation measures, like Joseph Nye, Deputy Under-Secretary of State responsible for non-proliferation policy during the Carter Administration, now take an intermediate position, cautioning against both "purism" and "cynicism" in supply policy.

The trend was confirmed in the Presidential Statement on Non-Proliferation, made on 16 July 1981, in which it was reiterated that -

Further proliferation would pose a severe threat to international peace, regional and global stability, and the security interests of the United States and other countries.

Regarding the contentious issue of supply policy, the President undertook to "seek" agreement on full scope safeguards in non-nuclear-weapon States,"as a condition for any significant new nuclear supply commitment". On the issue of reprocessing, the Statement declared that
the Administration will "not inhibit or set back... breeder reactor development abroad in nations with advanced nuclear power programs where it does not constitute a proliferation risk". No guidelines were set out for the objective determination of the existence of a "proliferation risk".

**Continuing Development of the Horizontal Non-Proliferation Regime**

**Convention on the Physical Protection of Nuclear Material:**

Following several years of negotiations, the Convention was opened for signature on 3 March 1980. As stated in the text, which was adopted at the Vienna Conference of Government representatives, the chief aim is to prevent the diversion of nuclear materials for weapons purposes, although the prevention of other kinds of misuse is also contemplated, whether in the course of domestic use, storage or transport. The Convention refers to any illegal manner of appropriating nuclear material, including illegal receipt, possession, use or alteration of materials.

The first international effort to give protection against theft or other unauthorised diversion of nuclear materials, and against sabotage of nuclear facilities, was made in 1972 under the auspices of the IAEA. It was in the form of a report by a panel of experts convened by the Director-General, under the title "Recommendations for the Physical Protection of Nuclear Materials". These
Recommendations were revised and published in 1975. Subsequently the Director-General of IAEA convened a Standing Advisory Group on Physical Protection of Nuclear Material, which proposed some modifications that were incorporated into the document in 1977.

The Convention is a further extension of the original IAEA Recommendations. By its provisions, physical protection is to be applied during the transportation of the materials across international borders, and also across the territories of individual States. Pursuant to the Convention, Parties undertake responsibility for materials carried on ships or aeroplanes under their jurisdiction, and they are required to impose agreed terms on any import or export authorisation of such materials. The types of physical protection that are to be applied to nuclear materials have been determined in accordance with the technical standards of the IAEA.

States Parties have also agreed to co-operate in the retrieval of missing or illegally appropriated material and to prosecute or extradite the perpetrators of criminal offences prohibited by the Convention. Provisions relating to the prosecution and extradition of offenders have been based on the Hague and Montreal Conventions on Suppression of Terrorism in Air Traffic and on the Convention and Punishment of Crime Against Internationally Protected Persons including Diplomatic Agents.
International Nuclear Fuel Cycle Evaluation:

The International Nuclear Fuel Cycle Evaluation was undertaken during 1978-80, by 40 supplier and consumer States of nuclear materials and technology. It was an attempt to reconcile the perceived economic benefits of nuclear energy with the belatedly acknowledged propensity of such use to spread the capability of manufacturing nuclear weapons. The suitability of all nuclear technology, and all weapons grade material however obtained, to utilisation for the manufacturer of nuclear weapons, has long been denied or underrated. It has been correctly pointed out, particularly by spokesmen for the developing nations, that there are more efficient ways of acquiring nuclear weapons capability than by clandestinely diverting materials and technological expertise ostensibly required for peaceful use. While that argument is sound from an economic standpoint, there are persuasive political reasons why the more devious path to proliferation may be preferred.\textsuperscript{35}

Concerns of this genre prompted a number of supplier States, consisting of Western and Socialist industrial States, to form themselves into the so-called "London Suppliers Club". They agreed to a set of guidelines regarding the conditions under which transfer of sensitive materials and technologies for peaceful purposes were to be conducted. These guidelines were reproduced in IAEA document INFCIRC 254, imposing substantially stricter conditions of transfer than those agreed upon by all IAEA Members, as set out in INFCIRC
Some consumer Members of the IAEA bitterly attacked the sectional approach by the "London Suppliers Club", whose members were accused of restricting supply for economic gain, rather than a measure to prevent proliferation.

Developing countries have argued, convincingly enough, that if the supplier States were truly concerned about the horizontal proliferation problem, they would ensure that States Parties to the Non-Proliferation Treaty received preferential treatment over non-Parties — whereas the converse position tends to prevail whenever economic conditions favour the non-Party. Some supplier States have even failed, so far, to require the acceptance of full scope IAEA safeguards as an invariable condition of supply, on the inconsistent and spurious ground that the requirement would constitute unwarranted interference in the internal affairs of sovereign States.

Another area of contention has arisen with respect to the measures to be adopted to enable the IAEA to maintain the high standard of its inspections. Of particular concern were the newly developed fast-breeder reactors being constructed in Germany and Japan as prototypes, with a view to their introduction on a commercial scale, and the growing volume of nuclear material being produced by an increasing number of facilities. Plans have been under consideration by the Agency for the construction of regional nuclear fuel-cycle centres and for the international management of surplus plutonium.
It was the accumulation of problems such as these which prompted the organising of INFCE. The essentially technical and analytical study afforded opportunities for international diplomatic consultation and the informal negotiation of outstanding issues. The evaluation was conducted in the following Working Groups:

- Working Group 1 - Fuel and Heavy Water Availability (Co-Chairmen: Canada, Egypt, India);
- Working Group 2 - Enrichment Availability (Co-Chairmen: France, Federal Republic of Germany, Iran);
- Working Group 3 - Assurances of Long-Term Supply of Technology, Fuel and Heavy Water and Services in the Interest of National Needs Consistent with Non-Proliferation (Co-Chairmen: Australia, Philippines, Switzerland);
- Working Group 4 - Reprocessing, Plutonium Handling, Recycle (Co-Chairmen: Japan, United Kingdom);
- Working Group 5 - Fast Breeders (Co-Chairmen: Belgium, Italy, USSR);
- Working Group 6 - Spent Fuel Management (Co-Chairmen: Argentina, Spain);
- Working Group 7 - Waste Management and Disposal (Co-Chairmen: Finland, Netherlands, Sweden);

The above designation of Working Groups accurately indicates that the emphasis was on economic considerations, especially the assurance of supply, the efficiency and safety of reactors, and the implementation of more productive technologies with respect to reprocessing spent fuel management etc. However, all of these matters are inexorably bound up with the problems of diversion and proliferation. Hopes were expressed during the earlier part of the Evaluation that a breakthrough in technologies might result in the
construction of nuclear fuel cycles that are diversion-proof. While it was found that such innovations would be feasible, it was concluded that they are not, at present, economically competitive.

During the course of the evaluation, the activities most prone to risk were identified as fuel fabrication, uranium reprocessing, and plutonium handling. However, it was acknowledged at various times that some risks of proliferation exist in relation to fresh nuclear fuel containing enriched plutonium, uranium enrichment, all reactors, spent fuel storage—especially plutonium storage, mixed oxide fuel fabrication, waste disposal, and the dismantling of old nuclear plants.

The findings of the participating countries, and five international organisations which contributed to the evaluation, were largely inconclusive. It was envisaged by the participants that, following INFCE, dialogue concerning the subject would continue within the framework of the IAEA. One kind of follow-up measure was expected to be the conduct of tests to evaluate a number of proposals presented at INFCE for proliferation-resistant technology.

Ongoing Conflicts and their Resolution

Neither INFCE nor any other forum has yet provided satisfactory solutions for reconciling the often quoted, so called "inalienable right" of all non-nuclear-weapon States to carry out their own programmes for the peaceful use of nuclear energy, with the objective of preventing
horizontal proliferation. Nevertheless, many improvements have been made with an important cumulative effect. The least publicised, but probably most effective steps have been the continuing improvements in the safeguards system applied by the IAEA. Increasingly stringent conditions imposed by the supplier countries, although open to charges of undemocratic and discriminatory conduct, have no doubt had an inhibiting effect on proliferation tendencies.

The several anti-proliferation proposals in Working Papers and other contributions to the inconclusive second Review Conference of the Non-Proliferation Treaty, together with the many tentative suggestions arising from the INFCE studies, have provided the basis for far-reaching measures. Clandestine diversion of nuclear materials for whatever purpose, including their utilisation by terrorist groups, perhaps with the connivance of some non-nuclear-weapon States, will be inhibited as the result of the Convention on Physical Protection of Nuclear Material. Technological initiatives undertaken by States, singly or in cooperation for the perfection of economically viable yet proliferation-resistant technologies also hold promise. Alternatively, the utilisation of nuclear fusion techniques in energy production, such as those being investigated through the International Tokamak Reactor Project,\(^{39}\) could have an important future impact.

Likewise the proposed institutional barriers to proliferation, notably the scheme for international
plutonium storage and international spent fuel management, as well as regional reprocessing and similar co-operative measures, present possibilities for reconciling economic objectives with non-proliferation objectives. Current projects have a predominantly European commercial orientation. Plans for international projects proposed to be undertaken chiefly to inhibit proliferation, are not sufficiently developed for legal issues to have emerged clearly. They could be established along the lines of the Statute of the IAEA, only participating States would have much greater economic interests in their operation.

The above matters will remain under constant review by the IAEA. There will be further opportunities for the elaboration of the appropriate agreements at several forthcoming conferences. The most significant of these will be a world Conference, in 1983, for the Promotion of International Co-operation in the Peaceful Uses of Nuclear Energy.

It should be borne in mind, however, that neither the technical possibilities for further international action to inhibit horizontal proliferation nor administratively contrived opportunities, could be automatically converted into concrete measures. That will depend on the extent of concurrence of all relevant States to take the definitive steps. Likewise, existing agreements regarding safeguards are only as firm as the determination to enforce them. If other political objectives override that determination, particularly by
one or other of the Superpowers, then the non-
proliferation regime must suffer to that extent. The
gradual erosion of the non-proliferation regime could be
slowed down by the strict imposition of the requirement
for full scope safeguards of all nuclear activities by
non-nuclear weapon States wishing to acquire nuclear
technology, equipment or materials.

It may be preferable for the international community
to moderate disapproval of the existence of a few
quasi-nuclear-weapon States whose security is under
special threat, like India, Israel and South Africa,
until the political situation eases, than to make their
presence an excuse for the further relaxation of
standards. Yet both Third World and developed Western
States are prone to the latter interpretation of the
situation.

There is a tendency for countries of the Third World
to accept proliferation under the slogan of non-
discrimination. China has been the foremost proponent of
this approach, in outright opposition to the Non-
Proliferation Treaty. Three years before that Treaty was
concluded, the Chinese position was stated in these words
by Marshal Chen Yi -

China hopes that Afro-Asian countries will be able to
make atom bombs themselves and it would be better for
a greater number of countries to come into possession
of atom bombs. 43

Since rapprochement with the United States, China has
modified its public statements on horizontal
proliferation but has made no statement in favour of non-
proliferation goals. It appears, however, that China has not supplied nuclear technology to other States. For example, K.N. Romachandran claims that -

Firstly on the question of transferring nuclear-weapon technology to other countries - a tangible act in support of proliferation - Beijing's unwillingness is similar to that of other nuclear powers. When Libya sent a secret mission to China and expressed a desire to buy a nuclear bomb late Premier Shou politely but firmly rejected the request.4

Yet it has been claimed by M. Goryanov that a statement made by Chinese Premier Zhao Ziyang in Pakistan, during his visit there in 1981, "implies assistance in the manufacture of the 'Islamic atom bomb'."45

It has been noted that there are also some Western theorists who postulate the alleged benefits to be derived from the possession of nuclear arsenals by States friendly to the Western Alliance. What they overlook is that if such a process gained momentum, the transfer of counterveiling nuclear weapons to their antagonistic competitors could be achieved in a very short period of time. A clear example of the speed with which a developing nation can acquire a nuclear weapons capability is that of Iraq, an oil-rich State which has no need of nuclear energy for industry and has had no peaceful nuclear facilities. Nevertheless, a sophisticated research reactor would have been ready for operation in that country by 1982, had it not been destroyed by Israel.46 There can be no doubt that Iraq had acquired the capability to manufacture nuclear weapons. The only matter open to question is whether there was an intention to divert fissionable materials in
contravention of commitments entered into under the Non-Proliferation Treaty. 47

As we have seen, the horizontal non-proliferation regime requires States to adopt and adhere to treaties, contractual arrangements, and gentlemen's agreements, and to do so by following the spirit as well as the letter of the agreements. In a subsequent Chapter the further need to monitor observance of the agreements, and to apply formal sanctions or economic disincentives, will also be examined. The success of the regime depends on these, together with some other factors.

As with vertical proliferation, the impetus towards horizontal proliferation is constantly spurred by technological advances. The nexus between the spread of technology and the danger of proliferation was presented in the following terms by United States Senator John Glenn –

A nation with fairly low sophistication in nuclear matters can make a bomb from 10 kilograms of plutonium. If they really know what they're doing, they can make a bomb from 5 kilograms. That means you could have between 25 and 50 bombs made from the leftover fuel of each gigawatt each year. If you multiply all that the potential from 247 peaceful nuclear reactors is between 4,000 and 8,000 bombs per year. 48

Technological advances also make safeguarding more difficult due to the quantity of materials to be inspected and the presently seeming impossibility of verifying the quantity of fissionable materials in the more advanced nuclear reactors.

In common with all NAC, horizontal proliferation is
also dependent on the general international situation, especially the relationship between the Superpowers and their progress or lack of it to curb vertical proliferation. Much more than other NAC issues, horizontal proliferation is influenced by economic considerations. These involve competition for nuclear markets by the developed nations and the condition of North-South relations, especially disputes about the implementation of a New International Economic Order and the claims of erstwhile colonial peoples to the rapid transfer of technology.

Maintenance and extension of the institutional framework of IAEA is crucial. For example the future ability of IAEA to assume control over the storage and reprocessing of nuclear materials could be decisive for the long term success of horizontal non-proliferation. In the short term, the person of the Director-General of the IAEA, as well as the composition of the Board of Governors, exercise a considerable influence over the maintenance of the regime. Apart from its planning duties, the Board is a quasi-judicial panel when investigating a breach or threatened breach of its Statute, and when recommending sanctions or warnings accordingly. Therefore, the election in September 1981 to the position of Director-General of Hans Blix, a committed opponent of proliferation, is a signal that, for the immediate future at least, the international consensus is to persist with a stringent approach to the horizontal spread of nuclear weapons.
1 See Table I.
2 Infra Ch.X.
3 Arts. 10 (5) and 16 (1).
5 NPT/CONF.II/C.I/2 and NPT/CONF.II/C.I1/34.
7 INFCIRC/153 (Corr.), The Structure and Content of Agreements Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons.
8 NPT/CONF.II/C.I/2 p.2.
9 NPT/CONF.IIC.II/39.
10 NPT/CONF.II/C.II/35.
11 E.g. discussion by Fischer, D.A.V. (former Assistant Dir.-Gen. of IAEA) in unpublished Paper on Preventing the Spread of Nuclear Weapons, delivered at the Australian National University on 2 April and 9 April, 1981; See also The Annual Report of the IAEA, esp. for 1980 and 1981.
13 Fischer, D.A.V., Nuclear Issues: International Control and International Co-operation (The Australian National University, Canberra 1981) p.viii - "As far as the writer is aware, there is no sensitive plant (reprocessing plant or enrichment facility) or significant quantity of plutonium or highly enriched uranium in any of the countries which have received nuclear supplies from the Soviet Union."
14 E.g. refusal to provide Egypt with a nuclear reactor prior to that country's alignment with the West.
16 Regarding the most ambitious project of this kind see Krugmann, Hartmut, "The German-Brazilian Nuclear Deal", The Bulletin of the Atomic Scientists, February 1981, Vol. 37 No. 2 p. 32.
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19 Ibid. p. 57.

20 Id. p. 37.

21 Id. p. 143.

22 Id. p. 146.

23 Id. p. 122.

24 Fischer, D.A.V., (1981) op. cit. p. 27 - "... the reprocessing and enrichment restrictions of the Act have had no visible impact upon Pretoria, Islamabad, Tel Aviv or New Delhi".


26 NPT/CONF.II/C.1/2 p.1.


30 INFCIRC/274/Rev. 1 of May 1980.

31 It has been argued that this type of NAC agreement is inimical to personal freedom: Sieghart, Paul, "Nuclear Power and Human Rights", International Commission of Jurists, June 1977, No. 18 p.49 - "In short, the price of "safe" nuclear power could prove to include a slow but inexorable erosion of civil liberties, human rights and the rule of law."


35 Dahlitz, J., "Proliferation and Confrontation", Australian Outlook, April 1979, Vol. 33 No. 1 p. 34.

36 NPT/CONF.II/C.II/34 p.5.

37 INFCE/PC/2/1-9 of 29 February, 1980, reproduced in IAEA publication STI/PUB/534.


39 Regarding the construction of a demonstration fusion reactor, the International Tokamak Reactor (INTOR) Workshop published its first report in June 1980.

40 For a comprehensive discussion see Internationalization to Prevent the Spread of Nuclear Weapons, Stockholm International Peace Research Inst. (Taylor & Francis Ltd., London 1980).

41 Apart from the IAEA, the following are the major international institutions for assisting the nuclear power industry, chiefly established for commercial purposes but with a proliferation inhibiting dimension - Eurochemic consisting of 13 States was initiated by the Nuclear Energy Agency of the OECD for training, research and development with the aid of a minor reprocessing plant. Urenco was created by the Federal Republic of Germany, the Netherlands and the United Kingdom to promote centrifuge technology. Eurodif is a European joint stock company operating a commercial gaseous diffusion plant. Joint European Torus (JET) is a research and development project to investigate fusion energy.

42 To be held in Geneva 29 August - 9 September, 1983, A/RES/36/78.


46 See A/RES/36/27.


49 Statute of the IAEA, esp. Art. VI F.

50 Former Deputy Foreign Minister for Development and Co-operation of Sweden.
CHAPTER IX

THE BILATERAL PROCESS IN NUCLEAR
ARMS CONTROL

Stabilising the Balance of Terror

As the nuclear weapons prowess of each Superpower greatly exceeds the nuclear weapons capability of all other States combined, the bilateral process is the most significant aspect of NAC. The bilateral NAC process consists of public agreements in the form of the ratified and unratified treaties listed in Table II, public statements and, presumably, some confidential understandings. It is evident from Table II that basically two kinds of public agreements have been concluded in efforts by the Superpowers to stabilise the nuclear arms race.

The first kind of agreement is in the form of ratified treaties that aim to prevent the accidental outbreak of nuclear war, essentially by improving communications. These agreements encompass the so-called "Hot Line" treaties which establish telegraphic, radiotelegraph, teleprinter and satellite communications between the Parties, especially for use in times of crisis. This type of agreement includes the only bilateral NAC agreements that are not between the Superpowers, namely three agreements, concluded by the Soviet Union with the United Kingdom and France respectively. The other communications agreements are
the Nuclear Accidents Agreement and the Agreement on the Prevention of Incidents On and Over the High Seas, both between the Superpowers. These Treaties require that immediate notification be given in ambiguous situations that could be mistaken for hostile action, and the taking of preventive steps in order to forestall misunderstandings that could lead to unpremeditated nuclear exchanges.

The second kind of bilateral NAC agreement sets limits on the number and type of nuclear weapons and delivery systems that may be tested or deployed by either Superpower. Most of the relevant agreements have been the outcome of the Strategic Arms Limitation Talks (SALT), of which only the agreements in the SALT I group of Treaties have been ratified. These comprise the Treaty on the Limitation of Anti-Ballistic Missile Systems (SALT ABM Treaty); the Interim Agreement on Certain Measures with Respect to the Limitations of Strategic Offensive Arms (SALT I Interim Agreement); and a Memorandum of Understanding Concerning the Establishment of a Standing Consultative Commission on Arms Limitation.

Several other bilateral agreements of the second kind have also been signed but have not been ratified. The most important among these has been the Treaty on the Limitation of Strategic Offensive Arms, including a Protocol, a Memorandum of Understanding, and a Joint Statement, together known as the SALT II Treaty. There is no evidence to suggest that there has been a breach of
any of the currently relevant, but still unratified, bilateral NAC treaties. Regarding the SALT II Treaty, there have been repeated public statements by the United States, the Party unwilling to ratify the Treaty, that its terms will be observed on a reciprocal basis.

The multilateral NAC treaties listed in Table I also play a part in the bilateral NAC process, as they have a special relevance for the Superpowers. In particular, the Outer Space Treaty\(^1\) is at present only applicable to the Superpowers, as only they have the means to carry out the activities contemplated by the Treaty. Although, with the possible broadening of the terms of the Treaty to include prohibition of the emplacement of nuclear weapons anywhere in space, other nuclear powers may also be affected, the Treaty would still retain a predominantly bilateral application.

The envisaged bilateral NAC programme entails a three-pronged strategy. Firstly, there is need for the maintenance and continued supervision of existing ratified treaties and those agreements which, although unratified, have so far been observed on a mutual basis. Secondly, it is sought to prevent a new spiral in the bilateral nuclear arms race that could disturb the existing essential equivalence of nuclear armed forces. Thirdly, there is the aspiration to achieve an eventual dismantling and destruction of nuclear weapons and weapons systems on a mutual basis, maintaining equal security at progressively lower levels of nuclear armament.
The principles agreed upon to govern the bilateral NAC process have been elaborated in their most comprehensive form by the SALT II Treaty, in the terms of a Joint Statement of Principles and Basic Guidelines. The Statement, despite its title, does not refer to principles but merely to broad objectives. These include the avoidance of the outbreak of nuclear war; the attainment of strategic stability; the outlawing of strategic offensive arms most destabilising to the strategic balance; the quantitative and qualitative reduction of strategic arms, including their development, testing, deployment and modernisation; and the future continuation of the SALT process.

These so-called principles avoid the issue of time frames, or the specification of any indices of asymmetrical equivalence for the guidance of negotiators. There are also other shortcomings. For example, while affirming the principle of equality and equal security, the Statement fails to specify whether equality refers only to strategic equality or to full military equality. Nor does it indicate whether equality is sought with reference to the two Superpowers, the NATO and Warsaw Pact Powers, or the whole Western and Eastern alignment of States. Yet even a rough approximation of equivalence would require such distinctions to be made.

A constructive feature of the Statement is the precedence given to strategic stability, ahead of contemplated reductions in strategic arms, acknowledging a concept of growing significance in arms control. It is
often assumed that the chief aim of arms control is the reduction in the number and destructiveness of weapons. However, in the bilateral NAC context, the regulation of strategic arms for the sake of stability does not necessarily entail their reduction, and may even require a temporary increase.

For instance, one of the destabilising aspects of the bilateral nuclear arms race at the present time is the growing vulnerability of the command, control and communications (C^3) systems of the Superpowers. It could prevent subsequent escalation to conclude bilateral NAC agreements for strengthening the C^3 systems of both the United States and the Soviet Union in order to guarantee the survivability of verification, early warning and retaliatory mechanisms. Similarly, an increase of missile sites protected by BMD could make mutual deterrent systems more secure, thereby enhancing their deterrent effect.

The view has also been advanced that certain arms cuts would result in propelling the arms race forward. Prima facie it would appear that a freeze on nuclear weapons systems, or their reversal to a prior stage of equilibrium, would promote stability. Yet it has been suggested that the proposition would only apply in the absence of continuing R & D, because the nature of the balance is irreversibly altered with the availability of new techniques, even if they remain only a latent option. The argument has been advanced, for instance, that -
The recent history of SALT has only augmented the powerful hold that substantial reductions have had on the popular imagination. Yet proposals for deep cuts seldom deal with the forces that most endanger stability - improvements in accuracy; some forms of mobility; antisubmarine warfare capabilities; ABMs; and the possibility of more exotic systems such as lasers. Indeed, deep cuts may only stimulate development in these areas.

The above formulation gives a misleading impression because it is not the quantitative freeze, or reduction of nuclear weapons, that could endanger stability but the failure to conclude concurrent agreements so as to control qualitative improvements in nuclear weapons systems. For NAC to be effective in the long term, each new refinement in the weapons and every new weapons system that becomes technically feasible, would have to be the subject of additional agreements forestalling their deployment.

Thus, the obsolescence of strategic stability gives rise to the need for advances in NAC merely for the maintenance of strategic equilibrium. As each Superpower is prone to conceal its genuine vulnerabilities with disputes about relatively inconsequential imbalances, such as numbers and throw weight of missiles, it is incumbent on the other Superpower or on third States to advance proposals for solutions to problems arising from disproportionate developments.

For the day to day application of current agreements, as well as for the continued monitoring of the overall balance, it is imperative to have an ongoing dialogue between the Superpowers in addition to the negotiation of major new SALT treaties. This requirement was
recognised with the establishment of the Standing Consultative Commission (SCC)\textsuperscript{4} in conjunction with the conclusion of the SALT I group of Treaties. The Commission, established by a Memorandum of Understanding between the United States and the Soviet Union,\textsuperscript{5} was originally given the task to promote and implement the Nuclear Accidents Agreement of 30 September 1971, the SALT ABM Treaty of 26 May 1972, and the SALT I Interim Agreement, also of 26 May 1972.

By the terms of the Treaty setting up the Commission, each side is entitled to representation by a commissioner, deputy commissioner, and such staff as may be deemed necessary from time to time. The original regulations agreed upon for the conduct of the Commission, laid down that the commissioners were to preside over meetings alternatively. They also provided that, on all occasions, each side could submit for consideration any issue within the competence of the Commission to determine, preferably after prior notification.

The Treaty requires the Commission to meet at least twice yearly, in addition to which the regulations facilitate the exchange of written or oral communications by commissioners during the intervals between sessions. While the original rules did not specify the numbers of advisers and experts whom either side was permitted to invite for participation at meetings, references to the work of the Commission indicate that efforts have been made to attain
reciprocity in the number of participants.

Express directives were given identifying methods of work, including the setting up of ad hoc Working Groups and the written recording of proceedings, English and Russian texts being equally authoritative. Regarding all aspects of Commission work, each side bears its own expenses.⁶

In the main, the work of the SCC can only be adduced from the results attained, as the meetings have been held in private since its inception.⁷ Regulation 8 immediately provided that the proceedings were not to be made public unless expressly agreed to by both commissioners. Report by consent has rarely occurred, and then only in very general terms.

Substantial expansion in the work of the Commission was contemplated in March 1977, when the two Superpowers agreed to convene joint Working Groups on the following subjects: chemical weapons, radiological weapons, conventional arms transfers, civil defence, anti-satellite capabilities, missile test flights, the Indian Ocean, and a comprehensive test-ban. The United Kingdom was invited to join the last-mentioned Group in July of that year. It is notable that the Working Groups established by the Commission relate to most of the major subject areas also under consideration by the Committee on Disarmament.⁸ In the case of radiological weapons, the consultations have led to the formulation of the elements of a treaty, although there has been less success in
other subject areas. For example, it is known that the Working Group on anti-satellite capabilities has only met three times. 9

The SALT II Treaty envisages a greatly expanded role for the SCC in the conduct of Superpower relations. 10 Although the Treaty has not been ratified, minimal compliance with its terms is being observed on the basis of reciprocity. 11 However, there is no evidence that such observance has included the envisaged expansion of the Commission's role. In the longer term, with the continuation of the SALT process, the intensification of the Commission's work seems inevitable for the maintenance of strategic stability between the Superpowers.

**Competition, Reciprocity and Linkage**

Whether in the Standing Consultative Commission or in the course of SALT negotiations, Superpower dialogue on the limitation of nuclear weapons is founded on the reluctant acceptance of a military stalemate that could only be resolved by mutual destruction. In its simplest form it has been stated as "co-existence or non-existence". Co-existence, as envisaged a decade ago, was to rest on strategic equilibrium together with other military restraints, some economic co-operation 12 and cultural exchanges. 13 It was thought possible to pursue this course in the face of undiminished competition for eventual supremacy, which each side believed would result from the ultimate non-viability of the social system espoused by the other. Unfortunately, the experience of
the past decade has demonstrated grave contradictions implicit in the concept of co-existence.

In the first instance, the balance of terror is not based on the nuclear arsenals possessed by both sides but on the perception that the other side will respond to the threat, and will do so reasonably. Apprehensions persist in the West that, due to their indiscriminate destructiveness, the weapons are perceived to be unusable.

Concern has also been expressed that a reckless leadership could gain control in either State, prepared to countenance vast destruction as "acceptable damage". Fears about the ascendancy of extremists in the opposite camp could, within each Superpower, weld coalitions between individuals who are motivated entirely by considerations of self-defence and those who desire to exploit military advantages for aggressive purposes. Further, nuclear weapons are clearly useless without the projection of an image of extreme viciousness that makes their possible use credible. This is in direct contrast to the calm reasonableness that is required for NAC dialogue.

The objective of maintaining equivalence in one sphere whilst seeking superiority in other spheres is also a direct contradiction, entailing simultaneously threatening and co-operative behaviour. Contradictions in detente, as hitherto understood, are exemplified by definitions of the concept from the leaders of the
Superpowers during the zenith of the period of accommodation. Gerald Ford, then President, said in 1975 regarding the meaning of detente –

It means maintaining the strength to command respect from our adversaries and to provide leadership to our friends, not letting down our guard or dismantling our defenses, or neglecting our allies. It means peaceful rivalry between political and economic systems, not the curbing of our competitive efforts...Detente means moderate and restrained behaviour between the two superpowers, not a license to fish in troubled waters. It means mutual respect and reciprocity, not unilateral concessions or one-sided agreements. With this attitude I shall work with determination for a relaxation of tensions.16

Likewise, Leonid Brezhnev said in 1972 that –

...while striving for the confirmation of the principle of peaceful coexistence, we recognize that successes in this important matter in no way signify the possibility of weakening the ideological struggle. On the contrary, it is necessary to be prepared that this struggle will intensify, will become a still sharper form of the antagonism between the two social systems. And we do not have any doubts about the outcome of this struggle, for the truth of history the objective laws of social development are on our side.17

In the course of their endeavours it is constantly demonstrated to practitioners that success in one aspect of their conduct diminishes returns in the other aspect. In a situation of overall confrontation, every concession is interpreted as a sign of weakness. Yet NAC consists of reciprocal concessions.

Both Superpowers have great difficulty in coming to terms with the abovementioned contradictions. The United States finds it especially burdensome to adjust to the loss of its outright nuclear weapons superiority. It is faced with the spectre that the Soviet Union will continue its rate of ascendancy unrestrained by public scrutiny or the means of societal censure. Restraint in
the nuclear arms competition is particularly irksome in view of the overall technological superiority enjoyed by the United States and its allies, and because the arms race is financially rewarding to some sections of the private sector. 18

Another, more aggressive strand in the United States anti-SALT syndrome is motivated not so much by concern about ultimate defeat but rather by expectations of imminent victory over the Soviet Union. That approach rests on the conviction that a continuing strategic nuclear arms race with the Soviet Union would soon exhaust the lesser resources of that country, leading to its spontaneous disintegration. 19 The Soviet Union, in turn, faced with domestic problems as well as simultaneous hostility in North America, Western Europe, Japan and China, is not well placed to make concessions at the present time without giving an impression of outright capitulation. 20 Whether, and if so to what extent, concessions would be made by the Soviet Union if the tables were turned, is a matter of conjecture.

So long as the confrontation mentality exists, the contradictions in the bilateral NAC process are likely to persist. The wish, if not the active promotion, of the disintegration of the political system in the adversary State is the diametrical opposite of the restraint and the predictability required for the reliable observance of NAC agreements. Failure to face this problem frankly and realistically has led to disillusionment with detente, the name allotted to the imprecise notion of
"peaceful competition" between the Superpowers.

During the 1960s and 1970s, the NAC agreements enumerated in Tables I and II were concluded, and various measures of economic, social and cultural co-operation, were undertaken between States having a socialist economic system and those with a free enterprise system. These measures succeeded in lessening antagonisms, but not sufficiently to give either Superpower the assurance that its security and the security interests of its allies would be safe from the other in the absence of constant military readiness. The Soviet Union gave expression to the dilemma with the vain slogan that detente should be made "irreversible", while United States leaders have increasingly decried the whole concept of detente.

Nevertheless, before the objective of detente is discarded, it is as well to recapitulate that the only alternative is mutual annihilation. This situation cannot be materially changed by measures such as the prohibition by the United States on the sale of some electronic equipment to the Soviet Union, imposed with increased vigour in 1982. Any suggestion that such steps could be significant in the balance of terror is entirely inconsistent with the often repeated United States assessment that the military strength of the Soviet Union is approximately equal, if not superior, to that of the United States.²¹ It is similarly inconsistent with the assessments of the Soviet Union and its allies, that the forces of the Soviet Union are inferior to those of
Thus, it becomes prudent to re-examine the concepts of detente and co-existence, to ascertain whether the methods of their implementation could be altered so as to reduce the contradictions inherent in notions of "peaceful competition". It is relevant to the present study to enquire how the fierce antagonism between the Superpowers could be reconciled with the continuation of the NAC process.

At the basic conceptual level, it would no doubt be helpful if the future of mankind ceased to be perceived in terms of a competition to demonstrate the "correctness" of the two unrealised and increasingly unrealisable nineteenth century objectives concerning proletarian inspired communism and free enterprise. It is suggested that a more realistic approach, in preparation for the twenty-first century, would be to envisage an era of rapid constructive evolution of all national systems of government for the benefit of citizens in conformity with the principles laid down in the Charter, taking into account historical, social and current resource factors, as well as the demands of the cataclysmic technological and demographic changes to be anticipated.

In the day to day management of Superpower disengagement an obvious approach would be to expand, and to make more precise, the concepts in the Joint Statement of Principles and Basic Guidelines contained in the
SALT II Treaty. The principles and rules of the bilateral NAC process have to serve the implementation of a wide range of tasks, the most prominent of which are now briefly to be considered.

Primarily, agreement is required on the demarcation of categories of nuclear arms, for example, as to what are to be designated strategic nuclear arms, and whether grey area weapons should be included in calculations of strategic weapons parity. Simultaneously there is the problem of measuring equivalence among a range of varied weapons, taking into account features like speed, accuracy, destructive power, capability to evade detection, and durability.

A further vital consideration is verifiability, such as adherence to externally observable design features. There is the need to consider how suspected breaches are to be dealt with. Attention must be paid to the functioning of early warning systems, so as to keep them inviolate against new weapons designed to evade detection; and to ensure that false alarms will not provoke mistaken retaliatory responses. It is also necessary to plan ahead so as to forestall the development of destabilising systems, complicating deterrence by the introduction of further weapons into space, or the perfection of a first strike capability by whatever means.

At the same time, there is the problem of the scope of the SALT process - whether it should take into account non-strategic nuclear weapons, conventional weapons, and
non-nuclear weapons of mass destruction, namely whether, and if so under what circumstances, cognizance should be taken of issues extraneous to the strategic nuclear balance. The relevant principle of both theoretical justice and military practicality on which the bilateral NAC process was based, has been that of reciprocity. The concept has been translated into words like "essential equivalence", "balanced reductions" and "mutual benefit". The problem then arises of the boundaries within which reciprocity should operate. The notion of "linkage" propounded by former United States Secretary of State, Henry Kissinger,\(^{24}\) is a form of reciprocity. It differs from the reciprocity of the SALT process, as hitherto understood, in that it advocates that the reciprocal acts, bargaining positions, rewards and punishments meted out by the Superpowers towards each other, should extend to the whole gamut of East-West relations.

The greater fairness of the proposed wider scope for the operation of reciprocity is beyond doubt. The problem is whether it is feasible, given the method of auto-legislation and auto-adjudication that are essential and foreseeably unalterable ingredients of the bilateral NAC process. For instance, could it be realistically argued that the United States is entitled to an X number of additional ICBM, provided that it supplies Y tonnes of grain per annum to the Soviet Union? Or that the Soviet Union may station twice the number of SS-20 missiles aimed at Europe, provided that a trade
union organisation in Poland is given access to certain media outlets? 25

Records of the seven-year negotiation of the SALT II Treaty provide ample evidence of the difficulty of measuring equivalence and ensuring reciprocity, even within very confined parameters. In particular, the debates in the United States prior to the signing of that Treaty, and in connection with the advisability of its ratification, demonstrate the immense complexity of the measurement of military strategic equivalence. That conclusion is confirmed by the varied assessments adduced by the two Superpowers in their pre-SSD II update, published by the United States under the title Soviet Military Power, 26 and countered by the the Soviet Union in a response entitled Whence the Threat to Peace. 27

Similarly, with respect to compliance, one can only conjecture about the chaos that would result if, say, the United States decided to suspend the Hot Line Treaties as punishment for the jamming of "Voice of America" broadcasts in Europe, or if the Soviet Union shot down a United States verification satellite in retaliation for that country's co-operation with South Africa in defiance of United Nations directives.

Hence, linkage between the bilateral NAC process and other forms of interaction between the Superpowers can only be envisaged in relation to a suspension of the bilateral norm creating process. However, as has been shown in connection with the consideration of recent
technological advances, and as will be discussed subsequently relating to projected nuclear arms programmes, the suspension of the norm creating process will shortly render existing NAC agreements obsolete. Therefore, by exercising the option to suspend bilateral norm creation for NAC, a Party must inevitably bring about a situation in which the entire bilateral process of NAC is put into jeopardy.

Perhaps wishing to increase public confidence, or perhaps due to fundamental misconceptions, the spokesmen of both Superpowers occasionally make statements indicating that they could defend themselves in a military contest should bilateral agreements on NAC be abandoned. Whatever the motivation, such statements are misleading. As previously indicated, the strategic balance is not a policy option but an inescapable necessity.\textsuperscript{28} Therefore, an element of choice only impinges on whether that balance is to be stable or unstable, in the knowledge that any instability poses roughly equally catastrophic dangers to all. In order to have predictability and reliability, and to adhere to a set of consistent norms capable of auto-application, it is essential to maintain a self-contained system. Within that framework, the general principles of conflict resolution have relevance.

Conflict Resolution and Quasi-Judicial Negotiation

Negotiation has emerged as the most favoured method of conflict resolution in the NAC process. It is applicable to both multilateral and bilateral situations,
and is suited to the elaboration of new NAC agreements, as well as to the settlement of disputes that arise in relation to the manner of their observance.

With respect to the conclusion and observance of NAC agreements between the Superpowers, bilateral negotiation has been the only method employed, without the benefit of third party assistance in any arbitral or mediating capacity. Even good offices have never amounted to more than a general encouragement. Hence, the nature of the negotiating process, notably its potential for harmonising Superpower relations, is of crucial importance.

The confrontational nature of bilateral NAC negotiations is not in question. For instance, the chief SALT negotiator appointed by the Reagan Administration, Paul H. Nitze sees the overall situation in these terms -

In seeking each specific objective within their global policy, the Soviet rulers use the lowest level of pressure or of violence necessary and sufficient to achieve that objective. The purpose of their capabilities at the higher levels of potential violence, all the way up to intercontinental nuclear war, is to deter, and if necessary control, escalation by us to such higher levels.

It is a copybook principle in strategy that, in actual war, advantage tends to go to the side in a better position to raise the stakes by expanding the scope, duration, or destructive intensity of the conflict. By the same token, at junctures of high contention short of war, the side better able to cope with the potential consequences of raising the stakes has the advantage. The other side is the one under greater pressure to scramble for a peaceful way out. To have the advantage at the utmost level of violence helps at every lesser level. In the Korean war, the Berlin blockades, and the Cuban missile crisis the United States had the ultimate edge because of our superiority at the strategic nuclear level. That edge has slipped away.
Leading Soviet theoretician on bilateral NAC negotiations, Henry Trofimenko, has a different view of the matter -

To sum up, then, throughout the entire post-World War II period, it is the United States that has tried to impose on the "potential adversary" rules of the game (i.e., rules of conflict behaviour) which would maximize the one-sided technical advantage enjoyed by the United States at any given moment and minimize the capabilities of the adversary. That is what the entire American doctrinal progress boils down to. 31

There has been so little trust between the two States that it sometimes appears from their dialogue that they are hardly discussing the same problems. For example, the Deputy Director of the Institute of United States and Canada Studies in Moscow, R.G. Bogdanov, speaks of -

...the illusion that it is possible to wage nuclear war and to survive sufficiently intact to make it other than completely senseless. 32

Paul Nitze, on the other hand, states that -

The Soviets do not follow a strategy of deterrence and retaliation. In their doctrinal writing, they spell out their belief in a strategy of first strike, and their weapons have been designed with that use in mind. Therefore, in their case, a condition of parity plus their policy of strategic initiative gives them superiority. 33

The partners in the bilateral dialogue have had negative attitudes towards each other regarding negotiating style as well as credibility. A typical view was that of Arthur H. Dean, Ambassador in the post-armistice negotiations in Korea; Chairman, of the United States delegation at the Disarmament and Nuclear Test-Ban negotiations in Geneva, 1961-63; and former member of his country's delegation to the UN General Assembly. In 1964 he claimed that -
In considering Soviet diplomacy as a whole, two major characteristics stand out: a dogmatic expectation of hostility from the outside world and an iron determination to carry out a program previously determined in Moscow and not subject to change by the diplomat in the field.

In the same year, Thomas W. Wolfe, of the Sino-Soviet Institute, George Washington University, elaborated further on the theme of both the unwillingness and the inability of the Soviet side to conduct fruitful negotiations.

Publicly expressed Soviet views of the West more often than not are meant to serve propaganda ends of one sort or another, such as demonstrating aggressive intent in every Western move. The private Soviet assessment, on the other hand, may vary from one case to another. Thus, image of the West reflected in Soviet public statements does not necessarily correspond in all respects with what Soviet leaders may think privately about the strategies and intentions of their opponents...

He went on to add -

It would be premature in the extreme to suggest that the Soviet image of the West now mirrors reality with reasonable fidelity. Soviet perception of the West is still filtered through ideological and parochial suspicions that produce a woefully distorted picture, particularly of Western motives and intentions.

Yet the treaties concluded and observed during the past two decades indicate that these assessments were, at the least, exaggerated and of limited application. The possibility of acquiring a changed outlook resulting from dialogue and experience, is illustrated by the remarks in 1979 of Senator Charles Percy, later to become Chairman of the Senate Foreign Relations Committee under the Reagan Administration. Commenting on the testimony of General Rowny during the SALT II ratification hearings, the Senator said -
It is interesting that the two most credible and strongest opponents of this treaty have both come to the same conclusion. In an off-hand comment this morning, I am sure well thought through, Paul Nitze came to the conclusion that he did not believe that the Soviet Union wanted to wage a nuclear war. This is an utterly responsible statement. It is so easy to demagogue this issue, to wave the flag and imply that the motive of the Soviets is to make a nuclear first-strike on the United States of America. That position has no credibility.

The last trip I took to the Soviet Union was with Hubert Humphrey. We walked through the Leningrad Cemetery where a half-million Soviet men are buried. The Soviets lost 20 million people in a war that was waged entirely with conventional weapons. We realized at the time that the deep-seated desire to avoid an all-out confrontation goes from the most humble Soviet citizen right straight through the top.  

Conflict resolution theories based on experiences from other fields such as management-labour disputes or interpersonal relations, could give too much weight to psychological considerations. Significantly different conditions prevail at bilateral NAC negotiations. As the Canadian Professor, Edward McWhinney, has pointed out -

The rival Soviet and American negotiating teams in the area of disarmament and arms control seem to have had superb professional qualifications and an unusual degree of technical expertise in strategic armaments limitation...

Thus, when debating the relative destructive capabilities of contending nuclear weapons, the parties can at least have confidence in their own assessments and a thorough comprehension of the legal and technical nuances involved in the day to day discussions.

Superpower negotiation for NAC in the framework of the Standing Consultative Commission has all the
elements of the classical bipolar model for conflict resolution. Although it is doubtful whether theories and models of conflict resolution have reached a standard that could beneficially influence a negotiating process of such complexity, the converse might very well apply so as to inhibit and discourage negotiation due to a misconception and underestimation of its possibilities by political decision-makers.

The negative impact of conflict resolution models chiefly arises from the projection of various game theories, which postulate two adversaries with diametrically opposed interests seeking to defeat one another by all means available within given bounds. In the light of this projection, negotiation is seen as a kind of game or battle, being a set arena of conflict where each player must beat the other or be beaten. It gives rise to the notion of "negotiation from a position of strength", which implies negotiation by threat. Negotiation by threat is a contradiction in terms and is merely an excuse for the avoidance or the postponement of negotiation. It is the converse of the concept of mutual benefit envisaging, as it does, a series of victories by one side and capitulation by the other.

A similarly negative approach is engendered by the postulate that a negotiation is a type of market place for bargaining over two relatively fixed sets of beneficial attributes. It implies that any shift from the status quo is likely to be to the advantage of one party and to the disadvantage of the other.
Another approach to negotiation is to see it as a process of compromise, in the sense that each side gets less than it would wish, on the understanding that the other is similarly deprived. The outcome is always represented as an overall loss. In accordance with this outlook, instead of making increasing threats, the parties need to make inflated claims, to ensure that the compromise struck will appear to be more of a sacrifice to them than it is in reality.\footnote{40}

The Marxist concept of conflict and its resolution by thesis, antithesis and synthesis could also be applied to negotiating postures, but this would imply that both parties have to change their position fundamentally in the process.\footnote{41} In the present climate of Superpower relations such an outcome would be, even theoretically, unacceptable to both sides.

Negotiation can be treated in the manner of a holding operation, as an empty gesture for marking time. Or it can be used as a form of camouflage, providing a benign facade to conceal preparations for heightened aggressive conduct. Negotiations can also be envisaged as a form of intelligence activity, facilitating the extraction of information concerning the strengths, weaknesses and objectives of the other side. Alternatively, a negotiation can be used as a propaganda weapon, by treating it as a forum for the dissemination of misleading information or, perhaps correct information, disconcerting to the other party.
All of the above negotiating postures are predicated on the premise that each side occupies distinctly circumscribed economic, social, ideological, and hegemonistic positions.\textsuperscript{42} Admittedly, some representations of conflict resolution postulate an evolutionary movement to take place as a result of sitting at one table and talking, but there is no suggestion of where the input will come from to propel the evolutionary development. For example, NAC negotiation between the Superpowers is mostly represented as an essentially closed system, not with respect to the precise nuclear weapons available, but in regard to the existence of two distinct ideological-military entities.

The most belligerent conceptualisation envisages the two "positions" to be entirely disparate, while more conciliatory outlooks picture the positions as overlapping at various points. Negotiation cannot alter whether the positions overlap or whether they do not, because that is given fact. The overlap could only increase, in this representation, if one or both sides changed their positions. To the extent that they would be prepared to do that, they would have to compromise their chosen ideology or abandon the most advantageous power-seeking military, or quasi-military posture.\textsuperscript{43}

It is possible that with the further advance of conflict resolution theory the process of negotiation, notably by the Superpowers, will become substantially more effective.\textsuperscript{44} In particular, it is suggested that
there are prospects for the development of negotiation theory in two main directions. One approach could be called the theory of the unstated third position, and the other, quasi-judicial negotation.

The Theory of the Unstated Third Position:

In accordance with this proposed theory, the positions adopted by the two adversaries in bilateral NAC negotiations - and by the various parties in most negotiations - do not accurately reflect either the real interests of the parties or the full import of their respective ideologies. This observation does not refer to deliberate deception but to genuine misconceptions by the parties due to stereotyped thinking, the constraints of language, the clumsiness of State bureaucracies, and other similar factors that limit and distort the perception of reality.

Therefore, there generally exists a reservoir of conciliatory factors not at first fully recognised by either side. These factors are not the kind that would necessarily become manifest with more thorough self-appraisal by each side. Slothful appraisal tends not to arise as a significant problem in NAC issues. These misconceptions are more fundamental and have the character of blind spots, which result in an inability to ask the right questions.

The theory differs from other models of conflict resolution, in that the "third position" is not envisaged
as any variant of compromise, deceit, conquest or synthesis, but of mutual discovery. Without denying that compromise and synthesis can be beneficially utilised in the resolution of conflict, the emphasis is on the opportunity afforded by the negotiating process for two or more parties, having different conceptual frameworks, to interact with a view to discovering areas of mutual benefit. Those areas represent the unstated third position.

The most significant example of an unstated third position that was subsequently identified, is the ideology and strategy of co-existence. Co-existence here is used in the sense of a permanent political condition for the foreseeable future, not merely an interim condition that was predicted by Lenin to persist until the so-called "inevitable" victory of international communism had been achieved.

Neither free enterprise nor socialist ideology has much to say about it, yet it is implicit in both ideologies that physical and cultural survival are indispensable conditions for their success. However, the notion of co-existence is only the tip of the iceberg. The detailed aspirations contained in the concept of the wish to survive, and the modalities to be elaborated for the attainment of those aspirations, form the subject matter of the future unstated third position.

The unstated third position is, by definition, the
position of realism. It reveals the necessary, often unwelcome— that is why it is overlooked— preconditions necessary for the realisation of the stated material and moral objectives of the parties. The identification of the unstated third position in NAC has consisted of perceptions concerning mutual benefits arising from the preservation of the environment, the desirability of legalised and co-operative espionage in the form of verification, the need for faster and more reliable communication between adversary leaders in times of crisis etc. Such measures have become the subject matter of the agreements listed in Tables I and II, although the concepts on which they are based were foreign to the ideological and military postures of the parties in the not too distant past.

Quasi-Judicial Negotiation:

This form of negotiation relates mostly to the auto-interpretation and auto-adjudication of treaties, although it is also applicable to the elaboration of agreements on the basis of precepts such as equivalence and equal benefit. It is a process whereby the parties apply mutually accepted principles and rules to a subject in order to resolve the differences between them.

It has often been claimed that the judicial process, to be effective, requires a common ideological-cultural base. The overall ineffectiveness of the International Court of Justice has been attributed partly to the alleged absence of such a base. The contention
overlooks the fact that even national entities are, to various degrees, culturally and ideologically heterogeneous. What does appear to be indispensable is a bridging ideology, consisting of a set of intellectual concepts and sincerely held beliefs concerning the legal precepts to be utilised.\textsuperscript{47} An internationally bridging ideology has to include fundamental concepts like the inviolability of treaty undertakings, reciprocity, essential equivalence, and the various norms of international conduct including those referred to above as international precept.\textsuperscript{48} While the existence of some common ground is necessary for any international judicial function, the need for a consistent and plausible bridging ideology is more pronounced in the tenuous environment of a bilateral negotiation.

The absence of a judge or any judicial figure is the chief distinguishing feature between quasi-judicial negotiation and an overtly legal procedure. It can be compensated for by meticulous precision in the rules to be applied. The terms of the SALT II Treaty indicate that the need to formulate exact rules and definitions has been recognised by both Superpowers.

However, it must happen in all complex evaluations that occasionally individual judgments have to be made, when existing rules do not extend to a particular situation. The decision could be of marginal importance and still cause inordinate delays. In such situations, a relatively impartial, respected individual could be asked to adjudicate regarding, say, the military equivalence
of two somewhat similar weapons. These and like stratagems could also be useful to save face, when the point at issue is not so much the content of a concession, although preparedness to make the concession could be construed as a defeat. In those circumstances, third party adjudication could greatly accelerate bilateral NAC negotiation.

Unlike other judicial proceedings, quasi-judicial negotiations are best conducted in secrecy, otherwise public opinion could usurp the position of the absent judge. In other words, the parties would be tempted to address their submissions to an extraneous audience that has no opportunity to gain access to all the relevant facts, thereby only further complicating the difficult task.

One possibility exists for the utilisation of public opinion in quasi-judicial negotiation, namely in case of a stalemate. A party could advise the other that, unless agreement is reached by a given date, the negotiating position of that side would be divulged. For example, the Soviet Union could declare that, unless the United Kingdom and the United States agree to a Comprehensive Test-Ban Treaty by, say, September 1983, its own position would be made public at the 38th Session of the General Assembly. Or, the United States could declare that, unless the Soviet Union were prepared to accept certain substantial cuts in armaments by a given date, details of the refusal would be revealed.
In those circumstances, the threat of adjudication and sanction by public opinion might accelerate the negotiation. On the other hand, it could lead to increased resentment and intransigence. A more beneficial variant might be if the parties were to agree to such a procedure as a prior stipulation at the commencement of negotiations. However, there are other, more effective sanctions to induce the Superpowers in the bilateral NAC process to adhere to NAC agreements, which will be discussed in the next Chapter.

When assessing the likely future effectiveness of NAC agreements in the maintenance of international peace and security, it would be misleading to exclude from consideration the possibilities for innovation that could accompany the increasingly acute danger of nuclear war. The elaboration of conflict resolution theory in this context is sought to provide an indication of the available outlets for development that might emerge with the passage of time, in the light of the successes and failures of NAC agreements so far negotiated and presently operative.

It would seem that with stronger commitment by States for negotiated arms control, especially on the part of the two Superpowers, negotiating techniques could be improved. It is also possible that a theoretical basis of NAC negotiation could be established, with a view to creating a consistent discipline that would impart much greater speed and predictability to the process.
Preventing the Next Spiral in the Bilateral Nuclear Arms Race

After consideration of various nuclear weapons strategies in previous Chapters, it was concluded that the weapons could be used in a non-self-destructive way only in two situations, either in an extreme case requiring self-defence, or in an almost totally disarming first strike. The next spiral in the nuclear arms race involves chiefly the development of weapons to serve those two purposes.

In the one instance, additions to arsenals consist of local war fighting weapons, like the neutron bomb and other tactical nuclear devices, together with hard-to-detect delivery systems, like the cruise missile and low flying manned bombers. Yet it is noteworthy that, while these weapons could be used defensively in local conflicts, they could also be employed aggressively although, as has been observed previously, such use could lead to unlimited escalation.

The other kind of development taking place is the perfection of weapons systems leading to the possibility of a disarming first strike capability, together with weapons designed to thwart such an outcome. The main arena for that contest is in outer space. In this regard it has been noted previously that the most dangerous international situation could arise at a time when either Superpower appeared to be approaching a first strike capability, because the other Superpower might be induced
to take extreme measures in order to prevent the attainment of that objective.

It may be appropriate to recapitulate that in view of the abovementioned considerations, no State stands to gain militarily, or in any other way for that matter, from developments that would constitute the next spiral of the nuclear arms race.

There are two impediments that appear to be particularly difficult to overcome in the limitation of tactical nuclear weapons. Firstly, verification of any treaty to limit their manufacture and deployment may be difficult to achieve by the usual verification methods. The other impediment to the limitation or elimination of tactical nuclear weapons is that the United States is thought to be disadvantaged, in some contemplated military confrontations, if restricted to conventional weapons and combat troops. Therefore, there is a powerful body of opinion within the United States and, to a lesser extent, among the NATO allies, that nuclear weapons should be on hand for use in those situations.  

With respect to arms control agreements to restrict the arms race in outer space, a major difficulty is to establish, with an acceptable degree of certainty, the level of R & D attained by the other side at any given time. The prevalent attitude is that any slackening in the pace of R & D might give the other side a lead that could not be made up. In addition, with respect to many relevant technologies, it would be impossible to
differentiate between those that have a military application, and those that are developed exclusively, or predominantly, for civilian purposes.

The strategic nuclear balance is closely bound up with the arms race in outer space. ICBM delivering nuclear warheads must travel through outer space during part of their trajectory. Also most of the backup systems enabling the use of nuclear missiles are conducted via satellite. For instance, the pin-pointing of targets is largely by satellites; homing guidance can be augmented by satellite; and commands for activating nuclear weapons systems rely, to a considerable extent, on satellite transmission.\textsuperscript{52}

Many defensive systems against nuclear weapons are also based in outer space. Early warning networks utilise satellite mounted reconnaissance systems, and verification by NTM is conducted by the Superpowers chiefly with the aid of remote sensing and other satellite connected methods of surveillance. A contemplated development is a space-based ballistic missile defence (BMD) system. In case of an impending first strike, anti-satellite (ASAT) weapons could be used to disrupt the command, control and communications (C\textsuperscript{3}) networks of the opponent.\textsuperscript{53}

The abovementioned defence systems could also be used aggressively. A combination of exact pin-pointing of targets - even moving targets, accurate guidance of missiles, instantaneous transmission of commands,
elimination of the opponent's satellites with anti-satellite weapons, and the use of BMD against any vestige of retaliatory capacity could, conceivably, result in a counterforce strike able to disarm the other Superpower.

Apart from effective BMD, the systems referred to are already operational, although they have not been perfected to the point that would enable either Superpower to mount a disarming first strike against the other. The most significant aspect of the next spiral in the nuclear arms race could provide such a capability although, on the available evidence, this could not be achieved by stealth. The new technologies giving rise to these developments will be considered briefly below.

It should not be overlooked that the technological revolution in the perfection of nuclear weapons systems has another dimension. While attention is directed to the novel technological feats of the Superpowers, it is all too easy to discount the immense technological strides of the other nuclear-weapon States, as well as the nuclear threshold States. Seven States are now said to have observation satellites in space, including those of two "developing" countries, namely China and India. For instance, the placement of weapons of mass destruction in space may not be far from the technical capabilities of these States. It is therefore disconcerting to note that China has not acceded to the Outer Space Treaty, which forbids the placement of weapons of mass destruction into outer space.
Failure by third parties, with military capabilities that have been the subject of bilateral NAC agreements between the United States and the Soviet Union, to adhere to the terms of those agreements, could exert a negative influence on the whole NAC process between the Superpowers. In the same way, by refusing to abide by multilateral NAC agreements with hitherto special application for the Superpowers, third States could prejudice the bilateral efforts for accommodation.

Several of the Treaties referred to in Table I have an application for arms control in outer space. The Partial Test-Ban Treaty of 1963, forbids the detonation of nuclear devices in outer space. The Outer Space Treaty of 1967, in Article IV, provides that the moon and other celestial bodies are to be used "exclusively for peaceful purposes". The Treaty also requires the Parties to -

...undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.

The SALT Treaties also have relevance to arms control in outer space. The SALT ABM Treaty of 1972, and Protocol of 1976, forbid all ballistic missile defence with the exception of one site each in the Soviet Union and in the United States, which may be so defended.

The SALT II Treaty of 1979, in Article IX provides that -

Each party undertakes not to develop, test or deploy...systems for placing into earth orbit nuclear weapons or any other kind of weapons of mass destruction, including fractional orbital missiles...
In addition, Article XV of the SALT II Treaty provides that -

For the purpose of providing assurance of compliance ...each party undertakes not to interfere with the national technical means of verification of the other party...

The import of the provision is that it forbids interference with satellites used for verification.

It has been noted already that all of the unambiguous provision of the above treaties have been observed. What the treaties fail to prohibit is the development of structures, instruments and techniques that could be used to destroy satellite borne C³ systems, or to intercept nuclear warheads in the early stages of their trajectories. So far there is no evidence to demonstrate that "weapons" as presently defined, have been utilised in outer space in the course of developing the aforementioned technologies. With the exception of weapons support systems and earth-targeted missiles, all space-related weapons are tested on the ground or in aerospace.

The technologies currently being perfected include "real time" calculations, with the aid of vast satellite formations some of which are already in their correct orbits. They will facilitate exact pinpointing of all potential targets on earth and in aerospace - and perhaps in outer space - together with precise home guidance systems for weapons to destroy them. Another facet of the developments is the perfection of directed energy weapons (DEW), including both particle beam weapons (PBW)
and high energy lasers (HEL). Unhampered by an atmosphere, the speed and accuracy of those beams would make them ideal ASAT weapons, as well as exoatmospheric BMD weapons. Continuing perfection of the manoeuvrability of satellites could also be turned to military use, both for approaching enemy satellites and for evading them.

The next stage in the testing of these systems would be to undertake experiments for actually destroying targets with the weapons in outer space. While any State that commenced such activities would be acting in defiance of the general principles of the Charter urging peaceful conduct, it is not entirely clear whether the Outer Space Treaty forbids the conduct. In accordance with Article III of the Treaty, activities in outer space are to be carried out -

...in the interests of maintaining international peace and security and promoting international co-operation and understanding.

However, in specific terms, Article IV of the Treaty only prohibits the testing of weapons and the carrying out of military manoeuvres on "celestial bodies". No definition is given of a "celestial body", but presumably the Treaty refers to naturally occurring celestial bodies indicated by various references in the Treaty, including a provision in Article I that "there shall be free access to all areas of celestial bodies."

The Antarctic Treaty, in wording similar to that used in the Outer Space Treaty, provides in Article l(1) that -
Antarctica shall be used for peaceful purposes only. There shall be prohibited, inter alia any measures of a military nature, such as the establishment of military bases and fortifications, the carrying out of military manoeuvres, as well as the testing of any type of weapons.

In that instance, the spirit as well as the letter of the Treaty has been observed. Not so with the Outer Space Treaty, which has been strictly interpreted by the Superpowers so as to permit the projection of weapons into space, as well as the stationing of military support systems on satellites. Keeping in mind the important bearing that those military activities have on the strategic balance, it would be entirely impractical to dismantle those systems at the present time. Likewise, continuation of the legal debate as to the correctness of the interpretation that permitted those military activities, could only serve as a distracting diversion from efforts to implement further arms control measures in outer space.

The crucial question is still outstanding, namely whether all space-targeted weapons, discharged from earth, aerospace or outer space, are to be outlawed. Countenancing tests of that kind would be consistent with the interpretation that the Superpowers have given the Treaty provisions, rightly or wrongly. Yet it appears from the literature that, so far, both Superpowers have been very restrained about weapons tests in space. Hence the next step for NAC in this field is to foreclose the option of deploying space-targeted weapons, either with a Protocol to the Outer Space Treaty or with the conclusion of a further treaty.
An additional treaty has been proposed by the Soviet Union, and a draft Treaty has been presented to the United Nations to that end. In two separate resolutions, one with the support of Western States and the other with the support of Socialist States, the General Assembly decided in December 1981 to explore the means of preventing an arms race in outer space. Western States gave priority to the negotiation of "an effective and verifiable agreement to prohibit anti-satellite systems", while the Socialist States called for a treaty on "the prohibition of the stationing of weapons of any kind in outer space", taking into account the draft presented by the Soviet Union.

Support given to both General Assembly resolutions by the Non-aligned States suggests that the obstructive, albeit theoretically plausible argument that the existing Treaty is adequate, has been abandoned.

No resolutions or treaties regarding the arms race in outer space, or any other aspect of the bilateral NAC process, could be so worded as to guarantee implementation. At best, the agreements are tools of trade that make NAC possible, provided the two Superpowers genuinely wish them to succeed. Their interests in so doing have already been adverted to, and will be further elaborated in the next Chapter.
Notes

1 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies.

2 Karas, Thomas H., "Implications of Space Technology for Strategic Nuclear Competition", Occasional Paper 25, Periodical of the Stanley Foundation (Iowa USA) July 1981, p.10 - "The paradox of the force-multiplying satellites is that they and their associated ground facilities become valuable military assets which are tempting targets for preemptive attack. Except for the danger of sabotage, most ground stations would probably be safe from attack during a conventional war. In a central strategic crisis, however, these facilities could supply one reason for the Soviets to consider preemption. In the years to come the proliferation of mobile ground stations could reduce this tempting vulnerability." This emerging threat to a stable strategic balance was identified by the mid-70s, e.g. Vlasic, Ivan A., cites a U.S. Library of Congress Study, c 1976, thus - "Voicing a suspicion that the U.S.S.R. might be developing a system similar to the NavStar, he [U.S. Navy Secretary] called for accelerated efforts on the part of the United States to produce instruments which could 'neutralize' such Soviet spacecraft 'through the use of chaff [to "blind" them] or by interdiction [i.e., destruction]'. It is, therefore, obvious that, even in non-combat conditions, the temptation will be great to interfere with space vehicles regarded as strategic threats, and so will the prospects of uncontrollable escalation." "Disarmament Decade, Outer Space and International Law", McGill Law Journal 1981, Vol.26 No.2 p.157. Sigal, Leon V., "Kennan's Cuts", Foreign Policy, Fall 1981, No.44 p.80.

4 Not to be confused with the Special Coordination Committee (SCC) of the National Security Council, which has engaged in the task of advising the US Govt. on SALT issues.

5 TIAS 7545.

6 Protocol establishing Regulations TIAS 7637.

7 Minimal information is released from time to time, e.g. The Department of State: Selected Documents (Bureau of Public Affairs, Office of Public Communication) February 1978, No.7 p.4; Remarks of a "White House official", Aviation Week and Space Technology, 25 May 1981, p.15.
"Article XVI [SALT II]

1. To promote the objectives and implementation of the provisions of this Treaty, the parties shall use the standing consultative commission established by the memorandum of understanding between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics regarding the establishment of a Standing Consultative Commission of December 21, 1972.

2. Within the framework of the Standing Consultative Commission, with respect to this Treaty, the parties will:

(a) Consider questions concerning compliance with the obligations assumed and related situations which may be considered ambiguous;

(b) Provide on a voluntary basis such information as either party considers necessary to assure confidence in compliance with the obligations assumed;

(c) Consider questions involving unintended interference with national technical means of verification, and questions involving unintended impeding of verification by national technical means of compliance with the provision of this Treaty;

(d) Consider possible changes in the strategic situation which have a bearing on the provisions of this Treaty;

(e) Agree upon procedures for replacement, conversion, and dismantling or destruction of strategic offensive arms in cases provided for in the provisions of this Treaty and upon procedures for removal of such arms from the aggregate numbers when they otherwise cease to be subject to the limitations provided for in this Treaty, and at regular sessions of the Standing Consultative Commission, notify each other in accordance with the aforementioned procedures at least twice annually, of actions completed and those in process;

(f) Consider, as appropriate, possible proposals for further increasing the viability of this treaty, including proposals for amendments in accordance with the provisions of this Treaty;

(g) Consider, as appropriate, proposals for further measures limiting strategic offensive arms.

3. In the Standing Consultative Commission the parties shall maintain by category the agreed data base on the numbers of strategic offensive arms established by the memorandum of understanding between the United States of America and the Union of Soviet Socialist Republics regarding the establishment of a data base on the numbers of strategic offensive arms of June 18, 1979."
11 For a comprehensive account of the stance adopted by the two Superpowers regarding compliance with the terms of SALT II and the actual conduct pursued, see Strategic Survey 1980-1981 (Published by the International Institute of Strategic Studies, London 1981) p.107 - "Officially, the United States said she would take no action to defeat the purpose of the treaty. Though the Soviet Union did not take a parallel position and insisted that an unratified agreement is not binding, she reaffirmed her desire to have the treaty ratified by the United States, implying that she will not act against the principles of the agreement while some prospect of its coming into force remains. As 1981 began both sides were acting so as not to prejudice future implementation of SALT II's terms."

The position of the United States has been reiterated by President Reagan, Secretary of State Haig and CD Delegate, Ambassador Flowerree. It was originally released by the Dept. of State as follows - "While we are reviewing our SALT policy, we will take no action that would undercut existing agreements so long as the Soviet Union exercises the same restraint." CD/PV.12 p.11.

12 For one of the foremost Western proponents of co-existence and inter-block trade, see Pisar, Samuel, Coexistence and Commerce (New York, 1970).

13 A formal recognition of the endeavours constituting co-existence was achieved in the framework of the Conference on Security and Co-operation in Europe, commenced in September 1973, culminating in the Helsinki Accords and subsequent East-West dialogue in the context of Review Conferences.

14 Then U.S. Secretary of Defence, Harold Brown, was quoted as saying - "But if deterrence of nuclear war is our most fundamental defense objective - and it surely is - what counts is what Soviet civilian and military leaders believe. On that score, we face another uncertainty. What we see as sufficient may appear as something else to them. What would deter us might not deter them. What some consider credible as a deterrent, they may dismiss as bluff." SALT II: An Interim Assessment - Report of the Panel of the Committee on Armed Services, House of Representatives, Second Session, 23 Dec. 1978 (U.S. Govt. Printing Office, Washington 1978) p.26.

15 The observation that some NAC policies strengthen the position of the more belligerent decision makers on the other side of the negotiating-table, while other policies strengthen the less beligerent ones, was made by Ambassador Averell Harriman. He called the latter "the more sensible people who are more interested in the development of Russia than in international adventure." The SALT II Treaty, Hearings Before the
Committee on Foreign Relations, U.S. Senate, July 1979


17 Id. p.77, emphasis added.

18 For a Soviet view see Ovinnikov, R., "How the USA Orchestrated the Attack on Detente", International Affairs August 1980, No.8 pp.92-6.

19 This world view is usually implied rather than directly stated, e.g. Newton, Maxwell, "The West Helps Russia to Arm: US strategists plan financial pressure as Soviet block economies begin to crumble", The Australian newspaper, 5 April 1982, p.9; Also Supra p.18.


22 E.g. statement of Ambassador I. Kömives of Hungary, CD/PV.153 of 11 February 1982 p.30 - "...the atomic bomb was introduced in 1946 by the United States and only four years later by the Soviet Union;

- the hydrogen bomb was introduced in 1953 by the United States and one year later by the Soviet Union;

- the strategic bomber: introduced in 1953 by the United States, four years later by the Soviet Union;

- the intermediate-range ballistic missile (IRBM): in 1953 by the United States, four years later by the Soviet Union;

- the tactical nuclear weapon: in 1955 by the United States, one year later by the Soviet Union;

- the intercontinental ballistic missile (ICBM): in 1955 by the United States, two years later by the Soviet Union;

- the nuclear submarine: in 1956 by the United States, six years later by the Soviet Union;

- the submarine-launched ballistic missile (SLBM): in 1959 by the United States, nine years later by the Soviet Union;

- the anti-ballistic missile (ABM): in 1960 by the United States, one year later by the Soviet Union;

- the MRV warhead: in 1964 by the United States, six years later by the Soviet Union;

- the MIRV warhead: in 1970 by the United States, five years later by the Soviet Union."
23 European Security and Co-operation: Premises, Problems, Prospects (Progress Publishers, Moscow) Eng. Translation 1978, p.54, emphasis added - "Despite some sensible ideas put forward by these bourgeois analysts, their views and doctrines are essentially limited, for in philosophical and political terms these are usually based on the idea that under the deepening general crisis of the capitalist system, the class, social and political foundations of capitalism should be strengthened to the detriment of socialism. The Marxist-Leninist doctrine makes it possible to give an all-round analysis of present-day international development and a deep assessment of the possibilities and prospects of detente under the contest between capitalism and socialism, the chief contradiction of our day."

24 "Out of office, Henry Kissinger has critized more forcefully what he sees as the lack of Soviet cooperation in building a 'web of common interests' with the United States. Early in 1979 he told an interviewer 'I'm not saying we should link SALT to every Soviet action that we do not approve of.' He went on, however, to enumerate Soviet actions which, in his opinion, violate the general spirit on which the SALT process eventually depends: ***We have had Cuban troops in Angola, Cuban troops in Ethiopia, two invasions of Zaire, a Communist coup in Afghanistan, a Communist coup in South Yemen, and the occupation of Cambodia by Vietnam, all achieved by Soviet arms, with Soviet encouragement and in several cases protected by the Soviet veto in the United Nations. In addition, Soviet-advanced aircraft piloted by Soviet personnel are protecting Cuba - presumably against us - so that Cuban pilots and aircraft are operating all round Africa - also presumably against us. That cannot go on and have SALT survive. It is doing no favor to Soviet-American relations to pretend that these areas are unrelated. Sooner or later it will lead to a confrontation."

25 An argument akin to Secretary Kissinger's view was advanced by E.V. Rostow to the CD on behalf of the United States. Quoting a remark by "the Soviet Foreign Minister, Maxim Litvinov" that "peace is
indivisible", Mr Rostow said that - "The United States has high hopes for a fair and reasonable outcome of the crisis in Poland. Such a turn in Soviet policy could make many other agreements possible, and help prepare the way for a genuine improvement in the climate of world politics and the genuine improvement in the climate of world politics fabric of the international community. One of the principal means on which we rely to achieve that goal is the negotiation of fair and balanced agreements for the reduction of nuclear arms, particularly of offensive nuclear arms." CD/PV.152 of 1982, pp.11-12.

The remarks were countered by Ambassador D. Erdembielg of Mongolia, who said that - "The Government of the Mongolian People's Republic, together with other socialist States, firmly believes that questions relating to the sovereign rights of socialist Poland should cease to be used as a pretext for increasing international tension and diverting the attention of peoples from the solution of the vital problems of strengthening peace and security, ending the arms race and achieving disarmament. Equally disturbing is the continued aggression of South African racists against the freedom-loving African peoples. As in the Middle East, the source of tension in South Africa would already long since have been eliminated and all Africa would have been free, had it not been for the direct assistance of the United States and other imperialistic States - assistance which has already been repeatedly condemned by the United Nations General Assembly."

CD/PV.153, p.22.


27 Whence the Threat to Peace (Military Publishing House, USSR Ministry of Defense, Moscow 1982).

28 Steinbruner, John D., "Nuclear Decapitation", Foreign Policy, Winter 1981-82, Vol.45 p.16. Describing the vulnerabilities of the C³ systems of both Superpowers the author concludes (at p.28)-"The United States can ill afford emotions or illusions of any sort in dealing with the problems of command vulnerability. Purging security policy of such influences and establishing a realistic grasp of the circumstances in which the United States finds itself should be the overriding commitment of the coming decade." Also, the issue is squarely confronted by Panofsky, W.K., Arms Control and SALT II (Uni. of Washington Press, Seattle and London 1979) p.25 - "Signing a SALT agreement is not a reward for good conduct on the part of the Soviet Union, nor does it imply approval of decisions made by this or past administrations of various actions in weapons procurement or military policy. The merit of SALT
must be judged on the basis of whether U.S. security and world security would be greater or less with SALT - and by that test the answer is clearly positive."

A similar formula may be applicable to the policy options of the Soviet Union.

29 Beres, Louis Rene, "Steps Toward a New Planetary Identity: the 1980 Rabinowitch Essay", The Bulletin of the Atomic Scientists, Feb. 1981, Vol.37 No.2 p.43 - "As we go on on with our seemingly important day-to-day concerns, the planet moves inexorably toward nuclear war. Just a few more years, perhaps, and there will remain no conceivable way of averting humankind's last paroxysm. The people of Earth will draw their last fitful, convulsive gasps. And they will do so, incredibly, with incredulity."


33 SALT Hand Book op.cit. p.680.


35 Id. p.58.


39 E.g. "... I believe that under current circumstances it will not be possible to negotiate reductions unless we are seen to be building." Testimony of Henry Kissinger, The SALT II Treaty, Hearings before the Senate Foreign Relations Committee, July 1979 (U.S. Govt. Printing Office, Washington 1979) p.196. This approach to negotiation was subsequently adopted by the Reagan Administration.


44 So far, the practical application of these theories to NAC has been very limited. See Lall, A., Modern International Negotiation: Principles and Practice (Columbia University Press, New York, 1966); Ikle, F.C., How Nations Negotiate (Harper and Row, New York, 1964).

45 E.g. As well as numerous assessments by United States Govt. personnel of the SALT II Treaty, when considering ratification of the Treaty during the second half of 1979 more than 100 expert witnesses gave testimony, mostly at public hearings, to the Senate Committee on Foreign Relations.


47 Id. Ch.3., Professor Tunkin identifies the new principles of international law during the period of co-existence to be - nonaggression; peaceful settlement of disputes; self-determination of peoples; peaceful coexistence; disarmament; respect for human rights; and the prohibition of war propaganda.

48 Supra Chapter VII.

49 The further remote possibility was suggested in
Chapter II supra, of the use of nuclear weapons against a third State found to be acting in defiance of the whole international community.


51 Ellsberg, Daniel, "Will We Use Them?", Current, June 1981, No.233 p.41, claims that documentary evidence exists to prove that the US has contemplated use of nuclear weapons on four occasions - 1950 at the Chosin Reservoir in Korea; 1953 at Panmunjom, Korea; 1954 for the defence of Dienbienphu, Viet Nam; and 1968 in defence of Khe Sanh in Viet Nam. - In Whence the Threat to Peace op.cit. p.75, the Soviet Union claims that "In 19 instances Washington discussed in earnest the employment of nuclear weapons, the USSR being directly threatened four times." The preponderance of Soviet conventional weapons is acknowledged on p.69 - "True, the USSR has more divisions in its ground forces than the USA. But this is quite natural because owing to its geographical and strategic position the Soviet Union has to maintain the balance of forces not only in Europe but also in other regions adjoining its borders."


53 Ibid.

54 E.g. Andelman, David A., "Space Wars", Foreign Policy, Fall 1981, No.44 p.106 - "Although ground-based testing of a laser system intended for use in space could conceivably be concealed, space-based testing could not. And a weapon system involving such exotic new technology could not be deployed without extensive experimentation in space. Otherwise, there would be no assurance whatsoever that the system could meet operating standards either defensively or offensively."

55 "India Rockets Ahead with Observation Satellites", New Scientist, 11 June 1981, Vol.90 No.1257 p.691; Ghosh, S.K., "China's Space Programme: IDSA Journal, April-June 1980, Vol. XII No.4 p.364, esp. p.373 - "To sum up, while a successful operational military satellite system takes a long time to develop and deploy, and to reach the level of the two Super Powers in this regard takes even a longer time, there is no doubt that China's stepped up space activity signifies its determination to advance towards this goal."
But cf. Vlasic, Ivan A., "Disarmament Decade, Outer Space and International Law", McGill Law Journal 1981, Vol.26 No.2, p.151—"Professor Harrison Brown of the California Institute of Technology foresaw the possibility of orbiting nuclear devices of 1,000 megatons which could, on command, incinerate six Western states within minutes if exploded at an altitude of three hundred miles. The concept of orbital nuclear bombers was eventually rejected as impractical and less efficient than the more conventional means of delivery..."

See Table II.

The latter loophole in the Outer Space Treaty is covered by the ABM Treaty for the time being.


Ibid.


A/RES/36/97C.

A/RES/36/99.

A/36/192.
CHAPTER X

SUPERVISION OF COMPLIANCE AND ENFORCEMENT OF
THE AGREEMENTS

Verification of Multilateral NAC Agreements

Supervision of compliance with NAC agreements and, in case of reluctance to comply or outright breach, the enforcement of those agreements, are essential components of the NAC process. There is no ambiguity in international law concerning the obligation to observe treaties on the basis of the universally uncontested maxim of pacta sunt servanda. Despite the assumption that all international agreements will be carried out in good faith, it is acceptable practice to supervise performance. The observance of compliance for the purpose of detecting any breaches of NAC agreements is referred to as verification. Methods of persuasion or coercion used to ensure that States abide by their obligations - whether pursuant to an Order or Opinion of the International Court of Justice, an arbitrated or negotiated settlement, or otherwise - are referred to as enforcement.

Apart from the Nuclear Tests case, discussed in Chapter VI, there is no case law relating to NAC. In accordance with the general principles of treaty interpretation, it can be adduced that the obligation to abide by an NAC agreement requires compliance with the letter and spirit of its terms, although it does not forbid
circumvention of the agreement by extraneous means even if that entails the attainment of unilateral advantage over another party. NAC provisions appear to be prone to ambiguity regarding distinctions between a breach and a permissible circumvention.

Verification has assumed a new importance with the advent of arms control agreements. In the case of other international agreements, such as commercial arrangements, protection of diplomatic personnel and aliens, or border dispute settlements, the observance or non-observance of the agreement is generally obvious. By contrast, in NAC agreements there is often a substantial possibility that extensive preparations for breach, should they occur, would not be detected and, possibly, that actual and repeated breach of the terms of the treaty would be overlooked. For this reason, the final document of SSD I refers to the need for adequate verification of arms control agreements.

"Adequate verification" could be defined as the intensity of surveillance necessary to ensure that discovery of an irregularity would be sufficiently likely as to make breach of the particular undertaking by subterfuge an unacceptable risk to the State concerned. As accidental discovery is usually a possibility, the risk of discovery does not rest entirely on deliberately instituted "measures".

When assessing "unacceptable risk" of discovery of breach, especially by United States Government Agencies, emphasis is often placed on the likelihood of discovery
rather than the consequences of discovery. Yet it is reasonable to suppose that the latter consideration weighs more heavily with Governments than the former one. The consequences of discovery of breach would no doubt depend to a large extent on the steadfastness of the NAC regime. So long as open breaches can be avoided, as they have been so far, then a breach of an NAC agreement by a party could lead to ostracism by other States or, if perpetrated by a Superpower, to the collapse of the entire NAC process.

The possibility of adequate verification can be prejudiced by ambiguities in drafting, often deliberately countenanced, in order to paper over irreconcilable differences among negotiating partners. A typical instance is the imprecise wording of Article IV of the NPT. Another example is a provision in the Statute of the IAEA requiring the deposit with the Agency, for the purpose of temporary storage, of "any excess of any special fissionable materials" being the by-products of safeguarded materials. The Treaty does not state by whom or by what criteria it is to be determined whether any nuclear material not in current use is "excess", requiring IAEA storage. Neither does it indicate in what manner or at whose cost such transfers of superfluous nuclear materials should occur. Hence, several non-nuclear-weapon States are building up large stockpiles of weapons grade nuclear materials. So far, no nuclear material whatever has been deposited with the IAEA for safekeeping, and the Agency has no facilities to
accommodate a State that may wish to transfer its excess special fissionable material for storage.3

In addition to ambiguities, several of the treaties have loopholes. Some of these are acquiring greater significance with the passage of time, such as the absence of any provision in the Non-Proliferation Treaty to prevent a non-nuclear-weapon State Party from supplying special fissionable material or relevant equipment to another non-nuclear-weapon State for military purposes.4 A further example is to be found in the Outer Space Treaty which is in urgent need of overhaul for the rectification of substantive omissions, for instance, failure to outlaw the stationing of weapons, that are not weapons of mass destruction, on satellites or on space stations.5

Methods of Verifying Multilateral NAC Treaties:

In some respects, international verification is comparable to search, interrogation, inspection of records, and similar procedures in domestic jurisdictions designed to ensure that the laws are being observed. Verification measures provided for in multilateral NAC Treaties are in addition to such other methods as States may themselves devise, without transgressing the rights of other States. For example, nuclear explosions in the atmosphere can be detected visually; by measuring fallout levels of radioactive substances; and by the nature and sequence of shock waves caused, referred to as the "signature" of the blast.6 Observations of this kind
can be made by NTM without receiving co-operation from other States, by using photographic, electronic, chemical and other sensors. The Partial Test-Ban Treaty, banning nuclear explosions in the atmosphere, makes no provision for internationally co-operative verification, thus leaving the Parties with only NTM as the method of verification.

The other multilateral NAC treaties do make some provisions for co-operative verification. To do so, they utilise several techniques, the most substantial being the institutional method employed by the IAEA, which will be considered in greater detail under the next sub-heading. The IAEA also provides the verification mechanism for the Non-Proliferation Treaty, by requiring all non-nuclear-weapon States Parties to enter into full scope safeguards agreements with the Agency. Adherence to the Treaty of Tlatelolco is also verified by the IAEA, in addition to on-site inspections undertaken by the Agency for the Prohibition of Nuclear Weapons in Latin America (OPANAL).

Another verification system being utilised is that of mandatory notification. For instance the Antarctic Treaty requires notification to be given to all Parties of any expedition undertaken to the Antarctic Continent. Likewise, by the terms of the Outer Space Treaty, a Party is obliged to notify all other Parties of any potentially harmful activities in outer space that it plans to undertake. By contrast, the Sea-Bed Treaty only requires notification of Parties after a dispute has occurred, in
order to facilitate co-operative verification procedures.\textsuperscript{13}

Observation provisions for the verification of NAC treaties authorise general observation of procedures, specific observation under given circumstances, as well as designating appointed observers and investigators. The Antarctic Treaty permits the appointment of observers by the Parties to scrutinise the whole Continent and all traffic flowing to and from it. On the other hand, the Outer Space Treaty only permits observation of activities and installations belonging to another Party after reasonable notice has been given. A different provision has been adopted in the Sea-Bed Treaty, which permits continuous observation of relevant activities, without requiring the designation of special observers.

Co-operative verification is provided for in both the Sea-Bed Treaty and the ENMOD Convention, but only at the request of the Parties when they, presumably, suspect irregularities. It is always implied, while in the Outer Space Treaty and the Sea-Bed Treaty it is overtly stated, that observation procedures must not interfere with the activities of the Parties being observed.\textsuperscript{14}

Contemplated Methods of Verifying Future NAC Treaties:

Efforts to improve the verification of multilateral NAC treaties take several forms. While States continuously endeavour to update existing techniques involved in methods such as remote sensing, and air and water sampling to detect nuclear waste products, novel
proposals are constantly put forward for the verification of treaties still under negotiation. For instance it has been proposed that a Comprehensive Test-Ban Treaty could be verified by periodic inspection perhaps aided with the installation of recording instruments in "black boxes" and/or inspection by challenge in the event of suspected irregularity. Likewise, an International Seismic Monitoring Network is under contemplation.

Another type of endeavour in multilateral NAC verification is to give more States access to verification techniques, if need be by utilising a joint operation. The most ambitious programme of this kind is the proposed International Satellite Monitoring Agency (ISMA). It is anticipated that through participation in the Agency, States would acquire access to remote sensing instruments and techniques by pooling their resources to launch the necessary satellites, and to analyse and interpret the resulting data. Until now, the procedure has been available only to the Superpowers.

When ISMA was proposed by France at SSD I, both Superpowers were strongly opposed to it, fearing that it would merely add to the grounds for international dispute, misunderstanding and competition. However, with the rapid development of launching techniques, particularly by the Europeans and the Chinese, remote sensing will soon be within the competence of several States. Therefore, the options today are only between haphazard additions to the space "club", or the introduction of an organised international system.
Nevertheless, the successful operation of this form of joint verification is not a foregone conclusion. Difficult questions are still unresolved regarding the equitable allocation of management responsibilities, the basis of cost-sharing, the criteria for participation and access to data, together with problems related to the interpretation and divulgence of the information to be gained.

The legal status of the proposed ISMA is also undecided and will, no doubt, depend on whether it is to be a United Nations body or whether only regional or other selective participation is achieved. In the meantime, the international community is obliged to place great reliance on the verification of multilateral NAC treaties by the Superpowers, a situation that is not altogether satisfactory. There is no recognition in international law that the Superpowers have a responsibility to divulge breaches of multilateral NAC treaties observed by them as a consequence of their developed surveillance systems. Nor are they required to report on conduct contrary to General Assembly resolutions, even if they alone are able to verify it. The adverse repercussions of this situation were strongly felt at the time of the suspected nuclear explosion off the coast of South Africa in 1979, known as the "September event", when records of observations of the event could not be elicited as of right.18
The IAEA Safeguards System

The verification of multilateral and bilateral international treaties regarding nuclear activities, referred to as the safeguards system of the International Atomic Energy Agency (IAEA), is by far the most extensive verification system for horizontal nuclear arms proliferation control. The objective of the IAEA verification system, as described in the Statute of the Agency, is -

To establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose...19

It was originally envisaged that the Agency's safeguards would be applied chiefly pursuant to project agreements, whereby material and technical assistance in nuclear projects is supplied by or through the Agency to a recipient State.

The IAEA is also authorised to apply safeguards at the request of its Members "to any bilateral or multilateral arrangement". These are referred to as safeguards transfer agreements, which enable States to confer on the Agency the task of supervising safeguards responsibilities undertaken in various nuclear co-operation agreements between them.

There is a further provision in the IAEA Statute which permits the application of safeguards "at the request of a State, to any of that State's activities in the field of atomic energy". The provision regarding
these unilateral submissions has enabled the Agency to verify the commitments of States under the Treaty of Tlatelolco and the Non-Proliferation Treaty.

It was only in 1962 that the first safeguards inspection occurred. During the next four years, the safeguards system was substantially revised and extended as the result of strong co-operation on the issues between the United States and the Soviet Union. It has been suggested that increased support by the Soviet Union for safeguards during that era was consequent upon the acquisition of a nuclear weapons capability by China.\textsuperscript{20}

Details of the safeguards system were elaborated in two Agency documents.\textsuperscript{21} The specific aim of safeguards is described as –

...the timely detection of diversion of significant quantities of nuclear material from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices or for purposes unknown, and deterrence of such diversion by the risk of early detection.\textsuperscript{22}

The Agency's Standing Advisory Group on Safeguards Implementation, has considered the meaning of "significant quantities of nuclear material".\textsuperscript{23} A "threshold amount" of nuclear material was defined as the approximate quantity of special fissionable material needed for a nuclear explosive device, namely, in general terms, 8 kg of plutonium, 8 kg of uranium 233 or 25 kg of uranium 235. The phrase "for purposes unknown", has been interpreted to mean that the Agency is not required to enquire into the purposes for which diverted material may be intended, provided it is shown to be a diversion from
the peaceful nuclear activities ostensibly undertaken. The Agency seeks an above 90% probability of detecting a diversion.

All Agency safeguards are based on a State System of Accountancy (SSAC), as well as national physical control of radioactive material. In accordance with this system States accept the obligation to maintain comprehensive records, based on the method of material balance areas to facilitate verification at key measurement points. They are required, inter alia, to submit monthly reports to the Agency concerning all nuclear inputs, outputs, production and losses of nuclear material. The State is also obliged to provide the results of all physical inventories of nuclear materials and to draw the Agency's attention to any discrepancies.

Inspectors appointed by the Agency have the task of ascertaining that such records supplied are consistent with the records appearing at the relevant plant and with the quantities of special fissionable material actually present. It is assumed that potential diverters could be States, facility operators, individuals or groups of individuals. Therefore, all information supplied by the State has to be independently verified in the course of ad hoc, routine and special inspections.

According to IAEA estimates concerning the efficacy of its safeguards on nuclear fuel cycle facilities, as submitted to the second Review Conference of the Non-Proliferation Treaty, the great majority of reactors,
being light water reactors, are effectively safeguarded. The Agency has greater difficulties with on-load fuelled power reactors, including the Magnox and Candu type reactors, which are refuelled continually without reactor shutdown. Also, in these reactors storage may be in "close-packed three-dimensional arrays", which does not facilitate fuel element counting.

It is claimed that conversion prior to fuel fabrication can also be satisfactorily safeguarded, as the facilities are usually shut down several times a year. On those occasions all the material can be tagged for later identification.27

The Agency admits to only "limited experience" in safeguarding reprocessing plants and no experience with large reprocessing plants. Only "some preliminary work" has been done regarding proposed methods for safeguarding the plants. Each of these plants can produce 10 to 14 tonnes of plutonium annually, so that expected measurement errors and uncertainties would be too great for the successful use of the customary material accountancy method. One suggestion has been the installment of monitoring barriers around critical parts of the plant. As safeguards for large reprocessing plants would have to be based largely on containment techniques, these would have to be built in during the construction of the plant.28

Likewise, the Agency has had no experience with uranium enrichment plants - or even pilot plants in this
case. The first enrichment plants to be safeguarded by the Agency are of the centrifuge type. Commercial diffusion plants to be safeguarded are still under construction, while the nozzle process and other new processes are merely at the experimental stage. Gaseous diffusion plants are as yet only operated in the nuclear-weapon States.

The chief verification problem of the Agency at the present time, is to prevent the possibility of converting a high production rate at low enrichment to a low production rate at high enrichment levels, between periods of observation. However, in the near future, larger scale diversion of special fissionable material, namely weapons grade material, could become possible.

Fast breeder reactors are the most proliferation-prone. In those reactors the irradiated fuel, and even part of the fresh fuel assemblies, are "virtually inaccessible". Nor can the quantity of material in the core be verified at any stage. Similarly, spent fuel cannot be identified for at least several months.

The Agency has only had experience in safeguarding pilot plants of the liquid metal fast breeder reactor type. At present prototypes are being perfected, while commercial plants are to commence production in the next few years. It is anticipated that containment and surveillance with the aid of inbuilt design features, could make safeguarding possible. The Agency claims that the necessity could arise for new concepts of
safeguarding to be utilised as the larger plants and the new fuel cycles of fast breeders come into operation.29

Already the Agency has the use of seals; electronic sensors to detect the movement of various grades of nuclear material; "tamper-proof" cameras; and sound recorders. The possibility of inbuilt measurement and containment features sought to be incorporated, gives some prospect of verifiability of the operation of the more sophisticated plants. The responsibility of non-nuclear-weapon States, under the relevant treaties and agreements, to ensure that all nuclear facilities subject to their jurisdiction are so constructed as to facilitate appropriate verification, is an issue of international law that, so far, has not been fully confronted.30

Compliance Enforcement of Multilateral NAC Treaties

Enforcing Compliance Pursuant to the IAEA Safeguards System:

The function of IAEA safeguards, pursuant to the two non-proliferation treaties and the various bilateral safeguards agreements concluded in compliance with those treaties, is to report on the diversion of special fissionable material suitable for the manufacture of nuclear weapons, from facilities ostensibly required to produce radioactive material for peaceful purposes. The mere knowledge that a breach of treaty obligations has occurred, or is about to occur, would be pointless unless it is assumed that divulgence of the facts would lead to deterrence. The relevant NAC treaties contain only
minimal direct sanctions provisions. These consist largely of withholding materials and assistance for further nuclear activities\textsuperscript{31} and making the facts of the breach known to those directly concerned, as well as to the world community through the United Nations. It would then be possible for States individually, collectively, or universally to apply economic, social, or military sanctions.

However, pressures in support of upholding the non-proliferation regime do not have to await a finding that an NAC treaty has been breached. International sanctions and inducements can be applied irrespective of treaty obligations.\textsuperscript{32} For instance, the offer of economic assistance or military aid can be made, in the first instance, with a view to persuading a State to accept obligations with respect to the prevention of horizontal proliferation. Moves to admit Spain into the European Economic Community, and subsequent acceptance by that State of full scope safeguards, may be a case in point. Conversely, South Africa and Israel have resisted economic pressures and are prepared to forego imports of enriched uranium for commercial use in preference to accepting full scope safeguards. Undoubtedly even those States could be persuaded to conform if Western States were prepared to apply more stringent economic and military inducements or, alternatively, perhaps if the security problems of the non-complying States ceased to be so pressing.

It would be mistaken to conclude from the above
considerations that the relevant treaties are either ineffectual or irrelevant. Their role in the non-proliferation regime could be characterised as the main strands in a wider fabric. In accordance with that analogy, the precise objectives and standards set by those treaties, and the support they enjoy, represent the strength and resilience of the binding strands that hold the fabric together.  

How well is this horizontal anti-proliferation fabric likely to endure? The present spread of proliferation-prone technology in the world has resulted from the pursuit of short term goals in preference to long term non-proliferation objectives. It began at a time of acute Soviet-American rivalry for influence among emerging Third World nations. In 1954, a United States Atomic Energy Act was passed, enabling that country to supply nuclear research reactors to more than twenty States, including several that were economically underdeveloped and politically unstable. However, as well as extending Western influence to the recipient States, the transactions were commercially profitable.

With the perfection of nuclear technology in additional developed Western States, the commercial incentive gained the upper hand. The nuclear industries of Canada, France and the Federal Republic of Germany, in particular, entered into competition with the United States for the sale of nuclear plant, materials and technology. This occurred simultaneously with growing demands by the Third World for economic and political
justice in the international arena.\textsuperscript{37}

The demand for commercial reactors for power generation, as well as for research reactors, is invariably justified on economic grounds, while the concomitant creation of a nuclear technology infrastructure, providing at least a potential for weapons capability, tends to be dismissed as an insignificant by-product of the process.

In recent years the argument for supplying sensitive technologies, for example, by Germany to Brazil\textsuperscript{38} and by France to Pakistan, has been that the consequent reliance by those States on the supplier for materials, spare parts and consultancy, would integrate them into the economic and legal non-proliferation system. The strategy appears to have succeeded, for the time being, with Brazil which has accepted full scope safeguards. Pakistan, on the other hand, which, as a result of a change of heart by France has been ultimately denied assistance, has decided to refuse full scope safeguards.

These two instances hardly justify a conclusion that the transfer of nuclear technology restrains proliferation while its refusal tends to promote proliferation. Such reasoning fails to take account of the different geopolitical situations of Brazil and Pakistan. More generally, the argument ignores the relevance of the time factor in the spread of proliferation-prone technologies, namely that the mere postponement of nuclear weapons prowess may be
beneficial. It also overlooks the propensity for early self-sufficiency in nuclear processes by assisted States, destined to reduce the influence of original suppliers.

Although the spread of nuclear technology was inevitable as the result of world-wide technical development, the rate of spread has been artificially increased stemming from Superpower confrontation, economic rivalries among the technologically advanced States, and the desire to acquire a future nuclear weapons option by developing States. The current issue is whether the nuclear weapons option is to be exercised by the twenty or more developed and developing States ripe for it, and at what rate additional States are to acquire the option.

Pakistan has often maintained at the United Nations that horizontal proliferation is not a technological question but a political question. While at present this is still not true for most States, it is becoming an increasingly valid claim. Restraint due to verification and the threat of sanctions, whether imposed pursuant to treaty obligations or as the result of international opinion independently of treaty obligations, in conformity with the general principles of non-proliferation, still only applies to a limited number of countries. It applies especially to those that have large commercial plants capable of rapidly producing militarily significant amounts of weapons-grade material, or the early prospect of enrichment, reprocessing and fast breeder facilities. Those are also the countries
that could not only produce increasingly large quantities of the sensitive materials but also, as has been noted previously, are installing reactors that are difficult, if not impossible, to safeguard. As well as undisguised production of weapons-grade material in reactors constructed for that purpose, research reactors and pilot plants can also be utilised to produce significant quantities of weapons-grade material.

At present only four non-nuclear-weapon States possessing nuclear facilities are not under full scope IAEA safeguards. These are India, Israel, Pakistan and South Africa. Several of the countries under full scope safeguards have accepted safeguards not as the consequence of treaty obligations, as they are not parties to either the Non-Proliferation Treaty or the Treaty of Tlatelolco, but under bilateral co-operation agreements. Unlike the requirements of the Treaties referred to, full scope safeguards undertaken pursuant to commercial treaties do not necessarily anticipate the safeguarding of any future nuclear plants.

However, the distinction between safeguards pursuant to a treaty and those in compliance with a co-operation agreement is of limited significance. Firstly, the repudiation of the relevant treaties only requires three months' notice. Secondly, recent bilateral nuclear co-operation agreements generally contain fallback safeguards, should IAEA safeguards no longer apply, and they can also require prior consent by the supplier to the recipient regarding reprocessing, enrichment and
transfers to third countries. In addition, several agreements restrict indirect proliferation routes, including copying and the use of subsequent generations of nuclear fuel. Thirdly, safeguards agreements entered into with the Agency consequent upon co-operation agreements probably have an independent operation and would continue even if the co-operation agreement were repudiated. A situation where it was sought to terminate Agency safeguards resulting from the suspension of a bilateral co-operation agreement has not occurred so far.

The emergence of renewed Superpower antagonisms coincidental with the growing nuclear autarchy of developing nations, could place the task of policing the horizontal non-proliferation regime increasingly with the Third World. Rather than withdrawing from the IAEA supply and safeguards system, these countries may prefer to exercise their voting strength in that institution in order to secure the election of a majority to the Board of Directors. In the meantime, the possibility can be used as a bargaining lever. Having acquired a voting majority, whether they would turn a blind eye to the emergence of some of their number as nuclear-weapon States is not predictable on the basis of present indicators. The wish to gain nuclear-weapon status by some of the developing States could well be offset by the growing apprehensions of their less ambitious colleagues.

At present, the only nuclear-weapon States in the
world are the five permanent Members of the Security Council. It is an indication of the astuteness with which the permanent Members were chosen, at a time when the architects of the United Nations were still unaware of the military potential of nuclear reactions. Yet, should the five veto-carrying nuclear-weapon States fail to provide an acceptable modicum of security to non-nuclear-weapon States, as well as continuing to slacken non-proliferation standards, they could be faced with nuclear challenges not only from developing States but also from technologically advanced States. For instance, the Federal Republic of Germany and Japan have vast stockpiles of nuclear material suitable for insertion into missile warheads, the possibility of sophisticated delivery systems, and the technical prowess to turn these capacities to immediate military advantage.

In the absence of concerted world opinion opposed to horizontal proliferation, it would also be possible for less powerful States to become thinly disguised latent or quasi nuclear-weapon States, such as Israel and South Africa are reputed to be. It is a stance that may afford a measure of deterrence while minimising ostracism and the embarrassment of allies.

Over the longer term, the non-proliferation regime could be substantially fractured with the emergence of additional overtly or reputedly nuclear-weapon States. It has been repeatedly put forward that such a situation might galvanize world opinion into enforcement of the non-use of nuclear weapons, thus preventing their further
spread. This view is open to conjecture. The successful restraint exercised, so far, by the nuclear five is not proof that nuclear weapons can be stockpiled as a deterrent indefinitely without precipitating their use. The relatively brief time involved and the exceptional stability and competence of the bureaucracies of those States, compared with those of many other States, were no doubt contributing factors in averting nuclear war. Even so, the use of nuclear weapons is known to have been seriously contemplated by at least one of the nuclear-weapon States in the post second World War period, while the other Superpower is also thought to have proposed such use on at least one occasion.

Hence, complacency about horizontal proliferation, in the belief that non-use of the weapons in a proliferated world could be more easily enforced than the prevention of proliferation, does not appear to be justified.

General Principles of Compliance Enforcement:

It has been observed in previous Chapters that the standard of compliance with the provisions of all the treaties listed in Table I has been very good. No situation has arisen when it would have been appropriate to consider the application of sanctions for non-compliance with an NAC treaty. Therefore, when assessing the likely effectiveness of sanctions that may have to be administered in the future, it becomes necessary to extrapolate from experience gained in the application of measures to enforce non-NAC agreements.
The only experience in relation to the enforcement of NAC provisions has been in the form of consultations between the Parties to a treaty. There has also been conduct inconsistent with United Nations NAC resolutions, perpetrated by States that had not undertaken treaty obligations in the relevant matters, for instance, in relation to conducting nuclear tests in the atmosphere, or refusal to accept IAEA safeguards.

Apart from consultations concerning compliance that take place in the IAEA or in OPANAL, formal consultations have been conducted in the framework of Review Conferences. If any breaches were to occur and in case of suspected breaches, the exposure of such conduct at Review Conferences or by direct communication to the parties, as provided by the disputes procedures of the various NAC treaties, would itself carry the sanction of ill-repute. By comparison, it is noteworthy that in other areas of international law more formal and regular procedures have been devised for the monitoring of compliance with international standards.

For instance, under Article 22 of the Constitution of the International Labour Organisation (ILO), States are obligated to supply annual reports regarding measures adopted by them to give effect to the Conventions they have ratified. Those reports have to supply particulars requested by the Governing Body of the ILO. Further, in accordance with Article 19 of the ILO Constitution, States Members are required to give an account of such circumstances as may have prevented them from ratifying
ILO Conventions to which they are not parties. A Committee of Experts on the Application of Conventions and Recommendations examines the reports submitted by Governments, a summarised version of which is presented at each annual session of the ILO.

Another example of enforcement by persuasion, on the basis of disclosure of non-compliance, is to be found in procedures pursuant to Articles of Agreement of the International Monetary Fund (IMF). For example, Article XII, Section 8 provides that "the Fund shall at all times have the right to communicate the views informally to any member on any matter arising under this Agreement". The Article further provides that the Fund is empowered to publish a report concerning matters within its control, if the balance of payments situation of Members has been adversely affected by the activities of another Member, provided there is strong international commitment regarding the matter. In the knowledge that it could be exposed for non-observance of an obligation by the reporting methods just referred to, any State that may be tempted to perpetrate a breach would tend to be dissuaded from so doing.

Yet another form of sanction for breach of an international obligation, under a treaty or otherwise, is to take retaliatory action commensurate with the breach. For example, Article XIX:3(a) of the General Agreement on Tariffs and Trade (GATT), permits the suspension of "substantially equivalent concessions or other obligations" in certain circumstances as retaliation for
breach. Likewise, the Contracting Parties to GATT may, under the said Article, retaliate against the withdrawal of some tariff concessions.

A further kind of retaliation is countenanced by the International Civil Aviation Organisation (ICAO) which, pursuant to the ICAO (Chicago) Convention of 1973, permits the exclusion of aircraft from the airspace of any State that has been adversely affected by a breach of the anti-hijacking provisions of the Convention.

Different considerations apply in the field of NAC. It is difficult to envisage retaliatory sanctions for the breach of NAC agreements that would not be self-defeating in their operation, by permitting the deployment or use of nuclear arms. An exception is the retaliation authorised by the Statute of the IAEA, which provides that a State that receives Agency assistance may be denied further assistance for its nuclear industry as the result of breach of an undertaking with the Agency. In accordance with Article XII (A)7 of the IAEA Statute, the Board of Governors has the discretion under such circumstances to either suspend or terminate assistance to the offending State.

Some formal sanctions for non-compliance with the provisions of NAC treaties are available. For example, the Outer Space Treaty, by Article VII, makes any State Party, "from whose territory or facility an object is launched" into outer space, liable for damage caused by the space object. Similarly, in case of breach of
safeguards Agreements with the IAEA, the Board of Governors is empowered to apply several formal sanctions in addition to the retaliatory measures of suspension or termination of assistance. These include the right to recall the return of materials and equipment supplied, and the suspension of all membership privileges, while requiring the continued observance of membership obligations.

The Annual Reports of the Board of Governors indicate that none of the abovementioned sanctions have been applied, so far, by the IAEA in pursuance of Article XII(A)7. Nevertheless, it is relevant to the operation of the horizontal non-proliferation regime that the retaliatory measures available under the Statute of the IAEA, as well as the other sanctions provisions, would pose no administrative difficulties in their application, with the exception that the return of materials and equipment already supplied may be difficult to enforce.

The most onerous formal sanctions that could be administered for breach of NAC obligations, would be applied in accordance with the provisions of Chapter VII of the United Nations Charter. Those sanctions are not available for the enforcement of most international obligations, as they may be invoked only on occasions when there is a "threat to the peace, breach of the peace, or act of aggression", in circumstances when the maintenance or restoration of "international peace and security" are at stake.
As non-compliance with NAC obligations could well give rise to a situation jeopardising international peace and security, the sanctions that may be imposed by the Security Council are very pertinent to this area of international law. The sanctions under Article 41 include the severance of international communication by rail, sea, air, postal, telegraphic, and radio contact, partial or complete interruption of economic relations, and severance of diplomatic relations. Article 42 authorises the Security Council to take whatever military measures are necessary "to maintain or restore international peace and security".  

While attempted sanctions for non-compliance with NAC undertakings could be frustrated by any permanent Member of the Security Council, the use of the veto to block sanctions against a State that had violated clear-cut treaty obligations would be a very serious step to take, which could damage the whole international legal system impinging on the observance of the United Nations Charter. This conclusion could be drawn from the deterioration of the international situation that occurred at the time when the Soviet Union used the veto power to prevent the application of sanctions against Iran, despite that country's clear violation of treaty obligations with respect to the safety of diplomatic personnel. The use of the veto on that occasion was sought to be justified on the ground that, although the taking of diplomatic hostages was reprehensible and a breach of treaty obligation, it did not represent a
danger to international peace and security authorising the application of sanctions under Chapter VII of the Charter. However, the military significance of NAC treaties would foreseeably preclude a similar argument as a plausible excuse for refusal to apply sanctions in the event of breach.

The United Nations can apply the further disincentive of expulsion from United Nations membership under Article 6 of the Charter and, in particular, under Article 5 authorising such action with respect to a Member "against which preventive or enforcement action has been taken by the Security Council". Expulsion entails suspension from the "exercise of the rights and privileges of membership" but does not absolve from the obligations of membership. Such action can only be taken by the General Assembly on the recommendation of the Security Council, which has so far failed to agree on the imposition of that sanction. A similar result can be attained by the General Assembly acting alone under Rule 27 of its Rules of Procedure, regulating the Assembly's exercise of power to accept or reject the credentials of delegations that purport to represent the Government of a Member State. Non-approval of credentials by the Credentials Committee of the General Assembly has been used by that body for several years as a sanction against South Africa, on account of its refusal to repeal its apartheid laws.

Neither accession to NAC treaties, nor any other form of international agreement is a necessary prerequisite
for the application of United Nations sanctions in a case that is deemed, by the world body, to be a sufficiently serious breach of international obligation under the Charter. Theoretically at least, in any conflict between the provisions of the Charter, no matter how imprecise, and other treaty obligations of Member States, however explicit the latter may be, the provisions of the Charter prevail by virtue of its Article 103. Hence, on the basis of possible imposition of formal United Nations sanctions in the nuclear arms race, the benefits to be derived from the existence of specific treaties are obscure.

It is not possible to prove by cogent argument that treaty obligations for NAC, in addition to the obligation under the Charter for the maintenance of international peace and security, have any practical effect for enhancing the relevant enforcement procedures of the United Nations. Nevertheless, although there is no unassailable legal dictum to that effect, the breach of a precise undertaking is a more obvious affront than failure to perform a nebulous duty, like the maintenance of international peace and security, and is therefore more likely to attract censure. To that extent, a more precise obligation is more binding.

Despite the vast legal powers of the United Nations by virtue of the provisions of the Charter, in practice, the imposition of sanctions and rewards to induce States to pursue a desired line of action is mostly of an informal nature, imposed by one State or a group of
States. These inducements usually involve trade or other economic benefits and disincentives. Occasionally, of course, there has been an assault by armed force, as was the case with the attack by Israel on the Iraqi nuclear reactor, on the alleged ground that the reactor was to be used for the manufacture of nuclear weapons with which to bombard Israel. At the other end of the scale, light sanctions can be imposed mainly have nuisance value, such as restrictions on travel by diplomatic personnel of the State to be punished, and the imposition of other deliberate inconveniences to its citizens.

It is a moot point to what extent the successful imposition of such informal sanctions is dependent on an international sense of justice that deems the conduct being enforced to be consonant with the imposition of international law. For instance, the suspension of nuclear tests in the atmosphere by France, and the release of the United States hostages by Iran, were carried out under the threat of economic sanctions in the former instance, and in response to actual severe sanctions imposed in the latter instance. Nevertheless, it would be plausible to suggest that those sanctions and threatened sanctions could only succeed because the relevant treaties and United Nations resolutions had firmly established the principles of justice which they sought to apply.

**Verification and Enforcement of Bilateral NAC Agreements**

Supervision of compliance with bilateral NAC
agreements is inseparable from the day to day performance of obligations under the relevant agreements. For this reason the main verification procedures, including the provisions in the two SALT Treaties facilitating verification, as well as the verification-related activities of the SCC, have already been alluded to in Chapter IX.

The reliability of verification procedures for establishing requisite compliance by the Soviet Union to bilateral NAC treaties is a matter of contention in the United States, on which expert opinion is sharply divided. In particular, assessments concerning the efficacy of national technical means of verifying the SALT Treaties are often contradictory, despite the sophisticated methods being used. Former Deputy Director of the CIA, Herbert Scoville, gave an indication of the prowess of NTM when he said -

Satellites can now locate, count and measure modern weapons from 100 miles away, while radar-sensitive radio receivers and infrared sensors on ships, on planes and on land can determine their characteristics and the number of warheads they carry. Limits on armaments can be verified so that pacts such as SALT II do not depend upon Russian cooperation. For example, in testimony to the Committee on Foreign Relations of the United States Senate, former Secretary of State, Harold Brown, stated the position thus -

Our capacity for the monitoring is spread among ground stations, some of them in foreign countries, satellite systems, and other detection techniques, some of them deployed aboard ships and aboard aircraft that stay in international air space. If we lost all of our overseas, our non-U.S. sites, our ability to monitor SALT would be degraded somewhat. But our ability to monitor Soviet strategic and other military programs in general and our indications and warning capability for potential Soviet actions would
be degraded very much more than that.\textsuperscript{52} When asked whether the United States would know when there was concealment or the impeding of verification of NTM, the Secretary replied -

We will be able to see when that happens. We will not always be sure, but we will always know enough to be able to raise it as an issue...It is easier to tell that they are trying to hide something than it is to tell what they are trying to hide.\textsuperscript{53}

He added that the chance of the Soviet Union being able to develop a weapons system without the United States being aware of the fact was "substantially less than 1 out of 1 million".\textsuperscript{54}

Senator Jess Helms has adopted a rather different approach. He maintained during the Senate hearings that, with respect to SALT II -

Technology has overtaken the supposed benefits of this treaty...We have no way of knowing whether the Soviet production lines have, in fact been shut down...But, if missiles can be reloaded or launched without a silo launcher, the threat, Mr Chairman, simply cannot be verified. We thought that we were counting guns and that the ICBM's were just the ammunition. Now we see that we have been counting holsters, and we have no idea how many guns they have pointed at us.\textsuperscript{55}

More recently, the views of a number of well known writers on the subject were collated in a volume entitled Verification and SALT: the Challenge of Strategic Deception.\textsuperscript{56} For example, while contributors Bruce C. Blair and Garry D. Brewer are of the opinion that SALT compliance can be adequately verified by national technical means, Senator Gordon H. Humphrey and Amrom H. Katz reach the opposite conclusion, while several others adopt intermediate positions.
A United States Government background briefing in February 1978, regarding compliance with SALT I, disclosed that "the U.S. does not feel that the Soviet Union has violated either the letter or the spirit of the Treaty since it was signed on May 26, 1972". At the same time, the briefing also stated that the United States had made eight specific enquiries challenging Soviet activities as to their consistency with the provisions of the Treaty, suggesting that there may have been deliberate concealment of activities. The briefing concluded that by 1975 the situation had improved. It was not alleged that any actual breach of Treaty provisions had occurred.

In April 1978 Secretary of State, Cyrus Vance, made a report on SALT compliance issues to the Chairman of the Senate Foreign Relations Committee. The introduction to the report, reproduced in a Department of State Bulletin, draws attention to "...how carefully the United States has raised promptly with the Soviets any unusual or ambiguous activities which could be or could become grounds for concern". It is further observed that, pursuant to the queries raised by the United States in the SCC -

In each case, the activity in question has ceased or additional information has allayed the concern.

None of the questions posed involved other than possible minor transgression of the agreements. For example, in 1973 United States officials came to the conclusion that the radar associated with FA-5 surface-
to-air missiles were being tested by the Soviet Union in "an ABM mode" contrary to the provisions of the ABM Treaty. Although the Soviet Union denied this, the disputed activity was abandoned. On another occasion the Soviet Union admitted that there had been failure to dismantle old ICBM launchers and SLBM at a sufficiently fast rate to comply with SALT I. When challenged they accelerated the dismantling.

The Soviet Union has also challenged certain activities engaged in by the United States with respect to the observance of the SALT I Treaty. For instance, they enquired whether missile silos for old Atlas and Titan missiles could be reactivated, and they queried the purpose of installing a new United States radar in Alaska, on the basis of its possible usefulness in anti-ballistic missile defence.

The marginal nature of these queries, and their satisfactory resolution in each instance within the framework of the SCC, supports the conclusion that the bilateral NAC treaties are being strictly observed and meticulously verified.59

Methods of application and effectiveness of verification procedures under the SALT II Treaty are extensively analysed in the 1980 Yearbook of the Stockholm International Peace Research Institute (SIPRI).60 Notable features of the verification measures cited include the prohibition of interference with national technical means of verification, and the prohibition of deliberate concealment of objects or
activities that could impede observation, such as denial of access to flight-test telemetry of missiles that may be required for verification of compliance. For purposes of verification, the Study also attaches importance to the agreed data base provided by both sides regarding their existing strategic arsenals, to be updated semi-annually. 61

The manner of defining the various weapons to be limited by the Treaty, taking account of their characteristics observable by NTM, contributes substantially to the effectiveness of verification. The characteristics whereby the various weapons are described, were summarised in the SIPRI study as follows -

(a) ICBMs, by range and land-based launcher;
(b) SLBMs, by their deployment on 'modern' submarines and, in the case of Soviet SLBMs, by the date of initial flight tests;
(c) heavy bombers, by their mission capabilities, including the capability to carry long-range cruise missiles (CMs), with specific exceptions to this definition; and
(d) CMs by their mode of launch, weapon delivery mission, and by use of aerodynamic lift.

Notification provisions under SALT II also add to the reliability of the verification of the Treaty. The Parties are required, inter alia, to notify each other of replacement, conversion, dismantling, or destruction of arms limited by the Treaty; they are required to designate new types of light ICBM and SLBM equipped with MIRV; they have to warn "well in advance" of certain flight-testing of ICBM which is to extend beyond national territory, as well as new ICBM test ranges; advise the
number of aeroplanes used for testing cruise missiles; and draw attention to the flight-testing of some unarmed aircraft that might otherwise be identified as Cruise Missiles, or other weapons limited by the Treaty that could be confused with them.

The backbone of SALT verification techniques is provided by the standards established in the Treaties for distinguishing the various weapons to be banned or, more usually, limited in numbers and performance. There is no verification problem where there are functionally related observable differences (FROD). Where, on the other hand, the observable features do not indicate performance capability, the Parties are required to differentiate between the weapons by creating externally observable design features (ODF).

The United States Arms Control and disarmament Act of 1978, by Section 37 provides that "adequate verification of compliance should be an indispensable part of any international arms control agreement". United States concern about verification of NAC treaties, especially the existing SALT Treaties and those envisaged in a continuation of the SALT process, stems from the belief that it is much more difficult for the United States to supplement verification by NTM with information gleaned from Government and other sources available in the Soviet Union, than it is for the Soviet Union to gain similar information regarding compliance with NAC agreements in the United States.
The danger feared is that a sudden revelation could occur of unsuspected stockpiles of weapons giving the other side a clear advantage, referred to as "strategic breakout". However, the SIPRI assessment, as well as much expert opinion in the United States, suggest that verification of NAC agreements by NTM precludes the possibility of strategic breakout, due to the necessity for repeated testing of sophisticated weapons before they become reliably operational. While a Panel advising the United States Intelligence and Military Application of Nuclear Energy Subcommittee reached a different conclusion, at least publicly, it did not rebut the arguments put forward in the dissenting testimony of Panel-member John Carr, who drew attention to the following point -

The panel expresses concern that SS-16 third stages could be secretly produced and stockpiled, and that "A determined evader could clandestinely MIRV missiles or increase the number of MIRVed warheads with a high degree of confidence that this would not be detected."

This is sophistry. A determined evader could maintain this "high degree of confidence: that his cheating was undetected only if he did not test the violating systems, in which case he would have a very low degree of confidence that the products of his cheating would work. And as I have pointed out elsewhere (see my dissent to HASC No 95-90) the counterforce first strike mission is absolutely intolerant of low-confidence weapons. Thus, cheating of this type would not give the Soviets a weapon of any use to them and would not be worth the risk of exposure."

In view of the many-faceted developments necessary to give a disarming first strike capability to either Superpower, a strategic breakout of that magnitude would not be possible. However, as has been observed in earlier Chapters, no other kind of military advantage
between the Superpowers is meaningful, except in a purely psychological context regarding uninformed persons.

At various times, spokesmen for both the United States and the Soviet Union have made threats of retaliation, predicting military supremacy for their side should breaches of the SALT Treaties occur, or in the event of the breakdown of the bilateral NAC process. Such statements can only be regarded as bravado, because it is self-evident from an understanding of the weapons under consideration, that neither Superpower could attack the other without incurring similarly devastating damage in response.

Nevertheless, a very powerful sanction exists which induces compliance with bilateral NAC agreements, and which propels the Parties towards continuing their NAC negotiations. This sanction could be referred to as the ultimate consequences sanction. The sanction consists of the negative consequences that would flow to both Parties if they failed to reach substantive agreement.

The most notable feature of the sanction that exists between the Superpowers is that each interim failure to reach agreement makes subsequent failure more likely which, if it persists, would ultimately invoke the sanction of nuclear war. Hence, although the sanction is liable to be exercised only once, with each setback and delay of the bilateral NAC process, the threat of the sanction becomes more acute.
See Greig, D.W., "The Interpretation of Treaties and Article IV.2 of the Nuclear Non-Proliferation Treaty", Australian Yearbook of International Law (Faculty of Law ANU 1978) Vol.6 p.77.


Art.III(2) only regulates such transfers if they are for "peaceful purposes", while Art.I, forbidding transfers to non-nuclear-weapon States for military purposes, only applies to nuclear-weapon State transferors.

Supra, Chapter IX.

Spence, Jack, "South Africa's 'Bomb in the Basement'", Armament and Disarmament Information Unit, October/November 1980, Vol.2 No.4 p.4, for a typical instance when an event can be deduced from several indicators.

Verification: the Critical Element of Arms Control, U.S. Arms Control and Disarmament Agency (Publication 85, Washington, March 1976): Compendium of Arms Control Verification Proposals (Dept. of National Defence, Ottawa June 1980); See also Statement by the Soviet Government, dated 19 April 1962, ENDC/32 - "After all, it is a fact that all nuclear explosions conducted so far, whether by the Soviet Union, the United States, the United Kingdom or France, have been recorded by national systems of detection in various countries - no other systems have existed or exist up to now. Nor do underground nuclear explosions constitute an exception in this respect. Very convincing in this connexion was the detection of the underground nuclear explosion, recently conducted in the Soviet Union, by the United States Atomic Energy Commission - and not by means of any international control or the despatch of inspection teams into USSR territory, but exclusively by means of national systems. This means that the United States has at its disposal detection systems which are adequate for recording underground nuclear explosions, however far from the United States these explosions were carried out. The Soviet Union also has such detection systems at its disposal, as have many other States."
Art.III(4).

Art.13.

Art.16(1).

Art.VII(5).

Art.IX.

Art.III(2).

Art.XII and Art.III(1) respectively.


Supra pp.74-75.


Art.III(5).


INFCIRC/66/Rev.2 and INFCIRC 153. The latter document forms the basis of all agreements with non-nuclear-weapon States pursuant to the NPT, while the former document forms the basis of project agreements, transfer agreements and unilateral submission agreements. The former document is being applied more stringently than hitherto. Fischer, op.cit. p.38 n.24 - "The Secretariat, with the approval of most members of the IAEA Board of Governors has, however, gradually introduced several amplifications and new clauses into safeguards agreements based on INFCIRC/66/Rev.2 so as to make the safeguards more watertight and comprehensive."

INFCIRC/153, Part II Art.28.
"Quantities of safeguards significance

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<th>Quantity of Safeguards Significance (SQ)</th>
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</thead>
<tbody>
<tr>
<td>&quot;Direct-use&quot;</td>
<td></td>
</tr>
<tr>
<td>Pu</td>
<td>8 kg Total element</td>
</tr>
<tr>
<td>$^{233}\text{U}$</td>
<td>8 kg Total isotope</td>
</tr>
<tr>
<td>$U^{(235}\text{U} &gt; 20%)}$</td>
<td>25 kg $^{235}\text{U}$</td>
</tr>
<tr>
<td>Plus rules for mixtures where appropriate</td>
<td></td>
</tr>
<tr>
<td>&quot;Indirect-use&quot;</td>
<td></td>
</tr>
<tr>
<td>$U^{(235}\text{U} &lt; 20%)}$</td>
<td>75 kg $^{235}\text{U}$</td>
</tr>
<tr>
<td>Th</td>
<td>20 t Total element</td>
</tr>
<tr>
<td>Plus rules for mixtures where appropriate</td>
<td></td>
</tr>
</tbody>
</table>

* Including natural and depleted uranium.*


26 Fischer, D.A.V., Preventing the Spread of Nuclear Weapons, Unpublished Paper (Dept. of International Relations, A.N.U., Canberra April 1981) pp.19-21; See also the Annual Report of the Board of Governors of the IAEA, and The Annual Report for 1980 of the Agency, p.40 paras.174, 178 - "174. In 1980, as in previous years, the Secretariat, in carrying out the safeguards prgramme of the Agency, did not detect any anomaly which would indicate the diversion of a significant amount of safeguarded nuclear material - or the misuse of facilities or equipment under certain agreements - for the manufacture of any nuclear weapon, or to further any other military purpose, or for the manufacture of any other nuclear explosive device. In the light of the report which the Director General submitted to the Board on the implementation of safeguards in 1980, it is reasonable to conclude again that nuclear
material under Agency safeguards remained in peaceful nuclear activities or was otherwise adequately accounted for."

"178. In 1980, safeguards agreements were in force with 11 non-nuclear-weapon States which were not party to NPT – namely, Argentina, Brazil, Chile, Colombia, Cuba, the Democratic People's Republic of Korea, India, Israel, Pakistan, South Africa and Spain...In four of the six States, as in nuclear-weapon States, the unsafeguarded facilities were capable of producing weapons-grade material." [Viz India, Israel, Pakistan and South Africa].

The report also disclosed that the quantities of nuclear material under safeguards changed during 1980 as follows – separated plutonium decreased by 38% to 5 tonnes; plutonium contained in spent fuel rose by 30% to 78 tonnes; low-enriched uranium rose by 18% to 13 872 tonnes; and source material rose by 24% to 19 097 tonnes. The quantity of highly enriched uranium under safeguards remained at 11 tonnes.

27 The Annual Report for 1980 of the IAEA, p.44 Table 7-

"Nuclear installations under Agency safeguards or containing safeguarded material

| Nuclear installations | End of 1980| |
|-----------------------|------------|
|                       | NPT | Non-NPT | Total |
| Power reactors        | 103  | 24      | 127   |
| Research reactors and critical assemblies | 147 (140) | 28 (31) | 175 (171) |
| Conversion plants     | 3 (4) | 1 (0)   | 4 (4) |
| Fuel fabrication plants | 31 (28) | 7 (5)   | 38 (33) |
| Reprocessing plants   | 4 (4) | 3 (1)   | 7 (5) |
| Enrichment plants     | 4 (4) | 0 (0)   | 4 (4) |
| Separate storage facilities | 15 (14) | 6 (5) | 21 (19) |
| Other facilities      | 40 (40) | 0 (0)   | 40 (40) |
| Other locations       | 340 (289) | 18 (18) | 358 (307) |
| Total                 | 687 (617) | 87 (83) | 774 (700) |

\a/ The figures in brackets indicate the status at the end of 1979."


29 Id. pp.50-62 re. plants and procedures that will require new inspection measures.

30 Ibid; The US Arms Control and Disarmament Agency has
carried out investigations on safeguarding the more elaborate commercial nuclear power facilities coming into operation - E.g. - "Our largest safeguards research project is the design, development, and demonstration of a system to provide nearly instantaneous information to the International Atomic Energy Agency on the status of sensors at safeguard facilities. For example, it should enable the IAEA to check at any time on the status of seals placed on equipment or on stocks of nuclear material and thus materially help provide timely warning of any diversion." Testimony on behalf of ACDA to the Subcommittees on International Security and Scientific Affairs of the Committee on Foreign Affairs, Ninety-sixth Congress, First Session Progress in U.S. and International Nonproliferation Efforts (US Govt. Printing Office, Washington 12 March 1979) p.22.

31 Statute of the IAEA, Art.XII(A)7, is the most comprehensive; see Dalhitz, J., "Proliferation and Confrontation", Australian Outlook, April 1979, Vol.33 No.1 p.32.

32 Holsti, K.J., International Politics: A Framework for Analysis (Prentice-Hall, Inc. New Jersey 3rd Ed.) p.181 - "Acts of influencing may take many forms, the most important of which are the offer and granting of rewards, the threat and imposition of punishments and the application of force." The author considers the exercise of inducements under the following headings: Persuasion; The offer of rewards; The granting of rewards; The threat of punishment; The infliction of nonviolent punishment; and Force.

33 E.g. Gangl, Walter T., "The Jus Cogens Dimensions of Nuclear Technology", Cornell International Law Journal, Winter 1980, Vol.13 No.1 p.63. In the author's opinion the development and sale of peaceful nuclear technology is conducive to horizontal proliferation which is inherently illegal because it is in breach of the norms of jus cogens. He asserts (at p.87) that "...the prohibition of nuclear weapons proliferation shares the status of the jus cogens prohibitions of slavery, genocide, and aggression."


36 For the United States position during the latter

37 E.g. see A/RES/36/140, "United Nations Conference on International Code of Conduct on the Transfer of Technology".


39 See n.26 supra.

40 The Treaty of Tlatelolco and the NPT. The Statute of the IAEA provides for prompt withdrawal on notice but some obligations of membership do not cease thereby.

41 Supra, p.247 re. safeguards agreements.

42 Fischer, op.cit. p.61, expresses the plausible view that, a situation "that would persuade countries like Japan and the Federal Republic of Germany that their national security requires them to abandon the [non-nuclear-weapon] policies they have followed since the war", could only arise as a sequel to "a catastrophic collapse of the present world power structure".


44 See Chapter IX supra, n.51.

45 The use of armed force by the UN is considerable although it falls far short of preventing or ending all instances of international aggression, as originally envisaged. E.g. see Sommereyns, Raymond, "United Nations Peace-Keeping Forces in the Middle East", Brooklyn Journal of International Law, Spring 1980, Vol.VI No.1 esp. pp.1-3.


47 Art.103 - "In the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligation under the present Charter shall prevail."


49 Supra Chapter VIII n.47.
By Sec.37 of the United States Arms Control and Disarmament Act of 1 January 1978 (22 U.S.C. 2577) "...adequate verification of compliance should be an indispensable part of any international arms control agreement".


Id. p.255.

Id. p.258.

Id. Part 6, October-November 1979, p.445.


Muir, Hugh, Keeping a Check on Compliance With SALT I, (United States Information Service, 2 March 1978).


See Einborn, Robert J., "Treaty Compliance", Foreign Policy, Winter 1981-82, No.45 p.29. At p.31 the author states that "A highly vocal group of critics has challenged these assessments, contending that the United States was too hesitant in raising troublesome issues with the Soviets, too weak in objecting to Soviet actions, and too expedient in minimizing the significance of Soviet misconduct." Yet no example is given of contravention of any NAC undertaking.

SALT II Treaty -
"STATEMENT OF DATA ON THE NUMBERS OF STRATEGIC ARMS AS OF THE DATE OF SIGNATURE OF THE TREATY

The United States of America declares that as of June 18, 1979 it possesses the following numbers of strategic offensive arms subject to the limitations provided for in the Treaty which is being signed today:

- Launchers of ICBMS: 1,054
- Fixed launchers of ICBMS: 1,054
- Launchers of ICBMS equipped with MIRVS: 550
- Launchers of SLBMS: 656
- Launchers of SLBMS equipped with MIRVS: 496
- Heavy bombers: 573
- Heavy bombers equipped for cruise missiles capable of a range in excess of 600 kilometers: 3
- Heavy bombers equipped only for ASBMS: 0
- ASBMS: 0
- ASBMS equipped with MIRVS: 0

The Union of Soviet Socialist Republics declares that as of (date of signature of the Treaty) it possesses the following numbers of strategic offensive arms subject to the limitations provided for in the Treaty which is being signed today:

- Launchers of ICBMS: 1,398
- Fixed launchers of ICBMS: 1,398
- Launchers of ICBMS equipped with MIRVS: 608
- Launchers of SLBMS: 950
- Launchers of SLBMS equipped with MIRVS: 144
- Heavy bombers: 146
- Heavy bombers equipped for cruise missiles capable of a range in excess of 600 kilometers: 0
- Heavy bombers equipped only for ASBMS: 0
- ASBMS: 0
- ASBMS equipped with MIRVS: 0

The Treaty further provides that - "...at each regular session of the Standing Consultative Commission the parties will notify each other of and consider changes in those numbers in the following categories: launchers of ICBMS; fixed launchers of ICBMS; launchers of ICBMS equipped with MIRVS; launchers of SLBMS; launchers of SLBMS equipped with MIRVS; heavy bombers; heavy bombers equipped for cruise missiles capable of a range in excess of 600 kilometers; heavy bombers equipped only for ASBMS; ASBMS; and ASBMS equipped with MIRVS..."
These include the definitions set out in Art.II of the Treaty and in the Agreed Statements and Common Understandings Regarding the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms.


However, the Soviets also claim to have verification concerns about SALT II. See Arbatov, Georgi, Director of the USSR Institute of US and Canadian Studies - "Obviously, the agreement does not and cannot resolve all the problems or remove all the reasons for concern. We are worried about the development of some U.S. weapons systems not covered by the agreement. We, like the Americans, would like to ensure the complete invulnerability of our ICBM's and have even more than 100 per cent confidence in verification. But I fail to understand how wrecking SALT II can help solve such problems. Take, for example, the issue of verification. The agreement provides a whole system of verification measures: special counting rules, a pledge not to interfere with each other's technical means, an obligation not to conceal telemetric data that are needed for verification, a special commission to deal with questions in dispute. Let the Americans ask themselves whether they will know more about our strategic forces without this system." "The Soviets on SALT", Newsweek, 28 May 1979, p.22.

CONCLUSION

At present there are five States heavily armed with nuclear weapons, including the two Superpowers which are at the start of a further spiral in the nuclear arms race. Detonation of those weapons could exterminate humankind. A survey of NAC negotiations since World War II, reveals that the overall situation today is the outcome of many lost opportunities by the international community to outlaw nuclear weapons.

However, in the course of concluding various agreements to partially control the spread and use of nuclear weapons, a vast reservoir of experience has been gained and efficient administrative machinery has been established. As a result, the nations of the world have acquired a much greater capacity than hitherto to accomplish NAC tasks, although the immense quantitative and qualitative increase in nuclear arsenals has made the undertaking more formidable.

In the early post-war period, when it would have been physically possible to do so, the opportunity to forestall the nuclear arms race was not grasped. It would seem that this was at least partly due to misconceptions about the limits of acceptable encroachment on national sovereignty, and an inability to devise NAC measures consistent with those limits.

Despite the growing nuclear menace during the 1960s and 1970s, or perhaps because of it, many multilateral
and bilateral NAC agreements were concluded during that period. While some of those agreements are only of marginal relevance, a number are of fundamental importance in the avoidance of nuclear war, both in the short term and by inhibiting the nuclear arms race in the longer term. Apart from a few ambiguities concerning interpretation, all of the NAC agreements in the form of treaties have been satisfactorily observed by all parties. When assessing the possibility of successful application of international law to NAC, the significance of this factor cannot be overemphasized.

There is ample evidence that during the 1980s, the problems associated with NAC are going to be of a different order than they were previously, due to vast technological advances taking place. Developments are constantly made by improving and diversifying the performance of nuclear weapons, and by introducing perfected delivery and targeting mechanisms for their projection. Simultaneously, defensive systems are planned in attempts to counteract the improved weapons, such as anti-ballistic missiles and anti-satellite weapons. When statesmen are unclear about the military utility of these weapons, it is doubly difficult to determine what agreed restraints in their manufacture and deployment may be consistent with national objectives.

Complexities arising from the uncertain nature of benefits to be derived from nuclear-weapons systems, as well as the technical expertise required to devise methods for their limitation, are exacerbated by the
importance attached to the perception of power which nuclear weapons are said to impart. Hence, the currently proposed NAC agreements are seen not merely as mutual restraints on weapons, but as offsetting one perception against another. In this morass of complexity, the clear aims for NAC remain the avoidance of nuclear war, the prevention of nuclear blackmail, and minimising the human and material resources devoted to the nuclear arms industry.

While nuclear war has been avoided so far, and progress has been made in the attainment of the other major NAC objectives, the momentum of progress in NAC is not sufficient to keep ahead of regression occasioned by the increased number of nuclear weapons and the technical improvements in their performance. In particular, reluctance to conclude a Comprehensive Test-Ban Treaty can be read as a signal of impending failure of the NAC process.

It has been universally accepted that NAC can best be achieved by the conclusion of appropriate treaties recognised by international law. The methods for doing this, established over the years and perfected in 1978 during the course of SSD I are, broadly speaking, adequate for the task. Only relatively simple organisational improvements in the treaty-creating process for NAC are required, chiefly in the sphere of greater backup and administrative facilities, both at the United Nations and within Member States. Endowed with resources more commensurate to the task, the Committee on
Disarmament could successfully grapple with crucial issues, instead of habitually evading them. Many of these issues have a legal character, requiring greater input by officials versed in the ways of international law.

Similarly, norm creation for NAC in the deliberative bodies of the United Nations charged with that responsibility, being the Disarmament Commission, the First Committee, and the General Assembly, is not hampered by any significant methodological problem. In particular, it was demonstrated in the General Assembly during SSD I, that a heavy volume of exceedingly controversial material relating to NAC and other arms control issues could be processed at some speed, leading to consensus on many substantive matters.

Notwithstanding the relatively satisfactory machinery available, the NAC process is often thwarted by a pervading scepticism regarding the significance of NAC related norms, including those created by treaty as well as those resulting from United Nations deliberations. The reason could be that, although the importance of the so called generally accepted principles of international law applicable to NAC are often alluded to in United Nations debates and resolutions, it is well known that those principles and rules are vague, contradictory and anachronistic. Likewise, procedures for the settlement of disputes concerning NAC and other matters crucial to the security interests of States, are unsatisfactory. The above considerations greatly reduce the significance
attached to the conclusion of the relevant treaties and
the endorsement of United Nations resolutions.

Especially inappropriate for contemporary
requirements are the imprecise tenets of international
customary law, and the consequently wide personal
discretion that must fall to judges of the International
Court of Justice, or to any other adjudicators who may be
called upon to apply that body of law. As a result, very
few cases are referred to the Court. On the one occasion
when an NAC case was brought to the International Court
of Justice, the majority of judges avoided handing down
an Opinion on the merits because they evidently deemed
that it would be unacceptable to the international
community for them to do so.

The deficiencies of the Court, and the law it is
presently required to administer, have not been
sufficiently compensated for by other organs of the
United Nations system, notably the Security Council and
the General Assembly. This hiatus has a directly
inhibiting effect on the NAC process. It also gravely
hinders the peaceful settlement of international disputes
on a wide range of subjects involving the security
interests of States - a situation that encourages resort
to armed might, both for the maintenance of security and
for gaining advantages.

No simple procedure is available for solving the
abovementioned difficulties. Constant repetition of
stereotyped phrases in resolutions on the need for the
peaceful settlement of international disputes, whether in the form of Declarations or Conventions, appears to have little impact. It is opportune, therefore, to re-examine the general principles of international law, with a view to creating a fundamental change in outlook consonant with contemporary requirements. Several initiatives are under examination in this regard. The proposed draft Code of General Principles of International Law, elaborated in Chapter VII, is an additional attempt to aid those endeavours.

The nuclear arms race has a horizontal and a vertical dimension. A propensity to the horizontal spread of weapons, involving more and more States, is related to the impetus for vertical proliferation of nuclear weapons by the nuclear-weapon States, especially the Superpowers. It will require increasingly stronger anti-proliferation commitment, and the further improvement of the IAEA safeguards system, to counteract proliferation tendencies generated by the availability in additional countries of the requisite technology for the construction and delivery of nuclear weapons. An increase in the number of nuclear-weapon States would put immense strains on the international legal system. There are no sound reasons to suggest that restraint on the use of the weapons would be easier to enforce than the prevention of their acquisition.

The most serious impediment to the prevention of horizontal proliferation, as well as the greatest danger of nuclear devastation, are occasioned by the
continuation of vertical proliferation and the consequent growing instability of the strategic nuclear balance. The resolution of conflict between the Superpowers is not amenable to traditional remedies - either by confrontation or by third party adjudication. Even international opinion can play only a minor part.

An unprecedented relationship that exists between the Superpowers, founded on their vast nuclear arsenals aimed at each other, has been managed during the past decade by the application of a quasi-judicial process. That process consists of the elaboration of NAC treaties on the basis of agreed general principles of justice and practicality, together with the auto-interpretation of the treaties and auto-adjudication of the required standards of performance. The continuing effective implementation of these uniquely difficult tasks is bound to be rendered impossible if extraneous considerations are permitted to intrude.

Rapid conclusion and strict observance of treaties to neutralise areas of most acute and imminent conflict are needed for minimising the immediate dangers occasioned by the stockpiles of nuclear weapons. At the same time, far-sighted innovations must be made for the long term management of nuclear weapons systems, with a view to their eventual elimination.

Presumably, if extraneous conflicts were to become uncontainable for example leading to the threatened disintegration of one of the Superpowers due to
apprehension of physical assault with non-nuclear weapons, or occasioned by economic chaos or social upheaval, then those extraneous considerations could not be divorced from the process of NAC. However, any step leading to interference with the bilateral NAC process would have to be taken on the understanding that it would almost certainly be the prelude to universal disaster.

Nevertheless, if a determined effort were made to keep the process of NAC isolated from other conflict areas, and if those extraneous antagonisms could be contained within supportable limits, the groundwork has been laid which could facilitate the rapid expansion of the principles and rules of international law so as to make NAC effective in the foreseeable future.
ABM* - Anti-Ballistic Missile

ARMS CONTROL - Any measure limiting or reducing forces, regulating armaments, and/or restricting the deployment of troops or weapons which is intended to induce responsive behaviour or which is taken pursuant to an understanding with another State or States.

ASAT - Anti-Satellite (weapon)

ASBM* - Air-to-Surface Ballistic Missile

ATOM BOMB - A bomb whose energy comes from the fission of heavy elements, such as uranium or plutonium.

BMD - Ballistic Missile Defence

BREEDER - A nuclear reactor that produces more fissile nuclei than it consumes. The fissile nuclei are produced by the capture of neutrons in fertile material. The resource constraint for breeder reactors is thus fertile material, which is far more abundant in nature than fissile material.

C³ - Command, Control and Communications

CCD - Conference of the Committee on Disarmament

CD - Committee on Disarmament

CM* - Cruise Missile

CTB - Comprehensive Test-Ban

DEW - Directed Energy Weapon

* Used for singular and plural
DISARMAMENT - The reduction of a military establishment to some level set by international agreement.

ENDC - Eighteen Nation Disarmament Committee

ENRICHED MATERIAL - Material in which the percentage of a given isotope present in a material has been artificially increased, so that it is higher than the percentage of that isotope naturally found in the material. Enriched uranium contains more of the fissionable isotope uranium-235 than the naturally occurring percentage (0.7 percent).

ER - Enhanced Radiation (Weapon), also known as the Neutron Bomb

FISSION - The splitting of a heavy nucleus into two approximately equal parts (which are nuclei of lighter elements), accompanied by the release of a relatively large amount of energy and generally one or more neutrons. Fission can occur spontaneously, but usually is caused by nuclear absorption of neutrons or other particles.

FROD* - Functionally Related Observable Difference

FUEL CYCLE - The set of chemical and physical operations needed to prepare nuclear material for use in reactors and to dispose of or recycle the material after its removal from the reactor. Existing fuel cycles begin with uranium as the natural resource and create plutonium as a byproduct. Some future fuel cycles may rely on thorium and produce the fissile isotope uranium-233.

FULL SCOPE SAFEGUARDS - IAEA supervision of all nuclear facilities in a State to ensure that fissionable material is not utilised for weapons manufacture

FUSION - The formation of a heavier nucleus from two lighter ones (such as hydrogen isotopes), with the attendant release of energy (as in a hydrogen bomb).
GATT - General Agreement on Tarriffs and Trade

GREY AREA WEAPONS - Medium-Range Nuclear Missiles stationed within range of a Superpower in a manner that could affect the strategic balance.

GROUP OF 21 - A caucus of Non-aligned States in the CD of varying membership, with a majority of members also belonging to the Group of 77.

GROUP OF 77 - A caucus of more than a hundred developing nations in the UN with a varying membership, largely overlapping with the Group of 21.

HEL - High Energy Laser

HYDROGEN BOMB - A nuclear weapon that derives its energy largely from fusion (thermonuclear bomb).

IAEA - International Atomic Energy Agency

ICAO - International Civil Aviation Organisation

ICBM* - Intercontinental Ballistic Missile

ILO - International Labour Organisation

IMF - International Monetary Fund

INFCIRC - Information Circular of the IAEA

ISMA - International Satellite Monitoring Agency

MARV* - Manoeuvring Re-entry Vehicle

MIRV* - Multiple Independently Targetable Re-entry Vehicle

NAC - Nuclear Arms Control
<table>
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<tr>
<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>NTM</td>
<td>National Technical Means (of verification)</td>
</tr>
<tr>
<td>NUCLEAR WEAPONS</td>
<td>A collective term for atomic bombs and hydrogen bombs. Any weapon based on a nuclear explosive.</td>
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<tr>
<td>NWMD</td>
<td>New Weapons of Mass Destruction</td>
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<tr>
<td>ODF*</td>
<td>Observable Design Feature</td>
</tr>
<tr>
<td>OPANAL</td>
<td>Agency for the Prohibition of Nuclear Weapons in Latin America</td>
</tr>
<tr>
<td>PBW</td>
<td>Particle Beam Weapon</td>
</tr>
<tr>
<td>REPROCESSING</td>
<td>Chemical treatment of spent reactor fuel to separate the plutonium and uranium.</td>
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<tr>
<td>R &amp; D</td>
<td>Research and Development</td>
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<tr>
<td>SALT</td>
<td>Strategic Arms Limitation Treaty (Talks)</td>
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<td>SCC</td>
<td>Standing Consultative Commission</td>
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<td>SIPRI</td>
<td>Stockholm International Peace Research Institute</td>
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<td>SLBM*</td>
<td>Sea Launched Ballistic Missile</td>
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<td>SSAC</td>
<td>State System of Accountancy</td>
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<td>SSD I</td>
<td>First Special Session of the General Assembly devoted to Disarmament</td>
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<tr>
<td>SSD II</td>
<td>Second Special Session of the General Assembly devoted to Disarmament</td>
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<td>THRESHOLD STATE</td>
<td>(Also known as Nth Country) - A nation judged to have high potential of becoming a nuclear-weapon State because of its technical and economic ability and/or its political motivations.</td>
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</tbody>
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BIBLIOGRAPHY

Books and Monographs


Arangio-Ruiz, Gaetano, The United Nations Declaration on Friendly Relations and the System of the Sources of International Law (Sijthoff and Nordhoff, Maryland 1979).


Doxey, Margaret P., Economic Sanctions and International Enforcement, Published for the Royal Inst. of International Affairs (London 1980).


Engels, Frederick, Anti-Durhing (Lawrence & Wishart Ltd., London 1942).


Lipsky, Mortimer, Never Again War: the Case for World Government (Barnes, South Brunswick N.J., 1971).


Millar, T.B., Political-Military Relationship in Australia (Working Paper No. 6, Australian National University, Canberra 1979.


Politzer, George, An Elementary Course in Philosophy (Current Book Distributors, Sydney 1950).


Short History of the CPSU (Bolsheviks), (Corbett Publishing House, London 1943).


Periodicals and Papers


Andelman, David A., "Space Wars", Foreign Policy, Fall 1981, No.44.


Bessonov, Anatoly, "Triple Link-up in Orbit", New Times (Moscow) January 1978, No.4.


Blechman, Barry M., "Do Negotiated Arms Limitations Have a Future?", Foreign Affairs, Fall 1980, Vol.59 No.1.


Brzezinski, Z., "How the Cold War was Played", Foreign Affairs, October 1972, Vol.51 No.1.


Doubb, William O., and Fidell, Eugene R., "International Relations and Nuclear Commerce: Developments in United States Policy", Law and Policy in International Business,


Einhorn, Robert J., "Treaty Compliance", Foreign Policy, Winter 1981-82, No.45.


Franck, Thomas M., "Growth of the International Community and Qualitative Shift in International Legal Relations", The Spirit of Uppsala (JUS 81) Manuscript No.54.


Grahl-Madsen, Atle, "International Law for Our Times", The Spirit of Uppsala (JUS 81) Manuscript No.41.


Greig, D.W., "The Interpretation of Treaties and Article IV.2 of the Nuclear Non-Proliferation Treaty", Australian Yearbook of International Law (Faculty of Law A.N.U. 1978) Vol.6.


Huisken, Ron, The Cruise Missile and Arms Control (The Strategic and Defence Studies Centre, Australian National University, Canberra 1980).


Johnson, Bo, "Changes in the Norms Guiding the International Legal System - History and Contemporary Trends", The Spirit of Uppsala (JUS 81) Manuscript No.44.


Liu, Leo, "The Nuclear Policies of China and India", Internal Problems (Tel Aviv) Fall 1977, Vol.16.


Ohlin, Göran, "Can World Order be Negotiated?" The Spirit of Uppsala (JUS 81) Manuscript No. 42.


Scott, A., "Strategic Reconnaissance and the Verification of the SALT II Agreement", Armed Forces Journal, June 1979.


Suy, Erik, "A New International Law for a New World Order", The Spirit of Uppsala (JUS 81) Manuscript No.43.

Szulc, T., "How Kissinger Did It" Foreign Policy, 1974, Vol.15.


Cases


Asylum case (Colombia/Peru) I.C.J. Rep. 1950.


The Lotus case (the Case of the S.S. "Lotus") P.C.I.J. Ser.A. Judgment No.9, 1927.

Document Series

Official Records of the -

Security Council
General Assembly
Committee on Disarmament
Eighteen Nation Committee on Disarmament
Conference of the Committee on Disarmament
Disarmament Commission
First Committee
Sixth Committee
International Atomic Energy Agency
Second Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons
United Nations Treaty Series
Preparatory Committee for SSD I
Preparatory Committee for SSD II

United States Government Publications


Muir, Hugh, Keeping a Check on Compliance With SALT I, (United States Information Service, 2 March 1978).


SALT II Agreement, Vienna, 18 June 1979, (Selected Documents No.12A, United States Department of State, Bureau of Public Affairs, Washington).


The Department of State: Selected Documents (Bureau of Public Affairs, Office of Public Communication) February 1978, No.7.


United Nations Studies Relating to NAC

All the Aspects of Regional Disarmament, A/35/416.

Comprehensive Nuclear Test-Ban, A/35/257.

Comprehensive Study on Confidence Building Measures, A/36/474.

Comprehensive Study on Nuclear Weapons, A/35/392.


Israeli Nuclear Armament, A/36/431.


Relationship Between Disarmament and Development, A/36/356.


South Africa's Plan and Capability in the Nuclear Field, A/35/402.

Miscellaneous

Compendium of Arms Control Verification Proposals (Dept. of National Defence, Ottawa June 1980).

Disarmament Times (New York) Vol.4 No.6.


"How Israel Got the Bomb", Time, 12 April 1976.


New York Times, 26 April 1981, Section IV.

Newton, Maxwell, "The West Helps Russia to Arm" The Australian newspaper, 5 April 1982.

Records of International Commission on Radiological Protection.


The Age, newspaper, Melbourne, 14 January 1982.

The International Herald Tribune newspaper, 22 October 1981.

The International Herald Tribune newspaper, October 24-25 1981.


Whence the Threat to Peace (Military Publishing House, USSR Ministry of Defense, Moscow 1982).