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ESTABLISHMENT OF A NUCLEAR-WEAPON-FREE ZONE IN THE REGION OF THE MIDDLE EAST

Study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East

Report of the Secretary-General

1. By its resolution 43/65 of 7 December 1988, the General Assembly requested the Secretary-General to undertake a study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East, taking into account the circumstances and characteristics of the Middle East, as well as the views and the suggestions of the parties of the region, and to submit the study to the Assembly at its forty-fifth session.
2. Pursuant to that resolution, the Secretary-General has the honor to transmit herewith to the General Assembly the study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East.

ANNEX

Study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East

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FOREWORD BY THE SECRETARY-GENERAL

The establishment of nuclear-weapon-free zones is not a new idea. Two such zones have been in existence for some time now in Latin America and the Caribbean and the South Pacific. A third one covers the vast unpopulated areas of the Antarctic, which has enjoyed demilitarized status since the 1960s. From the experience gained so far and particularly from the ongoing discussions on various other proposals, it is quite obvious that each zone, actual or potential, has its own characteristics, which, despite the basic common denominators they enjoy, make each one a unique undertaking.

A nuclear-weapon-free zone in the Middle East most certainly deserves such a qualification for more than one reason. The most obvious of them is that the Middle East is politically still unsettled and militarily volatile. More recently, events in an area of the Persian Gulf, although distinct from the long-standing security concerns of the Arab-Israeli question, have nevertheless sharpened the need for greater security reassurance in the Middle East as a whole. These elements make any effort to establish such a zone extremely difficult, but at the same time and for the same reasons, also an urgent and most desirable objective. This fact is fully recognized in the wording of the General Assembly resolution requesting preparation of the present study, which focuses on effective and verifiable measures which would facilitate the establishment of such a zone in the Middle East rather than on its actual creation. That should come eventually as a result of building sufficient confidence amongst the principal actors in the region at which point formal undertakings to that effect could be initiated.

The study discusses a number of steps and measures that could ease the process leading to the establishment of the zone. They could be undertaken independently or in conjunction with each other, as well as by individual States or jointly by several, and also on a reciprocal basis. Each of them would move the States concerned closer to their ultimate objective - the establishment of a zone free of nuclear weapons. Most of these measures would also have a positive effect on prospects for the settlement of the overall situation in the region as it relates to Arab-Israeli tensions. Equally, any progress towards lessening these tensions would considerably enhance the prospects for the zone. While these two goals are mutually supportive, they will naturally have to be pursued separately. The establishment of a stable peace in the region, based on justice and security for all, will represent the ultimate achievement of both efforts.

I wish to express my sincere appreciation to the consultants appointed to assist the Secretary-General in carrying out the present study and for completing their work in unanimity. I strongly believe that the establishment of a nuclear-weapon-free zone in the Middle East is not only highly desirable and in the interest of all, but also an attainable objective, given the fact that the creation of the zone has in principle been unanimously endorsed not only by the States from the prospective zone, but also by those beyond. It is with the aim of pursuing this objective that the present report is submitted to the General Assembly for its consideration.

LETTER OF TRANSMITTAL

17 August 1990

Sir,

The undersigned consultants, appointed by you to assist you in the preparation of the study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East, as requested in paragraph 8 of resolution 43/65 of 7 December 1988, have the honor to submit herewith a unanimously approved text of the study.

The work was carried out between July 1989 and August 1990. During this time numerous contacts and consultations took place with officials of States concerned through their Permanent Missions to the United Nations Headquarters in New York and the United Nations Offices at Geneva, as well as through their representatives to the International Atomic Energy Agency at Vienna. Visits were also carried out to the region, during which consultations were held on the subject of the study with Government officials of a number of States, as well as with several research establishments and university institutions dealing with the issues of relevance for the study.

We wish to express our gratitude for the invaluable assistance which was provided by the staff of the Department for Disarmament Affairs

throughout the preparation of the study. We wish, in particular, to convey our appreciation to Mr. Yasushi Akashi, Under-Secretary-General for Disarmament Affairs, Mr. Prvoslav Davinic, Chief of the Monitoring, Analysis and Studies Branch and to Ms. Silvana F. da Silva, Political Affairs Officer, who served as Secretary of the group.

Appreciation is also due to Dr. Hans Blix, Director General of the International Atomic Energy Agency, and his colleagues who provided helpful comments and remarks at various stages of the work on the study.

Accept, Sir, the assurances of our highest consideration.

(Signed) James Leonard
United States of America

(Signed) Jan Prawitz
Sweden

(Signed) Benjamin Sanders
Netherlands

His Excellency
Mr. Javier Pérez de Cuéllar
Secretary-General of the United Nations
New York

CHAPTER I

INTRODUCTION

1. The item entitled "Establishment of a nuclear-weapon-free zone in the Middle East" was first included in the agenda of the General Assembly, in 1974, at the request of Iran, later joined by Egypt. 1/

2. In introducing the item in the First Committee of the General Assembly, the representative of Iran said, inter alia, that "in view of the political and economic situation prevailing in the Middle East, ... the introduction of nuclear arms into that area could mean much more than simply a burdensome arms race, which in itself would be catastrophic". Iran also added that what it hoped for "is the final prohibition of the manufacture, acquisition, testing, stockpiling and transport of nuclear arms (in the Middle East), all under an effective system of control". 2/

3. In connection with the debate on the item, Egypt stated that three basic principles were relevant to the discussions of the subject-matter: (a) the States of the region should refrain from producing, acquiring or possessing nuclear weapons; (b) the nuclear-weapon States should refrain from introducing nuclear weapons into the area or using nuclear weapons against any State of the region; and (c) an effective international safeguard system affecting both the nuclear-weapon States and the States of the region should be established. Egypt further stressed that the establishment of a nuclear-weapon-free zone in the Middle East should not prevent parties from enjoying the benefits of the peaceful uses of atomic energy, especially for the economic development of the developing countries. 3/

4. On the basis of this item, Egypt and Iran co-sponsored a draft resolution, which was later adopted by the General Assembly as resolution 3263 (XXIX) of 9 December 1974. In introducing the draft resolution on behalf of the sponsors, Iran stated that "such a zone can only be established in our part of the world if a climate of confidence exists" and that, in order for the climate to be created, it was "necessary for the parties concerned to declare their willingness not to introduce or manufacture nuclear weapons in the area". 4/ On the same occasion, Egypt stressed that accession to the Non-Proliferation Treaty was "a prerequisite for establishing any effective, concrete, nuclear-weapon-free zone". 5/

5. In its resolution 3263 (XXIX), the General Assembly called upon all parties concerned in the region immediately to proclaim their intention to refrain, on a reciprocal basis, from producing or otherwise acquiring nuclear weapons and to accede to the Treaty on the Non-Proliferation of Nuclear Weapons (resolution 2373 (XXII), annex). It also requested the Secretary-General to ascertain the views of the parties concerned regarding the implementation of the resolution and to report on it to the Security Council and to the General Assembly at its thirtieth session, in 1975.

6. Since 1974, the General Assembly has adopted on a yearly basis a resolution on the establishment of a nuclear-weapon-free zone in the Middle East. In 1980, for the first time, the resolution was adopted without a vote (resolution 35/147 of 12 December 1980). 6/

7. In supporting the adoption of the resolution, Israel elaborated its position in its statement to the General Assembly. While accepting in principle the need for establishing a nuclear-weapon-free zone in the Middle East, Israel said that that objective should be achieved through a multilateral convention freely negotiated by all States concerned. In the explanation of their support for the resolution, several other Middle Eastern States stated that no direct consultations among the regional States would be possible with a view to establishing the zone until conditions set by them were met in respect to the overall situation in the Middle East created as a result of the armed conflict between Israel and Arab States.

8. In the years that followed, the status of the proposal for the establishment of a nuclear-weapon-free zone in the Middle East remained much the same – the relevant resolution continued to be adopted by the General Assembly without a vote, but no change occurred in the basic positions of

the various States concerned.

9. In 1984, the sponsors of the draft resolution introduced new language in the text, which emphasized the essential role of the United Nations in the establishment of a nuclear-weapon-free zone in the Middle East and requested the Secretary-General to seek the views of all parties concerned and to report to the Assembly on the implementation of the resolution. The resolution was again adopted without a vote (resolution 39/54 of 12 December 1984). The request continued to be included in the resolution on the subject adopted by the General Assembly in subsequent years.

10. In 1988, at the fifteenth special session of the General Assembly, the third special session devoted to disarmament, Egypt introduced a new proposal regarding the establishment of a nuclear-weapon-free zone in the Middle East. The three-pronged proposal called, first, for all States of the region, as well as nuclear-weapon States beyond the region, to declare that they would not introduce nuclear weapons to the Middle East. Second, the Secretary-General should be authorized to appoint a personal representative, or a group of experts, to contact the States of the region with a view to formulating a model draft treaty and to evolve specific practical measures capable of creating the necessary conditions to establish a nuclear-weapon-free zone in the Middle East. Third, the International Atomic Energy Agency (IAEA) should be invited to prepare a study and submit specific recommendations related to the necessary verification and inspection measures that would be implemented in conjunction with the establishment of a nuclear-weapon-free zone in the Middle East. ^{7/}

11. Owing to the inconclusive nature of the work of the third special session, no action was taken on the Egyptian proposal. As a result Egypt pursued the idea in two other forums - IAEA and the regular session of the General Assembly. In September 1988, the IAEA General Conference, at the initiative of Egypt, adopted a resolution (GC(XXXII)/RES/487) that requested the Director-General to prepare a technical study on different modalities of the application of IAEA safeguards in the Middle East region, taking into account the Agency's experience in applying its safeguards. The study was released in 1989 (GC(XXXIII)/887).

12. In late 1988, at the forty-third session of the General Assembly, Egypt again pointed to the need for the international community to give further impetus towards the realization of the objective of establishing a nuclear-weapon-free zone in the Middle East, and introduced a draft resolution that the General Assembly adopted on 7 December 1988 as resolution 43/65. The resolution reads in part:

"The General Assembly,

". . .

"8. Requests the Secretary-General to undertake a study on effective and verifiable measures which would facilitate the establishment of a nuclear-weapon-free zone in the Middle East, taking into account the circumstances and characteristics of the Middle East, as well as the views and the suggestions of the parties of the region, and to submit this study to the General Assembly at its forty-fifth session;

"9. Requests parties of the region to submit to the Secretary-General their views and suggestions with respect to the measures called for in paragraph 8 above;

"10. Requests the Secretary-General to submit to the General Assembly at its forty-fourth session a progress report on the implementation of the present resolution".

13. In preparing the report, the experts have interpreted the mandate as being to endeavor to identify various steps that would facilitate the establishment of a nuclear- weapon-free zone in the Middle East. In carrying out that mandate, they were fully aware of the need to take into account "the circumstances and characteristics of the Middle East" as prescribed in resolution 43/65. Therefore, while the study has not attempted to deal with the broad problem of the Middle East, it has taken into account important aspects of the politico-military situation in the region that have a bearing on the process leading to the establishment of a nuclear-weapon-free zone in the Middle East.

Notes

^{1/} A/9693/Add.1.

^{2/} A/C.1/PV.2000, p. 61.

^{3/} A/C.1/PV.2001, pp. 32 and 36.

^{4/} A/C.1/PV.2026, p. 6.

^{5/} A/C.1/PV.2026, P. 12.

^{6/} The texts of the General Assembly resolutions and respective votes since 1974 can be found in The United Nations and disarmament 1970-1975 (United Nations publication, Sales No. E.76.IX.1) and The United Nations Disarmament Yearbook, vols. 1-14.

^{7/} A/S-15/AC.1/25.

THE CONCEPT OF NUCLEAR-WEAPON-FREE ZONES

A. Introduction

14. The concept of nuclear-weapon-free zones as it developed since the mid-1950s has come to cover a spectrum of arrangements, geographically ranging from a whole continent like Latin America to smaller areas, and functionally serving the purposes of preventing the acquisition of nuclear weapons by additional States, as well as preventing or eliminating deployment of those weapons in certain geographical areas or environments.

15. Historically, two different approaches have been pursued in parallel. One is the open-ended and global non-proliferation approach, which led to the adoption, in 1968, of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). 1/ The main purpose of that Treaty is to limit the number of nuclear-weapon States to the five existing at the time.

16. The other approach is regional or zonal. 2/ The first major achievement regarding densely populated areas was the conclusion of the 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America (Treaty of Tlatelolco). In 1985, the countries members of the South Pacific Forum concluded the South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga). 3/

17. Proposals have been made for the creation of such zones in many other parts of the world. 4/ A new idea was introduced in 1982 with the proposal for the creation of a corridor in Central Europe from which tactical or battlefield nuclear weapons would be withdrawn in order to reduce the risk of such weapons becoming immediately involved in any conflict or incident. The area of application would be unrelated to national borders of the States involved and no security assurances would apply. 5/ Owing to substantive differences in approach of the countries concerned, no concrete negotiations have been initiated on the proposals.

18. A number of areas have been declared demilitarized zones according to treaties concluded long ago, most of them before the atomic bomb was invented. Among them are a number of small islands in the Mediterranean. By implication such areas should today be considered denuclearized as well. 6/

B. Two existing zones

19. The Latin American zone came into being as a result of a five-year process between the first endorsement of the proposal by the General Assembly in 1962, 7/ and the first signing of the Treaty in 1967. The entry-into-force process is still going on. As at 1 July 1990, the Treaty was in force for 23 States that had ratified it and waived the requirements for entry into force (art. 28). 8/

20. The basic obligations of the parties are to use nuclear material and facilities exclusively for peaceful purposes, not to possess nuclear weapons, not to engage in or encourage any nuclear-weapon activities in the zone and not to permit any presence of such weapons in their territories. The Treaty permits the parties to carry out nuclear explosions for peaceful purposes, but such explosions would be subject to special control procedures by the Treaty's permanent organ, the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL) and IAEA.

21. The geographical scope of the zone comprises all Latin American and Caribbean States (art. 25), all dependencies of extra-continental States (Protocol I), and also, when the Treaty has fully entered into force, considerable adjoining Atlantic and Pacific sea areas (art. 4, para. 2).

22. Protocol II provides that nuclear-weapon Powers respect the status of the zone and that they refrain from using or threatening the use of nuclear weapons against zonal States. All five of them are parties to this Protocol, with certain statements of interpretation.

23. The Treaty also establishes a verification and control system that includes the submission of reports to OPANAL, the application of IAEA safeguards to the nuclear activities of the zonal States and the possibility of "special inspections" in cases of suspected non-compliance (arts. 12-16).

24. The proposal to establish a nuclear-free zone in the South Pacific was endorsed by the General Assembly in its resolution 3477 (XXX) of 11 December 1975, but only in 1985 did the States members of the South Pacific Forum conclude the Treaty of Rarotonga. The entry-into-force process has been under way since that time. As at 1 July 1990, the Treaty was in force for 11 of the 15 members of the Forum.

25. The central undertakings of the parties are not to possess nuclear weapons (art. 3) and to prevent stationing of such weapons in their territories (art. 5). In addition, the Treaty prohibits the dumping of radioactive waste (art. 7) in the zone and, unlike the Treaty of Tlatelolco, it explicitly prohibits nuclear explosions within the entire zonal area, including those for peaceful purposes (art. 6 and Protocol 3, art. 1).

26. Annexed to the Treaty are three Protocols. Two are similar to those of the Treaty of Tlatelolco. The third requires the nuclear-weapon States to refrain from nuclear testing in the zone. Among the nuclear-weapon Powers, only China and the Soviet Union have adhered to the Protocols so far. France, the United Kingdom and the United States have indicated that they do not intend at this time to become parties to any of the Protocols.

27. Geographically, the South Pacific zone encompasses a very large area, extending from the Latin American zone in the east to include Australia and Papua New Guinea in the west, from Antarctica (latitude 600 S) in the south to the equator in the north. Most of that area is ocean, while most treaty provisions apply to national territories only.

28. The Treaty envisages a system, including IAEA safeguards, for the purpose of verifying compliance with its provisions (art. 8 and annexes 2 and 4). Reports to the Depositary and a Consultative Committee are also provided for (arts. 8, 9, 10 and annex 3).

C. Objectives and principles

29. Geographical, political and other circumstances make each nuclear-weapon-free zone different from any other. The term nuclear-weapon-free zone, however, usually implies the fulfillment of certain common objectives and the implementation of certain elements of arms limitation. A United Nations expert study ^{9/} and resolutions by the General Assembly have contributed to defining the scope and the frame of this concept.

30. The primary objectives for establishing a nuclear-weapon-free zone are to bar the presence of nuclear weapons in the zonal area and to reduce the risk of it being involved in a nuclear war. The fulfillment of those objectives requires co-operation both among prospective zonal States and between them and nuclear-weapon States and some other extra-zonal States. The attainment of those objectives must also be considered as a process in time. The establishment of the nuclear-weapon-free zones in two densely populated areas has required decades.

31. In addition, the creation of a nuclear-weapon-free zone can be considered a contribution to a process towards "the ultimate objective of achieving a world entirely free of nuclear weapons", as set forth by the General Assembly in the Final Document of the Tenth Special Session. ^{10/} Several other objectives having regional or, in some cases, wider significance, can be identified and, depending on the circumstances, may be pursued in a zonal agreement. The relevance and relative emphasis of such objectives may vary from one region to another. A subsequent evolution, i.e. the development and improvement over time of an initial zone agreement, would also be possible. Without prejudice to other objectives, which may be added according to the needs in a specific case, the following general objectives are important:

- (a) To spare the zonal States from the use or threat of use of nuclear weapons;
- (b) To contribute to preventing horizontal proliferation of nuclear weapons, as well as to limit a wider geographical deployment by the nuclear-weapon Powers;
- (c) To strengthen confidence and improve relations among zonal States;
- (d) To contribute to regional and world stability and security and to the process of disarmament, in particular nuclear disarmament;
- (e) To facilitate and promote co-operation in the development and use of nuclear energy for peaceful purposes both in the region and between zonal and extra-zonal States.

D. Definitions

32. States participating in a nuclear-weapon-free zone are free to decide what measures they consider appropriate to the requirements in their particular region. Each zone established or proposed so far has been intended to serve specific purposes and that will probably be so in the future as well. None the less, a general definition of the zone concept has been provided by the General Assembly and may be of assistance in formulating the arrangements for specific future zone projects.

33. In its resolution 3472 B (XXX) of 11 December 1975, the General Assembly defined the concept of a nuclear-weapon-free zone as follows:

I. Definition of the concept of a nuclear-weapon-free zone

1. A "nuclear-weapon-free zone" shall, as a general rule, be deemed to be any zone, recognized as such by the General Assembly of the United Nations, which any group of States, in the free exercise of their sovereignty, has established by virtue of a treaty or convention whereby:

- (a) The statute of total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone, is defined;
- (b) An international system of verification and control is established to guarantee compliance with the obligations deriving from that statute.

II. Definition of the principal obligations of the nuclear-weapon States towards nuclear-weapon-free zones and towards the States included therein

2. In every case of a nuclear-weapon-free zone that has been recognized as such by the General Assembly, all nuclear-weapon States shall undertake or reaffirm, in a solemn international instrument having full legally binding force, such as a treaty, a convention or a protocol, the following obligations:

- (a) To respect in all its parts the statute of total absence of nuclear weapons defined in the treaty or convention which serves as the constitutive instrument of the zone;
- (b) To refrain from contributing in any way to the performance in the territories forming part of the zone of acts which involve a violation of the aforesaid treaty or convention;
- (c) To refrain from using or threatening to use nuclear weapons against the States included in the zone.

34. Three years later, in 1978, the Final Document of the Tenth Special Session of the General Assembly referred in its paragraph 60 to the establishment of nuclear-weapon-free zones "on the basis of arrangements freely arrived at among the States of the region concerned" as an important disarmament measure. The Final Document further pointed out that "in the process of establishing such zones, the characteristics of each region should be taken into account" (para. 61).

35. "Nuclear weapon" is among the specific terms that may require an explicit definition. Only the Treaty of Tlatelolco contains such a definition (art. 5). While there is a general understanding of what a nuclear weapon is, the countries seeking to establish a nuclear-weapon-free zone may wish to define the scope of the nuclear-weapon concept, in particular whether the agreed measures would relate to nuclear warheads, to all nuclear explosive devices, as is the case in the NPT, or whether to include delivery vehicles carrying nuclear warheads.

36. "Nuclear-weapon system" may be another term to define when seeking to establish a nuclear-weapon-free zone. The question will be whether only nuclear warheads should be prohibited or whether equipment and installations that are integral parts of nuclear-weapon systems should be banned. Systems that can be used for both nuclear and other weapons, as well as for non-military purposes, also pose particular problems of definition and verification.

37. The term "nuclear-weapon State" may also require an explicit definition in a treaty establishing a nuclear-weapon-free zone, as such States may be requested to assume specific obligations with regard to the zone. ^{11/}

38. Pertinent in this connection would be the arrangements relating to States in a potential zone that may be *de facto* nuclear-weapon States but have not overtly established themselves as such. There may also be States that are believed to have technological potential to produce nuclear weapons and are suspected of having such intentions. These States are sometimes referred to as "threshold States".

E. Geographical considerations

39. No precise requirements can be set as regards the suitable size of nuclear-weapon-free zones. Sometimes a nuclear-weapon-free zone may be initially established in a more limited area and later extended as other countries agree to join in. A single State could establish itself, or even part of itself, as a nuclear-weapon-free zone. ^{12/} Normally, however, a zone would comprise the national territories of two or more neighboring States, including their territorial waters and airspace. It would also be possible for States separated from each other by high-sea areas or otherwise to form a nuclear-weapon-free zone. Furthermore, a nuclear-weapon-free zone might be extended by agreement into geographical areas not under the jurisdiction of any State, for instance sea areas beyond territorial waters.

40. One element of a zone arrangement could be "thinning out", i.e. withdrawal or other measures regarding nuclear weapons, military forces or military activities in areas adjacent to the zone, the purpose being to enhance the security of zonal States and the credibility of the assurances extended to the zone by extra-zonal States. Such "thinned-out" areas adjacent to the zone could be both land and sea areas. They would conform to specific conditions based upon agreements among the countries directly concerned.

41. Measures of this kind could also be defined in functional terms, that is, in terms of the relations that relevant weapons, forces and military activities could have to the zone. In the latter case, the extension of the "adjacency" would implicitly be related to the ranges of these weapons, forces and activities.

F. Basic measures and obligations

42. There are three measures of central importance for the achievement of the objectives of a nuclear-weapon-free zone. These are the non-possession of nuclear weapons by zonal States, the non-stationing of nuclear weapons within the geographical area of the zone by any State and the non-use or non-threat of use of nuclear weapons against targets within the zone.

43. The non-possession measure would apply to zonal States. It could be codified in a simple manner by relying on the concepts of the Non-Proliferation Treaty, mainly its article II. ^{13/} If the zone is to encompass only territories of non-nuclear-weapon States parties to the NPT, possession would be prohibited as long as the NPT is in force for all of them. ^{14/} If the zone is to encompass also States that are not parties to the NPT or States that possess nuclear weapons, a special régime must be prescribed. If a nuclear-weapon State (whether *de facto* or established) is to be included, this special régime must provide for abandonment of its nuclear weapons.

44. There should also be a provision specifying if parties have the right to acquire and operate nuclear explosive devices for peaceful purposes. Because of the technological similarity of nuclear explosive devices, whether they are meant for military or for peaceful purposes, the possession of any such device by a zonal State would significantly impair the effectiveness of the zonal régime. As peaceful nuclear-explosion technology, considering its economic, environmental and arms control implications, now seems generally not feasible, sacrificing the right to possess such devices would harm the parties very little while enhancing the effectiveness of the zone very much.

45. The non-stationing measure would apply primarily to the land areas of zonal States. Under recognized principles of international law, zonal States could not, by agreement among themselves, prohibit innocent passage or transit passage by vessels of nuclear-weapon States through their territorial waters.

46. Related to the non-stationing measure is "transit" of nuclear weapons through zonal territory. The transit concept refers to any movement of nuclear weapons over a limited period of time by a nuclear-weapon State, by land, by air or through internal waters, including calls at ports by ships carrying nuclear weapons. A zonal treaty should prescribe if transit would be generally prohibited or left for decision by each individual State of the zone, in accordance with international law, as is the case in the Treaty of Tlatelolco.

47. The non-use measure would be a commitment by nuclear-weapon States. This provision has been given the legal form of a separate protocol to existing zone agreements. Declarations and interpretations could not be avoided in the Latin American case.

48. The non-use measure should be considered against the background of ongoing negotiations on negative security assurances at the Conference on Disarmament at Geneva. All five nuclear-weapon States have made unilateral declarations that they would not attack or threaten to attack with

nuclear weapons non-nuclear-weapon States, but these declarations are not identical and include some conditions and reservations. Certain reservations are linked to the question whether a State can simultaneously be a member of a nuclear-weapon-free zone and of a military alliance with a nuclear-weapon State. This is certainly possible provided that the two sets of commitments are not contradictory.

49. Another form of negative guarantee is known as "no first use". China and the Soviet Union have categorically pledged not to be the first to use nuclear weapons. ^{15/}

50. A positive guarantee linked to the Non-Proliferation Treaty is embodied in Security Council resolution 255 (1968) of 19 June 1968. The resolution was introduced by the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland and the United States of America and envisaged that the permanent members of the Council would immediately extend assistance, through the Council, to non-nuclear-weapon States subject to aggression or threat of aggression by nuclear weapons. In developing a future nuclear-weapon-free zone, "positive guarantees" could be negotiated between the zonal States and outside guarantor States, which could include major military Powers. Such arrangements could also include rules and mechanisms for the invocation of assistance, as well as for other measures to maintain the security of zonal states and the integrity of the zonal régime.

51. Linked to the non-use measure has been the idea mentioned above that the measure could be complemented by a "thinning-out" arrangement in areas adjacent to the proposed zone. The nuclear weapons to be withdrawn would be those which were targeted against the zone or which had short ranges and were deployed very close to the zone, thus making them usable primarily against the zone. If such weapons were withdrawn, non-use commitments would be more credible.

52. A collateral measure to a zonal régime could be a prohibition to attack reactors and associated fuel-cycle facilities situated within the zone. The primary purpose of the prohibition would be to avoid the release of radioactive substances to wide areas. The resulting contamination would have some of the same effects as a nuclear attack, as the accident at the Chernobyl power plant in 1986 has amply demonstrated.

G. Social provisions for denuclearized sea areas

53. There are significant differences between applying arms control to sea areas and to land areas, because of different legal régimes. Almost all land is subject to the jurisdiction of individual States, a well-known exception being Antarctica. As a consequence, adversary military forces on land are geographically separated from each other in peacetime. On the other hand, military forces of different States may mix above, on and beneath sea areas. Indeed, they frequently do so.

54. Coastal States have full jurisdiction only over their internal waters. Their jurisdiction also extends to their territorial seas and archipelagic waters, but it is limited in that flag States enjoy the right of innocent passage for ships, including warships, in such waters. There is a more liberal régime for transit passage through international straits.

55. Zonal States have no right to limit by agreement among themselves the rights of flag States to navigate ships or fly aircraft in or over exclusive economic zones or the high seas. Their denuclearization would require agreement in principle among all States having the right to navigate through them. At a minimum, agreement would be required from the nuclear-weapon States to make the régime effective.

H. Complaints and control Procedures

56. It has long been recognized that effective implementation of a nuclear-weapon-free zone agreement requires a system of verification to ensure that all States involved, zonal States as well as extra-zonal States, comply with their obligations. The precise nature, scope and modalities of the system would vary from zone to zone and depend upon the nature of obligations undertaken. Generally a zonal treaty would have to include provisions both for verifying compliance and for considering and settling issues of non-compliance, should such cases arise.

57. Subject to verification should be:

- (a) All nuclear activities of zonal States to ensure that peaceful nuclear activities are not diverted to the manufacture of nuclear weapons;
- (b) The commitment that no nuclear weapons are present within the zone; special régimes would be required for sea areas and parts of nuclear-weapon States included in the zone;
- (c) The removal of nuclear weapons present in the zone in conjunction with the entry into force of the zone agreement, possibly also requiring an account of the nuclear history of participating zonal States;
- (d) The implementation of other measures associated with the zone agreement.

58. Most verification related to peaceful nuclear activities of zonal States could be entrusted to IAEA. The Agency is now operating nuclear safeguards in all non-nuclear-weapon States parties to the Non-Proliferation Treaty. This verification might need to be supplemented and reinforced by other verification procedures especially defined and prescribed in the zone treaty.

59. In some regions, the zonal parties may prefer to establish standing bodies or special organs for carrying out verification. In regions where sharp conflicts exist, entrusting the task of verification to an international organization, perhaps supplemented by bilateral arrangements, might be preferred.

60. IAEA could assume responsibility for safeguards subject to special agreements. However, to entrust all verification activities referred to above to IAEA may go beyond the Agency's current practices, although its statute gives the Agency considerable latitude in that respect.

61. There is also the possibility that an agreement on a zone would provide for any party to undertake verification activities, including on-site inspection, in another zonal State. One model could be the Stockholm document on confidence- and security-building measures in Europe, giving each of the 35 parties the right to undertake a limited annual number of inspections in the territory of any other party and obliging each party to receive and accommodate on short notice inspections in its territory. Another example of far-reaching on-site verification is included in the 1988 Treaty between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles (INF Treaty). Mutual verification systems of this obligatory nature could be of particular relevance for States, such as Israel, that might often find themselves outvoted within international arrangements where decisions are taken by a majority vote.

62. Verification of a denuclearization agreement applying to a sea area would involve several difficult problems. Every vessel or aircraft has a right to go almost anywhere at sea and that would facilitate national verification activities. On the other hand, under international law, warships are "immune" and agreements for on-board inspection seem unrealistic. Moreover, several nuclear-weapon Powers neither confirm nor deny the presence or absence of nuclear weapons on specific ships at specific times. Such a policy would thus be difficult to reconcile with a denuclearization or "thinning-out" régime at sea if warships or aircraft of nuclear-weapon States are to continue to be present in zonal sea areas.

Notes

1/ Resolution 2373 (XXII), annex; see also Security Council resolution 255 (1968).

2/ The first achievement in this category was the Antarctic Treaty of 1959, which declared the Antarctic continent a demilitarized zone and, by implication, also a nuclear- weapon-free zone. Two other multilateral agreements raising barriers to the deployment of nuclear weapons in new areas and environments were the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty) and the 1971 Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof (Sea-Bed Treaty).

3/ The texts of most multilateral treaties referred to in this document can be found in the Status of Multilateral Arms Regulation and Disarmament Agreements, 3rd ed., 1987 (United Nations publication, Sales No. E.88.IX.5).

4/ They refer to Africa, the ASEAN area, the Middle East, South Asia, as well as international sea areas such as the Baltic, the Indian Ocean, the Mediterranean and the South Atlantic. The political history of many of these proposals is described in the report of a United Nations study carried out by a group of governmental experts under the auspices of the Conference of the Committee on Disarmament. The report, which was submitted in 1975, first to the Conference of the Committee on Disarmament and then to the General Assembly (A/10027/Add.1), is entitled Comprehensive Study on the Question of Nuclear-Weapon-Free Zones in all its Aspects (United Nations publication, Sales No. E.76.I.7). A second study in 1985 was not finalized. The text was contained in an annex to a letter of 9 February 1985 from the chairman of the expert group to the Secretary-General.

5/ Common Security - A Blueprint for Survival, report by the Independent Commission on Disarmament and Security Issues, Simon and Schuster, New York, 1982, p. 147 (document A/CN.10/38).

6/ In recent years, local authorities in various countries have declared cities, towns, counties or other sub-national areas nuclear-weapon-free zones. Generally, such authorities have no legal competence for decisions of this kind and would have no possibility to have their "zones" internationally recognized. Such "zones" should therefore be considered expressions of opinion rather than arms limitation measures.

7/ A/C.1/L.312/Rev.2 and resolution 1911 (XVIII).

8/ The present status of the Treaty is described in document NPT/CONF.IV/15.

9/ See note 4.

10/ Final Document of the Tenth Special Session of the General Assembly (S/10-2), para. 61.

11/ The term was defined in article IX (3) of the Non-Proliferation Treaty as a State having manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967. This definition does not, obviously, cover a new country acquiring nuclear weapons after the stated date beyond the five recognized at the time. The possibility of "the rise of a new Power possessing nuclear weapons" is dealt with in article 28 of the Treaty of Tlatelolco.

12/ There are a number of cases in which only part of a State is included in a zone. Obvious ones are: (a) a State has dependencies in another region than the mainland and such dependencies are included in a nuclear-weapon-free zone. Protocol I in both the Treaty of Tlatelolco and the Treaty of Rarotonga applies to this case, (b) a State belongs to a nuclear-weapon-free zone but a far away dependency does not; (c) a special part of a country is a denuclearized or demilitarized zone and the mainland is not. An example is the demilitarized Spitsbergen archipelago, which belongs to Norway; and (d) a nuclear-weapon State has a military base in a country within a nuclear-weapon-free zone, but the host country has no responsibility for the base. An example is the United States base of Guantanamo in Cuba.

13/ Article II of the NPT provides that 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.

14/ In 1995, the extension of the NPT will be discussed at a special review conference of the parties (art. X (2)).

CHAPTER III

A NUCLEAR-WEAPON-FREE ZONE IN THE MIDDLE EAST

A. Geographic delimitation of the zone

63. The geographic limits of a nuclear-weapon-free zone should normally be established by the agreement of the States concerned. It is these States that determine, in the exercise of their sovereignty, whether they are prepared to place all or part of their territory under the constraints the régime of the zone will involve. A discussion of the limits of a Middle East zone can, therefore, only be preliminary and, in a sense, hypothetical. Such a discussion is none the less essential in order to develop a generally accepted list of those States whose participation in a nuclear-weapon-free zone in the Middle East will be necessary to make it meaningful in military and political terms.

64. An analysis of the region in terms of "core countries" and "peripheral countries" may be helpful. Such an analysis should take account of geography, of existing tensions and of the potential of particular States to develop nuclear weapons. This sort of analysis, explicit or implicit, lies at the base of all discussions of a Middle East nuclear-weapon-free zone in the rather substantial body of literature that has developed, both inside and outside the United Nations. One notable example is a recent study by IAEA. ^{1/} In that study the region was taken to include "the area extending from the Libyan Arab Jamahiriya in the West, to the Islamic Republic of Iran in the East, and from Syria in the North to the People's Democratic Republic of Yemen in the South". ^{2/}

65. This "IAEA definition" of the zone may provide a working list of core countries, although any potential zonal State would have the right to put forward its own list of minimum essential parties in such an undertaking. It may be useful, in that connection, to think in terms of two lists of core countries: a smaller group essential to the initiation of any serious action for the establishment of the zone and a somewhat larger group whose accession to the arrangement establishing the zone might be necessary to bring it into force.

66. A zone can be developed in stages, beginning with the core countries and later extended to include additional States. One option would be the possibility that the zone eventually encompasses all States directly connected to current conflicts in the region, i.e. all States members of the League of Arab States (LAS), the Islamic Republic of Iran and Israel.

67. The IAEA definition clearly excludes Turkey, Cyprus and Malta. This accords with virtually all other suggestions for delimiting a Middle East zone. Turkey is a NATO member and it has been generally assumed that it has United States nuclear weapons stationed on its territory. Cyprus and Malta are universally considered not to host any nuclear weapons. There are, however, two British bases on Cyprus. Given these facts, those countries may best be thought of as neighbors to a future Middle East zone, from which it would be reasonable to expect certain commitments to respect and support the zonal régime.

68. Afghanistan and Pakistan border the Islamic Republic of Iran to the east. The inclusion in a Middle East zone of one or both has at times been suggested as desirable. Nevertheless, their principal political-military concerns focus in other directions and their participation in this zone should therefore not be considered essential.

69. Djibouti, Somalia and the Sudan are members of LAS not included in the IAEA definition. While there may be substantial grounds for including the Sudan, the geographic factor clearly makes Djibouti and Somalia less indispensable. This is the sort of question that core countries will eventually have to consider at an appropriate time.

70. The group of Arab States lying west of the Libyan Arab Jamahiriya has a similar relationship. Some core group countries might look on the participation of Tunisia, Algeria or Morocco or all of them as not merely desirable, but essential. The same consideration could apply to inclusion of the westernmost Arab State, Mauritania.

71. On the western part of the North African coast, there are a few tiny enclaves of Spain. If the zone extends to that part of North Africa, those enclaves may be treated in the way that dependencies are covered by Protocol I of the Treaty of Tlatelolco.

72. Consequently, the IAEA definition may be taken as delimiting the probable core countries. The addition of the Sudan and the Maghreb countries ^{3/} is certainly desirable.

73. Several sea areas may be considered for inclusion or "thinning-out" measures in relation to the proposed zone in the Middle East. Both the Red Sea and the Persian Gulf may be enclosed or semi-enclosed within the zonal area. Prospective zonal areas have coasts in the Mediterranean, the Atlantic and the north-western Indian Ocean. Because of the legal status of the sea areas, maritime arrangements should be prescribed in separate protocols to a zone agreement. The law of the sea does not apply to the Caspian Sea divided between the Islamic Republic of Iran and the Soviet Union.

74. The prospective zonal area would include a few international straits subject to the régime of transit-passage, i.e. the straits of Gibraltar, Bab al Mandab and Hormuz. Also important in this respect is the Suez Canal, an international waterway crossing through Egyptian territory, which is open "in time of war as in time of peace, to every vessel of commerce or of war, without distinction of flag" according to the Constantinople Convention of 29 October 1888. ^{4/} This convention is also referred to in the Egypt-Israel Peace Treaty of 1978, which provides, inter alia, that the Strait of Tiran and

the Gulf of Aqaba are "international waterways open to all nations".

75. The possibility of including international waters within a nuclear-weapon-free zone in the Middle East immediately raises the question of the attitude of the five declared nuclear-weapon States, since the warships of several of them, believed to carry nuclear weapons, frequent these waters. It can be assumed that the broad support for a Middle East nuclear-weapon-free zone, repeatedly expressed in authoritative statements by the nuclear-weapon States, will be an important factor in realizing such a zone. Indeed, the nuclear-weapon Powers would be essential as guarantor States. Therefore, their rights to be present and to navigate in relevant sea areas with ships that may be nuclear-weapon-capable is an issue closely linked to the guarantees to be associated to the zone. The extension of the zone beyond the limits of national jurisdiction would thus be an issue that should be left to the later stages of negotiations.

76. A Middle East nuclear-weapon-free zone would be different from the Latin American zone and the South Pacific zone in one important respect. It would have neighbors around almost its entire periphery. It was noted above in connection with Turkey, Cyprus and Malta that it might be appropriate to look for commitments from those States to respect the zone, and the same could be said of Greece, Italy and Spain, Afghanistan and Pakistan, Chad and Ethiopia, and perhaps others. It should be noted that the prospective core zone would border both the Soviet Union and NATO territory. One might therefore consider "thinning- out" measures related to nuclear weapons deployed in land areas adjacent to the zone. Again it seems clear that the securing of such commitments would be useful although not fundamental to the success of the zone.

B. The present situation

77. Of the prospective parties to the zone, particularly the core group, all of the Arab States from Iraq to Mauritania, as well as the Islamic Republic of Iran are, with four exceptions, parties to the NPT. The exceptions are Algeria, Mauritania, Oman and the United Arab Emirates. Israel also is not an NPT party.

78. Nuclear facilities of relevance for the establishment of the zone in the Middle East are relatively few. Almost all of them are research reactors. Some of these facilities, however, are not subject to international safeguards. There are at present no reactors for electric power production in the region.

79. The three Arab countries parties to the NPT that have research reactors are Egypt, Iraq and the Libyan Arab Jamahiriya. They are all subject to safeguards agreements with IAEA. The Islamic Republic of Iran's research reactor is also under IAEA safeguards. Algeria, though not a party to the NPT, has placed its research reactor under IAEA safeguards. The other two Arab States non-parties to the NPT - Oman and the United Arab Emirates - have no nuclear facilities that require international safeguarding.

80. Israel has two reactors. Its 5-MW IRR-1 reactor at Nahal-Soreq is under IAEA safeguards, but its IRR-2 reactor at Dimona is not. It is the Dimona reactor and associated facilities that are commonly pointed to as the possible source of an Israeli nuclear-weapon capability. 5/

81. To establish an effective nuclear-weapon-free zone in the Middle East it would be essential to place all nuclear facilities under appropriate international safeguards, either through adherence of the State in question to the NPT or by concluding a full-scope safeguards agreement with IAEA. For practical purposes this requirement is of relevance to Israel only, since all other prospective participants in the zone with nuclear facilities have placed these facilities under IAEA safeguards.

82. As regards nuclear-weapon States, at present they are legally free, with the consent of the Middle East State concerned, to station nuclear weapons in that State. If a zone were established, such rights would be legally eliminated. The treaty establishing the zone would have to commit the parties not to accept deployment of nuclear weapons of others. A protocol on the model of the treaties of Tlatelolco and Rarotonga would solicit a corresponding commitment to respect the zone from the five nuclear-weapon States. The strong interest of the major Powers in any measure that enhances security and reduces the risk of a Middle East war makes it seem likely that this structure can be built.

83. Armed forces of nuclear-weapon States are deployed near the general area of a nuclear-weapon-free zone in the Middle East. As was noted above, four of the five declared nuclear-weapon States also maintain naval forces nearby. It is generally assumed that a number of these ships carry nuclear arms.

C. Official declarations and statements

84. All States in the area have declared themselves in favor of a Middle East nuclear- weapon-free zone. No Government has expressed opposition to the idea. Nor, despite the polemics from both sides of the Arab-Israeli dispute, is there solid ground to doubt that all the Governments concerned believe that a zone would be preferable to the present state of affairs. The problem is how, through what process and under what conditions a zone might be established.

85. The views of Governments concerned regarding the establishment of a nuclear-weapon- free zone in the Middle East submitted pursuant to various General Assembly resolutions are contained in the Secretary-General's reports to the General Assembly. 6/ These both reaffirm the long-standing support that the concept has received and also throw a clear light on the question of how to move forward.

86. For the Arab Governments and the Islamic Republic of Iran, the problem is simple: the difficulty lies in Israeli policies, and the proper step for Israel to take is to join the NPT and negotiate with, IAEA the application of safeguards on its nuclear installations or, short of joining the NPT, to accept full-scope safeguards on all of its installations.

87. For Israel the problem is equally simple: the difficulty lies in the unwillingness of other States in the region, except Egypt, to accept Israel as a legitimate State, and the proper step for them to take would be to sit down at a formal negotiating table with Israel and work out the arrangements for creating the zone.

88. For third-party observers, some skepticism is justified as to whether the matter is as simple as either side asserts. If the Government of Israel were to accept the Arab demand for safeguards on its Dimona reactor, then the installation could no longer be used - assuming that in fact it has been - for the production of fissionable material for weapons purposes. However, safeguards on Dimona would do nothing to neutralize whatever stockpile of weapons-grade material might have been accumulated. If Israel were to become a party to the NPT, that would also imply an obligation on its part to declare, to safeguard and then to dispose of any weapon stockpile it might have. Short of adherence to the NPT, Israeli negotiation for full-scope safeguards with IAEA would imply a declaration of any such stockpile and an agreement on how to deal with it.

89. Given the present intense mistrust that exists between Israel and most Governments in the area, it is difficult to imagine either (a) an Israeli Government making an immediate, full disclosure of weapon-related material or (b) a general acceptance of the completeness of whatever declaration Israel might make. For its part, IAEA does not at present have the authority or the means to conduct verification in the form of inspections or searches for undeclared material or installations. Clearly, an extended transition with novel and complex arrangements will be required to move from an initial acceptance by Israel of safeguards on its known facilities to an eventual acceptance by other States that Israel is truly nuclear-weapon free.

90. Turning to the Israeli pre-condition of a formal multilateral negotiation for the establishment of a zone, the situation also does not seem quite so simple. Arab willingness to sit at the table with the Government of Israel would signal an extremely important moderation in past attitudes and thus would reflect a diminution in Israel's security problem. It seems extremely doubtful, however, that in itself this improvement would appear to the Government of Israel and public opinion to be sufficiently profound and irreversible to justify a profound and irreversible alteration in Israel's defense posture. Rather one would have to expect that the negotiation of a nuclear-weapon-free zone would become related to other measures to reduce the danger of hostilities and to strengthen Israeli confidence that a true and lasting peace was being built.

91. Creating a nuclear-weapon-free zone in the Middle East is thus not simply a matter of finding some clever diplomatic formula that overcomes or circumvents the deadlock in the official Israeli and Arab positions. Only a series of steps that reduce tensions drastically can bring the parties to a serious negotiation. And even then it would not be expected that the negotiations would be quick and easy or that the zone, when agreed, can be fully realized without an extended transition. The complexity and drawn-out character of this process should not, however, discourage supporters of the concept. Each step of this process will be worth while in itself, reducing the risk of another war. And the structure, when completed, because of the multiple benefits it will have generated along the way and the many concessions that all parties will have made to secure these benefits, will be far more solid and durable than any quick and easy treaty would ever be.

92. This discussion of the official positions and the realities that lie behind them has proceeded as if the problem had only two sides: Arab and Israeli. Again the reality is far more complex. As illustration one need only cite the Iran-Iraq relationship. Two important States, each with peaceful nuclear installations and considerable missile capabilities, they were engaged in an extremely bitter and prolonged war in the 1980s, producing far more casualties than all the Arab-Israeli wars together. Under the circumstances, it could be expected that each of them would be concerned as to the possible development of a nuclear-weapon capability by the other despite the IAEA safeguards. A third-party observer may be relatively confident that these safeguards are effective, in view of the early stage at which safeguards were applied. But suspicions are hard to eliminate totally, and even with full and effective safeguards, a steadily increasing number of scientists and technicians are growing familiar with nuclear physics, chemistry and engineering, and the handling of nuclear materials. A "breakout" from the NPT and safeguards régime thus unavoidably becomes more imaginable and the potential value of a nuclear-weapon-free zone, with strong political support from other States in the region rather than just the major Powers, is correspondingly enhanced. Tensions and fears are also evident in a number of other places in the Middle East, thus making the need to keep the area free of nuclear weapons very much in the interest, of regional and global peace.

D. Relationship between the nuclear factor and other military and security factors

93. Various factors will influence a State's decision as to whether or not to associate itself with a nuclear-weapon-free zone. The following paragraphs, from the 1975 study of the question of nuclear-weapon-free zones, 7/ address some of the considerations that would play a role in such a decision-making process:

82. The dominant factor in the development of interest in the concept of nuclear-weapon-free zones has been the desire to secure the complete absence of nuclear weapons from various areas of the globe, where suitable conditions exist for the creation of such zones, to spare the nations concerned from the threat of nuclear attack or involvement in nuclear war ... The concept of nuclear-weapon-free zones has stemmed from the realization that a number of States in various regions of the world have or could have the capacity to develop a nuclear-weapon capability within a relatively short period, and that it is possible that more States may decide to do so. Should this occur it could present new threats to the security of States in areas at present free from nuclear weapons; could precipitate a ruinously expensive and perilous nuclear arms race in those areas; and could add new dangers of nuclear war to an already dangerous world situation ...

84. The premise upon which any nuclear-weapon-free zone must be based will be the conviction of States that their vital security interests would be enhanced and not jeopardized by participation. The perception of national security is, obviously, a matter of national policy, and these perceptions change, but it was argued by several experts that the presence of nuclear weapons in a region could threaten the security of States in that region, not excluding the possessor of the weapons or the country in which they are deployed, and that there is, accordingly, a conjunction of national and regional interests in regions where these weapons do not exist in ensuring their total absence. The situation in areas where nuclear weapons are already present will be different and will raise particular issues for the security of States. These issues would have to form a major consideration in any proposal for the establishment of a nuclear-weapon-free zone ...

86. Many experts considered that, in regions where the most acute tensions exist, the establishment of nuclear-weapon-free zones, though particularly difficult, would be particularly desirable. The exponents of this argument considered that the creation of an effective zone should, in itself, reduce such tensions and could lead to regional arms limitation measures and co-operation on wider issues. On the other hand, it was argued by some experts that the reduction of tension must precede the creation of a truly effective nuclear-free zone.

94. These statements have in common the assumption that States will participate in a nuclear-weapon-free zone only if doing so would enhance their national security or, inversely, that refraining from doing so would impair that security. Obviously, this assumption applies in the Middle East as

much as anywhere else.

95. A second assumption that is safe to accept is that Israel falls under the category referred to in paragraph 82, as quoted above, that is, that "Israel, if it has not already crossed that threshold, has the capability to manufacture nuclear weapons within a very short time". ^{8/} Thus, the "different situation" of paragraph 84 arises. And, as stated in paragraph 86, the establishment of a zone will be both particularly difficult and desirable. ^{9/}

96. In terms of armed forces, Israel has long been a militarily significant nation in the region of the Middle East. Although its stock of equipment may no longer be as large in relation to that of its potential opponents as it once was, well-informed sources regard its army and air force as still particularly well equipped, staffed and trained. ^{10/} While other Middle Eastern States have also been receiving high-quality military equipment from various sources, including some traditionally well-disposed towards Israel, the latter has increasingly supplemented its external purchases with domestically manufactured weaponry ranging from small arms to medium-range ballistic missiles. It has also made technical improvements to imported equipment.

97. Nevertheless, there are indications that Israel's relative conventional strength may be diminishing. In this connection, one factor that should be pointed out is the acquisition by potential opponents of ballistic missiles with a relatively long range and high accuracy. This gives those States a means of striking at a longer distance and enables them to participate in a conflict, even if their territory does not directly abut on the opponent's. As its population is small and becoming smaller in proportion to those of the other nations in the area, Israel has also become more vulnerable to a situation of prolonged warfare leading to a high number of casualties among its civilians or its military.

98. Against this background, it is appropriate to point out that Israel's security position is characterized by three features that cannot but play a part in determining its attitude towards the creation of a nuclear-weapon-free zone: the relatively small size of its territory; the sustained hostility between itself and the great majority of States of the region; and the fact that it has no military allies in the region and that the one State that might support it in a conflict is geographically remote.

99. Little is known about Israel's nuclear policy beyond its repeated statement that it will not be the first country to introduce nuclear weapons into the Middle East. The United Nations study on Israeli nuclear armament lists a series of "disincentives against possession of nuclear weapons" as well as "incentives to possession of nuclear weapons". ^{11/} In the absence of authoritative information, one can only speculate as to which disincentives or incentives have determined Israel's course of action in this regard. As the aforementioned study says, "a survey of the official and unofficial statements of Israeli policy-makers on Israel's nuclear policy would indicate that Israel's nuclear posture" fits either of two policy options, which are described as follows:

"it may acquire (nuclear) weapons and deny that it possesses them; or it may acquire a nuclear-weapon potential just short of the actual possession of nuclear weapons and maintain a posture of ambiguity". ^{12/}

100. Either way, it would seem that the actual or potential possession of nuclear weapons plays an important part in Israel's security policy, as a deterrent or a weapon of last resort - or a combination of both. ^{13/} One may assume that it is not envisaged as a realistic war-fighting option in a non-terminal conflict, given - among other things - the possibility that the use of nuclear weapons would meet with retaliation with remotely delivered chemical warfare agents. Moreover, any use of nuclear weapons against close-in military opponents in the restricted theatre of operations involved would also tend to impair the user's own operations and would risk the gravest consequences for its civilian population. In fact, in the Middle East as a whole, it does not appear that the use of nuclear weapons could achieve any rational military or political objective.

101. The developments referred to above indicate that in any future widespread or prolonged conflict Israel would have greater problems than before. It may therefore be expected that it will not see its way clear to a renunciation of nuclear use - by adherence to any arrangement that would oblige it to submit all its nuclear activities to international safeguards - unless it has credible assurances that no military action is likely.

102. Such assurances can never be absolute. In this respect, it may be instructive to consider the situation on the European continent, which has long faced problems somewhat similar to those existing in the Middle East. In Europe, two major adversaries who have confronted each other now seek to reduce the likelihood of the outbreak of a conflict that might escalate into a nuclear war. They are using a variety of confidence-building measures, such as transparency of military forces, movements and maneuvers, as well as reduction of armaments. Both are prepared to assure compliance with those measures through verification and constant monitoring from the ground, air and by satellite.

103. Of course the situation in the Middle East differs from that in Europe in important respects. In the Middle East, rather than two more or less evenly matched groups of opponents, one notes the presence of a large group of States equipped with conventional weapons confronting a single State with a powerful conventional force and presumed capable of producing nuclear arms. Those nations are in a continuing state of war with the single State to which reference is made. In addition, the majority among them do not recognize the nuclear-capable country as a State. The tension between the Islamic Republic of Iran and Iraq is perhaps more like Europe in its relatively balanced, bipolar character, even though there are obvious differences as well.

104. The character of the Middle East situation both makes the outbreak of war easier to justify and harder to prevent. Thus, it complicates the possibility of achieving a situation in which Israel could be brought to accept restraints on its presumed nuclear capability. The outbreak of another major Middle Eastern war, moreover, would imply that Israel's nuclear posture had failed in its deterrent function, thus bringing it closer to the stage where it might consider use of nuclear weapons as a last resort, should it actually have those weapons. At that stage, of course, the time at which it could be persuaded to give up that capability would be past.

105. It follows that Israel should be persuaded to renounce its presumed nuclear capability at the earliest possible stage, before a further major conflict can erupt. However, it is most unlikely that Israel will give up the security it believes it now derives from its nuclear ambiguity, its presumed deterrent and its eventual weapon of last resort, without a much higher degree of assurance that such a conflict will not occur, as well as compensation in terms of arrangements to enhance regional security in all of its multiple and complex dimensions, conventional as well as chemical and nuclear, political as well as military.

Notes

- 1/ Technical Study on Different Modalities of Application of Safeguards in the Middle East. IAEA-GC (XXXIII)/887, 29 August 1989. A similar definition is included in the 1975 study on nuclear-weapon-free zones, para. 72.
- 2/ On 22 May 1990, Democratic Yemen and Yemen merged to form a single State. Since that date they have been represented as one Member with the name "Yemen".
- 3/ The States members of the Arab Maghreb Union are: Algeria, the Libyan Arab Jamahiriya, Mauritania, Morocco and Tunisia. The Union was created on 17 February 1989 and entered into force on 1 July of the same year.
- 4/ Only a ship carrying the flag of a State at war with Egypt can be prevented from passing the Canal.
- 5/ Report of the Secretary-General on Israeli Nuclear Armament (A/42/581).
- 6/ See A/40/442 and Add.1; A/41/465 and Add.1; A/42/364; A/43/484; A/44/430 and Add.1-2; and A/45/388.
- 7/ Official Records of the General Assembly, Thirtieth Session, Supplement No. 27A (A/10027/Add.1).
- 8/ See Study on Israeli Nuclear Armament (United Nations publication, Sales No. E.82.IX.2), para. 82.
- 9/ See ibid., para. 83, in which the experts who produced the study in question state that "it would, in their view, contribute to avoiding the danger of a nuclear arms race in the region of the Middle East if Israel should renounce, without delay, the possession of or any intention to possess nuclear weapons, submitting all its nuclear activities to international safeguards, through adherence to a nuclear-weapon-free zone in accordance with paragraphs 60 to 63 of the Final Document of the first special session of the General Assembly devoted to disarmament".
- 10/ See, for instance: Bernard Blake, ed., Jane's Weapons Systems 1988-89; Surrey, Jane's Information Group, Ltd., 1988; and The Military Balance 1988-1989, United Kingdom, The International Institute for Strategic Studies, 1988, pp. 94-119.
- 11/ Study on Israeli Nuclear Armament, op. cit., paras. 64 and 65.
- 12/ Ibid., paras. 60 and 61.
- 13/ Ibid., para 65. A survey of theories concerning nuclear weapons is contained in the report of the Secretary-General on the comprehensive study on nuclear weapons (A/45/373).

CHAPTER IV

MEASURES FACILITATING THE ESTABLISHMENT OF A ZONE

A. Introduction

106. The previous chapter discusses the general security situation in the Middle East; and paragraphs 95 to 105 focus particularly on the security environment of Israel, the one State in the area that is widely assumed to possess a nuclear-weapon capability. Israel's posture of nuclear ambiguity has been developed as its response to that environment and is considered by Israel a valuable asset in protecting its national security. The other States of the area have responded to their security concerns in a different way, feeling that they are more secure if they renounce nuclear weapons and adhere to the NPT as the formal codification of that renunciation. Many have no doubt also been influenced by the calculation that the road to a nuclear-weapon capability would be a long, costly and possibly dangerous passage.

107. It is important to note that neither Israel's ambiguity nor the policies of the other States were dictated by a narrow symmetry; neither the possible possession of nuclear weapons nor their renunciation was determined simply by the fact that an adversary possessed or had renounced them. Rather, in all cases the policies were decided on the basis of the nation's total security environment, particularly the balance or imbalance in conventional weapons.

108. The present asymmetrical situation is not stable. There are psychological and political pressures to "level up" if Israel refuses to "level down", and that development will become ever more likely as technological disparities between Israel and its neighbors diminish. The spread of chemical weapons may thus be seen as a warning that nuclear proliferation will follow if a new factor is not introduced. Nuclear proliferation is made even more likely by the fact that the Arab-Israeli conflict is not the only challenge to peace in the region.

109. A nuclear-weapon-free zone could be a new factor that sets the region on a firm course away from proliferation and constantly heightening insecurity. Realistically, however, such a zone can be realized only step by step in a process extending over years, a process in which all States would work to create a total environment in which no State feels its security is threatened. A zone can be even more effective in this regard than the NPT, essential as that instrument and its IAEA safeguards system are. A zone can, for example, involve even more extensive and rigorous verification

procedures; it can establish additional constraints on peaceful nuclear activities; it can provide for an extensive system of positive and negative security guarantees; it can prescribe even more difficult requirements for withdrawal than the NPT.

110. There is broad agreement that an effective zone would be a great improvement over the present situation. The problem is how to create the conditions in which a zone becomes a realistic development. How does one get from here to there? In a general way the answer is obvious: the fears of the various parties must be understood and dealt with. All assert that they have no aggressive intentions; all fear that they will themselves be the victims of aggression. Confidence must be built on all sides: confidence that declarations of a desire for a just and lasting peace are not merely a smoke screen, confidence that military solutions to political problems are excluded, confidence that military postures that are perceived as threatening can be avoided or adjusted. Renunciation of hostile acts and of threatening, inflammatory declarations would do much to increase confidence as well. Most important of all, there must be progress in solving the fundamental conflicts in the region. Without such progress, technical measures in the nuclear area or on other security problems will hardly be given serious thought, much less will they be developed to provide a meaningful barrier to tension and even war.

111. With this framework in mind, a number of suggestions have been gathered for steps that could be taken by one, several, or all of the States in the region to build mutual confidence and thus facilitate the realization of a nuclear-weapon-free zone. Most of the measures are in the nuclear field. Others do not directly involve nuclear matters but do bear on the security of States and thus meet needs and provide opportunities for building confidence. Indeed, most of the States in the area have underlined the relationship they see between chemical and nuclear weapons, while the Iran-Iraq war illustrated - painfully - the relationship between chemical and conventional weapons. It is not the mandate of this report to propose measures to solve the complex problems of chemical and conventional weapons, but it is essential to draw attention to the need for such measures.

B. Confidence-building in the nuclear field

112. In discussing possible confidence-building measures, particularly in the nuclear field, it should be kept in mind that such undertakings by the States in the region may not always involve symmetrical actions, in view of their different positions regarding the NPT and safeguarding of their nuclear facilities.

113. For non-parties to the NPT, which in practical terms means Israel, the most significant confidence-building measure available would be to place all of its nuclear facilities under safeguards. The principal installation not safeguarded is that at Dimona. Clearly, there can be no nuclear-weapon-free zone in the area until this has been done. The Government of Israel's endorsement of the establishment of a zone thus entails an eventual willingness to safeguard the Dimona reactor (or to close it down, a less likely alternative).

114. Safeguarding or closing Dimona would not in itself eliminate any nuclear weapons or weapon material that Israel might have. Most of whatever plutonium may have been produced in the Dimona reactor and chemically separated is presumably stored elsewhere. (Israel is not believed to have produced any highly enriched uranium, the principal alternative to plutonium as bomb material.) The eventual application of safeguards to Dimona would certainly bring an end to any production of plutonium for weapons, but it would not impose control on whatever plutonium may have already been produced. (That problem is considered below.) What safeguards on Dimona would do is place an upper limit on the amount of weapons material in Israel's possession.

115. It is not possible to suggest the circumstances in which an Israeli Government would consider submitting Dimona to safeguards. Those circumstances could, however, be considerably short of the sort of transformation of the area that would lead Israel to relinquish its nuclear capability totally and irreversibly. This is so because the "Israeli deterrent" or "weapon of last resort" would remain intact even with Dimona safeguarded. For this reason, it may be useful to think of safeguarding Dimona as a half-way point on Israel's road to a nuclear-weapon-free zone.

116. For parties to the NPT, unilateral declarations of their activities in the nuclear field will underline their commitment to a nuclear-weapon-free zone. They have, of course, already made declarations to IAEA in accordance with their safeguards agreements. There are, however, certain respects in which these could usefully be supplemented, generally by a simple statement regarding nuclear activities that are not covered by safeguards. For example, uranium mining or processing, heavy water or tritium production or stockpiling, and any research facilities capable of handling even de minimis quantities of fissionable material that are exempted under standard safeguards agreements, all could be declared.

117. Confidence in these declarations could be built by an informal system of inspections by invitation. If a question is raised or a charge is made that weapon-related activity is being carried out at a given research center, the Government concerned could invite the Director-General of IAEA to send representatives to see what in fact is being done at that location. Such "invitational inspection" perhaps could not always demonstrate with total certainty that nothing untoward was taking place, but it often could demolish unfounded reports of the kind that do so much to raise suspicions in the area today.

118. For those countries which have or will have research or power reactors, still other measures could reinforce IAEA safeguards. One would be a public commitment to refrain from any domestic reprocessing of reactor fuel, even on an experimental basis. Arrangements regarding the handling and storage of spent fuel and the processing of waste, preferably the shipment of the spent fuel back to an outside source or to a specially established international fuel cycle facility, would discourage suspicions and rumors. Countries planning the construction of reactors could avoid designs that would use highly enriched uranium. States having such uranium could arrange to return it to its supplier against an equivalent amount of lower-enriched uranium.

119. With regard to all activities in the nuclear field, a maximum degree of openness and transparency will be greatly in the interest of the country concerned. The simple publication of an annual report and its filing with IAEA would be helpful. Invitations to foreign scholars to visit and, better yet, to reside and conduct research would also be useful.

120. NPT parties could build further confidence by unilateral declarations in which they would set explicit limits for themselves on the right of withdrawal contained in article X, paragraph 1, of the Treaty. 1/ Governments could specify the grounds for withdrawal within three months, for example, a nuclear test by a State in the region, or other event that clearly points to or demonstrates the development of nuclear weapons. In any other situation, they would give a full year's notice, thus allowing a longer breathing space for diplomacy to try to cure whatever "extraordinary event"

was threatening the Treaty. NPT parties could also offer to extend this breathing space to as much as two or three years in exchange for satisfactory positive security assurances from the major Powers.

121. The fact that Israel is assumed to have a substantial quantity of unsafeguarded plutonium will have to be dealt with before a zone can be effectively established. This will require the development of verification measures extending well beyond the facilities safeguards that IAEA has in operation for present NPT parties. This is because no NPT party except the three depository (nuclear-weapon) States had significant quantities of unsafeguarded fissionable material before adherence. The case of South Africa, which has had a uranium enrichment program, may be relevant in this context. The way that IAEA safeguards will be applied to that State, once it adheres to the NPT, may provide something of a preview of what can happen eventually in the Middle East. It is beyond the mandate of the present study to define what verification measures Israel's neighbors might seek and Israel might accept to ensure that no secret, undeclared stockpile remained. Nor is it the mandate of the study to discuss what reciprocal measures Israel might seek from other parties in the region to increase its own confidence. What can be foreseen is that the measures would have to be intrusive and pervasive. They would also have to apply throughout the zone.

122. Although IAEA would be a logical candidate for administering such expanded verification measures, the procedures would have elements not customary in current safeguards practices. They would have to include provision for the kind of challenge inspections being developed in the Conference on Disarmament for a chemical weapons ban, with short notice and no right of refusal, and also with inspectors from the challenging State.

123. Purely reciprocal and mutual verification and inspection of the kind provided for in the Stockholm document would be a possible system or a component of such a system for a nuclear-weapon-free zone in the Middle East. The establishment of such a verification procedure in Europe required a negotiated, regional, inter-State agreement.

124. A regional commitment not to test a nuclear device would be another highly useful partial measure looking towards a nuclear-weapon-free zone. Those who question the utility of such a regional test ban commonly make two points. They say that since most Arab States and the Islamic Republic of Iran are parties to the NPT, an additional promise from them not to test would be redundant. And, with regard to Israel, some argue that it may have conducted a clandestine test, while others assert that modern computer simulations make tests unnecessary. These objections do not appear well founded. An explicit commitment by Israel not to test would give more precise substance to its promise not to be the first to introduce nuclear weapons to the area. Similarly, an additional commitment by NPT parties not to test would reinforce their non-nuclear status.

125. With regard to Israel, the value to a weapons program of a single, clandestine test or of computer simulations is a complex question on which there are divergent views. There is however, reason to believe that, without several tests, the reliability and predictability of an initial stockpile of weapons would be doubtful. If so, then for any State wishing to base its security on the possible use of nuclear weapons a testing program would be important.

126. With regard to a no-testing commitment from Israel's neighbors - the clear and specific character of such a commitment; the fact that it would involve an obligation towards other neighboring States, both friendly and unfriendly; and the prospect that breaching it would trigger sharp reactions by others - all these factors would make it a significant additional barrier to any tests. Moreover, such an explicit commitment would imply and could entail a clear obligation not to develop or procure the material and equipment, some of it highly specialized in character, that is essential to the construction of the non-nuclear components of a nuclear weapon. Such material and equipment is not constrained by the NPT and does not fall within the IAEA safeguard system.

127. The principal significance of a no-test arrangement in the Middle East would, however, be political. It would underline the commitment of each State to the eventual achievement of a nuclear-weapon-free zone. It would move forward from the present situation based on Israel's ambiguous unilateral declaration and on its neighbors' adherence to the NPT by creating an interlocking network of explicit commitments. Since these commitments would presumably be phrased in reciprocal terms - "... will not test unless ..." - they would highlight the interest that all parties have in not crossing this dangerous threshold.

128. It will be important that any regional commitment not to test be phrased in absolutely unambiguous terms. The commitment should refer to "any nuclear explosive device of any type", thus leaving no loophole for a "peaceful nuclear explosion", which could only be interpreted by others as a clear and purposeful demonstration of a nuclear-weapons capability. One way of making the commitment would be through formal letters to the Secretary-General.

129. Another area for confidence-building involves barriers to attacks on nuclear installations. Such barriers should go beyond and strengthen current international law. Subsequent to its 1981 attack on the Iraqi reactor, Israel stated officially in 1984 in a letter from its representative to IAEA that it would not attack "nuclear facilities dedicated to peaceful purposes". ^{2/} It would be useful if explicit and authoritative commitments of all States in the area were placed on record, perhaps in letters to the Secretary-General of the United Nations.

130. If identical commitments "not to attack ..." are to be encouraged, it will be important to make them of the broadest possible character. Restricting such a pledge to "nuclear facilities dedicated to peaceful purposes", leaves open a particularly dangerous possibility in that it implies that facilities not expressly dedicated to peaceful purposes may be attacked and that it is up to the potential attacker to determine for what purpose he believes the facility is being used. ^{3/}

131. The spread of radioactive fall-out that could result from an attack on a nuclear reactor would relate not to whether the reactor was or was not dedicated to peaceful purposes, but to the amount and composition of the reactor fuel and the fission products in the facility at the time of an attack. The destruction of a nuclear reactor, whatever its use, could produce fall-out equivalent to that from a nuclear explosion.

132. The above considerations have an obvious relevance for Israel. Israel has not asserted that its Dimona reactor is "dedicated to peaceful purposes"; therefore commitments by other States using the same terms would not apply to Dimona, an attack on which could have catastrophic consequences extending beyond Israel itself. The problem of nuclear proliferation is a serious one and should be dealt with seriously, but high explosives are not among the means that should be employed.

C. Security assurances

133. Progress towards the realization of a nuclear-weapon-free zone will require support from the major outside Powers and indeed the entire international community will have to contribute in important ways if threats to peace are to be brought under control and eventually eliminated. The major outside nuclear Powers, particularly the Soviet Union and the United States, can help to invigorate the process by the posture they adopt on the matter of security assurances. Such a posture would demonstrate strong general support for a zone, which is absolutely essential if the idea is to be more than a dream. Through assurances the outside Powers can provide a positive complement to their important "negative" role of discouraging any development, such as a weapon test, that would make realization of the zone far more difficult. Security assurances will of course give stability to the structure of the zone itself, when it eventually becomes a reality. The willingness to provide assurances, even in advance of the creation of a zone, could give States in the region the necessary encouragement to face the risks a zone will inevitably entail.

134. Security assurances are customarily considered under two headings: negative assurances, or commitments to refrain from a particular action; and positive assurances, undertakings that in specified circumstances a guarantor-Government will take a specified action. Both types have a long and controversial diplomatic history.

135. Co-ordinated negative security assurances going beyond existing unilateral commitments are currently being negotiated in the Conference on Disarmament at Geneva. However that discussion proceeds, there will clearly have to be new assurances specifically formulated for the Middle East region as the zone there moves closer to crystallization. The States of the region will expect that the participants in the zone will receive categorical commitments, going beyond the existing unilateral statements, from the nuclear-weapon States - commitments not to threaten or attack them with nuclear weapons. Such commitments have been embodied in protocols to the treaties establishing the Latin American and South Pacific zones. The nuclear Powers do not find this unreasonable, even though for other reasons some of them have not ratified Protocol 2 to the Treaty of Rarotonga. If they wish to encourage the formation of a Middle East zone, there would appear to be no reason why they should not indicate well in advance that they intend to give favorable consideration to such co-ordinated assurances when the time comes.

136. There is another form of negative assurance that a Middle East zone can be expected to elicit: a commitment not to station nuclear weapons in the treaty area. This could be politically a more meaningful commitment than the "not to attack ..." assurance discussed above, desirable though that is. None of the nuclear-weapon States seems to have reason to station nuclear weapons on the territory of a prospective treaty State, or has ever done so in the past, or has indicated that it was considering doing so. In these circumstances, it could now be useful for them to consider making such a commitment. This could be a substantial incentive for continued regional efforts and it would help to sustain "peer pressures" within the region against any regional State that might be tempted to break away from the present consensus in favor of a zone.

137. Positive assurances are, by their nature, more difficult for States expected to give them than are negative assurances. They involve commitments to assist a State that is in danger in circumstances that cannot be clearly specified or foreseen. Promises of humanitarian aid are not a problem and such aid should be expected from the world community and not just from the nuclear Powers. As one climbs the ladder through diplomatic support to military assistance, however, the difficulties increase. Moreover, positive assurances are not unambiguously advantageous from the viewpoint of the State receiving them. Such a State might fear that its sovereign independence could be compromised if the outside State felt that its guarantee gave it some sort of right to pressure the State receiving assurances. This concern is not frequently manifested by officials in the Middle East. On balance, positive assurances appear to be strongly desired, rather than feared.

138. The last time the world community took collective action on the problem of positive assurances was in 1968, when the Security Council approved resolution 255 (1968) on the suggestion of the three nuclear-weapon States that are also parties to the NPT. That resolution is regarded as too limited by the officials of virtually every Government in the region. There is, however, no consensus on specifically how it should or could be strengthened in connection with a Middle East zone.

139. One form of assistance to a State that is the victim of a threat or an attack is sanctions against the attacker. Sanctions short of direct military support for a victim are not likely to look impressive as a response to an actual attack, but in the more modest yet vital task of deterring an attack, halting a build-up, or reversing the effects of an aggression, sanctions may play an effective part. It will thus be important for the major Powers to monitor closely nuclear developments in the Middle East, to make it clear that they will react strongly to any efforts to breach the delicate line that defines the present stand-off, and to deploy extraordinary efforts to roll back the dangerous situations that have recently developed with regard to the closely related areas of chemical weapons and missiles.

140. It is not only the nuclear-weapon States whose positive and negative support for the zone is important; adjacent States, particularly Turkey and Pakistan, could contribute in important ways. It is to be expected, of course, that they will continue to support the concept and will be ready to give firm commitments not to co-operate in any attempt to circumvent the eventual treaty.

D. Steps by outside Powers to encourage a zone

141. It has long been obvious that a nuclear-weapon-free zone will be realized only if it is strongly desired and supported by the States of the region. As noted above, outside Powers, especially the nuclear-weapon States, also have important roles to play. This is particularly true for the Middle East, where the bitter conflicts within the area, at times fuelled by outside rivalries, have also repeatedly required third parties to assist in moderating them. The importance of security assurances by the nuclear-weapon States, discussed in the preceding section, is a reflection of this requirement.

142. The first duty of outside Powers who want to encourage the elimination of nuclear dangers from the area is to make their position clear. They should do this in ways that cannot be regarded as mere lip-service to a remote and probably unrealizable ideal, but as serious endorsement of a process that should start forthwith. They should plainly state, for example, that they strongly oppose any development, such as a nuclear test or an attempt to circumvent the NPT, that would move the area in the wrong direction and would damage the process leading to the zone.

143. The major outside Powers should also come forward with proposals for concrete measures, whether those discussed in the present study or

others, for reducing tensions, building confidence and gaining control over the various arms races in the area. The United States and the Soviet Union have a particular moral and political responsibility in this regard. Their past competition in the area has facilitated the enormous accumulation of arms there (though it has by no means been the only factor) and they need to make clear their determination that the improved relationship between them will not now lead to a "dumping" of masses of surplus weaponry into regional hot spots like the Middle East. Restraint on the part of the United States and the Soviet Union will have to be accompanied by determined action that discourages other suppliers from filling the gap.

144. The leading industrial States have a significant role to play with regard to export of technology that has military implications and of weapons, particularly nuclear and other weapons of mass destruction. Over the past 15 years, three groups of Governments, largely overlapping, have joined their efforts to discourage proliferation of nuclear weapons, chemical weapons and missiles of medium and longer range.

145. The first of these, the so-called Zangger Group, operating in the framework of IAEA, has helped define exports that should trigger safeguards. The second, the so-called Australia Group on Chemical Weapons, remains relatively informal. The third, the Missile Technology Control Régime, was organized even before the Australia Group and has begun to reach out to the Soviet Union and others to widen the network of co-operative restraint among suppliers.

146. Unfortunately, these supplier groups tend to be perceived by the countries of the Middle East (and elsewhere) as designed to keep developing countries in a state of technological backwardness and military inferiority. This is not, of course, the spirit of the groups themselves, but it is how many in the developing world regard the activity. It thus seems desirable for the industrial States to make an effort to enlist the support and co-operation of Middle Eastern countries and to assure them that this does not reflect any desire to keep them in a condition of technological dependency. Support and co-operation could be offered, for example, to regional space programs in exchange for minimizing any spillover from such programs into military activities. Something similar might be done in the chemical area, to encourage, for example, an adequate supply of locally produced insecticides and other chemicals in ways that do not facilitate the production of chemical weapons. Co-operation in peaceful nuclear programs would have even greater symbolic and political value. Most nuclear programs in the Middle East are quite modest. Outside support, preferably through IAEA, could help to ensure that as they expand they remain devoted to peaceful objectives.

147. Outside support for peaceful nuclear activities in the area would be especially appropriate when those have a multilateral or regional character. Joint projects on nuclear power might be of great interest to those countries which are not rich in oil, and even to some, such as the Islamic Republic of Iran, which have major oil reserves. The provision of international facilities for nuclear waste disposal would help to ensure against diversion to military purposes.

148. Recently, President Mubarak of Egypt made a proposal that offers the Governments participating in the various supplier groups an opportunity to align themselves with a regional initiative (see A/45/219-S/21252, annex). The Mubarak Plan calls for making the Middle East free of all weapons of mass destruction. What practical form such an alignment and support could take is outside the mandate of the present study, but it is clear that the objectives are in complete harmony.

149. Whatever the level of support and co-operation that outside States may extend to the Middle East in the nuclear, chemical and missile fields, this co-operation should be structured to enhance the transparency of the corresponding activities within each State of the area. Assistance channeled through IAEA is of course completely in the public domain, but bilateral programs should meet this same standard. Governments should, moreover, actively publicize the facts, rather than obscure them.

150. The virtue of transparency should be recognized as applying to past transactions as well. A number of developed countries played key roles at one or another time in assisting various Middle East Governments with military, technology. In particular, past transfers of nuclear material and equipment to projects in the Middle East should be declared by the suppliers. Putting the historical facts on the public record would be of considerable assistance for efforts to understand the present situation and to develop a reliable "baseline" for future movement towards a nuclear-weapon-free zone.

E. Confidence-building in other military fields

151. The close relationship - the "linkage" - among all the elements that affect security is well known. Nuclear capabilities are linked to chemical weapons, chemical weapons to conventional arms, conventional arms to political conflict. And all these threads are woven into a seamless fabric of fear and insecurity. If the area is to become and remain truly nuclear-free, then this fabric must be cut into pieces and dealt with piece by piece. The problem is much too complex and unyielding for any comprehensive settlement to solve all at once. Yet all the separate elements must be worked on concurrently, for it will not be possible to settle any one piece of the problem unless it is clear that progress is being made on the other pieces as well. A radical transformation, step by step, must be effected in the military and political relationships of the entire area. The peoples of the Middle East must develop confidence that the political conflicts that surely will long remain are going to be settled - and settled equitably - without resort to force or the threat of force.

152. In specific terms, Israel's neighbors must gain confidence that Israel has no intention of using its superior technical skills, including nuclear technology, to expand its frontiers or to impose an unacceptable settlement of the problem of the Palestinians. Israeli opinion must gain confidence that its neighbors have no intention of using their superior manpower, wealth and other resources to destroy Israel or to impose an unacceptable settlement of the problem of the Palestinians. The acute character of still other tensions and fears is dramatically evident.

153. Much of this transformation falls into the political area, and it thus is outside the terms of reference of the present study. The political side of the question must, however, be seen as of primary importance. Technical military confidence-building measures can be of great assistance in developing mutual confidence and in averting unintended deteriorations. They cannot, however, take the place of a political process; and they should be developed and installed in parallel with the political track, not as a substitute for it.

154. Military confidence-building measures have one general objective: to provide transparency and thereby predictability. They thus serve to prevent surprise attack and to assure a potential adversary that one's forces and dispositions are not of an offensive character. Discouraging surprise attack has a long history in the Middle East, though under different names. 4/ Most recently, the United Nations Iran-Iraq Military Observer Group

along the Iran-Iraq border has a similar function. Obviously, past efforts have been neither a total success nor a complete failure. Some problems were perhaps not foreseen; for others there were no negotiable solutions. One very serious problem was, for understandable reasons, simply not addressed. It was the task of assuring that the various armed forces and their deployments were, to the extent possible, of a basically defensive character. Dealing with this task will be protracted and complex; it can hardly be taken up in any broad and fundamental way under current circumstances.

155. It lies beyond the scope of the present study to develop any comprehensive program of measures either to prevent surprise attack or to ensure that the armed forces of the region are essentially defensive in structure and deployment. There are, however, certain near-term steps that could further one or both of these objectives and would be particularly relevant to weapons of mass destruction, especially nuclear weapons. ^{5/} These are discussed below. Much of the recent development in the theory and practice of confidence-building has taken place in Europe and it would be helpful if conferences and seminars on East-West military arrangements could regularly include scholars and officials from the Middle East.

156. The impossibility of building mutual confidence if conventional force levels continue to escalate is evident from even a brief look at the numbers. Four States of the region have more main battle tanks than either the United Kingdom or France. Two have more armored personnel carriers than any NATO country except the United States. Moreover, to an increasing degree these mountains of equipment are of the most modern type and quality.

157. The repertory of measures that has been developed and is being utilized to reduce confrontation in Europe is impressive. Forces, particularly offensive-type forces such as armor, can be withdrawn from areas near national borders. Inventories can be published and verified. Maneuvers and movements can be notified well in advance and observers invited. Procurement plans can be announced. Military doctrine can be discussed. Measures such as these foster transparency. The understanding that transparency is desirable, that it enhances the security of the side that promotes it, even in the absence of reciprocity, that it can help to avoid the mutual escalation that prudent, "worst-case" military or civilian judgements entail - all this was not easily accepted by military or civilian leaders in Europe. And it is not likely to sweep away "old thinking" in the Middle East, either. But it is clearly valid, while the utter futility and grave dangers contained in further rounds of the multiple Middle East arms races are apparent.

158. The linkage between nuclear and chemical weapons - or more precisely among all weapons of mass destruction: nuclear, chemical, biological and their means of delivery, especially long-range missiles - has been asserted by leaders and by commentators throughout the Middle East and elsewhere. The relationship is complex and is frequently misunderstood or misstated. Some see chemical weapons as a deterrent or a possible response to the threat or use of nuclear weapons - the "poor man's bomb". Others see nuclear weapons as a deterrent or response to the threat or use of chemical weapons, as well as a general weapon of last resort. Missiles are usually seen as the "normal" or "preferred" means of delivery of all three categories of mass destruction warheads.

159. It is not useful to dispute the interrelated, "linked" character of these weapons. Nor, of course, can one dispute that they all have a relationship to conventional forces. What must be disputed are arguments that nothing can be done about A unless the problem of B is completely resolved. In other words, the argument that nothing can be done about chemical weapons unless nuclear weapons are eliminated and the argument that nothing can be done to make the region nuclear-free until chemical weapons have been eliminated are both obstacles to progress. It will take much time to deal definitively with any one of the elements, but a beginning must be made - and indeed has been made - in dealing with each one in its own terms. At the same time, whatever successes are achieved in limiting or banning one of the four elements of mass destruction weapons (three warhead types plus delivery means), it must be recognized that those successes will be fragile and ultimately reversible unless progress is made on all the others as well as on conventional weapons and political problems.

160. A discussion of confidence-building measures in the nuclear field was contained in the previous section. With regard to biological weapons, a treaty totally banning them was negotiated at Geneva in 1971, signed in 1972 and brought into force in 1974. However, few States in the Middle East have become parties to the Treaty. ^{5/} All should do so. The adherence of States of the region will be particularly timely and useful if they complete the procedures in time to participate in the Review Conference scheduled for the summer of 1991.

161. Confidence-building in the area of chemical weapons is of fundamental importance. A convention to eliminate chemical weapons - the counterpart to the Biological Weapons Convention - is under active negotiation at Geneva, with most States of the Middle East present either as members or observers in the Conference on Disarmament. These States should contribute actively to the negotiation, thereby making it clear that when a satisfactory text has been developed they will promptly join the treaty and support universal adherence to it. Meanwhile, everything possible should be done to hold the line and ensure that the treaty does not come too late to handle the problem. If chemical weapons were allowed to proliferate widely in the Middle East, it is hard to imagine that general nuclear proliferation could be avoided.

162. The problem of delivery systems for weapons of mass destruction, both chemical and nuclear, is complex and difficult; but it may offer opportunities for confidence-building even in the very near term. Long-range missiles are, of course, not the only way that nuclear weapons can be delivered. Both chemical agents and nuclear explosives can be configured for aerial bombs as well as for artillery shells. In fact, for certain lethal chemicals, aerial spray tanks, such as are widely used for agricultural purposes, may even be the most effective method, and nuclear bombs could be dropped from transport aircraft. Nevertheless, missile systems designed for chemical and nuclear weapons have characteristics that make an effort to control them worth considering.

163. Missile systems whose ranges extend substantially beyond the battlefield are not very cost-effective unless they have chemical or nuclear payloads. As was shown in the Iran-Iraq war, missiles with high-explosive warheads can cause numerous casualties and much destruction hundreds of miles behind front lines, but they cannot have decisive, war-terminating effects on cities, on industrial or transportation targets, or on rear-area military installations such as airfields or depots. The possession of such medium- or longer-range missiles thus appears to indicate either an intention either to exert psychological terror or to threaten to use them with chemical or nuclear warheads. The utility of not presenting a potential adversary with threats of this type would appear to argue for mutual, reciprocal limitations on the possession of such missile systems.

164. An additional reason for seeking limits on long-range missiles is their destabilizing character. They are uniquely appropriate for a "bolt out of the blue" first strike designed to disarm the enemy. Aircraft can have a similar role, but defenses and adequate warning are at least imaginable with regard to aircraft while quite unlikely concerning missiles. Finally there is the military and psychological factor that missiles are seen as "hair-trigger" weapons, while aircraft take more time to dispatch and can be recalled.

165. The foregoing argues for limits on missiles if limits can be devised. Unfortunately a number are already in the arsenals of States in the region, while short-range, battlefield missiles are well on the way to becoming a normal extension of conventional artillery in many armies. If the Middle East cannot be kept missile-free, is there still a possibility of meaningful limitations on missile systems? The answer can only be "Yes", provided the matter is approached with energy and a sense of urgency.

166. The first task must be to define measures that have a real possibility of gaining acceptance. Battlefield missiles would have to be left out of the picture and research and development probably cannot be constrained, at least at the outset. On the other hand, indigenous production, procurement from outside the region and deployment all would appear to be controllable if there is a general will to do so. As a starting-point for discussions, it would be desirable to consider a complete suspension by all States in the region of domestic production and of imports of missiles beyond a certain range.

167. Verification of a missile freeze should not be an insurmountable problem. The import or production of a few missiles might well escape detection, but a large-scale, militarily significant violation of agreed limits probably would not, and even a rather simple verification system would be likely to detect violations. Deployments would be even more readily observed than imports or production.

168. A missile freeze could be strengthened by suspending any further missile flight tests. A suspension or a missile flight-test ban probably could not be absolute. Several Governments have or plan to have space programs and much of the technology for space launches and military missiles overlaps, but a space program has no need for the large number of missiles that would be required to deliver meaningful quantities of chemical warheads or to prepare a disarming first strike with nuclear warheads. The need to provide for space launches is thus not an insuperable impediment to a missile-test ban. Any space program would, however, have to be conducted in an open, transparent manner, rather than in secrecy illuminated by periodic flashes in the night.

169. In addition to a missile freeze, it would be helpful if deployment constraints could be developed for aircraft capable of carrying chemical or nuclear bombs. An effective military use is greatly facilitated if there are specially configured aircraft on which crews are regularly trained. Declarations by States that they did not have any such equipment or personnel would therefore be reassuring.

170. The preceding discussion has suggested that there is a large inventory of measures, many of them developed through the Conference on Security and Co-operation in Europe, that could build confidence among all nations of the Middle East in the peaceful intentions of others. Transparency has been a recurring theme in this discussion. There is one measure that could make such a dramatic contribution to transparency that it seems desirable to single it out for special attention. It is the concept known as "Open Skies", which has recently been accepted in principle in Europe.

171. The different circumstances in the Middle East would require certain changes, but the basic concept seems fundamentally transferable. As in Europe, each State willing to participate in opening its skies would declare its willingness to be over-flown and photographed by reconnaissance aircraft on a schedule and on flight paths agreed between that Government and the organization established to carry out the photography. All of the territory of a State should be open to over-flight if it were to participate, since closed areas would negate the effectiveness of the enterprise.

172. The most immediate contribution that Open Skies could make at an early stage would be to dispel false alarms that could trigger unintended hostilities. It could also give the international community added warning time for diplomatic endeavors if some attack actually seems to be contemplated. If a freeze on nuclear and chemical-capable missiles can be developed, then its verification by Open Skies would in itself be well worth the effort involved.

173. It should be noted that an embryo form of Open Skies is being conducted by the United Nations along the Iran-Iraq border. Its experience should be taken into account in any efforts to establish a larger enterprise.

174. As Governments come to understand the ways in which military transparency can enhance their security and open their skies to outsiders, it will be appropriate to ask from them a further general commitment: to facilitate the work of any fact-finding mission that the Secretary-General might send to investigate a military problem. The Security Council should also consider a generalized endorsement of the authority of the Secretary-General to conduct such military fact-finding, thus sparing itself the possible need for a contentious debate and sparing its permanent members the problem of whether to veto a proposed mission or to withhold a veto with the possible implication that they endorse an allegation that they in fact do not support. The permanent members could also consider stating formally that they intend to consider all suggestions for such fact-finding by the Secretary-General to be proposals of a procedural character, not subject to the veto. They would thus make clear in advance that they would not attempt to prevent any fact-finding mission, even when they felt that the allegation being investigated was without merit.

Notes

1/ The relevant part of the article reads:

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

2/ GC (XXVIII)/720 of 30 August 1984.

3/ During the Iran-Iraq conflict, Iraq attacked the sites where Iranian nuclear power plants were under construction.

4/ The United Nations Truce Supervision Organization (UNTSO), set up in 1948, was designed not only to see that the truce agreements were observed, but to warn if a renewal of hostilities seemed to be contemplated. The arrangements established after the wars of 1956, 1967 and

1973, as well as the arrangements in the Sinai following the Egyptian- Israeli Peace Treaty, all were in part designed to deal with fears of surprise attack.

5/ The United Nations definition of weapons of mass destruction is "atomic explosion weapons, radioactive material weapons, lethal chemical and biological weapons" (see the resolution contained in document S/C.3/30, 1948). For the purpose of the Middle East where some States are geographically small, any weapon or weapon system that can destroy indiscriminately a large part of the civilian population of a State would be perceived as a weapon of mass destruction by such a State.

6/ They are the following States: Bahrain, Iran (Islamic Republic of), Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Qatar, Saudi Arabia, Tunisia and Yemen.

CHAPTER V

CONCLUSIONS

175. The present study of the path to a nuclear-weapon-free zone for the Middle East has been made in a spirit of "realistic optimism". There clearly is no instant solution to the problem. There also is no doubt that the goal can be reached; it is not an idle dream. Intensive and sustained efforts can overcome the most serious difficulties, provided that these efforts attract the participation and support of the States of the region and of the major outside Powers. In the end, the co-operation of the international community as a whole will be essential. This consideration alone points to a central role for the United Nations.

176. The effort required will be great, but so will the benefits of success. The nuclear threat can be effectively and permanently eliminated only as a pattern of sound regional security relationships is developed based on unequivocal, unambiguous, legally binding arrangements amongst which must be an equal commitment by all States of the nuclear-weapon- free zone in the Middle East to relinquish the nuclear-weapon option. That pattern will have to be radically different from the dangerous and unstable relationships that exist today, with sophisticated weapons proliferating, including weapons of mass destruction and their means of delivery, and where political tensions remain unresolved.

177. Chapter IV of the present study lists a number of measures to build mutual confidence and prepare the way for the establishment of a nuclear-weapon-free zone. They are not arranged in order of priority or importance; indeed some could also be elements in a final agreement setting up the zone. (These latter are summarized in the annex.) Some of these measures can be implemented unilaterally by States of the region or outside it. Others may require agreement among groups of States. When it will become possible to arrange a negotiating conference involving all the core States in the region, together with some outside States at some point, a major breakthrough in confidence-building will have occurred.

178. To get the process moving forward, various Governments can unilaterally or Jointly initiate action on the measures they consider most useful, even without waiting for all potential participants to join. This applies in particular to the principal outside States, who may have greater freedom of action than States in the region.

179. It is especially important that confidence-building measures be developed in the nuclear field, since they will demonstrate a conviction that the goal of a nuclear-weapon- free zone is really attainable and that it is truly preferred over the only imaginable alternative: a region with multiple nuclear Powers in which "peace" is maintained by the fear of mutual devastation.

180. The single measure immediately available for giving momentum to the process aimed at a zone is a regional understanding that there will be no test explosion of a nuclear device, nor any moves towards such a test. Israel, a non-party to the NPT, has said it will not be the first to introduce nuclear weapons into the region. It has not, however, stated clearly whether it considers that this commitment bars a nuclear test. Parties to the NPT are barred from actually conducting such a test, or from accumulating the unsafeguarded fissionable material required for a test. However, they are not barred from other actions that would be required in preparing for one. Clarifying these ambiguities would be a substantial first step on the road to a zone.

181. Adherence to the NPT by all States of the region - and notably by Israel - would be a most significant milestone. Pending such a measure, the acceptance by Israel of safeguards on the Dimona facilities would be an important move towards the establishment of a zone and could be realized well in advance of its adherence to the NPT.

182. The application of safeguards to Dimona will equate to the acceptance by Israel of an effective upper limit to whatever stock of plutonium it may have accumulated from the operations there, but will not necessarily entail the placing of safeguards on that stockpile.

183. NPT parties with relatively advanced nuclear programs, involving, for example, the construction of research or power reactors, can arrange those programs to minimize suspicions that they might also serve a military objective. The programs can avoid any use of weapon-grade fissionable material and they can invite inspection of any facilities that use significant quantities of nuclear material. Stocks of natural uranium, heavy water and tritium can be declared.

184. The final step to the establishment of a zone will be taken when all States of the area can credibly declare that they have no unsafeguarded fissionable material nor unsafeguarded facilities that could produce it. This situation would need a substantially expanded system of verification, which could be installed either as an extension of the present IAEA safeguards system or as a combination of safeguards and other verification arrangements of a multilateral or bilateral character.

185. There is one important measure that could be taken by the States of the region at any time during the process outlined above leading to the zone: that is the development of a categorical understanding that there will be no attacks on nuclear installations.

186. The area of security assurances is one in which the nuclear-weapon States can make major contributions, not only when the zone itself finally takes shape but even much earlier. It appears likely that the nuclear-weapon States will agree to "negative" assurances: commitments not to threaten or attack the States of the zone with nuclear weapons. The same applies to commitments not to station nuclear weapons anywhere in the zone.

187. The question of positive assurances - commitments to assist a nation that has been threatened or attacked - may be more complicated. Assurances going beyond Security Council resolution 255 (1968) are widely desired, but the possible content of such assurances is nowhere clearly defined. In discussing a nuclear-weapon-free zone, one thinks first of nuclear threats, but it seems doubtful that security assurances can or should be restricted to the nuclear dimension. No one wishes to appear to give a green light to aggression that threatens to use "only" conventional weapons. An active role for the permanent members of the Security Council in developing solutions to this broad and complex problem appears essential.

188. The role of the major outside Powers and others in encouraging the realization of a nuclear-weapon-free zone goes beyond the problem of security assurances. Unless they put their weight and their diplomatic skills unreservedly to the task, it is not likely that it will be accomplished. A balanced and comprehensive plan for their action is required.

189. The leading industrial States must also continue and even expand their activities designed to discourage any proliferation of weapons of mass destruction, especially nuclear weapons. These activities should, moreover, be extended to enlist the co-operation of Middle Eastern States, perhaps through the Mubarak Plan. The struggle against proliferation is in the interest of all, but the industrial countries should take whatever measures are necessary to ensure that this effort does not prevent any country from developing nuclear energy for peaceful purposes.

190. There are a number of other confidence-building measures that may be appropriate to Middle Eastern circumstances. Such measures, including a number that have been discussed but not yet adopted in Europe, offer an extensive a la carte menu from which selections can be made. These include limitations on forces and deployments, notifications of maneuvers, and so on.

191. Still other measures have particular significance for the Middle East, such as adherence by all States in the area to the Biological Weapons Convention, as well as the chemical weapons convention as soon as its negotiation is completed in the Conference on Disarmament. A freeze on missiles (beyond a certain range) should be pursued as a matter of high urgency. Furthermore, the Security Council should examine measures to enhance the effectiveness of its efforts to intercept the development of dangerous situations at the earliest possible stage.

192. The presence of nuclear weapons throughout the Middle East is in no sense inevitable. They do not result from uncontrollable natural processes. They do not emerge unbidden, like some poisonous fungus, from dark caves deep in the earth. They were invented by human beings and, even though humans cannot "uninvent" them, they can freely decide not to make them. But this decision not to make them will have to be affirmed and reaffirmed again and again by the Governments and peoples of the region. A nuclear-weapon-free zone can be the effective framework within which that decision is formulated, carried out, and sustained.

ANNEX

Elements of a possible agreement on a nuclear-weapon-free zone in the Middle East

1. The mandate of the present study does not extend to the modalities of establishing a nuclear-weapon-free zone in the Middle East. Such a mandate would involve the consideration of the ways in which its terms would be worked out as well as the precise substance of those terms. It is clear, however, that the problems to be solved are so complex that the relevant proceedings will need to involve protracted efforts on the part of all concerned.

2. Even though the precise terms are not defined here, the study does reflect a general conception of the substance of a nuclear-weapon-free zone arrangement in the area of the Middle East. The following comments are offered on the elements of a possible zone, with all appropriate reservations regarding the need for the ultimate document to take full account of developments that will occur but cannot be foreseen.

3. The principal elements of a zonal arrangement will be its geographic extent, the list of its basic prohibitions, the verification of compliance with those prohibitions, and the commitments towards the zone to be made by States outside the region. Secondary elements include the duration of the relevant arrangement, provisions regarding adjacent areas, including sea areas, relationships to other similar zones, relationships to other international agreements and various technical clauses such as ratification and withdrawal provisions.

Geographic extent

4. The desirability of bringing the zone into effect for a core area without waiting for all possible participants to ratify will require a rather complex legal structure to be specified in the final, technical clauses of the relevant agreement. The provisions of the Vienna Convention on the Law of Treaties may be particularly useful in this connection. That Convention makes clear that the signature by a State of an agreement carries with it a legally binding commitment not to act in a manner that would undermine the basic objectives of the agreement. It may therefore be possible to obtain the necessary broad political and legal endorsement of the zone well before all potential parties have ratified a zone treaty.

Basic prohibitions

5. The most basic is clearly the ban on any form of possession of a nuclear weapon by some States, whether through indigenous development or acquisition from outside or any combination of these. Decisions will be needed on whether this ban will or will not extend to particular installations or equipment aimed at either the development or the delivery of a weapon. In addition, stationing of nuclear weapons on the national territory of any State party or any other form of what might be called "proxy" or indirect acquisition of control over a weapon must be prohibited.

Verification

6. It is assumed that much of the verification burden could be carried by IAEA, along the lines of its current safeguards operations, but that this might not be enough for all foreseeable situations. Procedures expanding and reinforcing present safeguards may be needed and it may be necessary to have staff dedicated to compliance problems that could arise regarding the zone.

Role of outside Powers

7. A zone can only be realized if outside States are actively promoting it and commit themselves to its continued effectiveness, once it is in force. In the two existing zones, this commitment has been formulated in protocols whose ratification by the five nuclear-weapon States has been sought. A more complex structure will be required for the Middle East, including the formal involvement of the neighboring States. But the most important role for outside Powers will be a commitment to respect the zone and especially to remedy any breach or threat of breach of its terms. Some of the commitments of the wider international community towards the zone will presumably be formalized in Security Council or General Assembly resolutions.

Duration and withdrawal

8. Experience with arms limitation treaties that were foreseen as having an extended but limited life expectancy (e.g. 25 years for the NPT), suggests that an unlimited duration is highly desirable. There will no doubt have to be a provision for withdrawal, but withdrawal should be made as difficult as possible. The delay between notification of intent and the effective date of withdrawal should be as extended as can be justified.

Relationship to other international agreements

9. From a legal viewpoint, it will presumably be desirable to have the zone in the Middle East free-standing, that is, not dependent on the continued viability of any other agreement. It will, however, be appropriate to consider "preambular" endorsements of such treaties as the NPT and there will certainly be some defined relationship to IAEA and its safeguards system. Whether there should also be a relationship to any conventional arms limitations, to nuclear-test-ban agreements, to a chemical weapons ban and its verification structure, or to other possible nuclear-weapon-free zones, or to a possible regional missile control arrangement cannot at this point be foreseen.

Technical clauses

10. There will no doubt be a political requirement on the part of many States for at least a particular minimum group of adherents (perhaps a "core group") to participate in the agreement as it is brought into force, and this requirement can be expected to find reflection in the technical arrangements for signature, ratification and the moment when the agreement becomes binding on its initial parties. There will presumably be arrangements for later accessions and for possible amendments. It may be desirable to attempt to prohibit reservations during the ratification process. It should be noted, however, that such an attempt in the Treaty of Tlatelolco was effective only on the parties present at the organizing conference, not on the outside States who were not represented there.
