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REVIEW OF THE IMPLEMENTATION OF THE RECOMMENDATIONS AND DECISIONS
ADOPTED BY THE GENERAL ASSEMBLY AT ITS TENTH SPECIAL SESSION

Study on deterrence

Report of the Secretary-General

1. By its decision 39/423 of 17 December 1984, the General Assembly requested the Secretary-General to prepare a study under the title: "Deterrence: its implications for disarmament and the arms race, negotiated arms reductions and international security and other related matters". That decision was based on the recommendation of the Advisory Board on Disarmament Studies, in paragraph 6 of the report of the Secretary-General (A/39/549). The General Assembly requested the Secretary-General to submit the final report to it at its forty-first session.
2. Pursuant to that decision, the Secretary-General has the honour to transmit herewith to the members of the General Assembly the study on deterrence.

* A/41/150.

ANNEX

Study on deterrence

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FOREWORD BY THE SECRETARY-GENERAL

1. By its decision 39/423 of 17 December 1984, the General Assembly, on the recommendation of the First Committee, requested the Secretary-General to prepare a study under the title: "Deterrence: its implications for disarmament and the arms race, negotiated arms reductions and international security and other related matters". That decision was based on the recommendation of the Advisory Board on Disarmament Studies in paragraph 6 of the report of the Secretary-General (A/39/549). The Assembly requested the Secretary-General to submit the final report to it at its forty-first session. By the same decision, the General Assembly also requested those Member States which wished to submit their views on the subject to communicate them to the Secretary-General not later than 1 April 1985.
2. As recommended by the Advisory Board, the Secretary-General's mandate provided that the study should be conducted on an in-depth objective basis, that all schools of thought and points of view should be explored and reflected by their respective advocates and that it should, therefore, give full expression to differing views and their supporting arguments without attempting to arrive at joint conclusions and recommendations. The General Assembly by its decision also recommended that the study should be carried out by a group of governmental experts, which would be kept as small as practicable consonant with the requirements of geographical and political balance, and that the ratio of representation should be similar to that applied in the Conference on Disarmament.
3. In pursuance of the request by the General Assembly, a group of eight governmental experts was appointed to carry out the study. The Group of Governmental Experts held three sessions between April 1985 and March 1986.
4. The study benefited from the views submitted by a number of States in reply to the request of the Secretary-General on this matter,
5. The Secretary-General wishes to thank the experts for their report which is submitted herewith to the General Assembly for consideration at its forty-first session. It should be noted that the observations and recommendations contained in the report are those of the experts. In this connection, the Secretary-General wishes to point out that, in the complex field of disarmament matters, in many instances he is not in a position to pass judgement on all aspects of the work accomplished by the experts.

LETTER OF TRANSMITTAL

30 April 1984

Sir,

I have the honour to submit herewith the report of the Group of Governmental Experts to Carry Out a Study on Deterrence: its implications for disarmament and the arms race, negotiated arms reductions and international security and other related matters, which was appointed by you in pursuance of General Assembly decision 39/423 of 17 December 1984 and as recommended by the Advisory Board on Disarmament Studies in paragraphs 6 and 7 of the report of the Secretary-General (A/39/549) of 4 October 1984.

The governmental experts appointed in accordance with the General Assembly decision were the following:

Mr. Julio César Carriales
Ambassador
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Buenos Aires, Argentina

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Director
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New Delhi, India

His Excellency
Javier Pérez de Cuéllar
Secretary-General of the United Nations
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Mr. Ulf Svensson*
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Stockholm, Sweden

Mr. Henning Wegener
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Head of the Delegation of the Federal Republic
of Germany to the Conference on Disarmament
Geneva, Switzerland

Mr. Vitaly V. Zhurkin
Professor
Deputy Director
Institute of United States and Canadian Studies
Academy of Sciences of the Union of Soviet
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Moscow, Union of Soviet Socialist Republics

The report was prepared between April 1985 and March 1986 during which period the Group held three sessions: the first from 29 April to 3 May 1985, the second from 7 to 18 October 1985, and the third from 10 to 21 March 1986. The first and third sessions were held in New York and the second session at Geneva.

The members of the Group of Governmental Experts wish to express their gratitude for the assistance which they received from members of the Secretariat of the United Nations. They wish, in particular, to thank Mr. Jan Martenson, Under-Secretary-General for Disarmament Affairs, and Mr. Timour Dmitrichev, who served as Secretary of the Group.

In accordance with the recommendations of the Advisory Board on Disarmament Studies, the study has been designed in such a way as to give full expression to the differing views and supporting arguments of the respective advocates without attempting to arrive at joint conclusions and recommendations, thus permitting the reader to draw his or her own conclusions on the value of the arguments presented. Following these requirements, the experts decided to prepare individual presentations, or, in some cases, joint contributions, which they submitted to the second and third sessions and which were the subject of in-depth discussion in the Group, whose members analysed, commented, or, in some cases, proposed alternatives to the views presented by different authors in their papers. This part of their work is incorporated in the three papers submitted by the experts and constitutes part two of the report. In the light of the discussions and analysis, the

* For personal reasons Mr. Ulf Svensson could not continue in the work of the Group before the beginning of the third session and did not submit a written paper. The Group of Experts would like to acknowledge with appreciation the contribution of Mr. Svensson during the Group's first two sessions.

individual contributions were revised and resubmitted and they are to be found in part one of the report. Part three constitutes a compilation of the respective points of view of the experts expressed in their own words. The members of the Group felt that this arrangement was the most efficient way to accomplish the task that had been entrusted to them.

It is with satisfaction that I am able to submit to you, on behalf of all the members of the Group, its report.

Please accept, Sir, the assurances of my highest consideration.

(Signed) K. SUBRAHMANYAM
Chairman of the Group of Governmental
Experts to Carry Out a Study on
Deterrence: its implications for
disarmament and the arms race,
negotiated arms reductions and
international security and other
related matters

INTRODUCTION

1. The present study has been prepared pursuant to General Assembly decision 39/423 of 17 December 1984 in which the Assembly requested the Secretary-General to prepare a study under the title: "Deterrence: its implications for disarmament and the arms race, negotiated arms reductions and international security and other related matters". That decision was based on the recommendation by the Advisory Board on Disarmament Studies in paragraphs 6 and 7 of the report Of the Secretary-General (A/39/549). The Assembly requested the Secretary-General to submit the final report to it at its forty-first session. As recommended by *the* Advisory board, the Secretary-General's mandate provided that the study should be conducted on an in-depth objective basis, that all schools of thought and points Of view should be explored and reflected by their respective advocates and that it should, therefore, give full expression to differing views and their supporting arguments without attempting to arrive at joint conclusions and recommendations.
2. The General Assembly by its decision also recommended that the study should be carried out by a group of governmental experts, which would be kept as small as practicable consonant with the requirements of geographical and political balance, and that the ratio of representation should be similar to that applied in the Conference on Disarmament.
3. The present study is the first of its kind by the United Nations to investigate in depth various schools of thought and points of view on the concept of deterrence. It is with this aim in mind that the Group has tried to give full expression to differing views and their supporting arguments without attempting to formulate joint conclusions and recommendations.
4. Following this general approach, the Group established a general framework for this study which includes individual and, in some cases, joint contributions reflecting the various analyses and opinions on the theme. These contributions are to be found in part one of the report. Part two presents a brief summary of the different arguments and counter-arguments on the individual papers as contained in part one. Part three contains a compilation of the respective points of view of the experts expressed in their own words.

ABBREVIATIONS

ABM	anti-ballistic missile
ASAT	anti-satellite
ATBM	anti-tactical ballistic missile
C3	command, control and communications
C3I	command, control, communications and intelligence
ICBM	intercontinental ballistic missile
INF	intermediate-range nuclear force
MIRV	multiple independently targeted re-entry vehicle
NATO	North Atlantic Treaty Organization
SALT	Strategic Arms Limitation Talks
SDI	Strategic Defense Initiative
SLBM	submarine-launched ballistic missile
SRAM	short-range anti-missile
START	Strategic Arms Reduction Talks

Part One

INDIVIDUAL CONTRIBUTIONS BY THE EXPERTS

CHAPTER I

PAPER BY MR. J. CARASALES

Introduction

1. This paper is not intended to provide a thorough analysis of the concept of deterrence and its implications. There already exist a great number of studies and other works on the subject.
2. My object is simply to offer a point of view and an idea of deterrence, particularly nuclear deterrence, as conceived by a national of a so-called third-world country who comes from a region far away from the centres of power and the probable settings of a large-scale conflict.
3. Deterrence is closely related by definition to the possibility of conflict. As such, it has existed in one form or another ever since human societies first clashed with one another. In that context, it is logical and reasonable for a State to seek to deter a potential adversary from attacking it by developing a military capacity that would make the costs of such an attack too high in comparison with any possible advantages.
4. That basic policy has always existed and could possibly continue to exist as long as human nature *remains* the same. This does not mean, however, that it will not present problems if carried beyond certain limits, to the point where it becomes unacceptable to the rest of mankind.

Arguments concerning deterrence

5. As far as the possible adversaries are concerned, it is clear that excessive development of a State's military capacity vis-à-vis that of its rival, the achievement of a clear superiority by *one* over the other, far from contributing to the maintenance of peace will be a destabilizing factor that will endanger it and inevitably fuel an arms race.
6. But apart from potential enemies, there are a great many countries that would not be involved in the potential conflict and are even geographically remote from the area of possible hostilities. Such States have every right to see that their security is not eroded as the result of a misuse of deterrence and that they are not forced to directly suffer the consequences of such use.
7. One element has added a new dimension to the traditional concept of deterrence: the emergence of nuclear weapons. The criteria of reasonableness and proportionality must always prevail in deterrence. The response to a possible attack must correspond to the nature of that attack; it must be adequate but not excessive, within broad limits, of course

8. But these criteria of reasonableness and proportionality cease to be relevant when the threat of retaliation implies the first use of nuclear weapons. This situation gives rise to a number of extremely serious problems pertaining to the essence of the doctrine of nuclear deterrence.

9. The doctrine of nuclear deterrence, as attested, involves the possibility of using nuclear weapons to retaliate against an attack carried out with non-nuclear means. The victim of "aggression" reserves the right to decide what response to make to an act of "aggression", including, specifically, the use of nuclear weapons. In other words, the possibility of a nuclear war becomes a genuine and concrete prospect, officially proclaimed and affirmed, as decided by the wishes of a small number of persons.

10. It is not surprising that this situation has been a cause of overwhelming concern to the vast majority of the members of the international community as well as within those countries whose Governments espouse this doctrine. Nor is it surprising that reactions have on the whole been very negative.

11. The third world's point of view can be easily understood. It is a fact that a nuclear conflict will never be limited or localized. And it is also a fact that the consequences of a nuclear war will be felt in all regions of the world without exception.

12. As long as nuclear weapons exist, the possibility of a conflict involving their use will permanently threaten the security and even the survival of the third-world countries, none of which possesses such weapons. This in itself is unacceptable and has given rise to the most disparate movements, all of which have a common objective: the elimination of nuclear weapons from the face of the Earth.

13. What makes the doctrine of nuclear deterrence unique and serious is that it posits the first use of nuclear weapons as a fundamental feature of the official policy of a group of States. That means that the unleashing of a nuclear war would no longer be the result of an indefensible and unpredictable decision by an irrational Government and would become a deliberate and conscious act, defended and accepted by those who chose it as a legitimate means of self-defence. In other words, recourse to nuclear weapons would not then be an act condemnable per se, but a justified and valid option in certain circumstances.

14. Incidentally, the argument that Article 51 of the Charter of the United Nations authorizes the doctrine of nuclear deterrence cannot be accepted. In the first place, it is a basic fact that the Charter of the United Nations was signed before the existence of nuclear weapons and their disastrous destructive capacity were known. Only a biased interpretation, then, can support the notion that first use of nuclear weapons is upheld by the terms of Article 51 of the Charter.

15. The criterion of proportionality, however, has always been an essential component of the concept of self-defence. Aggression with conventional weapons, whatever the scope, could never have the enormous consequences wrought by nuclear weapons and, therefore, retaliation with such weapons of mass destruction would not be proportional. It could never be reasonably argued that a non-nuclear attack -

the nature of which would, furthermore, be evaluated by a group of persons under extreme pressure - would justify the use of nuclear weapons. Not only would the criteria of reasonableness and proportionality be absent, but that alleged self-defence would also constitute an aggression against third countries that have nothing to do with the conflict.

16. The feeling of insecurity among the third-world countries is becoming unbearable. They already have to live in a world which contains nuclear weapons which port a permanent danger. But this is compounded, given the prevalence of the doctrine of nuclear deterrence, by a far greater danger, in that even incidents of a doubtful nature could be interpreted as an attack and set off a chain reaction, whose course would be unknown - and possibly random - and which could result in the outbreak of a nuclear war. There can be no doubt that the possibility of an outbreak of nuclear conflict, which is inevitable as long as the arsenals of some Powers contain such weapons, is considerably heightened by the existence of a doctrine that paves the way for and advocates the first use of such weapons. The situation is not changed by the pretence of a system of controls and safeguards, which moreover cannot be guaranteed to work really effectively.

17. In this context, it has been argued that critics of the doctrine of nuclear deterrence stem to place the aggressor and the victim of aggression on the same moral plane, which would be manifestly unfair. This is not true. No such assimilation exists. What may be questioned in this Specific Issue is over-reaction, quite apart from the international condemnation which the actions would deserve and the assistance which should be given to the victim of the attack. Moreover, it should not be forgotten that experience has shown that instances in which the existence of an unquestionable act of aggression can be clearly determined are rare; the definition of aggression in the situation under consideration is determined not by an international organ or tribunal, but by one of the parties to the conflict. The functioning of nuclear deterrence thus depends on elements that are often imponderable or controversial and could not, therefore, be used to justify the enormous effects of nuclear weapons.

18. Various arguments are put forward in favour of nuclear deterrence. The most widespread of these maintains that it is thanks to deterrence that the world has lived in peace for the past 40 years.

19. It should be pointed out here that this is not entirely true. While there have been no wars in Europe, the third world has been the scene of numerous armed conflicts.

20. In any case, it can be admitted that no wholesale conflagration has taken place since the Second World War. What cannot be accepted as true is that this is due to the existence of nuclear weapons and the deterrent effect of a doctrine that threatens they will be used. The most that can be accepted as true is that we are dealing with a hypothesis whose accuracy cannot be proved. There are many political and strategic causes which may have had an effect - and a decisive one - on the maintenance of this relative peace. Moreover, throughout history there have been long periods during which the world has experienced no widespread conflicts.

21. It is dangerous to accept as true those statements which establish cause-and-effect relationships between elements that may or may not be interrelated. This applies in the case of statements that the circle of nuclear-weapon States has not widened owing to the adoption of the Treaty on the Non-Proliferation of Nuclear Weapons. 1/ It is a fact that there has been no such increase, but it is quite doubtful, to say the least, that this is owing to the existence of a treaty to which many countries possessing sufficient technical capacity to produce nuclear weapons have not acceded. It seems more appropriate to attribute this restraint to the sovereign free will of those States which have chosen not to embark on a nuclear military arms race.

22. The same consideration applies to the doctrine of nuclear deterrence. To suggest that this doctrine has had positive effects for international peace is, to say the least, unwise and risky. We have to live permanently under a reign of terror which has been raised to the rank of official policy by some nuclear-weapon States.

23. This situation has to be endured by third-world countries without the slightest guarantee that it will ensure the indefinite maintenance of international peace. It means leading a precarious existence under a perpetual threat of destruction, in the illuatory hope that this destruction will never take place. It is a hope which will persist until something happens to prove it false. And then it will be too late to complain of the fallacy of a deceptive doctrine devoid of any real foundation. There will be no one left to do so.

24. Not only is the risk too great, but to accept the reasoning that the threat of the use of nuclear weapons is the best - or, in any event, the most realistic - guarantee of peace leads to the conclusion that, if a State wishes to continue to be safe from possible attacks by a neighbour, the best means of achieving this is to acquire nuclear weapons. One cannot in all honesty maintain that what is good for some is not good for others, or that there are some countries which are serious and responsible and others which are not. The countries which have developed nuclear weapons cannot invoke any valid reason which grants them - and them alone - the right to possess and eventually to use those terrible instruments of mass destruction.

25. There is good reason to question the very foundation of the doctrine of nuclear deterrence. Does the threat of nuclear retaliation really "deter"? Do potential adversaries hold back because they fear a nuclear response?

26. A policy's credibility is one of its essential components. Everyone knows that the use of nuclear weapons will inexorably lead to the outbreak of an atomic war, and everyone knows that, in that event, the first country to use them and its people will not escape the catastrophic consequences of what they have unleashed. In other words, whoever starts a nuclear war is in fact committing suicide.

27. It is therefore legitimate to question the credibility of a policy whose authors, in addition to destroying their adversary, would simultaneously annihilate themselves. Will the rival really believe that they will resort to the use of nuclear weapons;?

28. In answer to this question it may be stated that it is enough to sow doubt in the mind of a possible aggressor, who would hardly be likely to run the risk of having nuclear weapons actually used against him. But does not this idea add another elusive and improbable element to a situation that is already unstable and remote from any reasonable margin of safety?

29. The third-world countries cannot passively allow their future to depend on such precarious and destabilizing factors as those I have just mentioned.

Impact of nuclear deterrence on the arms race and disarmament

30. There are additional factors which aggravate the instability of the situation. If a State is willing to use nuclear weapons first - as envisaged by the doctrine of nuclear deterrence - and it understandably wishes to avoid the consequences of that action, it must acquire a first-strike capacity, which eliminates from the outset any possibility of retaliation by the enemy, or at least reduces such a possibility to tolerable limits.

31. Deciding when a country has achieved first-strike capacity is certainly one of the most complex problems in the military field. This can never be known with any certainty and, moreover, no one has ever achieved that capacity, except the United States during the latter part of the 1940s.

32. But this fact does not imply that a State, in order to be able to survive the reaction caused by its first use of nuclear weapons and also to make the deterrent effect of its policy more impressive, will not inevitably have to augment its nuclear arsenal as much as possible and try to achieve a clear superiority over its presumed enemy.

33. This means acquiring more and more nuclear weapons, making them increasingly sophisticated and lethal and increasing their effectiveness and their destructive capacity. As this will have to be counteracted by its rival, for its own defence and also, paradoxically, to "deter" its adversary from resorting to first use of nuclear weapons, the result is the unleashing and escalation of an arms race. As has already been pointed out many times, this is a spiral which is fed by actions and reactions that are constantly interrelated and which, apart from its political, economic and strategic consequences, seriously affects international security.

34. At the same time, if a State or group of States bases its own security on a policy of nuclear deterrence, there is no doubt that anything which restricts or diminishes its capacity for effective action in this area and anything which means making its arsenal less of a deterrent will be viewed with the strongest reservations. It will therefore not be easy to negotiate and accept agreements for the limitation or reduction of weapons, and it will be even less easy to achieve actual disarmament.

35. Any negotiation in the field of arms control and disarmament is, by definition, extremely difficult and complex. The doctrine of nuclear deterrence introduces a factor here which substantially adds to these difficulties.

36. Most of mankind has been demanding the complete prohibition and elimination of nuclear weapons for a long time. Even the nuclear Powers have admitted that this is a desirable objective. It is obvious, however, that as long as a doctrine based on the possibility of using nuclear weapons prevails, it will never be possible to make any headway towards their abolition.

37. Whatever problems the doctrine of nuclear deterrence introduces into the field of disarmament, the basic element implicit in this doctrine lies in the sphere of international security.

Conclusions

38. Governments that invoke this doctrine argue that it is essential for their security. This position, in the opinion of many people, including this writer, is incorrect. The germ of self-destruction contained in the doctrine gives serious reason to doubt that it contributes to the security of the States that uphold it. In any case, it is based on subjective and unpredictable elements which, together with the possibility of a holocaust, which is inherent in it, create a reign of terror under which it is impossible to live in peace and tranquillity.

39. Although, as I have mentioned, the contribution of the doctrine of nuclear deterrence to the security of its sponsors is at least debatable, there is not the slightest doubt that it not only does not contribute to, but also directly endangers the security of third countries, including those of the third world.

40. Conflicts that are completely extraneous to them and occur thousands of miles away may result, in the corollary of the doctrine of nuclear deterrence becomes a reality, in the destruction of these very countries. In closed and distant circles to which they have not the slightest access, and entirely without their knowledge, the existence and the future of these countries and their people will be decided.

41. This state of affairs is totally unacceptable, unfair and even immoral.

42. It is true that the basic ingredient here is the emergence of nuclear weapons, which radically changed the factors that had previously characterized the politico-strategic situation. Many of the elements referred to in these pages derive in fact from the very existence of nuclear weapons and would be present, at least partially, even if there were no doctrine of nuclear deterrence.

43. But it is a fact, in my view, that an already disturbing picture has been aggravated by the prevalence of a doctrine that accepts and advocates first use of nuclear weapons and officially accepts the launching of a nuclear war as a possible and legitimate action.

Alternatives

44. This having been said, one may even wonder if there are any viable alternatives to a policy involving the first use of nuclear weapons.

45. The first question that may come to mind is whether or not it is possible to limit the scope of future conflicts to purely conventional limits. The world lived until the middle of the twentieth century fighting its battles with conventional weapons. These weapons are certainly destructive - and abundantly destructive - of lives and property, but by no means do they approximate the lethal dimensions of nuclear weapons or extend their effects to the population³ of third countries. These remarks are certainly not intended to extol the virtues of conventional weapons and still less to favour their use or to portray such use as acceptable or lawful; the enormous differences of every kind which distinguish them from nuclear weapons cannot, however, be ignored.

46. The obvious conclusion is that an agreement should be reached on the prohibition of nuclear weapons and the destruction of existing ones.

47. It has been stated in this regard that there are no recorded cases in history of abolishing or not using weapons once they had been invented. Although this assertion could be further clarified, its value, in any case, is very relative, since in the past there were no weapons with the destructive capacity of nuclear weapons - weapons which, as has been pointed out - should be named differently, since the use of the word "weapon" to refer to such artefacts of mass destruction creates confusion.

48. The situation described above may mean that the experience of the past - assuming that our understanding of it is entirely correct - will not be repeated with nuclear weapons. Moreover, the leaders of the nuclear Powers have formally declared that they consider the abolition of nuclear weapons to be a desirable objective, and it may be assumed that they would not seriously state this as a goal if they did not feel it was possible.

49. All this does not mean that the elimination of nuclear weapons can be accomplished easily or over the short term. It is therefore necessary to consider other alternatives.

50. There is no denying that an indirect way of achieving the same objective would be the conclusion of an agreement on the complete prohibition of all nuclear-weapon tests. This would severely restrict the continued development and sophistication of nuclear weapons and would gradually reduce the reliability of existing weapons. In practice, the use of nuclear weapons in such circumstances would involve too great a risk.

51. Another alternative, and in my opinion a quite feasible one, would be to replace nuclear deterrence by conventional deterrence. Those who support the first use of nuclear weapons claim that it is the only defence against the adversary's superiority in conventional weapons and troop strength.

52. The logical conclusion is that, to avoid the possible use of nuclear weapons, either the supposedly weaker side should increase its capacity for conventional retaliation or the supposedly stronger side should decrease its capacity until a margin of comparability with the adversary is reached.

53. We all know that there is a conflict between the North Atlantic Treaty Organization (NATO) and the Warsaw Treaty Organization. In my opinion, the West has enough human, economic and technical resources to put up a credible and deterrent conventional defence against the East. This is not to disregard the fact that a decision to pursue this course would imply serious political, financial and social problems and that the eventual economic consequences would extend beyond the countries directly involved and would have certain repercussions on the world economy, including the third world.

54. At the same time, the fact that it is difficult does not mean that it is impossible. The prospect of a nuclear holocaust is such that, in my view, some sacrifices to avoid it or at least appreciably diminish the likelihood of its occurring would be fully justified.

55. It cannot be denied, however, that the size of the conventional forces of the Warsaw Treaty countries is perceived in many sectors as excessive and, consequently it would be possible to reduce them without thereby lowering the level of security of those member countries.

56. In this context, it should not be forgotten that both the United States of America and the Union of Soviet Socialist Republics, the leaders of the two blocs, are practically invulnerable from the point of view of conventional attack.

57. It is indisputable that the ideal solution for avoiding any armed conflict - and primarily a nuclear war - would be to have totally effective machinery for collective security. In that event, any dispute would be settled peacefully, and any outbreak of hostilities would be rapidly cut short. It is also indisputable that such a collective security system does not now exist, or at least does not offer sufficient guarantees, as can be seen from daily events. It is not realistic, moreover, to assume that it will be established in the near future.

58. Nor would it be realistic to anticipate the establishment of a defensive capacity of a kind that would ensure the invulnerability of whoever possessed it and would therefore make nuclear weapons obsolete. Existing data and studies do not support the feasibility of such a defensive system.

59. To sum up, the doctrine of nuclear deterrence should be abandoned, in the opinion of this writer, because of its intrinsically immoral nature and because of its negative effects on the security of the third world and the international community as a whole, including the countries which advocate it. The security of the latter countries should be sought, primarily, in the creation of a capacity for conventional deterrence and in the elimination of nuclear weapons from the arsenals of the great Powers, without prejudice to continuing efforts to find a reliable and satisfactory system of collective security.

CHAPTER I I

PAPER BY MR. A. FAKHR

Introduction

1. In recent years, the subject of deterrence has aroused growing controversy throughout the world. Soldiers, politicians, philosophers and analysts have written about deterrence, the growing scale of the nuclear arms race between the super-Powers and the global arms race in conventional arms and technology. This discussion, however, has largely reflected viewpoints of the United States of America, the Union of Soviet Socialist Republics, western Europe and Eastern Europe. One rarely finds writings describing the third-world view.
2. This presentation tries to fill some of this gap. Deterrence and the arms race between East and West - mainly between the two super-Powers - are of enormous concern to the third world. They have direct and indirect implications which affect the present politics of the third world and will help shape its future survival. The two super-Powers compete in four major fields: ideology, politics, economics, and military force. At the same time, this competition is limited by deterrence. All super-Power actions in terms of the nuclear arms race, the confrontation between the North Atlantic Treaty Organization (NATO) and the Warsaw Treaty Organization, and their competition for influence and power in the third world are shaped by the balance of deterrence as well as the strength of each super-Power.
3. The third world cannot stand aside from the competition between the super-Powers or the balance of deterrence. This competition affects every aspect of their global behaviour. It leads to constant competition in ideology, politics, economics, and military strength. At the same time, each bloc must constantly consider its ability to deter the other, and the extent to which it is deterred in turn.
4. The super-Powers and their European allies naturally think of the risk of nuclear conflict largely in terms of its impact on their own territories, populations and economic and political interests. Even if we ignore such risks as nuclear winter, however, the world is far too interdependent for such a point of view. A massive disruption of North-South trade and development assistance could kill millions in the third world before its economies, already more marginal than those of the industrialized countries, could adapt to such a radical shift in markets, aid and the flow of food. Development could virtually halt on a global scale while most populations would still increase on at least a short-term basis. Even under the most favourable projections, nuclear fall-out would kill millions prematurely and increase the long-term death rate on a global basis.
5. The risk of an all-out nuclear conflict is steadily increasing over time. While estimates of the nuclear strength of the super-Powers vary, virtually all sources agree that an incredible increase took place in the period from the early 1960s, the time of the Cuban missile crisis, to the mid-1960s, the point at which it is felt both sides reached parity.

6. The United States and the USSR had a total of only about 3,000 strategic nuclear weapons on all their active delivery systems in the early 1960s. They had about 7,000 on-line strategic nuclear weapons in 1970. They increased them to 12,000 in 1975, and have more than 20,000 today. Given current plans, the United States and the USSR are certain to build up to well over 25,000 weapons by the early 1990s.
7. While there are no reliable estimates of the numbers of nuclear weapons in the theatre forces of each super-Power bloc, it is clear the trends in that category have been equally grim. There were about 10,000 theatre nuclear delivery systems in the military forces of NATO and the Warsaw Treaty Organization in 1975. There are about 20,000 today.
8. The risks alone that this increase in the number of weapons implies make deterrence a vital concern for the third world. However, deterrence involves super-Power conflicts and rivalries that go far beyond the risk of global nuclear war. The relative balance of deterrence affects every level of their competition. It can lead to global or regional conflicts, with each super-Power attacking strategic targets in the third world that are vital to the opposing bloc. This includes every third-world oil exporter, every exporter of strategic minerals and every third-world nation with a vital waterway. It includes most third-world nations with military bases or facilities that are used by either bloc.
9. From a third-world perspective, deterrence also shapes the behaviour of the super-Powers in military aid, arms sales, military advisory efforts and the use of military proxies. It affects their willingness and ability to intervene in national and regional political crises, revolutions, border wars and broader regional conflicts. It affects the struggle for basing rights, for control over strategic resources and trade and for control of key lines of communication. It affects the risk of direct super-Power military intervention and of regional conflicts between the blocs. It affects the risk of a United States-Soviet or European conflict whose impact on trade and development could threaten the very existence of some third-world nations.
10. The stability of super-Power deterrence is thus critical to every third-world State at virtually every level of regional conflict. While only a global nuclear conflict would threaten the very existence of every third-world nation, the balance of deterrence extends to the point where almost casual tensions between the super-Powers or between the Eastern and Western blocs can destroy a generation of third-world development effort or political and social progress.
11. At the same time, deterrence between third-world nations affects the super-Powers. Studies by the United States Arms Control and Disarmament Agency reflect the grim pace of the arms race in the third world. The real value of military expenditures in the developing world is increasing by more than 50 per cent a decade. It now totals roughly \$180 billion a year. It averages about 6 per cent of the gross national product of the developing world and over 20 per cent of all government expenditures.

12. This arms race is fuelled by the more than \$30 billion spent annually on arms exports. This is three times the level of a decade ago in current dollars, and twice that level in constant dollars. It is about 6 per cent of all developing nations' imports.

13. These arms imports link regional and national conflicts and tensions in the third world to those between the super-Powers and the Eastern and Western blocs. Arms sales are both an objective in themselves and a powerful political tool. While the volume of such transfers varies yearly, it averages nearly \$10 billion for the USSR and \$8 billion for the United States. The NATO European Powers export another \$9 billion a year, and Eastern Europe exports about \$2 billion. About 80 per cent of these transfers are now in the form of cash sales or credit sales made directly at the expense of third-world living standards and development, and the rest are in the form of military aid obtained at the expense of economic aid.

14. Virtually every country in the third world has suffered from the fact that deterrence has not meant stability for either the super-Powers and their allies or for the developing third-world States. Instead deterrence has meant the linking of regional and super-Power competition and tensions. The result is a flood of killing mechanisms that is almost as threatening as the nuclear arms race.

15. The third world now suffers from the annual transfer of about 2,000 tanks, 4,000 other armoured vehicles, 4,000 artillery weapons, 100 combat ships, 700 supersonic aircraft, 1,000 other military aircraft, 4,000 surface-to-air missiles and 1,000 anti-aircraft guns per year to nations that all have one basic thing in common: the need to give priority to economic development and human welfare.

16. This presentation does not aim to set out a definitive view of collective third-world opinion regarding deterrence. It can only highlight some of the issues and risks involved. It should already be clear, however, that deterrence is a global issue. No one in the third world is unaffected, and the risk that deterrence will fail at any level of conflict in a global risk.

The concept of deterrence

17. The fact that deterrence is a global issue makes it critical that we understand what it really means, although "deterrence" is a word which is far harder to define than to use. We are living in a world of instant and universal communication. We use phrases and terms to compete with one another, indeed, as another form of deterrence. We exploit the way in which people perceive the world and act according to their perceptions. Words like "deterrence" are political tools and weapons.

18. In fact, politics has a tendency to produce handy and attractive terminologies designed to characterize some condition in international affairs or to enunciate some new strategic concept. Sometimes these terms reflect the reality of the moment. At other times, they have no significance beyond that of propaganda. In almost every case, however, they tend to lead to over-simplification and to serious errors in our assessments and judgements.

19. "Deterrence" is just such a term. It is widely used, sometimes to justify military action or arms purchases, sometimes to condemn an opponent and sometimes to stop thinking or debate about the risks inherent in military activities. It is obvious that deterrence has more than one meaning in the minds of those who use it or hear it. To some, the term "deterrence" is related only to nuclear warfare. To others, it covers the discussion of conventional arsenals. To still others, it includes actions in the economic and social spheres. To new generations in some regions, it may be related to religion and to the increasing impact of religion on political struggle.

20. In this presentation, I shall try to define deterrence in broad terms as: the steps taken to prevent opponents from using military strength to achieve political goals, to prevent them from initiating armed actions, and to inhibit escalation if combat occurs.

21. This interpretation leads us to some major consequences.

(a) Deterrence means viewing the world in terms of allies and opponents. This is nothing new. We have always tended to view the world in terms of regional and international opponents and we shall inevitably continue to do so. The real problem is that deterrence is increasingly used to justify a consistent military buildup and an emphasis on war-fighting in order to preserve national interests. It implies a peace-keeping motive for actions that increase the risk of nuclear war. Unfortunately, deterrence is rarely aimed at eliminating or reducing the size and potential use of conventional and nuclear weapons; rather, it seeks supremacy or a level of safety that no potential opponent could ignore.

(b) The primary aim of deterrence is to prevent current or potential opponents from initiating armed actions. At best, this means deterrence involves mistrust and the continuous, careful and negative interpretation of every opponent's political behaviour, diplomatic signals, economic movements, weapons purchases and military deployments. It means nations must support intensive overt and covert intelligence activities and buy sophisticated intelligence technology, with all the dangers of such activities and technologies. At worst, it means constant instability, tension and military buildup. Without arms control, each side must continue in interactive military buildup. Each side must constantly invent new military programmes and adopt new military doctrines, causing the other side(s) to react in turn and triggering a new cycle of military actions in spite of the financial and economic burden.

(c) Deterrence rests on many expectations, one of them being that the opponent should believe that the other side is going to use force. This means that deterrent capabilities should not be secret. Yet, in real life, a great deal of military information is secret. There is no stability, verification or inspection. This contradiction increases the probabilities of miscalculation, wrong assessment of the threat, crisis management and war. Coupled with the "arms race cycle" aspects of deterrence, it steadily increases the rate of military competition and the risk of war.

(d) If combat should occur, deterrence might or might not act to inhibit escalation. The current rhetoric of deterrence is almost always escalatory. Each side is led to try to win the game of deterrence against the other. Each tries to escalate to a level the other will not risk. Each tries to convince the other that it can win. Supposedly rational people constantly miscalculate. Only the most objective "players" and a clear and well-defined politico-military chain of command from the highest level to the field could prevent the possibilities of irrational actions and reactions.

Military strategy, international security and deterrence

22. The problem we all face - every Member of the United Nations - is to redefine deterrence so it can mean acceptance of a stable mix of military forces and steady reductions in the global arms race. We need a mix of deterrence and military strategy that will move towards peace and not towards global destruction. To meet this goal, deterrence and military strategy must meet the following tests:

(a) Military strength must support the national strategy of a given country. It should be compatible with its political, economic, psychological and ideological strategies - the other components of a given national strategy.

(b) Military strategy should secure national interests and attain the objectives of national policy by application of force or threat of force.

(c) Military strategy should be directed towards objectives and concepts that do not threaten other nations or trigger an endless arms race. The major concept here is deterrence, but deterrence should be supported by arms control and stability.

(d) From a military point of view, a military strategy based on deterrence has succeeded - to a certain extent - in securing the national objectives of the two Super-Powers and of NATO and the Warsaw Treaty Organization. By using conventional military force in some cases and by threatening its use in others, the two super-Powers have controlled tension in their relations with each other and have avoided a third world war. We have seen this work in the Berlin crisis (1948-1949), in the military conflict in Korea (1950), in Hungary (1956), in Czechoslovakia (1968) and in Afghanistan today. At the same time, it has not reduced any risks - there is a constant buildup in nuclear and conventional forces.

(e) Military strategy does *require* forces to execute and implement it. Here, however, deterrence has dangers as well as advantages. Deterrence should be a defensive concept. In practice, it is not. Worse, it lacks clear limits. The development of military technology under the umbrella of deterrence - theories of massive retaliation, first strike, second-strike counter-forces and mutual assured destruction - has converted deterrence from a concept of defence into a threat of mutual suicide. Everyone knows that to launch a nuclear attack no longer offers the possibility of physically defending or protecting one's own society, but no one has succeeded in limiting the growth of forces or competition. A valid mix of strategy and deterrence must do so.

(f) The trends in the nuclear balance show that deterrence is becoming a concept based on an increased spectrum of potential violence. The concept of nuclear deterrence has become more than a theory about how to counter threats. It has become a theory of the causes of war and escalation and concentrates not only on the capabilities but also the intentions of the other nuclear side. We need a concept of strategy that makes deterrence discourage all escalation, rather than lead one side to try to win.

(g) Most strategists talk about military nuclear deterrence by denial or punishment. Deterrence by denial means a country deters another Power from a first strike by convincing the opponent that no military gain could accrue by striking first. This is essentially a counter-force posture, and is achieved by deploying a disarming and damage-limiting capability. Deterrence by punishment is based on a nuclear capacity to survive a nuclear first strike and to inflict unacceptable damage on the opponent in a retaliatory second strike, while military advantages would accrue if one struck first, one is deterred from such action by the knowledge of the unacceptable damage one would suffer in a retaliatory blow. These views of deterrence, however, focus on managing rather than on avoiding nuclear exchanges. They are strategic theories for living with terror and surviving because of terror. They contradict every goal of the United Nations, every long-term hope of living together on this globe. They affect the attitude and behaviour of the politico-military planners. They encourage focusing on scenarios of a nuclear war, which would cause enormous casualties, widespread destruction and profound disruption and confusion. All such options, open to all nuclear parties, would be miserable alternatives, and all of the choices would have uncertain outcomes. Valid nuclear deterrence cannot try to make the uncertain certain. A valid strategy must seek the opposite path.

(h) Strategy must accept the danger that East-West nuclear conflict could become world-wide. That is why all nuclear scenarios include deployment in other parts of the world to defend one's interests, lines of communications and vital areas and materials. If an East-West nuclear conflict occurred - in Europe, for example - the rest of the world would suffer. A valid strategy must take into account the fact that the balance of power between the nuclear powers cannot be assessed on the basis of their capabilities in the European context. The strategy must allow for a world-wide balance of power. It must seek to avoid both regional and global escalation.

(i) From a third-world viewpoint, nuclear deterrence goes further. A large number of third-world countries live today with a third type of deterrence, nuclear deterrence wielded by ambiguous nuclear nations, and the result is very different from mutual deterrence. A nation is said to have ambiguous nuclear capabilities if it is impossible to predict under what circumstances it might be tempted to strike or take advantage of the fact that its opponent has no retaliatory force. A super-power facing an adversary with nuclear capabilities relies upon its ability to carry out a devastating retaliatory strike. When this ability does not exist, nuclear forces can play a critical role in political or military blackmail. Considering the huge, complex and diversified types of problems facing third-world countries, unilateral capability or nuclear blackmail will have serious and prolonged repercussions. Unilateral capability will lead to proliferation.

Problems will not be solved in a just way, one which is accepted by the people and which guarantees stability. If a country is faced with regional nuclear ambiguity, should it start to develop a nuclear capability to retaliate? States have a right to survive, but any form of nuclear proliferation is an invalid strategy or form of deterrence for the third world.

(j) Nuclear deterrence by denial, by punishment or even by ambiguity requires third-world countries to always be prepared for nuclear exchanges. It requires threatened States to create their own nuclear forces prepared to launch a major retaliatory strike, to strike with the objective of reducing the adversary's national power and preventing any recovery, to destroy the other side's forces or to carry out limited nuclear operations. One can imagine the impact of this continuous preparedness on the minds of policy-makers and decision-takers. One can also imagine the impact of the continuous need to develop a nuclear-force structure. One can imagine the military expenditures to meet the needs of this continuous preparedness. That is why third-world countries inevitably see nuclear deterrence as a path of endless and increasing risk.

(k) The perception of nuclear ambiguity has already led new candidates to try to join the second rank of nuclear Powers. These nation-candidates have spread all over the world: Asia, Latin America, Africa, the Middle East and Europe. If they succeed, and one country after another goes nuclear, this will mark the end of the United Nations attempts to prevent the spread of nuclear weapons.

(l) These nuclear candidates claim that they need nuclear power to deter their adversaries for strategic reasons. But a serious problem arises here from the fact that at least some of the third-world countries among these new nuclear Powers may not have the resources or the time to build second-strike deterrent forces. They may opt for a small first-strike nuclear force that would provide them with regional military superiority or a deterrent "hair trigger". This would destroy any hope of establishing regional military stability.

The implications of deterrence for disarmament

23. Disarmament means the reduction of armed forces and armament - nuclear and/or conventional - as a result of unilateral initiatives or international agreements.

24. When we now deal with deterrence and disarmament, we find them contradictory. Forces for deterrence must be maintained - not disarmed - at a level sufficient - but not reduced - to make it clear that even an all-out surprise attack would not cripple the nuclear capabilities to retaliate.

25. That is why all that we can see during the past 40 years is a series of unilateral decisions which has resulted mainly in an escalated arms buildup, nuclear and conventional. Under deterrence, to feel secure one must have a capability similar to that of one's opponent to create a stable balance. That is why decisions on one side to guarantee deterring forces have been reciprocated by the other side in an endless action-reaction process of deterrence. While the United States-Soviet SALT agreements did cap certain categories of weapons, they never resulted in a real reduction of forces, as true disarmament requires.

26. A recent study entitled Unilateral Nuclear Disarmament Measures, 2/ prepared by a group of governmenta? experts appointed by the Secretary-General of the United Nations, stated that;

(a) Bilateral negotiations between the Soviet Union and the United States on nuclear arms reduction remain frozen;

(b) There is strong need for confidence-building measures)

(c) There are some areas where unilateral actions could be of particular importance in promoting and complementing disarmament negotiations. These areas are:

(i) A nuclear-test ban)

(ii) Prevention of nuclear war;

(iii) Non-first use of nuclear weapons)

(iv) A nuclear freeze;

(v) Prevention of an arms race in outer space.

27. These are good words and good intentions. But these steps conflict with the current philosophy of deterrence. The previous analysis has shown that this philosophy is in conflict with both valid military strategy and the hope for arms control..

(a) Strategic nuclear power is deterred only by the use of opposing strategic nuclear power. The development and increase in nuclear capabilities is going to continue as long as the parties adopt a concept of deterrence based on competition.

(b) Deterrence depends on perceptions. If one actor's behaviour is to influence another, it must be perceived. With the political, psychological and military dimensions of deterrence, there is no guarantee that the output will be the perception hoped for. Today, inadequate perceptions and mistrust virtually destroy any hope of creating will ingness for confidence-building, verification or inspection.

(c) Deterrence is currently based on the notion that the opponent must constantly see that he is going to suffer too much, even totally unacceptable damage. Nuclear tests are one of the needed indicators for such "communication". Therefore, it is difficult to expect any success in achieving a comprehensive nuclear-test ban.

(d) The changing requirements for the continued success of deterrence include developing second-strike capabilities and counter-force abilities. They are obviously opposed to the requirements of disarmament or of the non-first use of nuclear weapons.

28. It is becoming clearer to everybody that, given the present state of military technology, the primary element in the strategic forces of both the super-Powers will be the ballistic-missile submarine. All other strategic systems are becoming secondary. This is simply because the primary attribute required of any deterrent force is the ability to survive a counter-force or pre-emptive attack, Ballistic-missile submarines are almost ideal for satisfying this requirement. As long as we live with the concept of deterrence, we should expect an increase in ballistic-missile submarine forces because their mobility and invisibility make them virtually immune to destruction in a surprise attack. Under any successful disarmament measure one can - theoretically - assume a freeze on intercontinental ballistic missiles (ICBMs) and strategic bombers, but not submarine-launched ballistic missiles (SLBMs). The most dangerous element here is that there is no reliable communication between these submarines and their command authorities; there is no guaranteed jam-proof system and there are no secured positive sealed orders. This simply means that any communication failure, any false electronic interference or any fog in the submarine's fighting zones might result in a local command for a nuclear first strike. This fact completely contradicts all the philosophy behind deterrence and, of course, makes it impossible to achieve.

29. The development of SLBMs comes with the existing state of military technology, But what is more important today is the fact that, as anticipated technology advances, the world is moving into a new dimension. During the last 40 years, the whole world was concerned about the use of nuclear weapons in three environments: land, sea and air. Today, with the new American Strategic Defense Initiative (SDI) , we are introducing a fourth environment³ space. As was stated before, preventing an arms race in outer space is of great importance in promoting and complementing disarmament negotiations.

30. The SDI concept suggests that the essential purpose of nuclear forces is to deter aggression. Therefore, SDI is directly related to the concept of deterrence and it is intended to deter and to face threats of military aggression. But SDI also suggests that the nature of the military threat has changed and will continue to change in very fundamental ways in the next decade. The assumption of the west has been that deterrence can be best assured when each side is able to maintain the forces and the ability necessary to threaten retaliation against any attack. So, if one side is going to outer space - militarily - the other side will be forced to do the same. Thus each side will attempt to guarantee its ability to maintain the forces needed for deterrence. It is quite clear that adding strategic defence to the concept of nuclear deterrence will drag the world into outer space. No talk about disarmament would be reasonable or acceptable if we did not have enough armament on land, in the sea and in the air - but we do have, and we are starting to arm outer space as well.

31. To conclude, it is obvious that disarmament - as a human dream and concept - cannot function successfully if we continue to adopt the present concept of nuclear deterrence, either today with the existing military technology or tomorrow with the anticipated advances in outer-space technology.

Deterrence and the arms race

32. This conclusion also tells us what will happen in terms of the impact of deterrence on the arms race. Every arms race involves a relationship between two or more nations that results in weapons proliferation, an increase in the lethality and range of weapon systems, and a quantitative and qualitative growth in the armed forces of those nations. It is a dynamic process of quantitative accumulation and/or qualitative improvement of various armaments and armed forces.

33. All concepts of deterrence from 1945 to the present have aimed at maximizing deterrence. This has led to a continuous action-reaction process and to a continuous arms race. Military expenditure, new arms, competition in military technology and the quantity and quality of arms have kept increasing to maximize deterrence.

34. Let us consider the shifts involved. We started with conventional warfare, moved to nuclear deterrence and are now going to outer space. In 1963 the launcher strength of the United States was: 424 ICBMs, 224 SLBMs and 630 bombers, and that of the Soviet Union: 90 ICBMs and 107 SLBMs. By 1983, the number had increased to the point where the United States had 1,045 ICBMs and 568 SLBMs and the Soviet Union had 1,398 ICBMs and 932 SLBMs. This is only one indication of how the arms race has been driven by our current view of deterrence.

35. Nuclear deterrence must ensure that the opponent cannot win a nuclear war, and more important, that it does not believe it could win a war. This assurance can be achieved only through continuous development of military technology, improved methods of conducting wars and increased killing capabilities. This is a key cause of the arms race. For example, developing warheads on multiple independently targetable re-entry vehicles (MIRVs) led the United States to increase its target-hitting capabilities from 656 before MIRVs to 5,128.

36. Without arms control, nuclear deterrence requires a constant increase in the number and variety of options available to cover a widening range of kinds of targets, while reducing the arms race requires limiting and decreasing the number and variety of options. Today we have ICBMs, SLBMs, hydrogen bombs, long-range strategic bombers and other nuclear means.

37. The more options nuclear deterrence requires, the more acute the arms race becomes. This has led to a continuous assessment of the nuclear balance between the two super-Powers. Such assessments drove the parties concerned into an arms race to achieve strategic parity, which now has no visible limit. The nuclear arms race turned into a race for deterrence, and nuclear weapons ceased being tools and instruments for defence and became ever more dangerous political tools. The surplus nuclear weapons are used today for political bargaining, for bargaining from a position of nuclear strength and for circumventing any limits imposed by peaceful negotiations.

Conclusion

38. We - Members of the United Nations - live in a world driven by mankind's addiction to wars and the development of weapons for war. One of the key objectives of the United Nations is to convince the world that our ultimate goal must be the total elimination of war or at least their limitation. Nuclear arms make this the key to our survival.

39. Each of the two super-Powers now has at least 20,000 on-line nuclear warheads which currently can be committed to a major strategic attack within minutes or hours. The casualties that could occur on each side could reach a high of 155 million to 165 million people (almost 74 per cent of the United States population and 62 per cent of the Soviet population). Millions more would die in the third world, perhaps more slowly but often more painfully. This would be a human catastrophe. Our obligation as Members of the United Nations is to eliminate this terrifying possibility.

40. If the present concept of deterrence continues, however, new regional nuclear Powers will come into being. The validity of the assumption that they would be restricted to limited-nuclear-war scenarios is highly questionable. Any use of nuclear weapons carries a high risk of retaliation and escalation, either by regional Powers that have nuclear capabilities or by their friends and allies among the great Powers.

41. Nuclear deterrence has not created any reliable method for stopping a nuclear war once it has started. Even the so-called limited use of nuclear weapons could lead to the ultimate catastrophe of a global nuclear war.

42. There are other risks involved. Conventional deterrence is also threatening. Nevertheless, it is clear that the time has come for the United Nations to establish a new entity to conduct and manage a nuclear dialogue between its Members. It is not enough to have entities like the Food and Agriculture Organization of the United Nations, the United Nations Environment Programme, the United Nations Educational, Scientific and Cultural Organization and the World Health Organization to deal with international issues such as food, the environment, culture and health. It is also essential to have some place for the nuclear dialogue. This dialogue is necessary to increase the global awareness of the nuclear capabilities of all sides, to help in reducing the role of nuclear weapons in international relations and to limit the risk of nuclear damage.

43. At worst, this nuclear dialogue could help in formulating mutual rules for any nuclear warfare. It could help nations avoid escalation, understand their mutual risks and fears and see that no valid strategy can be based on nuclear "bluff". In other words, this dialogue would help us, the Members of the United Nations, to know how to live with the nuclear age - not how to die with nuclear deterrence.

44. It is also clear that the time has come for the holders of nuclear weapons, especially the two super-Powers, to get rid of their surplus nuclear warheads. There is no purpose in having the capability to destroy the whole globe 50 times. One time is more than enough.

45. The surplus nuclear bombs and missiles could be converted into conventional weapons. We should get rid of the nuclear warheads and replace them with conventional warheads. This would take the world from nuclear deterrence to conventional deterrence, which would entail less damage in the event of war.

46. The Members of the United Nations that now hold nuclear weapons should bear the responsibility of their nuclear choice. The General Assembly should adopt a resolution outlawing any use of nuclear weapons outside the territory, territorial waters and territorial space of the holders of nuclear weapons. We, the non-nuclear Members of the United Nations, should not be at the mercy of the holders of nuclear weapons. The United Nations should also eliminate any ambiguity about the possession of nuclear arms. Either a country has such weapons or it does not. If it has pursued a nuclear option, the United Nations should treat it as a nuclear Power.

47. The Members of the United Nations should agree on a process of securing and increasing co-operation between all Members. This should be a main responsibility of the two super-Powers through a United Nations action plan.

48. All Members of the United Nations should pay less attention to developing military force and concentrate more on developing the political means to avert those situations that make war more likely. This could be achieved by creating channels and approaches to secure co-operative behaviour in defence policies. A feasible idea here would be for the United Nations to establish for all its Members an "arms information bank". It would serve as a data base for military research work and military development, especially in the nuclear field. It would break down secrecy and intimidation, highlight every new risk from nuclear deterrence and attack the ever-growing problem of conventional arms transfers.

49. Sophisticated command and control and intelligence systems should be used to keep nuclear weapons under the direct control of the political leadership in different countries. The control of mobile ICBMs, submarine-launched missiles and the tactical nuclear weapons that are in the hands of local commanders should be a high priority in any strategic arms limitation talks. The freezing of these three types of weapons must be a short-term goal.

50. Deterrence without arms control makes us view the world in black and white. Each side talks about defending itself while increasingly obtaining offensive capability. Both the super-Powers and third-world nations now have more arms than they need for defence. We cannot afford to fuel the arms race and delay disarmament. The peoples of the States Members of the United Nations need and want to know how to live, not how to die. If we are to live, deterrence must lead to significant reductions in arms. Today, deterrence is moving us towards death.

CHAPTER III

PAPER BY MR. M. MÜLLER

1. During the first half of the 1980s, the world has witnessed an aggravation of the international situation and a dangerous increase in the nuclear threat. Within the world-wide movement for peace which has developed during these years, the question has been raised: What are the causes of this dangerous deterioration? In the search for alternatives, the role of nuclear weapons and of strategies based on such weapons and, finally, the role of the military factor in general in the contemporary world are critically discussed. There is growing understanding that the concepts of security and the means to achieve it have to be re-evaluated. This leads to demands for a return to détente and for disarmament and for new concepts of security and peace.

2. In contrast to that, a number of States with huge military potentials at their disposal insist that there is no real alternative to their doctrine of nuclear deterrence which, from their point of view, is the "natural" security policy in the nuclear age. Since this question of strategy is of crucial importance for the further development of international relations and the stability of world peace, the analysis of nuclear deterrence and its role in the present and future world is an urgent necessity.

The essence of the doctrine of nuclear deterrence

3. Historically, deterrence has usually been one of the functions of armed forces. But nuclear deterrence and its elaboration into a general concept of political-military strategy has set military thinking and planning in an absolutely new direction. Military power and especially nuclear weapons are looked upon as main and decisive instruments of a foreign policy whose aim is to force upon other countries the basic social values of its advocates. The main Western Power developed this doctrine of nuclear deterrence shortly after dropping its nuclear bombs on Hiroshima and Nagasaki.

4. The resultant "nuclear diplomacy" was a demonstration of the claim to leadership in the world and of the intention to halt and reverse the process of social change in Europe, the collapse of the imperialist colonial system and the emergence of newly independent nations as an expression of the exercise of the right of peoples to self-determination. From the very beginning, the concept of nuclear deterrence was directed against all progressive developments the world over.

5. The doctrine of deterrence has been the official doctrine of security policy of the North Atlantic Treaty Organization (NATO) for nearly 40 years. But some other countries, including Israel and South Africa, also subscribe to that doctrine and have already acquired the technological capability to produce nuclear weapons.

6. During its history, this doctrine has passed through several stages. There have been different schools of thought behind the general doctrine, and there have been different interpretations of it. This is still true today and has to be taken into account. At the same time, the general aims and main characteristics of the

doctrine remain unchanged and have to be examined. The advocates of the doctrine of nuclear deterrence consider it to be indispensable to their security. This consideration is based on the assumption or assertion that their countries or their external interests are subject to threats that can be averted only by military wane, by military strength. In various declarations of NATO, it is alleged that the "danger from the East" or the "communist threat" lie behind NATO military **•** ⁷ forte. But there exists no proof of such assertions and they are usually merely based on a Western explanation of "communist ideology". This profound misinterpretation of the aims and intentions of the foreign policy of socialist States is used to increase the driving-power of nuclear deterrence. The protagonists of that doctrine declare that the present world with all its contradictions, confrontations and conflicts, especially the intransigent East-West conflict, makes strong military forces and nuclear weapons unavoidable. Another **•** argument says that the scientific-technological revolution must lead to new kinds of weapons, and that the "free" character of Western society makes it impossible to prevent that development, which is "natural" and could not be stopped without far-reaching and devastating economic consequences.

7. This general direction of thinking makes military power the central factor of foreign policy and regards a steady arms buildup as an unavoidable consequence of the present state of the world. Political measures to achieve security and peace have to play a secondary role at best. Even those followers of the doctrine of deterrence who look at the armed forces of NATO from a merely military defensive point of view accept this central role of military power.

8. Other countries and especially those which are officially called "enemies" and "potential aggressors" cannot but look upon this policy as a threat to their own security. Confronted with the political intentions of the advocates of deterrence, their dangerous nuclear arsenals and the possibility that they may use nuclear weapons first, others have no choice but to strengthen their own defence. This again is taken by the other side as confirmation of their doctrine and of the necessity of even more military power. This shows that the doctrine of nuclear deterrence unavoidably leads to new spirals in the nuclear arms race. The years since the first use of nuclear weapons against Hiroshima and Nagasaki have proved it.

9. Within the historical process, we have experienced periods of a certain military stability. For example, the emergence of a military equilibrium, notably in strategic terms, in the late 1960s and early 1970s restricted to a great extent the scope for threat and pressure in international affairs. This change caused realistically minded officials in the United States and other Western countries to draw sensible conclusions. They accepted the necessity of peaceful coexistence as the only alternative to nuclear destruction and were ready to have it embodied in the treaty of 1972 between the USSR and the United States. 3/ The process of international détente began with the conclusion of a number of arms limitation treaties. In Europe, the package of East-West treaties and the process initiated by the Conference on Security and Co-operation in Europe were the most graphic evidence. Under the theory of nuclear deterrence, concepts of "minimum" or "realistic" deterrence came up at that time, and an escape from the existing balance was thought to be impossible. The ensuing conclusion that world peace had

to be based on a "balance of terror" showed, however, the entanglement of those theoreticians in what remained a futile pattern of thinking. None the less, the 1970s proved that realism and détente are possible in a world of States with different social systems and in an environment of nuclear weapons. Détente, in turn, was thought to be instrumental in making progress along the path of nuclear disarmament. The Final Document of the Tenth Special Session of the General Assembly, 4/ held in 1978, states in paragraph 13: "Enduring international peace and security cannot be built on the accumulation of weaponry by military alliances nor be sustained by a precarious balance of deterrence or doctrines of strategic superiority."

10. Deplorably, influential quarters in the West completely ignored this important conclusion in the following year. With the beginning of the 1980s, concepts of maximum deterrence started to rule the policies of NATO again. The main intention of this concept - which was repeatedly announced in public during the first half of the 1980s - is to make military power a workable instrument to intimidate other countries and to achieve far-reaching global political aims. These selfish aims, which are both political and economic, are mostly directed against the legitimate interests of other people. It is no coincidence that the States that base their policies on the concept of nuclear deterrence are also the principal opponents of a new international economic order, a new international information order, the new law of the sea and other processes aiming at a democratization of international affairs. But at the same time, this policy is mainly directed against the socialist States.

11. To demonstrate that military power is developed in the interest of such aims, its use has to be made "credible". Since the existing military equilibrium prevents such a military posture, a full-fledged programme of arms buildup is under way to destroy parity and to achieve superiority. To show preparedness and readiness to use the military factor, a war-fighting capability is aspired to. This whole development in the doctrinal field in NATO within the past years, even if it is named "deterrence", has in fact little to do with deterrence in the real meaning of the word and has to be characterized by terms like "war-preparing" and "power policy". There is discussion within NATO on this strategy. Some member countries of the pact insist that the general thinking, laid down in the Harmel Report, 5/ should remain NATO strategy. Even if this is officially proclaimed in NATO documents, the general direction of the pact's strategy is now towards maximum deterrence.

12. Contrary to its allegedly defensive character, the essence of this nuclear deterrence strategy consists in imposing one's own will on other States through recourse to a policy of strength - the superior might or nuclear weaponry, increasingly combined with other modern means of destruction, and the threat of inflicting incalculable damage that would definitely jeopardize the survival of the adversary. The State thus threatened would be left with only one option to evade that risk: adoption of behaviour in foreign affairs; and changes in its domestic system that would suit those embracing the doctrine of nuclear deterrence.

13. The main proof that the essence of deterrence is imposition of one's own will is the intention of NATO to destroy and change the existing strategic parity, which

is a decisive element of stability in East-West relations and, therefore, a pillar of world peace. Lowering the level of this parity by measures of arms reduction and disarmament would make peace safer without any loss in stability. But the following developments in the field of strategic weaponry, which started during the last few years, will lead to a dramatic growth in the threat to mankind:

la) First, the decisive increase in weapon accuracy. This can lead to the possibility of destroying targets - especially hardened second-strike weapons - with one single missile;

(b) Secondly, the reduction and final elimination of pre-warning time. This limits more and more the time of reaction and makes the launching of second-strike weapons prior to the arrival of a first strike impossible;

(c) Thirdly, the development of strategic defence systems. These systems are vulnerable to destruction and unable to prevent a first strike, as alleged. But they can work within a first-strike concept, by destroying the limited number of second-strike weapons that a victim of a first strike may be able to launch. Some of these systems may also be used for offensive first-strike measures.

14. These three trends in the development of strategic weapons systems, if fully advanced, would basically change the existing stable strategic situation. Dangerous new weapons, new disparities and a new round in the arms race would commence. The main characteristic of these new weapon systems is that they promote a first-strike concept. They might even lead to first-strike strategies in the future, if the chances for a second strike seem to be reduced. They will also increase dependence on automatic systems of control and command, with all the fateful consequences of technical slip-ups.

15. It was the United States that initiated all these developments and insists on their continuation. The socialist States can only interpret this as an attempt to achieve superiority and, possibly, strategic first-strike capability. Even if it seems impossible to attain this aim, since countermeasures can be found, the insecurity of all States will grow, and mistrust, fear and adventurism will find new ground. Therefore, the socialist States demand preservation of strategic stability, observance of the common declaration that no side seeks to achieve superiority and a stop to the weapons developments mentioned above.

Deterrence and the European situation

16. The whole concept of nuclear deterrence, especially in its present version, which calls for maximum deterrence, and, above all, the insistence of NATO on the first-use option for nuclear weapons are based on the assertion that the socialist States have massive superiority in the field of conventional weapons in general and in the military situation in Europe in particular. This has to be deterred.

17. But in reality, the military situation in Europe is different.

(a) First, neither side has military superiority in Europe. Structural, geographic and other disparities do exist. But in general, in the number of

soldiers, in the main types of weaponry and in the pros and cons of the geographic and logistic situation, there is parity. Neither side has means enough to guarantee success in attack.

(b) Secondly, there is no threat of an attack against members of NATO in Europe.

(c) Thirdly, the first use of nuclear weapons would not lead to a halt in a conventional war, but would be bound to attract nuclear counter-strikes, so that the alleged offsetting effect of nuclear first use would fail to materialize, and such use would only lead to a process of nuclear escalation.

(d) Fourthly, there are ample offers for agreements on effective measures ~~for the reduction of armaments, on a mutually agreed basis and, as subsequent limitations and~~ reductions in weapons and armed forces in Europe on a basis of equality - all of which would provide for extensive security in Europe without the threat of first use and the doctrine of nuclear deterrence.

(e) Finally, the fact that the general situation in Europe has fundamentally changed since the Second World War has to be taken into account. That war exacted a toll of more than 50 million victims, and half of Europe was completely destroyed. In view of the destructive power of modern types of conventional weapons, the impossibility of limiting war, and the concentration of industrial plants, inter alia, a great number of nuclear power plants and other nuclear installations and chemical works, a war in Europe waged merely by means of conventional weapons, if actually possible, would result in the destruction of the continent. No political, economic or military aim could be achieved by such a war, and both sides would suffer unacceptable damage. The preparation of such a war is highly adventurous and can only be conceived of by those outside Europe hoping to limit it to the European continent.

The doctrine of nuclear deterrence and stable peace and security

18. To justify the doctrine of nuclear deterrence and to prove its defensive character, its supporters maintain that it has preserved peace, at least for them, for more than three decades. This assertion, however, does not stand up to serious examination.

(a) First, since the foundation of NATO, the member States of that alliance have been involved in nearly 100 wars and military operations that were not waged on their own territories but predominantly in Asia, Africa and Latin America. In all these cases, the NATO States involved have never been those which were attacked.

(b) Secondly, in all these years, no other States have threatened to attack any of the countries embracing the concept of deterrence. Their borders, their sovereignty and their domestic systems have never been questioned by other countries. Nobody ever attempted to lay embargoes on them, to put them under pressure to accept their conception of civil rights or to otherwise interfere in their internal affairs. The belief that nuclear deterrence works is, therefore, unproved, and it serves as justification for a steady arms buildup for quite different purposes.

(c) Thirdly, it is necessary to take into account the fact that it was and is the doctrine of nuclear deterrence that has brought about the present dangerous state of international confrontation, has created mistrust between States, has led to the foundation of opposing military coalitions and has poisoned the international atmosphere again and again.

(d) Fourthly, this doctrine, accompanied by the nuclear arms race, has produced grave economic and social consequences for many countries of the world and for the member States of NATO in particular. For many decades the unemployment rate in capitalist industrialized countries was below the high level it is at now, in a period of maximum armament. The arms race is hampering the common solution of urgent global problems: development, starvation and the destruction of the human environment. If resources comparable to those now being spent on armaments went into government programmes to address those problems, that trend could be reversed in a short space of time to the general benefit of mankind. At the same time, unemployment could be effectively checked.

19. The doctrine of nuclear deterrence gives precedence to national or bloc-related security over common, international, security. Egoistic objectives which disregard the justified security interests of other States come to the fore and are often claimed to be the essence of international security in general. The refusal to base policies on world realities and to seek to achieve national security mainly through joint efforts for the maintenance of peace, through peaceful coexistence and disarmament, burdens nations with ever-growing military budgets and is eroding the economic stability and social security of those which have subscribed to the policy of deterrence. As a consequence, international peace and security are also being jeopardized.

20. In the nuclear age, notions of maintaining security primarily through military strength are both antiquated and perilous. Even by imposing the heaviest restrictions, economic and especially technological and scientific - which merely tend to affect international trade - one would not be able to attain or maintain the lead in weapons technology required to make the threat or ultimate use of the military factor credible, notably in the case of nuclear weapons. The history of the nuclear-arms race over the past 40 years has shown that, where leads have been gained, they have tended to narrow rather than widen. Any hopes of using the nuclear-arms race to impose intolerable economic and social strains on the other side have also failed to materialize. It is extremely short-sighted to pin one's hopes on temporary factors in economic or techno-scientific developments. A sober assessment would rather require analyses from a historical perspective. What follows from such analysis is that gaps in the economic and scientific advance between the two systems are not widening but shrinking. Allowing for differences in the efficient use of existing potentials for defensive purposes, one can speak of a balance in opportunities across the board. This situation is not going to change fundamentally in the foreseeable future. Therefore, a further stockpiling of nuclear weapons is unlikely to bring the achievement of globally sought political or military objectives any nearer.

21. Summarizing the general characteristics of the doctrine of nuclear deterrence, one has to say that this policy - if it ever has created any benefit for its

advocates - has produced the nuclear-arms race, undermined peaceful and stable international relations and hardened East-West confrontation. In our day, this concept, with its inattention on the role of nuclear weapons and with far-reaching programmes in the strategic and conventional fields, becomes more and more dangerous. Security cannot be based on new and more numerous weapons. The times urgently demand new concepts of security.

Is the Strategic Defense Initiative an alternative to the dangers of nuclear deterrence?

22. The Strategic Defense Initiative (SDI) aims, in the words of its advocates, at enhancing deterrence and making it less dependent on nuclear weapons, and it may even create the opportunity to renounce them one day. Only SDI, it is said, may provide an alternative to deterrence in the future. But SDI can never produce a real alternative to nuclear deterrence.

(a) First, SDI is no defensive instrument. The invulnerability that the United States aspires to, if it can ever actually be achieved, is only conceivable within a Yifat-strike scenario. And while SDI is being prepared, all the elements of the strategic triad of the United States are under qualitative improvement too. This shows that there is no real intention to change strategic thinking from offensive to defensive; rather, the intention is to open new offensive strategic options through SDI.

(b) Secondly, the assertion that a buildup of mutual strategic defence systems would exclude the possibility of superiority of one side and would end in a more stable strategic situation is an absolute misinterpretation of the consequences of such a development. Even if several States had strategic offensive-defensive systems, the situation would change for the worse. Such a system would be nearly impossible to control, and they could not be ever if led. It seems that such systems would give an advantage to the side that used offensive weapons first. This would only lead to mistrust and a destabilized strategic situation.

(c) Thirdly, there is no possibility of perfect defence against nuclear weapons. Defence systems against such weapons will intensify the search for new nuclear systems to penetrate defence. Therefore, the nuclear-arms race will not end, but speed UP.

(d) Fourthly, the feigned willingness to give assistance to others to establish their own strategic defence systems is attended by ever more complete embargoes and restraints on modern technology. If there is any readiness to build a mutual system, then at what price?

(e) Fifthly, every step in the direction of strategic offensive-defensive systems will not only change the strategic East-West situation but the role of other States too. The dependence of countries without such systems - and this will be the overwhelming majority of States - on those which have them, will grow. The differences in security in the world will become even more extreme than they are now.

23. No matter from what angle SDI is investigated, the results show that it will be unable to solve any of the problems the world is confronted with. On the contrary, it will sharpen most of them. This initiative will never end nuclear deterrence; instead, it will prolong it indefinitely. It is also argued that this system can work in combination with deep cuts in strategic nuclear systems. But if it is possible to achieve deep cuts in the nuclear-weapon systems, why then do we need SDI? This question brings us to the central point of thinking behind SDI: the belief that the manifold problems of the present world are to be solved by new weapons, by new weapon systems based on new technological principles. A political shift in the relationship of States towards peaceful understanding and disarmament is not only called impossible but unnecessary, since in this view new technological weapon systems will create security despite sustained political and military confrontation with other countries, especially the socialist ones. That position, however, is in basic contradiction with the realities and possibilities of the nuclear age. This line of thought and action will only result in new steps of qualitative armament, while it must fail to achieve its end.

Socialism and nuclear deterrence

24. The German Democratic Republic and the other member States of the Warsaw Treaty Organization do not base their foreign policy and their security policies on concepts of nuclear deterrence.

25. The essence of their security policy lies in the prevention of war by developing peaceful and mutually beneficial relations with all States, irrespective of their social systems. Their military power, solely defensive, plays a part in this security policy concept. As a matter of principle, they support peaceful, political solutions to all international disputes. For the German Democratic Republic, the highest precept of its domestic and foreign policy is that war must never again be allowed to originate on German soil, only peace. The socialist countries have never based their policy to preserve peace and security exclusively or mainly on military power. The peace and security concept of the States parties to the Warsaw Treaty is basically political. Within this policy, political means like peaceful coexistence, détente, international agreements on the non-use of force, confidence-building and, as the most important ones, arms limitation and disarmament, play the dominant roles. These States are ready to eliminate all kinds of weapons, in the first place, nuclear weapons. They do not believe that peace rests on nuclear weapons.

26. Based on these enduring principles, the security concept of socialist countries is at the same time flexible and takes into consideration the real situation and new developments in the world.

27. In analysing the international situation, the member States of the Warsaw Treaty Organization, at the beginning of the 1980s, came to the conclusion that a new situation in the relationship of peace and war had come into being. This situation is characterized, inter alia, by the following phenomena.

(a) First, it becomes absolutely clear that a nuclear war cannot be limited, cannot be won and will call into question the very survival of mankind. Every

policy which can lead to such a war, including the case "if deterrence fails" is dangerous and has to be abandoned.

(b) Secondly, the arms race has reached a crucial point. If this race goes on, if it changes the present strategic situation by introducing qualitatively new weapons, especially space weapons, international stability will be undermined, the arms race will get out of control and the possibilities that old strategies will "fail", will grow dramatically.

(c) Thirdly, the fact that a nuclear war will unavoidably end in the destruction of civilization makes such a war the enemy number one for all people. Nothing can be achieved by war or by the threat of war. This perception can lead to a new understanding of the role of peace and the need for common action for peace. It becomes clear that the strategies of past decades cannot solve the problems of our time. Nuclear deterrence is such a strategy of the past. It may be questioned whether it worked yesterday. But it is obvious that it cannot work in the future.

28. Starting with these perceptions, the States parties to the Warsaw Treaty, at their 1983 and 1985 summit meetings, held in Prague and Sofia, respectively, worked out a general concept aimed at a basic shift in the whole course of international affairs towards more stable peace and truly international, that is, common, security. This concept is close to the thinking of other States and of different political, social and religious groups with the same objective - to save life on earth.

29. In view of this new international situation, the resumption of the Soviet-American dialogue and particularly the 1985 summit meeting are widely regarded as an expression of hope and realism. The proclamation at the meeting that a nuclear war must not be started and that it can have no winner is of particular relevance. It is true that any conflict between the USSR and the United States would lead to catastrophic consequences not only for these two countries but for the whole world. Therefore, only peace can be the basis for ruling the relationship between both States and alliances.

30. The intensification of the arms limitation and disarmament negotiations should lead to early progress in preventing an arms race in outer space and terminating it on Earth. Better Soviet-American relations can contribute to an overall climate of confidence, restraint and mutual respect. The agreements and declared intentions in this field have therefore their own value.

31. The main task now consists in putting into effect the summit decisions. The socialist States are ready to do their utmost towards this end. They have submitted far-reaching proposals and even undertaken unilateral steps aimed at stopping the arms race and starting nuclear disarmament. But they cannot solve these problems on their own. Political will to come to concrete agreements on the basis of equality and equal security is needed from the other side too in order to achieve any progress.

32. The summit meeting and its intended continuation have opened a "window of hope" - the danger of nuclear war may to a certain degree have decreased now. But concepts of maximum nuclear deterrence and of exploiting outer space for that purpose are still blocking the way towards a fundamental change in international relations commensurate with the requirements of our time. Therefore, real alternative concepts via-b-vis nuclear deterrence have to be elaborated and put into effect without delay. Only by that course of action can the opportunity the summit has created be used successfully.

Real alternatives to the doctrine of nuclear deterrence

33. A true alternative concept to the doctrine of nuclear deterrence has to be based on the recognition that, in the nuclear age, States cannot achieve security against each other, but only jointly, with all others. The prosperity and security of one State depend on the prosperity and security of all other States. Social and scientific-technical developments have led to a situation where even smaller States and peoples who feel their security is threatened can find ways and means to threaten the security of others. In the interest of establishing general and common security, the foreign policy of any State has to start from the following basic pre-nuppositions.

(a) First, security and lasting peace cannot be based on ever more numerous and sophisticated weapons. The way to peace can only be found by stopping the arms race and reducing the level of military power, particularly nuclear weapons. A disarmament process that will ensure undiminished security for all States at all stages and will finally increase security for all has to start from the existing military parity.

(b) Secondly, the present world exists as a system of States with different social systems. Every attempt to change this situation by applying military means in international relations or other kinds of pressure will only increase again the danger of war. There is no choice but to live together in peace, to solve problems by peaceful means on the basis of equal rights, to search for common security. In the nuclear age, there is no alternative to peaceful coexistence between States of different social systems.

(c) Thirdly, a reversal in international relations has to be started without political pre-conditions. Even the existence of different military strategies, if they really are intended to be defensive only, will not prevent understanding, if their common aim is to reduce the nuclear danger, to halt the nuclear-arms race and to stabilize peace. The creation of common security has to be seen as a process. But it is urgent to start that process now.

34. The idea of collective security is already embodied in the Charter of the United Nations. The implementation of its basic principles - respect for national independence and sovereignty, refraining from the threat or use of force, inviolability of borders and territorial integrity, peaceful settlement of disputes, non-interference in the internal affairs of other States and equal rights - represents a solid basis for common action. If all States are guided by those principles, the way will be opened to the establishment of an international system of common security, to lasting peace for all States and peoples.

Military equilibrium and common security

35. Any striving for military superiority is alien to the Warsaw Treaty Organization's concept of defence. Its member States do not have and do not seek an edge over NATO - either in strategic or in tactical terms, or in nuclear or conventional forces. All really serious examinations of the military balance have confirmed this. But the Warsaw Treaty countries will not permit the other side to gain superiority either. They favour an approximate military equilibrium, the level of which should be continuously lowered through agreed measures of arms limitation and disarmament until comprehensive disarmament, notably in the nuclear field, is achieved. These countries subscribe to the maintenance of military parity because of their historical experience and the fact that the doctrine of nuclear deterrence has been and continues to be directed against them. This is the sole and exclusive reason for them to keep up and organize their military power.

36. The socialist States have no interests that could profit from armament. Military spending hampers their economic capability to implement their social strategy. These States have neither the concept of exporting revolution nor the intention of creating spheres of influence or enforcing access to sources of raw materials and markets. Since their military effort is exclusively geared to defence purposes, they are content with maintaining military parity. There is evidence to show that the creation of military parity, particularly in strategic forces, has contributed much to détente. The current dangers do, in fact, arise from the attempt to upset this parity.

37. The resolve of the Warsaw Treaty States to maintain the military equilibrium cannot be interpreted to mean that they are committed to a policy of balance for its own sake. They have never regarded military equilibrium as an end or a value in itself, but always as just a means of preserving their security and world peace. They believe that a policy purporting to safeguard peace through a nuclear balance of terror is dangerous. "We have never been and will never be supporters of a balance of terror", said Erich Honecker, Chairman of the Council of State of the German Democratic Republic. The socialist States, therefore, combine their insistence on military parity with their renunciation of nuclear first use and with far-reaching proposals for nuclear disarmament, including the total banning of these dangerous weapon systems through international agreements.

38. Military equilibrium is an essential point of departure for nuclear disarmament. Recognition of the existing approximate parity is the prerequisite for a freeze and subsequent reduction of nuclear arms. The role of parity has been explicitly recognized in documents of the General Assembly, for instance, resolution 39/63 C, which was adopted by a very large majority.

39. Striving for military superiority sometimes appears in the form of claims that parity has to be achieved and that "windows of vulnerability" exist. Moreover, attempts are being made today to convince us that the enormous arms buildup of NATO is only aimed at re-establishing the military equilibrium. To prove that, one-sided or even forged figures, are used. This brings us to the question whether military equilibrium can be made a workable element and can be stabilised. This would be possible if both sides negotiated in good faith and if the identification of parity were an element of arms-limitation treaties. The two SALT agreements are proof that it is possible.

40. A general freeze on nuclear weapons as proposed by a majority of States, accepted by the parties to the Warsaw Treaty and supplemented by them with proposals aimed at a freeze on conventional weapons too, would fundamentally stabilize the military equilibrium strategically and in Europe. This would provide an excellent starting point for subsequent, balanced arms reduction with a guarantee of equality and equal security for both sides. Since such a course of action would enhance security not only in the East and West, but over the whole globe, it could be called the "development of mutual or common security". Stability of military parity requires the cessation of the arms race and an arms build-down, and the outlawing and final elimination of nuclear weapons.

Ways to eliminate the nuclear threat and make a change for the better in Europe and the world

41. The main measure to eliminate the nuclear threat is disarmament, above all in the nuclear field.

42. The most urgent problem is to prevent an arms race in outer space. As explained before, the development of weapon systems for outer space would basically change the strategic balance and, therefore, create instability and growing danger. It would initiate a new round in the arms race, with far-reaching consequences. There is no way to justify such a development.

43. There exists an inseparable relationship between the prevention of an arms race in outer space and the cessation of the arms race, especially in the nuclear field, on Earth. If SDI or other elements of offensive weapons are deployed in space, there can be no hope of halting the nuclear-arms buildup. Therefore, the proposal of the Soviet Union that the two greatest nuclear Powers cut in half their nuclear systems, each of which can reach the territory of the other side, is linked to the prevention of an arms race in outer space. It is obvious that such deep cuts in the strategic arsenals would decisively contribute to the stabilization of peace and the growth of mutual confidence. Such a measure would constitute a decisive step on the way to freeing the world of all nuclear weapons within the last 15 years of the century.

44. Irrespective of the results in this central field of disarmament negotiations, the following measures are of specific value:

(a) To stop any development, testing and deployment of space weapons, including anti-satellite weapons;

(b) To freeze all nuclear weapons;

(c) To end the deployment of medium-range missiles in Europe.

45. Other disarmament measures of central importance are the following:

(a) A comprehensive test ban;

(b) A comprehensive ban on all chemical weapons, including binary weapons;

(c) A commitment of non-first use by all nuclear-weapon States.

46. Since developments in the field of conventional weapons are of growing significance, the arms race in conventional weapons, especially between the United States and the Soviet Union, should be stopped. The Warsaw Treaty Organisation proposes that these two States should not start to develop and produce new kinds of conventional weapons with a destructive power similar to that of nuclear weapons. The numbers of their soldiers should be frozen, and their military budgets should not be further enlarged.

47. As to a general improvement of the international situation, particular importance attaches to the disarmament process in Europe. Under the NATO doctrine of deterrence, Europe is regarded as the main theatre of operations. Here the greatest military forces confront each other and thousands of nuclear weapons continue to be deployed. While it has been possible to limit conflicts in other parts of the world, however disastrous they may be for those affected, the outbreak of a conflict in Europe would most probably trigger 'a global conflagration. Therefore, measures to prevent war and conflicts, to enhance confidence and security and to strengthen detente are urgently needed in Europe. Disarmament must really proceed on this continent also.

48. The members of the Warsaw Treaty Organization propose to stop the further deployment of nuclear weapons on the continent and to start the reduction of such weapons until Europe is completely free of them. A decisive step in this direction would be to conclude a separate agreement on medium-range nuclear weapons with the aim of achieving urgent mutual reductions in all such systems in Europe. The establishment of nuclear-weapon-free zones and a corridor free of battlefield nuclear weapons on both sides of the dividing line in Europe would contribute to that aim as well.

49. A zone free of chemical weapons in Central Europe would stabilize European security and be helpful in the conclusion of a general ban on chemical weapons at the same time.

50. The Conference on Confidence- and Security-building Measures and Disarmament in Europe, convened at Stockholm, which has reached the stage of real negotiation now, can contribute to political and military confidence-building and security-building and, in that context, assist progress towards a mutual renunciation of the use of force.

51. The basic position of the members of the Warsaw Treaty Organization regarding disarmament is summed up in their statement: "There is no kind of weaponry they would not be ready to limit, to reduce or to ban from the arsenals and destroy for ever, on the basis of an agreement with other States and on the principle of equality and mutual security."

52. Even if the NATO doctrine of nuclear deterrence is mainly directed against the socialist countries and regards Europe as its principal field of action, it nevertheless influences the situation of the whole world. The developing world is the main area of conflicts, some of which are an expression of the global aims of leading NATO countries. The persistent refusal of Israel to comply with United Nations decisions, South Africa's racist policy, and other main elements of

conflicts are maintained only through the assistance of leading Western Powers, which have declared that they must deter communism all over the world. With this assertion, they undertake interventions, ignore the right of peoples to self-determination and try to create zones of foreign influence and economic predominance. A world-wide system of military bases serves this policy. Even if the policy is carried out by conventional weapons, it is based on nuclear power. There is a growing threat that one of the regional conflicts may expand into a global war. The peoples of the developing countries are influenced by the ongoing arms race, and they would be affected by a nuclear war and would, in fact, be victims of such a war, like the nations of the northern hemisphere themselves. The prevention of a nuclear war, a shift in the East-West relationship to détente and disarmament, especially nuclear disarmament, is, therefore, also in their interest. At the same time, the peaceful settlement of international conflicts would contribute to world peace. In this connection, the conflict in the Middle East and the situations in southern Africa and Central America are of particular importance. The support of reactionary, racist and aggressive régimes has to be abandoned, and the right of peoples to determine their own future and to build social orders of their own choice has to be respected.

53. The massive arms buildup of leading NATO countries has decisively contributed to the foreign indebtedness of many developing States. The limitation and reduction of military spending in the developed countries, would, therefore, contribute to the improvement of the economic situation of the developing countries and allow a considerable increase in development aid.

54. Other problems are the re-establishment of great-Power negotiations to limit arms deliveries to developing countries and the dismantling of foreign military bases. Agreements on the limitation of naval activities could also contribute to the security of the developing States.

55. The basic assumption of the members of the Warsaw Treaty Organization is that peace is indivisible. Therefore, they propose to all States and to all peace-loving forces in the world a coalition of reason and realism. The content of that common action would consist in:

(a) Preventing an arms race in outer space and terminating it on Earth, as the starting-point for eliminating all nuclear weapons;

(b) Causing a shift in international affairs towards détente and peaceful coexistence;

(c) Building a system of common security based on the principles of the Charter of the United Nations;

(d) Starting a process aimed at overcoming global problems such as the threat of war, starvation and ecological destruction.

56. This is a programme that would lead mankind out of the nuclear confrontation prevailing now in international relations.

CHAPTER IV

PAPER BY MR. R. OSGOOD AND MR. H. WEGENER

Introduction

1. In today's usage, "deterrence" is mostly equated with the defence policy of the Western security system, that is, the members of the North Atlantic Treaty Organization (NATO), Japan and countries closely associated with them. These countries regard deterrence as indispensable to their security. They see deterrence as the basis of 40 years of peace for countries that experienced two world wars in the first half of this century. But for many others in the world, deterrence evokes the spectre of an arms race to maximize nuclear terror, which threatens to end in a global catastrophe.

2. Unfortunately, the etymology of deterrence focuses on the element of terror that is inherent in nuclear weapons. In reality, deterrence - as defined by Western countries - is politically defensive in that it is intended to discourage aggression and, indeed, to remove the scourge of war in the nuclear age. It depends not only on the presence of nuclear weapons but also on non-nuclear defence, on reassurance against aggression as well as on an implicit threat to deny an aggressor the fruits of his aggression. It is intended to prevent nuclear terror, not to inflict it. The French equivalent, dissuasion, expresses the concept and the spirit of deterrence more accurately.

3. Military dissuasion is intrinsic to international relations in so far as they have chronically included security conflicts and armed force. It has been practised by all kinds of States throughout history and is practised today by all States that feel the need and have the means of restraining adversaries. However, deterrence is principally associated with the defence policies of the Western security system, since the Western countries have most acutely felt the need to prevent aggression, and since, for this reason, it is largely Western theorists who have explicitly elaborated and refined the concept and articulated the strategies to implement it.

4. Some of those outside the Western security system have condemned deterrence as though it were exclusively an instrument of Western terror, responsible for the nuclear policies of the adversary it is intended to restrain and even responsible for the temptation to emulate deterrence and for the rapid arms buildup in the third-world countries. The opponents of Western deterrence have tended to go beyond the criticism of particular strategies of implementation to identify it with all the risks and dangers of a confrontation among armed adversaries in the nuclear age.

5. This skewed portrayal fails to recognize that Western deterrence is an exclusively defensive strategy, that no threat to third countries emanates from it, and that no threat emanates from it at all unless aggression occurs. It overlooks the fact that the essence of Western security thinking is political, aiming at a peaceful, co-operative and stable world. In the nuclear age, it concentrates its criticism on the undeniable horrors of nuclear war and the competition for nuclear strength without taking account of the international political context of deterrence or the full meaning and consequences of deterrence within this context.

6. we welcome the opportunity to explain the Western approach to deterrence within this larger context.

The concept of deterrence: meaning, function and morality

General definition and concept

7. Military deterrence is ~~not~~ something invented by the West for exclusively Western use. It is intrinsic to international conflict and the prospect of force throughout history. It is simply the means by which one State dissuades an adversary from taking a hostile action by convincing it that the risks and costs imposed by counteraction will exceed any expected gains, either because the adversary believes that it will be unable to achieve its objective or because it believes it will cost too much, or both.

8. Nuclear weapons that are capable of inflicting, suddenly and with little warning, enormous damage on an adversary's homeland have created a quantum increase in the power of deterrence - and of intimidation too. Indeed, their capacity to threaten to inflict costs that an adversary will regard as far out of proportion to any gains it might derive from a hostile action put them outside the familiar category of war-fighting weapons intended only to defeat an enemy militarily. When both the United States and the USSR can inflict inordinate nuclear damage on each other, a nuclear war could be self-defeating for both.

9. The inordinate destruction of nuclear war and the prospect that any East-West military encounter might become a nuclear war have created a situation of mutual deterrence which also restrains the USSR and its allies from incurring even slight risks of a direct military encounter. From the standpoint of the Western allies, this existential condition of mutual deterrence contributes essentially to protecting them from aggression, whether nuclear or non-nuclear. But to prevent war it must also deter both East and West from believing that they must strike the other first out of fear that they might be struck first. Therefore, the stability of mutual deterrence depends not only on the Western Powers convincing 'the Eastern Powers that aggression would be too costly but also on both sides having the kind of non-provocative weapons posture, effective command and control system, and safeguards against war by accident or miscalculation that reassure them against the danger of an unprovoked first strike.

10. The record of East-West avoidance of war since the Second World War, measured against the evidence of the whole history of war before, indicates that mutual nuclear deterrence has been a major factor in preventing East-West military encounters. Yet, implicit in deterrence is the prospect, however unlikely, that the means of deterrence might have to be used - that deterrence might fail. Therefore, it is incumbent on the nuclear Powers to design deterrent forces and operational strategies that do not foreclose but effectively hold *open* the option of conducting and terminating a war long before either side would exercise its full capacity to defeat the other. At the same time, no precautions to avoid the uncontrolled escalation of an East-West war can ever make the resort to such a war any less fearsome and forbidding. Holding open an option to avoid automatic catastrophe if deterrence should fail cannot obviate the unacceptable risk that any

direct military encounter will escalate to a level of destruction far offsetting any political gain.

Implementation of deterrence: political context and strategy

11. Western military strategies and forces to implement deterrence reflect the political context that necessitates them: the Western nations want only to defend what they have and to live and let live. They have a broader security interest, in keeping with their respective commitments and capabilities, in preventing threats to the independence of other States, especially if these threats might shift the East-West balance adversely. The Western allies believe that their security is threatened by Soviet intentions and military capabilities. They also believe that Soviet aggression can be deterred by countervailing power.

12. The perception of a Soviet threat to Western security springs from the Soviet Union's ideological commitment to the demise of other political systems, its propensity to see enemies in strong, independent countries that are not absorbed into its own international system and its compulsion to seek an absolute security that breeds insecurity among these imagined enemies. From the Western perspective this perception is amply confirmed by a historical record of an expansionist tendency. If this tendency springs from a Soviet (indeed, Russian) feeling of insecurity, rooted in history and geography, it is evidently a feeling too profound to be allayed and one that feeds on the fears in others that it creates.

13. Western perceptions of the Soviet threat are reinforced by the immense and steady buildup of Soviet military capabilities far beyond those that are needed for self-defence or military parity - especially in the European theatres by Soviet operational military doctrine and force structures that emphasise nuclear war-fighting capabilities and preparations for a sudden massive blitzkrieg in Central Europe; and by public disavowal of any intention or even possibility of conducting a war short of the total use of available power to defeat the adversary.

14. At the same time, Western countries credit the Soviet Union with being rational and cautious about the direct, overt use of its military power. Therefore, they believe that military aggression can be deterred if the Soviet Union is clearly confronted with the prospect of countervailing military action that would make aggression (direct or indirect) unprofitable. Where the West has failed to make clear its willingness to use force against aggression, as in the Korean peninsula in 1950, aggression has occurred.

15. The strategy of deterrence is essential not only for deterring aggression and preventing war but also for resisting nuclear intimidation and avoiding the brink of war during severe crises (commonly referred to as "crisis stability").

16. The effectiveness of deterrence depends heavily on both sides having sufficiently invulnerable second-strike forces and C³ (command, control and communication) capabilities to avoid being either the perpetrator or victim of a pre-emptive strike. Present force structures - especially, heavy Soviet reliance on fixed land-based multi-warhead missiles in conjunction with vulnerable American land-based missile targets - and technical-political problems of achieving secure

and effective C³ capabilities impede the full implementation of this basic condition of mutual security. There is reason to expect that future developments, such as less vulnerable command and control facilities and procedures, will alleviate these deficiencies.

The political strategy of NATO

17. The Atlantic alliance is the core organization of the Western security system, a system that also comprises a number of defence arrangements in the Pacific region. NAM is a partnership of free nations for the purposes of security, based on a common conviction of civility, human rights and the underlying principle of individual freedom. The overriding objective of the alliance is the preservation of peace in freedom so that its members can perfect their societies. Theoretically, the alliance would operate against any external threat; in practice, from its origin and history, the purpose of the alliance has been to guarantee the security of the West vis-à-vis the common threat from the East.

18. Given the overriding political purpose, the North Atlantic alliance is not limited to purely military matters. It combines collective defence with the readiness to enter into dialogue and practical co-operation with the East, inter alia, in the fields of arms control and disarmament, in accordance with a cogent concept of promoting international stability and a meaningful state of peace. This concept was set forth especially in the Harmel report of 1967 and has been confirmed by NATO ministerial statements ever since. An essential portion of the Harmel report reads as follows:

"The Atlantic Alliance has two main functions. Its first function is to maintain adequate military strength and political solidarity to deter aggression and other forms of pressure and to defend the territory of member countries if aggression should occur. . . . the Allies will maintain as necessary, a suitable military capability to assure the balance of forces, thereby creating a climate of stability, security and confidence.

"In this climate the Alliance can carry out its second function, to pursue the search for progress towards a more stable relationship in which the underlying political issues can be solved. Military security and a policy of détente are not contradictory but complementary. Collective defence is a stabilising factor in world politics. It is the necessary condition for effective policies directed towards a greater relaxation of tensions." 5/

19. Thus, the military strategies of the Western security system are fundamentally embedded in a larger political philosophy. The military capabilities of NATO, including its nuclear means, have not been acquired for the enhancement of power or for posturing, but exclusively for preventing aggression and war. In the view of NATO, relations between States must not be narrowed to the military aspect. Thus, military deterrence must be supplemented by political action to promote the same objective. In accordance with this principle of the primacy of political ends over military means, all countries of the alliance, individually and collectively, are committed to working towards a more peaceful conduct of States in the nuclear age, enhancing confidence and co-operative security, in fulfilment of the paramount command of the Charter of the United Nations: the prohibition of the threat or use of force among States.

The military strategy of NATO

20. The implementation by NATO of this political strategy through military strategy has gone through several stages, responding to the dynamics of weapons technology and the developing ratios of forces.

21. In 1967, NATO Governments moved to open for the alliance a range of options for defence, so as to make an attack at any level visibly unprofitable and therefore to deter its initiation. It was recognized that a strategy of flexibility supported by forces structured and armed to provide such flexibility offered a defender who restricted its military action to an adequate response to enemy attacks the best guarantee of deterring any form of aggression, and thereby preventing any form of war.

22. The strategy of flexible response adopted in 1967 and valid to this day incorporates three types of conceivable responses to which the strength, equipment and training of armed forces and their operational planning are adapted.

(a) Direct defence is intended to prevent the aggressor from achieving his objective at whatever level of force it is initiated. It would aim to defeat a conventional attack by a conventional response, but might include the use of nuclear weapons if the enemy were the first to use such weapons. Consequently, either the aggression would fail or the aggressor, facing failure, would incur the burden of escalation.

(b) Deliberate escalation is intended to persuade the aggressor to cease hostilities by convincing him that the risk and cost of continuing hostilities at a higher level of conflict would not be warranted by the prospect of success. As a means of convincing him of this, the alliance reserves the option of resorting to the politically controlled, selective use of nuclear weapons.

(c) General nuclear response - the last, hypothetical stage of response and ultimate deterrent - would entail using the alliance's strategic nuclear weapons mainly against the aggressor's strategic potential and would aim at reducing further damage to NATO by degrading the aggressor's capability and will to continue aggression.

23. A number of important consequences flow from these broad strategic principles:

(a) The strategy of flexible and controlled response deliberately leaves open the question of when a particular kind of response may occur, so as to confront an enemy with permanent uncertainty as to whether the initiation of conflict or the further pursuit of an ongoing aggression is calculable in terms of risk and possible political advantage. This uncertainty pertains specifically to the point at which the defender would decide to resort to a defensive use of nuclear weapons. The incalculability of this risk impresses upon the potential aggressor that an attack cannot be a rational option. The principle of uncertainty of response is thus a determining element in the effectiveness of deterrence.

(b) By the same token, deterrence does not depend on nuclear weapons alone. An adversary is deterred from conflict by the overall defensive posture of NATO.

Conventional forces, short-range and intermediate-range nuclear weapons and strategic nuclear weapons, as an inter linked combination tailored for deterrence and defence, form an inseparable complex or continuum of deterrence. It would therefore be misleading to say that NATO merely operates a policy of nuclear deterrence.

(c) The defensive character of NATO strategy and forces is conspicuous in its overall posture. NATO deliberately renounces the capability and planning for offensive operations in the sense of forward movement. The Western alliance is simply not in a position to wage a war of aggression. Contrary to the Warsaw Treaty Organization, NATO does not possess a logistic system capable of supplying its forces and enabling them to conduct sweeping operations in enemy territory. This constraint, imposed by NATO upon itself, is an important confidence-building measure. It corroborates the function of deterrence as a political tool for the prevention of war.

(d) A key principle of flexible response is the adequacy of the means to be employed in order to ensure that NATO is able to respond to attacks of any size, to prevent uncontrollable escalation, to assure damage limitation and to terminate a conflict imposed upon it at the earliest possible point.

(e) The strength of NATO lies in the collective nature of its defence. In the case of conflict there will be unity of alliance response. The political commitment of the alliance - and especially of the United States - applies to an attack on any part of NATO territory. The continuum of deterrence - the ability of NATO to take defensive measures on a sliding scale and under control, so as to terminate a potential war quickly - is ensured by the indissoluble military bond between the United States and its European allies. The determination of the United States to honour this commitment, even if the use of nuclear means should become unavoidable, is called "extended deterrence". The effectiveness of the deterrent function of the United States military commitment is ensured by the presence of American forces, including the stationing of nuclear weapons of various ranges on European soil.

(f) In addition to its general deterrent effect, the deterrent posture of NATO produces special military effects that make war less likely. Thus, NATO nuclear weapons influence deployment patterns, in that an adversary cannot afford to concentrate massive tank armies to conduct a surprise attack, since troops, like tanks, must be deployed in dispersed order and would, in the case of an intention to attack, require longer planning and concentration times. The mere presence of deterrent forces, therefore, extends warning time, which could be used by NATO to bring its own forces into an increased state of defence readiness, to mobilize reinforcements from the United States and, if feasible, to try to settle the impending conflict by political means.

(g) A credible deterrent posture on the part of the Atlantic alliance all but eliminates the likelihood of a "small" war with limited political aims, since the Soviet Union would have to include limitless escalation in its calculations, forcing it to plan comprehensively for a major and perhaps decisive conflict that would require the mobilization of its entire manpower resources and the placing of

its entire economy and population on a war footing. This requirement not only impedes a rapid military fait accompli; it also opens additional and perhaps decisive possibilities for peaceful settlement.

(h) The prevention of war is the overriding objective of NATO and the primary purpose of its strategy of deterrence. NATO countries are confident that their deterrent is effective in this sense. To them the outbreak of hostilities between East and West remains highly unlikely as long as deterrence functions on the basis of a credible defence posture and approximate military balance. (A more detailed risk assessment may be found in a subsequent section.) If aggression nevertheless occurs - if deterrence fails - "intra-war deterrence" will take place, with the goal of limiting conflicts and terminating hostilities at the lowest possible level of damage. In war, NATO strategy is limited to defence and to restoring the conditions of pre-war deterrence. It is oriented towards the restitution of the status quo. Intra-war deterrence aims not at the continuation and successful completion of military measures but at their earliest possible cessation.

Quantitative aspects of deterrence

24. Critics of deterrence often consider every armament measure in NATO or the Warsaw Treaty Organization as a direct and indispensable consequence of the adoption of a strategy of deterrence. They assert that deterrence must lead to a spiral of ever newer and more numerous arms. Against such sweeping inferences it is useful to spell out the true characteristics and requirements of a military posture consistent with the NATO doctrine of flexible response.

25. Since the NATO posture is strictly defensive, both in terms of deterring the adversary from initiating conflict and as regards intra-war options, one of the principal structural features of NATO armed forces is that they can be adequate though smaller than corresponding Warsaw Treaty Organization forces. This reflects the age-old military experience that it is the aggressor who needs superior numbers of forces and weapons to prevail. In this sense the military balance that NATO requires in order to be satisfied that deterrence is credible is not a parity of numbers, but a parity of defensive options that could be invoked to provide pre-war or intra-war deterrence. Thus NATO could deny the Soviet Union a monopoly of land-based intermediate-range missile and strengthen coupling to American strategic forces with a limited deployment, even though the Soviet Union has acquired - and continues to enlarge - its manifest superiority in this weapon category. By the same token, provided that overall forces are flexibly structured over the whole deterrent spectrum and possess adequate survivability, readiness, sustainability and effectiveness, NATO forces need not match Warsaw Treaty Organization forces on a one-to-one basis, for example, in tanks. Equally, NATO can afford to forgo the acquisition of certain types of weapons or operational capabilities that are predominantly geared to offensive uses. Thus, a strategy of deterrence in the NATO sense does possess an intrinsic tendency towards lower force levels. NATO can remain beneath the force level of a potential aggressor and include a strong defence-only element in the composition of its arsenal.

26. Thus, NATO pursues a policy of optimizing deterrence at the lowest possible level of forces and armaments. However many forces such a minimum deterrent posture requires, it requires fewer than those held by the potential aggressor.

British and French nuclear forces and NATO doctrine

27. The United Kingdom and France maintain independent nuclear forces, but the nuclear warheads in these forces - if one wanted to make such a comparison, in spite of their different roles - add up to no more than a few per cent of either the United States or Soviet warheads. British nuclear systems are subordinated to NATO command, and the United Kingdom, notwithstanding the role of its nuclear weapons as a "last resort" for national defence, fully espouses NATO political objectives and its current doctrine of flexible response. French nuclear systems remain outside the NATO military structure, but are equally put at the exclusive service of deterrence.

28. The basic French premise is the principle of dissuasion du faible au fort. French strategists underline the value of the concept of proportional deterrence, according to which a more powerful adversary could be deterred effectively from any aggression, nuclear as well as conventional, by the sheer disproportion between the damage he might suffer through nuclear retaliation compared with the potential gains he could hope to achieve by attacking the smaller nuclear country. In the French view, this doctrine allows for the credibility of a relatively small independent nuclear force of a defensive character. French doctrine differs conceptually somewhat from the flexible response of NATO in that it does not link the first use of its nuclear systems to the impending breakdown or manifest inadequacy of direct (conventional) defence, but it regards jeopardy to the nation's "vital interests" as a criterion for triggering a defensive nuclear response.

29. The deterrent effect emanating from the British and French systems is enhanced by the fact that NATO Europe as a whole is covered by the United States strategic deterrent and the possibility and likelihood that any attack on Western Europe would trigger United States involvement. British and French nuclear forces add to the alliance deterrent by heightening the factor of uncertainty of response in the potential aggressor's mind. However, they are no substitute for United States nuclear weapons and their role in NATO deterrence.

Soviet doctrine and practice of deterrence

30. This paper seeks to explain the Western, not the Soviet, approach to deterrence. But since Soviet theorists and publicists have dwelt upon the alleged dangers of the Western approach, it is necessary to clarify Soviet views of deterrence by way of contrast.

31. Although the vocabulary is not uniform, Soviet literature employs two different words for deterrence. The concept of deterrence has often been defined as ustrashenie, which implies terrorization or intimidation, while the Soviet concept is at times registered by the word derzhivanie, which conveys the less threatening notion of restraining an opponent. In keeping with this semantic differentiation, Western policies of deterrence are routinely condemned by the Soviet Union and its allies as provocative and dangerous, while corresponding Soviet policies are praised as defensive countermeasures.

32. It should be clear from the description of the Western strategy of deterrence in this paper that this one-sided imputation of threat and recklessness to the Western alliance bears no relationship to reality, since it takes no account of the defensive purposes and the rigorously defensive force structure of the NATO security system. Worse, the Soviet condemnation of Western deterrence beclouds both the similarities and the dissimilarities between the nuclear stances of NATO and the Warsaw Treaty Organization.

33. As was pointed out earlier, deterrence in a general sense is little more than a description of the realities of the nuclear age, since as long as the two military blocs possess nuclear weapons, the existential situation of mutual deterrence will endure. In this sense Soviet nuclear strategy is a strategy of deterrence just as much as that of NATO, and Soviet nuclear arsenals operate as an effective deterrent system. Soviet writers are certainly to be believed when they proclaim as the highest political priorities the prevention of nuclear war and the protection of Soviet territory from nuclear attack. Their emphasis, however, is on the danger of the use of nuclear weapons rather than on deterring a conventional attack, since this danger does not confront the Soviet Union in view of its overwhelming conventional superiority over any conceivable adversary and the clearly defensive posture of NATO. Thus, the overriding objective of nuclear deterrence, in the Soviet view, is to deter a Western nuclear response to an Eastern attack and, more broadly, to hold Western Europe hostage to Soviet political will under the gun of overwhelming conventional and nuclear power.

34. Soviet deterrence further differs from the Western doctrine of flexible response in the excess of means that the Soviet Union deploys to implement it; in its over-insurance against possible attacks; in the absolute quality it applies to its own guarantee of security without regard for the insecurity this inflicts on others; and in its rejection, heretofore, of any concept of mutual deterrence and, thus, its obliviousness to the nuclear dilemma that entraps both sides in a difficult problem of managing the interdependence of their security. For, in the last analysis, the absolute security of one Power must necessarily lead to the absolute insecurity of all others. The Soviet emphasis on deterrence by denial, that is, on the capacity to defeat enemy forces at every conceivable level of hypothetical attack, has generated forces of a nature and magnitude that provoke a feeling of permanent threat and intimidation on the part of those who are supposed to be deterred.

35. The operational differences become even more distinct in the hypothetical case that deterrence fails. The Soviet doctrine especially in its public expression rejects the Western concept of intra-war deterrence and the strict limitation of intra-war operations. Should a conflict break out, the Soviet Union, according to its doctrine, would not undertake every effort to limit the damage, would not aim at the earliest possible termination of conflict, and would not admit territorial and target constraints for military action. Soviet doctrine looks to the implementation of defence through military offensive operations intended to carry war far into the territory of the adversary in order to inflict total defeat upon it through a "crushing blow". In sharp contrast with the Western doctrine of deterrence, the Soviet Union thus articulates its doctrine in terms of a comprehensive, unconstrained war-fighting strategy, including nuclear war-fighting, and the final attainment of victory without regard to cost.

36. As part of its pre-war deterrent stance, the Soviet Union, in its public pronouncements, unambiguously proclaims that once the first nuclear weapon is used, rapid escalation to the highest strategic level is inevitable, and a general nuclear confrontation, leading to the ultimate holocaust, cannot possibly be prevented. There is, however, a profound contradiction between these apocalyptic forebodings and both the war-fighting doctrine and the force structure of the Soviet Union and the Warsaw Treaty Organization. The essence of Soviet military doctrine is the integrated war-fighting concept, in accordance with which conventional, chemical and nuclear means are deployed, down to relatively low echelons, in co-ordination with each other, in order to inflict military defeat on the adversary. This concept is not only reflected at the level of strategic doctrine but diffused down into field manuals and current training practices. The contradiction becomes particularly clear when one looks at the structure of the Soviet Union's nuclear arsenal and their far-reaching stratification. The diversity of nuclear weapons in the strategic category - both land-based and sea-based - and the formidable and multifaceted arsenals in the intermediate-range to short-range and nuclear artillery, combined with the reloading potential for many of these weapons, make it evident that the Soviet Union has consciously prepared for a broad range of nuclear options that could be justified only if one admits, at least in principle, the controllability of a nuclear conflict and its escalation.

37. Most Soviet professional military writings - as distinct from doctrine proclaimed at the highest level - have always explicitly, as well as implicitly, reflected a large debt to Clausewitz, who taught that war must be limited in order to serve political ends rather than become a thing in itself. In recent years - particularly since the late 1960s - these writings have gone far to adjust strategy to the nuclear age in Clausewitzian terms by recognizing the need to be prepared for a variety of scenarios of limited war, even in vital areas like Europe. This convergence with the same trend in Western doctrines and plans does not reflect - in either the East or the West - any diminution in the resolve to avoid nuclear war. Indeed, it reflects a growing practical recognition of the necessity of minimizing the awful dangers of nuclear catastrophe. Moreover, considering the absolutely determining role of the military practitioners in shaping Soviet operational military plans and actions, it strongly suggests that the single-minded preoccupation with uncontrollable apocalyptic scenarios in Soviet public doctrinal statements is best explained as an example of the political and psychological exploitation of terror, intended, particularly, to play on European nuclear anxieties and to loosen Europe's strategic bond to the United States.

The ethical underpinning of deterrence

38. By their very nature and potential effect, nuclear weapons raise ethical questions of the highest order; no strategic concept in which nuclear weapons play a role can escape the need for an appraisal in moral categories.

39. Military deterrence, although intended to prevent aggression and avoid war, is based on the presumption that, however unlikely, force might be used. Any use of armed force, whether in clear self-defence or not, incurs a moral cost because it destroys life and the values of living. Nuclear defence would probably incur an

extraordinary moral cost, conceivably one endangering civilization itself. However, even a very destructive defence need not incur a net moral cost if the purpose of the defence is obviously just and sufficiently compelling and there is no non-military way of supporting it. For all those who are not absolute pacifists, for whom no objective - even the saving of lives - is worth the taking of a life, the moral costs of war are justified if the moral costs of not going to war, among which the nation's survival ranks highest, would be greater. But for the super-Powers and their allies, the potentialities of nuclear destruction have greatly expanded the gap between the anticipated costs of resorting and not resorting to war. They compel us to examine the moral basis of nuclear deterrence as well as of nuclear war with particular rigour.

40. In general, the traditional ethical principles that apply to the use of any force apply to the use of nuclear force. They are simple to state, though difficult to apply with precision and subject to abuse. Force should be under the effective control of competent political authorities; it must be used only for a just cause; it must be used for self-defence and for the defence of other States against aggression when their security is integrally related to one's own; it should be used only after all non-military alternatives have been exhausted; the means of force must be effectively related to its political objectives; they should not incur moral costs disproportionate to the value of these objectives; and non-combatants should not be the direct and deliberate target of force. The extreme practical difficulty of applying these standards to nuclear war - especially those relating to proportionality and sparing non-combatants - confines the justification of the use of nuclear weapons to supporting the most imperative requirements of national survival and the survival of allies. But the principles of overt use do not fully resolve the ethics of deterrence.

41. Effective deterrence has the positive value of preventing war and restraining actions that might lead to war. If deterrence works, this outcome mitigates its moral cost. Deterrence entails a moral cost because of the presumed intention to resort to force that it entails, but the onus for this cost must be placed on the state that would use force offensively, not on the State trying to prevent aggression without war. The moral costs of deterrence are of a very much lesser order than those of aggression and also less than those of intimidation. The way to minimize them is not to abandon deterrence but to make deterrence as effective as possible and, if deterrence fails and force must be used, to be prepared to terminate the war for just objectives at a reasonable cost, with as little damage to life and society as possible.

Deterrence and international law

42. Occasionally, legal arguments are advanced against the doctrine of deterrence. A brief survey of the relevant provisions of international law might therefore be useful.

43. When deterrence fulfils its overriding function and prevents war, no legal problems arise. The compliance with Article 2, paragraph 4, of the Charter of the United Nations is clearly secured. The mere possession of weapons, including nuclear weapons, for defensive purposes, does not pose a legal question either

There can be no doubt that nuclear-weapon States may have such weapons in their possession. Nor does the possession alone constitute a threat to peace and security. The Atlantic alliance is a defensive alliance which does not threaten anyone and does not seek to gain superiority either. In their Bonn summit declaration of 10 June 1982, the 16 countries of the alliance reaffirmed that none of their weapons would ever be used except in response to attack.

44. An attack can therefore emanate only from countries outside of the alliance. In this case, any aggression by weapons of any type would be a clear violation of the Charter of the United Nations. A nuclear first strike, a "bolt from the blue" triggered by a country from outside the alliance, would be in gravest violation of the Charter. In view of the horrendous damage nuclear weapons can do, condemnation would also pertain to pre-emptive strikes, including any launch of nuclear weapons on warning. The Atlantic alliance has never considered such military measures.

45. Should deterrence fail in its primary, war-preventing purpose and an attack on NATO occur, NATO would take defensive measures - including, under certain circumstances, the use of nuclear means - in the exercise of the inherent right of individual or collective self-defence under Article 51 of the Charter of the United Nations. The Charter does not qualify or limit in any way the means by which such defensive action is to take place. The exercise of the right under Article 51 could therefore comprise the use of nuclear weapons against a nuclear or a non-nuclear attack. Attempts to infer that Article 51 contains an implicit limitation, merely because it was drafted before the first use of a nuclear weapon (although it quite clearly entered into effect after the events of August 1945), or to deduce a general prohibition of the use of nuclear weapons from older, very general legal clauses, like the "Martens Clause" of the preamble to the fourth Hague Convention of 1907, 6/ have failed to change international law.

46. It is, however, uncontested that any resort to nuclear weapons in war would be subject to limitations under the existing laws of war. Any conceivable use of nuclear weapons would thus be governed by the law of proportionality between attack and defensive action, and by the prohibition of deliberate attack against civilian populations only. The alliance's strategy of flexible response takes these inherent limits of the right to defence into account. Current NATO strategy is governed by the principle of no more than minimum adequacy of the means to be employed. The political guidelines within the alliance for the use of nuclear weapons, as well as the corresponding commands issued by allied commanders, contain rigid constraints for nuclear planning and any conceivable use of nuclear weapons. All these pursue the objective of minimizing losses of civilian populations. NATO policy is that under no circumstances may nuclear weapons be used deliberately for the purpose of destroying populations. NATO planning provides for no use of nuclear weapons against cities or civilians. The principle of strict proportionality and rigorous limitations of use on the part of NATO contrast with Soviet doctrine which, in the case of any attack on the Soviet Union, however limited, provides for a "crushing" nuclear blow and the ultimate defeat of the adversary.

47. Proposals of the Warsaw Treaty Organization for the adoption of a nuclear non-first-use policy by the two major military alliances and all nuclear-weapon

States are often accompanied by a claim that any first use of nuclear weapons would be illegal because of the indiscriminate effects of nuclear explosions. Clearly, there is no such rule in international law. At any rate, the presumed illegality of a defensive nuclear first use would have to pertain equally to a second retaliatory nuclear strike, since its alleged indiscriminate effects would be at least as great. International law would also contradict: the simultaneous Warsaw Treaty Organization call for a devastating nuclear blow against a nuclear attack.

Implications for international security

Introduction

49. Among critics of deterrence there is a tendency first to isolate deterrence from the full role of military power in international politics and then to attribute to it the full range of adversities that spring from the confrontation of armed adversaries and the existence of nuclear weapons. To assess properly the implications of deterrence for international security one must understand the relationship of deterrence to the general role of military power and also to the full international political context within which it is practised.

49. In the nuclear age, military deterrence has probably been indispensable to the avoidance of a direct clash of arms between the super-Powers and their allies, although it is important to realize that it has not been the only factor.

(a) The experience of two very destructive world wars is a powerful deterrent to a third world war. It is a deterrent to the kind of dependence on a first strike (which, in 1914, was inherent in the military advantage of using mobilized ground forces first) and the chain of diplomatic actions and reactions that led to the First World War, and it is a deterrent to the piecemeal aggression, appeasement and lack of peace-time preparedness that led to the Second World War.

(b) The fact that, after the Second World War, the Eastern and Western European States and Japan, which had been the source of major wars, became participants in the Eastern and Western security systems has undoubtedly contributed to the avoidance of war, although the largely bipolar military structure that underlies these systems - its negative aspects notwithstanding - might not have been so dominant in the absence of nuclear weapons.

(c) The absence in United States-Soviet relations of historic territorial or other national grievances that have traditionally caused war and the great caution of each Government in avoiding the use of force in ways that would provoke a direct encounter with the other have been factors of extraordinary mutual restraint in the protracted period of post-war political conflict and competition.

(d) One must also attribute the avoidance of war to the fact that, after the Second World War, the side that initially had a nuclear monopoly, followed by clear nuclear superiority for a couple of decades - that is, the Western security system - wished only to defend the existing territorial-political arrangements, while the Eastern bloc was preoccupied with recovering from the devastation of war

and gaining parity; whereas by the time the latter bloc gained a strategic nuclear parity, conventions of reciprocal restraint, reinforced by the experience of several East-West crises, had emerged under the inhibition of mutual deterrence. One cannot be confident that the cold war would have been so cold if the military postures had been reversed.

50. Nevertheless, the record of other political conflicts and military rivalries before the nuclear age, as well as the common perception of the realities of the East-West relationship, establishes a strong presumption in favour of the widespread view that the post-war peace between the super-Powers and their allies would have been far more fragile and might well have broken down had it not been for nuclear deterrence.

51. Super-Power deterrence has, however, not brought peace and order to all aspects of international conflicts. Nor has it prevented tensions or created harmony. Mutual deterrence has not prevented crises, tests of nerve and will, efforts to intimidate, and psychological and political "warfare" revolving around nuclear weapons and popular fears of war. In a sense, the very success of deterrence has made these modalities of conflict short of war a prominent feature of international politics.

52. Nor has mutual deterrence between nuclear Powers prevented indigenous wars and revolutions in the third world or even the involvement of the nuclear Powers in these armed conflicts. In fact, the constraints against the direct armed involvement of the Soviet Union in local conflicts have - with one grievous exception - channelled its efforts towards the indirect support of local wars and revolutions intended to change the territorial-political status quo through allies and proxies. These same constraints have led the United States, in defence of countries under attack, to give direct armed support to South Korea and South Viet Nam in territorially limited wars.

53. These regrettable facts of international life do not mean that mutual deterrence causes third-world conflicts or that peace and order in the third world would be fostered by the abandonment or failure of deterrence. The sources of third-world conflicts lie fundamentally in and among these countries themselves. In so far as mutual deterrence between the super-Powers extends to their involvement in the third world, it tends to restrain these involvements. It has certainly restrained the escalation of local wars in which they have been directly or indirectly involved into regional or global wars. In so far as bipolar deterrence prevents direct military encounters between the super-Powers and their allies in the third world, it saves the whole world, directly and indirectly, from the extremities of violence that the most advanced nuclear and non-nuclear forces can inflict.

54. Military deterrence also operates independently of the super-Powers among countries not aligned with them. This is not because these countries emulate the super-Powers, but because deterrence is integral to any international conflict in which armed adversaries may resort to war or the threat of war. Among such armed adversaries, however, the post-war record shows that incentives to go to war are much stronger and disincentives far weaker than between the super-Powers and their

allies. Consequently, there has been a high incidence and great variety of Inter-State, transnational and intranational armed conflict among third-world countries. This is primarily because of the intensity of national, ethnic and communal conflicts among countries that are still in an early stage of national and international development, following the dissolution of the colonial era. But it is also because of the general absence of those special conditions of military equilibrium among adversaries that help to sustain mutual deterrence between the super-Powers.

Trends in the East-West force relationship

55. The Western elaboration of the doctrine of deterrence has been fundamentally shaped by the perceived military threat posed by the Soviet Union and the Warsaw Treaty Organization. The nature and magnitude of this threat spring from Soviet political objectives, strategic intentions and military capabilities.

56. This is not the place to undertake an analysis of the motives that lie behind the dominant role that military power has played in the Soviet economy and political system and in Soviet relations with other countries. But a brief account of how Soviet armed forces and military policies affect Western security is necessary to round out the explanation of Western deterrence.

57. Whatever Soviet motives may be, the fact is that the Warsaw Treaty Organization, by a continued and rapid increase of the numerical superiority of its forces and the quality of its weapons, has considerably shifted the East-West force relationship to the detriment of NATO. The Warsaw Treaty Organization has thus objectively increased its threat potential to the Western alliance and continues to do so.

58. Whatever the methods of military force comparison, Warsaw Treaty countries have, over time, built a military potential in Europe far in excess of any conceivable defensive need. This, combined with the geographic asymmetries between NATO and the Warsaw Treaty Organization and the resulting disadvantages for European NATO member countries, has for NATO further enhanced the task of maintaining credible deterrence, especially for the security and sense of security of its European members.

59. In terms of the balance of forces in Europe, the Warsaw Treaty Organization now possesses a clear numerical superiority in virtually all weapons categories: conventional, nuclear and chemical. In addition, the strategic operational planning of the Soviet Union has notably improved and now provides for close co-ordination of the ground, air and naval forces and of its strategic rocket troops, with the objective of providing the Warsaw Treaty Organization with the capability of launching massive operations with very little warning against the NATO forward line of defence in Central Europe. At the same time, the Warsaw Treaty Organization has been able to close the weapons quality gap that formerly existed.

60. It is not the intention of this paper to provide the numerical details of this growing Soviet superiority. It should, however, be mentioned that, in addition to

its growing numerical strength and qualitative progress in conventional forces, the Warsaw Treaty Organisation has now also gained an unequivocal superiority in all systems of nuclear weapons in Europe. This is most evident in the continued growth of the Soviet arsenals of land-based intermediate-range systems, where warhead deployment at present stands at the ratio of approximately 10:1 in favour of the Soviet Union. In the shadow of the nuclear strategic balance of the two super-Powers and unperturbed by a series of far-reaching Western arms control offers, the Soviet Union has thus, since 1977, been establishing an intermediate-range nuclear potential. NATO had nothing comparable to oppose to it until it began its modest counter-deployment at the end of 1983 in accordance with the double-track decision of 12 December 1979. Whereas NATO decided even to reduce its overall nuclear stockpile in Europe, the Soviet Union has recently been compounding its already existing advantages by the modernization and forward deployment of shorter-range nuclear systems. The quantitative superiority of qualitatively comparable aircraft of the Warsaw Treaty Organization forces has continuously increased. The enormous expansion of Soviet naval forces in the North Atlantic and in the European peripheral seas over the last 15 to 20 years has fundamentally changed force relationships at sea. For Central Europe, the increasing capability of the Eastern naval forces to carry out amphibious landing operations in the Baltic Sea with strong air support is a growing threat, commensurate with the overall threat the Soviet and allied navies constitute for Atlantic sea-traffic, the economic and Logistic lifeline of the NATO alliance. With these changes in force relationships, the Soviet Union has purposefully improved its offensive military options.

61. A particularly worrisome aspect of the East-West force relationship and the deterioration of the balance, from a Western perspective, lies in the ceaseless augmentation of military attack capabilities, which bears no discernible relationship to Western capabilities and force trends. Even though the annual growth rate of Warsaw Treaty Organization military equipment may have slightly subsided in recent years, Soviet armament efforts proceed in a relentless, almost automatic growth. Available information about present weapons production, new models in the pipeline, ongoing military research, and so forth, betray a largely unchecked growth process with no terminal goal.

62. Against the formidable and growing capability of the Warsaw Treaty Organization for launching offensive action, with or without nuclear weapons, NATO is incapable of generating or sustaining the enormous peace-time military establishment that would be necessary in order to hold and repel such an assault at the forward line for long. As an alliance of nations that want only to protect the territorial-political status quo from violent change so that they can concentrate their energy and resources on the enjoyment of civilian life, the Western alliance does not intend to deploy forces that would match the Warsaw Treaty Organization tank for tank, division for division or missile for missile. The extreme degree of militarization of life in all its aspects required for such an effort would stultify its societal purposes and deprive it of its leading and stabilizing role in the world economy, including its ability to contribute to the development of third-world countries. The alliance must therefore continue to rely on its nuclear deterrent capacity to pose unacceptable costs and risks to the potential aggressor while strengthening its capacity to withstand a conventional attack by conventional means before having to consider defensive escalation.

The stability of deterrence: an assessment of the inherent risks

63. If deterrence has so far worked and secured peace, will it continue to work? Is it becoming more or less etablc? One cannc' answer these questions in purely military-technological terme - however important this factor may be - but only in terms that relate the military factor to its political context. Thia leads one to a sober assessment of potential conflict scenarios. How would a conflict between East and West, conceivably involving nuclear weapons, break out, and how likely is its occurrence?

64. Deterrence cannot be practised with dummy weapons and with arsenals incapable of impressing the full risk of unacceptable damage upon the adveraary. Yet, war prevention must not be confused with war-fighting. The risk of war, which is ultimately a product of political relations, cannot be derived simply from a calculus of relative technical capabilities.

65. A preoccupation with military-technological details, which is characteristic of much of the literature on nuclear weapons, beclouds the fact that any decision on the use of nuclear weapons is nor a simple technical option, but a political and moral calculation of the highest order. One-dimensional thinking in technically conceived worst-case scenarios distracta one from a realistic aeesement of the threats of the nuclear age. A political analysis of the risk of the outbreak of war in the East-West context leads to quite different and more reaeecuring results.

66. A rational, disarming first-strike attack by one major Power against the other is unfeasible in both technical and political terms. Under any realistic assumption, a considerable second-strike potent ' - ' would be retained by the other side. Any first-strike attempt would therefore risk suicide for the attacker. It is therefore the least likely of all scenarios of nuclear war. The elaborate precautions that the nuclear Powers have taken in reciprocal agreements to prevent or defuee accidental nuclear occurrencee - the enhanced "hot line" agreement between the United states and the Soviet Union is a case in point - also make it virtually impossible that a general nuclear conflagration would result from malfunctioning or misinterpretation. If the policy of non-proliferation of nuclear weapons is respected, one can also be assured that regional conflicts - even under the assumption of limited nuclear capabilities by one or several third-world countries - will be confined to the region and will not draw the two major Powers into a cataclysmic use of their own nuclear systems. Therefore, one can rule out the possibility, for all conceivable purposes, that a nuclear war involving the two military alliancea would start as a nuclear exchange.

67. In the East-West context this leaves the one realisti nuclear contingency to worry about: the possibility that a conventional war might erupt in Europe, based on the mistaken calculation on the part of the 'Warsaw Treaty Orqanization that its increased capabilities for non-nuclear attack and for the suppression of the escalatory threats of NATO would permit a rapid and perhaps decisive onslaught against Western European territory during some severe crisis. The immense buildup Of conventional arms in recent years by the Wareaw Treaty Organization has made this kind of scenario more plausible. But even this scenario cf East-West conflict can be discounted - at least for the time being. Already , on military grounds, it

is hard to imagine a Soviet premeditated attack in Europe of this order) NATO is confident that its deterrence and forward defence will provide an overwhelming disincentive to such war plans; and it has the technology and resources to deny the most plausible kinds of premeditated attacks.

68. Even the slightest risk that a failure of deterrence would result in an East-West conflagration must be cause for serious concern and preventive measures, but not for alarmist vision of a fragile deterrent balance poised for an apocalyptic breakdown. In reality, there is no ground for alarm, and deterrence is likely to maintain the relatively stable non-war relationship in which the outbreak of conflict becomes an infinitesimal possibility. Realistically considered, mutual deterrence has a considerable safety margin within which it can operate and will remain effective.

69. Despite this considerable safety margin, the functioning and the credibility of deterrence will require vigilance at all times. Threats to the stability of deterrence must be countered by appropriate action. These threats reside largely in the dynamics of weapons technology and the growth process of Soviet military might. Thus, the improvement of ballistic missile forces providing increased prompt, hard-target kill capabilities and the quadrupling of the number of nuclear warheads on the side of the Warsaw Treaty Organisation have increasingly threatened the survivability of forces deployed to deter aggression. By the same token, the deterioration of the conventional balance in Europe to the detriment of NATO jeopardizes the functioning of deterrence. Yet - as will be demonstrated in the final chapter of this presentation - all these dangers can be harnessed, and there is no question in the mind of NATO decision-makers that deterrence can be maintained as a stable and effective strategy of war prevention at acceptable cost, and this by no means necessarily at higher levels of forces and military hardware but at lower levels of more stabilizing and potentially less threatening weapons systems, better adapted to the strategy of flexible response.

70. In the light of these realities it is regrettable that public attention has so unduly focused on the potential failure of deterrence and the outbreak of war, mostly under the hypothesis of an early nuclear conflagration. The remoteness of a conflict, especially a conflict involving nuclear weapons, should be consistently emphasised. In reality, nuclear weapons of our day - at vastly decreased numbers in the West - have become safer and less accident-prone than in the past; nuclear-weapon holders have become more circumspect and prudent; deterrence in the form of flexible response has become more reliable and manageable. The powerful safeguards against doomsday scenarios that have been alluded to here have not occurred by accident. They are the product of reasoned prudence and the deliberate shaping of military-technological measures to serve this prudence.

71. Nevertheless, the small hypothetical chance that nuclear deterrence might fail and that intra-war deterrence would then have to achieve war termination at the earliest possible point and with the least possible damage should not be ignored. Again, such a hypothetical inquiry must be clearly focused and not dominated - as is so often the case in the current popular strategic literature - by the obvious intention of the analyst to prove the worst and to assume an accumulation of all those factors which might be conducive to a general catastrophe. There is no doubt

that any conventional aggression against NATO that could not be countered and stopped by rapid means of direct, conventional defence and subsequent political initiatives would precipitate a very dangerous situation in which NATO military commanders would have to request political authority to move to controlled escalation with nuclear means. Despite the rigid hierarchical constraints on the defensive use of nuclear weapons, available facilities of C³I and battle management would in such a situation be taxed in an unprecedented manner. It is impossible to predict whether the intended *controllability* of a conflict involving nuclear weapons would in fact succeed. There is, however, a considerable chance that control and early war termination can be achieved, and the ongoing and planned improvements in the C³I field will enhance such possibilities.

72. Any policy of early war termination is, in addition, supported by powerful motive 5 on the part of both conflicting parties. At each stage of the conflict, even though these stages may succeed one another at very short intervals, the uncertainty as to the controllability of further acts of escalation is likely to grow, and the damage that may already have been inflicted will provide a powerful disincentive to an; further heightening of hostilities. Both parties to the conflict, whatever their strategic doctrine or their war aims, would thus feel the compelling urge to incur no further risks and to proceed to war termination as their then overriding, shared objective. By contrast, a mechanically constructed worst-case scenario, assuring a simultaneous and cumulative failure of all control features and safeguards and the imputation to military decision-makers of an irresistible urge to make use of all nuclear fire-power once a conflict erupts does not reflect a realistic sequence of events.

The nuclear-winter hypothesis and deterrence

73. At the present time, much attention is given to ongoing research into the global climatic consequences of a conceivable nuclear exchange, and the hypothesis has been formulated that a large-scale nuclear war, or even a more limited nuclear exchange, would result in a drastic decrease of global temperatures - a nuclear winter - and accompanying disastrous results for humanity and the environment. Although many uncertainties remain, and scientists may alter their preliminary conclusions as a result of future research efforts, the issue of global environmental effects of nuclear war is undoubtedly a grave one.

74. Some initial thought has already been given to the strategic implications of the nuclear-winter hypothesis in its various facets. For example, it has been suggested that the prospect of a nuclear winter could make nuclear deterrence pointless and inoperative, since a self-defeating, civilization-destroying resort to force lacks all credibility as a threat and all reason as an act. Against such a view it could better be argued that the prospect of dire climatic consequences of the unlimited, uncontrolled use of nuclear weapons would simply make the case for the avoidance and deterrence of war - any war - even more imperative. Similarly, should deterrence fail, it would make the case for intra-war deterrence to facilitate a rapid termination of conflict at the lowest possible level of destruction compelling. The nuclear-winter hypothesis also argues for restructuring nuclear arsenals in terms of a further decrease in numbers, throw-weight and nuclear payload, as well as for an increase in the mobility and accuracy of nuclear weapons - developments that might be beneficial rather than damaging for the doctrine of deterrence.

A world without deterrence³

75. The contribution of deterrence to a relatively stable East-West relationship and to peace and International security In general can best be illustrated by a hypothetical inquiry into the nature and consequences of a world where deterrence would be suddenly removed, and where especially the Western alliance would spontaneously renounce all nuclear defensive options and, conceivably, even the possession of nuclear weapons.

76. The military balance of forces would thus be dramatically shifted, and the overwhelming conventional superiority of the Warsaw Treaty Organisation would immediately exercise its unmitigated effect upon Western countries, whether neutral or part of the alliance. The major disincentives to conventional attack would be lifted, and the spectre of devastating conventional conflicts in the densely populated countries of Europe - and also elsewhere - with the certain outcome of total political subjugation under the political régime of the attacker would commence to haunt people's minds. Not only this, but the sudden removal of nuclear deterrence, while making conventional war more likely, would not really eliminate the prospect of nuclear war. Even if all nuclear weapons were verifiably abolished - an unrealistic assumption - the knowledge of how to produce them and the means of producing them would remain. Consequently, the outbreak of conventional war would quickly raise the spectre of nuclear rearmament, and the race for nuclear rearmament, starting from a zero base, would be extremely destabilizing and conducive to pre-emptive first strikes.

77. However, war need not even erupt to change the world power balance in a fundamental manner. The mere presence of vastly superior and perhaps invincible conventional forces on one side would spell fear and intimidation of such a degree that political, social and economic choices in the free world - and mainly in Europe - would be immediately affected.

78. Investment would come to a standstill, mass flight of capital and talent would ensue, and the political and economic stability of the Western countries would be severely shaken, their wealth-generating capacity impaired or destroyed. The economic crisis and the ensuing political upheaval would profoundly affect the countries of the third world.

79. It is difficult to foresee the full extent of the resulting destabilisation of the world system as we now know it. Yet, critics of deterrence must address the likely consequences of their recommendations, and must demonstrate that the alternatives to deterrence they seek to promote could contribute to international security in comparable measure, while safeguarding against a disastrous shake-up of the global balance.

Nuclear non-proliferation and the third world

80. The generally dampening effect that nuclear weapons have exerted on the East-West antagonism - particularly the inhibitions they have imposed against the resort to war and in support of the management of crises - results from unique conditions, which cannot be duplicated by other antagonists: the bilateral nature

of the nuclear balance, the chastening impact of two world wars, the political feasibility of establishing a mutually acceptable territorial-political de facto modus vivendi in the area of acute confrontation in Central Europe, the early formation of military-political alliances, the pace of nuclear buildups in the context of this structure of opposing relationships (permitting the time and circumstances for peaceful adjustments), the special structure and magnitude of the arms competition underlying the nuclear balance (providing assurance against, rather than provocation to, an initiation of nuclear conflict) and, at all times, mutual recognition that the great risks and costs of any direct military encounter would clearly offset the value of any political objective that might be gained by such an encounter.

81. Therefore, one cannot infer from the stabilizing effects of East-West mutual deterrence that the production or deployment of nuclear weapons by other States would promote their security or the security of their adversaries (whether or not these adversaries also acquired nuclear weapons). Nor could one expect that the mutual deterrent effects of the East-West nuclear balance that extended to the other nuclear Powers in the distinctive political context of the post-war period would be replicated by new nuclear Powers outside this structure of relationships. It seems much more likely that the acquisition of nuclear weapons by additional States would be profoundly destabilizing locally and regionally. The proliferation of nuclear weapons among a number of States might also upset the stabilizing effects of the present East-West balance on United States-Soviet relations as well as on the relations of other States. Despite tendencies of the present world system towards a more multipolar nature, there can be no doubt that the global power balance is so constituted that the two major nuclear Powers have a decisive impact upon peace, stability and security in the world. This confers upon them a singular degree of responsibility which no other State or alliance, whatever its armament, can assume or, in reality, share.

82. At the present time, approximately 130 States have signed the nuclear non-proliferation Treaty. 1/ They have thereby acknowledged that the possession of nuclear weapons is not required for their own security, and that, pending the implementation of article VI, international security is generally served by the existence of the Treaty. The security problems of many third-world countries are grave and must not be belittled. The task of enhancing regional security in many areas of the world is of evident importance. But it is difficult to see how nuclear weapons, more widely spread, could advance such security. None of the few countries that have chosen to remain aloof from the non-proliferation Treaty has so far gone nuclear, obviously for the same reason. Nearly all of these countries have traditionally also been eloquent in affirming that they support the goal of nuclear non-proliferation and will not consider the acquisition of nuclear weapons, although they wish to leave their nuclear option open as a matter of principle or in case a nuclear arsenal is acquired by a specific competitor.

83. The spread of nuclear weapons to a particular third-world country or even - an unlikely case - the concerted acquisition of such weapons by two competing countries could scarcely contribute to international stability. Whether or not the possession of nuclear weapons by the present five nuclear-weapon holders (pending, hopefully, far-reaching measures of nuclear disarmament) is considered stabilizing,

any multiplication of the number of nuclear players would in all likelihood be considerably more difficult to manage and would arouse widespread fears. While the present nuclear arsenals along the East-West axis are conceived in terms of a bipolar antagonism, a wider spread in the third world would, in all conceivable cases, generate unspecified fears all around.

84. A number of States not party to the non-proliferation Treaty justify their rejection of the Treaty by the argument that it is discriminatory in nature. However, given the existence of nuclear weapons, the only non-discriminatory solution would be that they be allowed to proliferate to all other countries that might conceivably want them - obviously a highly destabilizing situation. Under the circumstances, the implementation of the suggestion of some third-world countries that they, too, should be allowed to have nuclear weapons in order to practise deterrence would neither eliminate the discriminatory nature of the non-proliferation Treaty - unless all countries were permitted to have the bomb - nor contribute to this security.

85. There is a significant contradiction in the fact that it is especially those countries taking a particularly negative stand on deterrence and the possession of nuclear weapons towards that end that wish to maintain the nuclear option for themselves. The same countries often argue that deterrence is tantamount to an endless spiralling upward of the quantitative and qualitative development of nuclear systems - a notion not shared in this paper - but that the acquisition of nuclear weapons by themselves for deterrent purposes would be harmless.

Implications for the arms race

86. "Arms race" is a misleading metaphor for the quantitative and qualitative competition for military strength between adversaries. It is misleading because the 'players' do not compete for victory according to agreed rules of the game on the 'identical course'. They do not compete in every weapon, and some weapons are always being retired from the race while others are entering it. Nor does one side always race, even though it may run.

87. So-called arms races have emerged as a prominent feature of international politics since advanced industrial countries, in the last quarter of the nineteenth century, acquired the ability to improve the balance of military power with respect to an adversary relatively quickly by the innovation and production of military technology. Although the resulting competition has sometimes aroused fears and heightened tensions, its relationship to the outbreak of war is, on the whole, non-existent, although occasionally ambiguous as one factor among many. In most cases races ended before war broke out. In some cases they may have prolonged peace or served as a surrogate for war. The clearest correlation of an arms race to the outbreak of war lies in the period between the two world wars, when the aggressive totalitarian States raced and the status quo democracies failed to run soon enough or fast enough to deter aggression until it was too late.

88. The nuclear-arms competition absorbs money and resources that, theoretically, might be spent for non-military pursuits, although it consumes a fraction of the

money and resources devoted to conventional forces, where the metaphor is even less applicable. Moreover, the post-war arms competition has sometimes disturbed East-West relations with popular fears, warranted or unwarranted, that one side is attaining a dangerous advantage. But given the unfortunate reality that States with conflicting interests arm against each other, one can view the contemporary arms competition - however undesirable many of its traits -- with its high rate of technological innovation across a broad spectrum of weapon systems, as providing a certain safeguard against the destabilising tendencies of arms races.

89. In the age of nuclear deterrence, the arms race has replaced shifts of alliance and the resort to war as the primary means by which the most developed States try to improve their military positions vis-à-vis adversaries. The rapid pace and great diversity of technological innovations have been a factor for stability in the East-West military balance in that no single weapon system can be regarded as decisive and one side's technological advance is likely to be offset by the other's before the first side achieves a decisive advantage, while neither side is likely to upset the balance with a sudden weapons deployment or technological breakthrough.

90. For the Western security system, technological development has been a particularly important instrument of deterrence, since it enables the West - consistent with its emphasis on civilian pursuits - to compensate for the superior capacity of the Union of Soviet Socialist Republics (owing to its political system) to maintain a high level of mobilized manpower, weapons production and forces-in-being on a steady basis.

91. Just as the "arms race" is a misleading metaphor, so is "stopping the arms race". The metaphor implies that the arms competition can be stopped without eliminating its cause, which lies in the political sources of East-West rivalry - in the ends, not the means, of competition.

92. An agreement to stop the arms race would have to stop the innovation, production and development of all weapons. But modern military technology has become so widely diffused among the laboratories and factories of developed States (whatever their social and economic system) and so fused with non-military technology and products that stopping the technological process would require eliminating the scientific-industrial infrastructure of developed States - which is obviously impossible.

93. This means that, although the testing, development, production and deployment of some weapons can be limited, reduced, or even stopped by agreement or unilaterally, the arms race as a whole has a propensity to shift towards channels that are not excluded. Although they rechannel the arms race, restrictions on weapons and technology are useful if they help to stabilize the arms competition and make it safer or cheaper; but only a resolution of the political sources of the competition could end it.

94. As noted earlier in this paper, many critics of deterrence tend to attribute all perceived dangers and evils of armament measures - especially measures of nuclear armament - to the adoption of the principle of deterrence. They see a

causal link between deterrence and every aspect of the competitive arms buildup between the two military alliances. Obviously, there is a prominent action-reaction component in the competitive arms buildup between the two military-pact systems. The interaction model of direct causality between deterrence and the arms race, however, is a gross oversimplification. The reality is more complex and, at the same time, exonerates deterrence from its imputed role as a fomenter of a nuclear-arms race.

95. There are mainly two factors that disprove the simple causality hypothesis; first, the way in which the two major Powers have actually funded their defence budgets and conducted their nuclear armament over the past decades; and secondly, the quantitative needs of a credible deterrent stance in a highly competitive nuclear relationship.

96. Looking at available data on defence budgets and the introduction of new weapon systems (particularly nuclear), one can easily demonstrate that there is no steady process of arms accumulation and no rapid action-reaction cycle in nuclear armament; the arms buildup is quite irregular, with long periods of restraint, mainly on the Western side. Thus, between 1968 and 1976, United States defence expenditure in constant dollars shrank continuously by a factor of almost two, while, at the same time, Soviet military expenses in constant roubles climbed steadily by about the same factor. During the period most notable for a rapid Soviet nuclear buildup - the years from approximately 1963 to 1978 - the United States did not develop a single new nuclear strategic weapon and no new strategic bomber. While Soviet arsenals grew rapidly in both numbers of warheads and collective throw-weight, the United States stockpile went down according to both these criteria. Since the 1960s, the number of United States nuclear warheads has gone down by 8,000, and their total throw-weight has been reduced by approximately 75 per cent. At a time when the Soviet Union was engaged in a rapid increase of its tactical nuclear weapons, including nuclear artillery, in Europe, NATO decided to dismantle 1,000 tactical nuclear weapons and to renounce one additional weapon for each intermediate-range weapon to be newly stationed in the framework of the modest intermediate-range nuclear force (INF) countermeasures to the Soviet SS-20 thrust. In 1983, during a period when Soviet SS-20 deployment reached new heights and new forward-based nuclear weapons of the Warsaw Treaty Organization were about to make their appearance, NATO, at the Montebello meeting, decided to withdraw another 1,400 nuclear weapons from Europe. Taken together, these NATO decisions mean that the alliance now deploys fewer nuclear systems in Europe than at any time since the early 1960s. This clear downward movement in the nuclear arsenals of NATO contrast with the unprecedented nuclear buildup that has occurred during the same period on the side of the Warsaw Treaty Organization. This brief balance sheet also indicates that, whatever the long-term tendencies and overall characteristics of the competitive arms relationship between the two systems, the thesis that deterrence will invariably entail a permanent and limitless escalation of nuclear hardware on either side can hardly be sustained.

97. The causality hypothesis is further shaken if one looks at the basic definition of deterrence in the Western sense. It has been pointed out above that credible deterrence according to the NATO reading does not depend on superiority or even numerical parity of military forces for war-fighting purposes, but on the

parity of defensive options. This explains the restraint in nuclear armament that NATO has for long periods been able to exercise and continues to practise. This is true for the present force relationship, but it can be extended further. Quite in contrast with the theory that deterrence tends inevitably to foster the endless numerical growth of nuclear systems, a much lower level of armament would be quite compatible with deterrence. In this sense it can be maintained that deterrence, as defined by NATO, does not possess a built-in tendency to grow, but rather a built-in propensity to bring about a stable nuclear relationship between the military alliances at considerably lower levels of nuclear hardware. This point deserves elaboration in connection with the subsequent section on disarmament and arms control.

98. The foregoing reflection on the implications of deterrence for the competitive arms buildup between the two military systems do not purport to provide a full explanation of the very complex mechanics of the nuclear-arms race. A more complete analysis must take into account both the different political objectives of the two military alliances and the factor of a rapidly evolving weapons technology. An empirical inquiry into the complex dynamics of the East-West arms competition shows that new nuclear hardware has rarely been acquired in direct response to particular moves by the other side. Major weapons developments, like the decisions on the NATO side to relinquish a large number of nuclear-weapon systems, have often been taken autonomously, with long lead times, solely on the basis of perceived national needs and with the aid of available technology. On the NATO side - and to some extent on the Soviet side also - new armaments decisions have often improved strategic stability by replacing older, more vulnerable systems. However, there have also been armament decisions that have not contributed to stability. The Soviet SS-20 deployment, planned and implemented at the height of détente to create a conspicuous monopoly of land-based intermediate-range nuclear missiles, is a case in point.

Implications for negotiated arms reductions and disarmament

99. Just as it is impossible to stop the innovation, production, and deployment of all military technology in advanced industrial-technological States that maintain armed forces, so it is impossible to eliminate independent armed forces, short of the establishment of an effective world government. Thus, appeals for "disarmament" in the sense of general and complete disarmament are statements of aspiration with very little relevance in the real world. However, if disarmament is taken to mean prohibiting, reducing, limiting or controlling the development, testing, production or deployment of specific weapons or categories of weapons, that is to say, "arms control", it is demonstrably feasible in the existing system of sovereign States.

100. The primary purposes of arms control are to reduce the risk of war and to make the arms competition more predictable and therefore more moderate and stable. Since the Second World War a number of arms-control agreements to make the military environment safer have been achieved, ranging from the partial nuclear-test-ban Treaty ^{7/} to the "hot-line" agreement. But most of these have not directly, if at all affected the relationship of forces in the central military balance. Only the

ABM Treaty 3/ and the SALT I Interim Agreement 8/ have fallen into this category (which also includes the unratified SALT II treaty 9/). Popular hopes focus primarily on so-called strategic-arms control, that is, on agreements that restrict medium-range and long-range nuclear weapons and weapons designed to defend against them.

101. The fundamental reason for the relative paucity of strategic-arms agreements is that, as per-nuclear history also demonstrates, it is exceedingly difficult for armed adversaries, even if they genuinely seek the benefits of an arms agreement, to reach a mutually beneficial agreement that would commit them to observe a particular relationship of forces restricted by treaty. For such an agreement raises formidable problems of measurement and verification, which are compounded by technological innovation, the diversity of interrelated weapon systems, and the asymmetry of military structures and functions. It confronts adversaries with awkward problems of formal equity and equivalence, which do not impinge on national status to the same extent if left undefined. Most important, it requires them to forgo opportunities to adjust restricted categories of forces to compensate for unanticipated and of ten unpredictable technological developments and qualitative-quantitative changes in unrestricted categories - a difficulty that is compounded by the complexity of force structures and the rapid pace of technological developments. All of these problems are accentuated in proportion to the comprehensiveness of an agreement. Yet the less comprehensive an agreement, the more likely it is that developments in unrestricted areas will upset the military balance that the agreement was intended to codify.

102. The problem of achieving and maintaining mutually advantageous strategic-arms agreements can be mitigated if the adversaries are content to accept the balance of forces where it exists and confine arms restrictions to those that either do not affect or else put a ceiling on desired military programmes. But an agreement like this is not likely to produce enough of the benefits of arms control to seem worth the problems it entails. In the democratic countries the actual effects of such limited agreements on the arms race are likely to seem inadequate in comparison to the hopes invested in them. That is the story of SALT I and II.

103. With these considerations in mind, the Atlantic Alliance seeks substantial arms reductions, not just ceilings. But recognizing that reductions, in themselves, do not necessarily make the arms race safer, more predictable, or even cheaper, the West has proposed reductions within a structure of forces which is consistent with a rough equivalence of striking power and mutual abnegation of strategic superiority and which is designed to foster the overriding objective of arms control: to strengthen strategic stability, that is, to reduce the risk of war by minimizing any incentive for an armed attack. The distinctive features of this structure are the reduction of warheads per launcher and of warheads deliverable on military targets, while strategic defence weapons are severely limited in accordance with the ABM Treaty, so that neither side is vulnerable to a first strike or invulnerable to unacceptable retaliatory damage. To foster mutual agreement on offensive-force reductions, considering the asymmetries of force structures, the West proposes trade-offs that would enable each side to trade limits on the weapons in which it holds an advantage for comparable limits on weapons in which the adversary holds an advantage.

104. The indispensable condition for the achievement and the success of an arms agreement is that it reflect and stabilize a balance of military power which the signatories are content to live with and which they prefer to the balance that might result from unregulated arms competition. From the Western standpoint this balance is expressed in the concept of military parity, or a parity of options, which refers to a relationship of forces in which neither side has the kind of overall advantage that would threaten the security of the other, and neither lacks the assured retaliatory capability to make aggression unprofitable. The essence of this balance is a situation of mutual deterrence in which each side can be confident that the other will not launch a pre-emptive or an offensive nuclear or non-nuclear attack against it.

105. Apart from these general considerations concerning NATO objectives in current and future arms-control negotiations, the extent to which deterrence can make a particular contribution to negotiated disarmament is worth noting. This contribution is twofold.

106. In the first place, as has been demonstrated above, deterrence, properly conceived, possesses a built-in tendency towards lower equilibrium points in nuclear, as well as conventional, forces. In negotiations on nuclear-arms control, the United States, with full alliance support, has thus consistently proposed mutually balanced levels of weaponry far below the number of existing or planned systems. Cases in point are the United States negotiating proposals in the course of the SALT II negotiations, the strategic arms reduction talks (START), the current bilateral negotiations in Geneva, and the proposal of a double-zero solution on intermediate-range nuclear weapons during the 1981-1983 INF talks.

107. There is a second reason why credible deterrence provides a favourable condition for arms control. Functioning deterrence grants effective protection from attack and provides a feeling of confidence and reassurance, without which arms-control negotiations may aggravate tensions and suspicions. With a background of credible deterrence, a negotiator has a sufficient margin of flexibility and manoeuvrability to make negotiations worthwhile and to strive successfully for lower levels of weaponry. Far from being an obstacle to successful arms-control negotiations, as is occasionally claimed, deterrence facilitates the arms control process.

The future of deterrence

Stabilizing deterrence: the case for restructuring

108. For 40 years deterrence has imposed a measure of restraint upon international politics that is unique in the history of great-Power conflicts. Under the inhibitions of mutual deterrence, the super-Powers and their allies have avoided war. They have developed important conventions of behaviour and means of communication for avoiding and moderating crises that might lead to war, and they have learned to negotiate some of their most serious differences where interests converge. Never harmonious, the quality of East-West relations ebbs and flows, but these relations are as far from the brink of war as ever. Indeed, they are much

further from war than at earlier points in the post-war period, which were themselves not near, for example, two Berlin crises, the Korean War and the Cuban missile crisis. In the absence of any functional equivalent, therefore, we can continue to rely on deterrence with confidence, while trying, through arms agreements and diplomatic accommodations, to make it as safe as possible.

109. Nevertheless, for reasons of ethics and self-interest, we should not be satisfied forever with a system of deterrence that depends ultimately on the possibility of catastrophic destruction. Deterrence in its present form, as the currently - best available policy of war prevention in the nuclear age, rests on sound moral foundations. Yet, its ethical acceptability has one important prerequisite that no opportunity be lost in the conscientious search for ways to diminish the reliance on nuclear weapons. This corresponds to the teachings of many religious leaders who have accepted deterrence, including its nuclear component, as a temporary expedient in the interest of the preservation of peace, predicated upon a morally responsible search for a lasting state of peace that could ultimately dispense with the assistance of the nuclear instrument. A better system of international security must, at the least, offer equally effective prevention of war with significantly less reliance on nuclear retaliation at substantially lower levels of nuclear armament. To achieve a better system of mutual security, however, we must not only have a sound idea of where we are going, but also a practical road-map for getting there.

110. In search of an alternative to deterrence, some are inclined, whether from conviction or for purposes of propaganda, to advocate Utopian solutions that would require the transformation of the international political system, such as schemes of universal security that are as remote from reality as world Government. Others are content to exhort Governments to get rid of nuclear weapons and the arms race or to conduct their relations according to the kind of rules of good behaviour that are supposed to govern the affairs of an orderly State, as though the problems of the real world of sovereign countries with conflicting interests and opposing armed forces could be overcome simply by prescribing them out of existence.

111. We propose, as an ultimate goal, not an alternative to deterrence, but a fundamental restructuring of deterrence. Restructuring of deterrence must be compatible with the existing international system and the basic political and military relationships within the system, taking into account, in particular, the imbalance in conventional forces and geopolitical asymmetries. This means that it must be based on the realities of contemporary international politics, for example, the reality that fundamental conflicts of interests and aims trouble East-West relations, that the Eastern and Western security systems are engaged in a competition for military strength to support these conflicting interests and aims, and that nuclear weapons cannot be uninvented or, in all probability, verifiably eliminated.

112. Fortunately, another reality is that the nuclear adversaries have a common interest in reducing the risks of war and of catastrophic destruction if war should occur. To implement this common interest they need not wait for an alternative to nuclear deterrence. They can accomplish a great deal - even unilaterally - by further improving the stability of the existing system of deterrence.

113. On any realistic road-map, making the aviating system of deterrence safer is also the prerequisite for diminishing our reliance on it. For only a stable military equilibrium that gives both sides a reasonable sense of security can provide the basis for moving co-operatively towards a structure of deterrence less dependent on nuclear weapons.

Unilateral measures

114. To make the existing structure of deterrence more stable, both sides can take a number of measures to make their own forces less vulnerable to an attack and less likely to threaten an attack in the eyes of the adversary. For example, they can reduce their reliance on fixed-site missiles with many warheads; move towards greater reliance on appropriately stationed, single-warhead missiles; emphasize delivery systems and warheads that ensure accuracy, diminish collateral damage and reduce dependence on first use for their utility; and diminish the vulnerability of C³ facilities, while further increasing their capacity to ensure political control of the use, as well as prevent the unauthorized use, of nuclear weapons.

115. NATO has taken an important unilateral initiative to enhance the stability of deterrence within the framework of flexible response by undertaking a programme to obviate the need for early recourse to nuclear weapons against conventional aggression. By strengthening conventional defence capabilities against the Warsaw Treaty Organization's first strategic echelon and utilizing new conventional technology to combat follow-on (or reinforcement) echelons before they enter the battle, NATO will reduce its dependence on early resort to nuclear weapons and thereby increase its political and military flexibility and freedom of action. At the same time, these conventional improvements will obviously not be of a nature or magnitude to support a NATO-initiated offensive. Therefore, if the Warsaw Treaty Organization's intentions are purely defensive, these NATO defence measures will make the military balance in Europe safe for them as well as for the Western allies.

116. Another way to enhance the stability of deterrence while reducing relative dependence on nuclear weapons could be to utilize new defence technology that is emerging, in order to move towards a balanced structure of deterrence less dependent on nuclear weapons and more dependent on non-nuclear defence against attacks. In the strategic realm, in any case, the United States feels compelled to give serious consideration to defence options because of trends in Soviet strategic forces which threaten United States land-based retaliatory forces: the substantial increase in the number of warheads on heavy missiles with a hard-target kill capability; the heavy investment in development and improvement of the world's only currently deployed anti-ballistic-missile system (in the Moscow area), with a growing break-out potential and the world's only deployed anti-satellite capability. Moreover, these adverse trends in the balance of long-range strategic forces are accompanied by similar developments concerning the military balance in Europe: the great superiority in deployed intermediate-range and short-range ballistic nuclear missiles and the development of anti-tactical ballistic missiles (ATBMs), such as the SA X-12, which are not technically covered by the ABM Treaty's restrictions. All these Soviet achievements are based on comprehensive research and development.

117. In spite of these trends in Soviet forces, which threaten the stability of deterrence from the Western standpoint, and notwithstanding the long-term promise of achieving a strategic balance less dependent on nuclear weapons, the United States remains committed to the ABM Treaty - a commitment highly appreciated by its allies - and earnestly seeks Soviet compliance with it.

Co-operative measures

118. As the preceding discussion indicates, although there are a number of steps each side can take unilaterally to increase not only its own assurance of effective deterrence of an attack but also the adversary's assurance, other measures to stabilize mutual deterrence are best implemented, and indeed, can only be implemented, through negotiated co-operation,

119. The greatest, most immediate contribution to a more stable nuclear balance is certainly going to be provided by an agreement or agreements on strategic and intermediate-range nuclear weapons that enable both sides to adjust their nuclear-force requirements to a substantially lower level of nuclear warheads in categories of reduction that further alleviate mutual fears of a nuclear first strike unprovoked by a conventional attack.

120. One essential category of such measures is arms-control agreements that improve the political relationship between East and West. For instance, a successful conclusion of the Conference on Confidence- and Security-building Measures and Disarmament in Europe would alleviate fears and suspicions springing from the confrontation of military systems, reduce the risk of war by miscalculation, and enhance the influence of the political element in mutual restraints in comparison to the military element.

121. Another decisively important category of negotiated co-operation to increase the stability of mutual deterrence is arms agreements that would stabilize deterrence by diminishing mutual fears of attack and, especially, a nuclear first strike in a serious crisis. The associated confidence-building measures proposed in the framework of the strategic arms reductions talks and the intermediate-range nuclear forces fall into this category.

122. Thinking in the United States is currently directed towards a third, more far-reaching category. It looks towards a long-run strengthening of deterrence by making it less dependent on offensive nuclear weapons. It envisions agreed measures to change the structure of military relations to one less dependent on nuclear defence and more reliant on non-nuclear defence against nuclear attack. President Reagan announced this as an ultimate goal in March 1983, when he launched the Strategic Defence Initiative (SDI). SDI is a United States Government research programme to explore the feasibility of a strategic defensive system that would, in the United States view, enable nations to live secure in the knowledge that their security does not exclusively rest upon convincing the adversary that aggression will be met with nuclear retaliation, but rather on the ability to defend against potential attacks - to protect national populations by conventional means rather than avenge such attacks with nuclear weapons.

123. In the view of the United States Government, the ultimate achievement of such a system by both the West and the East would render nuclear weapons functionally obsolete, even if it could not guarantee their literal abolition. At the same time, the objective would not be to make the world safe for conventional war but to encompass a non-nuclear balance, reinforced by the potential for nuclear rearmament, within the constraints of a comprehensive arms agreement which would presuppose an underlying political accommodation.

124. From this perspective, the most immediate objective of Western arms-control efforts would be to achieve within the next decade a substantial reduction in the striking power of offensive nuclear arms while forgoing any change in the mix of offensive and defensive arms, whether the latter were designed for deployment on Earth or in space. At the same time, it would be essential to investigate the feasibility of achieving the ultimate goal of the SDI programme and to consider co-operative measures of transition towards that goal. The United States Government insists that it will consider potential next steps jointly with its allies if SDI research yields positive results; the United States would also consult and negotiate with the USSR, as provided in the ABM Treaty, about co-operative ways to introduce defensive systems into the force structures of both sides.

125. It is part of this scenario, as presented by the United States Government, that every such transitional step would be designed to achieve an agreed balance of offensive and defensive capabilities that both sides would regard as stabilizing. No step would permit either side to attain superiority, either objectively or in the eyes of the adversary. Obviously, negotiating such transitional steps would be difficult. Among other difficulties, it would presuppose broad disclosure of technological developments and a reasonable resolution of formidable problems of verification. The United States Government is aware that the process would work only if there were underlying agreement on the objective of stabilizing mutual deterrence at a much lower level of nuclear striking power and a much higher relative level of non-nuclear defensive capabilities.

126. The advocates of this view are aware that the ultimate objective - creating an agreed defence-dominant structure that would permit both East and West to ensure their security by their own capabilities to resist nuclear attacks - may be unattainable for political as well as technical reasons. They accept that a less-than-perfect national defence system, combined with radical reductions of offensive-nuclear-force, may provide some of the advantages of a nearly perfect system without the problems the latter system may entail. The authors of this line of thinking are aware that the answers to these questions may not be known for a long time.

127. The strategic significance of this new approach is evident; equally evident - to both the United States and its allies - is the degree to which the SDI concept impinges on central issues of alliance security and survival, as well as East-West relations and the future of arms control.

128. The Atlantic alliance has therefore initiated an intensive process of consultation which can be expected to generate definite results only over time, as the technological perspective can be more clearly visualized and the various strategic implications be more reliably assessed.

129. In this early phase of alliance consultations, many alliance leaders have, however, broadly speaking, voiced their support for the United States research programme under SDI, stressing its compatibility - and the need for its continuing compatibility - with the ABM Treaty and acknowledging that it is morally justified, politically necessary and in the security interest of the West as a whole.

130. In addition, allied Governments have, over recent months, formulated a number of understandings reflecting significant security interests on their part, in an attempt at interpreting and clarifying the United States concept as it evolves. It is important to note that these understandings have been accepted by the United States and have now also been incorporated into guiding United States Government documents. There are thus a number of tenets that are already broadly shared within the alliance. It appears agreed, whatever the further manifestations of the strategic defence concept and not prejudging its ultimate desirability or feasibility, that:

(a) The alliance's political and strategic unity must be safeguarded; there must be no zones of different degrees of security in the alliance; specifically, Europe's security must not be decoupled from that of North America;

(b) The aim of the SDI research programme is not to achieve superiority, but to maintain and enhance the essential strategic balance which has kept the peace for 40 years;

(c) Any transition to new defence systems, going beyond the research phase, must be effected on the basis of co-operative approaches together with the Soviet Union, as has been part of the United States concept from its inception;

(d) There is an intrinsic relationship between any co-operative moves towards more defence-dominant structures and significant reductions in offensive nuclear weapons;

(e) The overall aim of SDI is to enhance, not to undercut, deterrence;

(f) The strategy of flexible response must remain fully valid for the alliance as long as there is no more effective alternative for achieving the goal of preventing war;

(g) Finally, during the entire phase in which the possibilities of the strategic defence concept are explored comprehensive intra-alliance consultations remain of particular significance.

131. During this entire far-reaching attempt at restructuring deterrence, the prevention of war, including nuclear war, and the promotion of confidence and co-operation between the two military systems will continue to be the overriding objectives of the West. The future of deterrence resides in large measure in an even stronger reliance on its political component.

132. The political component of deterrence becomes particularly important as we enter a new phase of improved relations between the two major Powers, and of

renewed active arms-control negotiations. In this phase, both sides have put forth concepts and proposals that include significant elements of convergence, including their shared will to prevent all wars, nuclear or conventional; to prevent an arms race in space and to terminate it on Earth; to limit and reduce - and, indeed, ultimately eliminate - nuclear arms; and to enhance strategic stability. There are other possible elements of convergence that need to be explored. But the translation of these elements into the details of one or several comprehensive arms-control agreements will be an arduous and probably long process, which will illuminate conflicts of interest and perception. In order that the constructive effects of this process may predominate over the divisive effects, it will be indispensable that both sides try to understand each other's perspective as objectively as possible, without animus or paranoia, including their respective views on deterrence, and that they strive to improve the constructive quality of their political relations in areas outside the arms negotiations. The objective must be to make the East-West conflict safer, and gradually to supersede the present system of safeguarding peace by mutual deterrence that is based so heavily on the capacity of both sides to destroy each other - and themselves. The two great Powers must confront these tasks as the fiduciaries of the entire international community, responding to the yearning for durable peace in freedom of their own populations, but no less to the legitimate concerns and ideals of the peoples of the third world. There is now a time for hope that this challenge can be met.

CHAPTER V

PAPER BY MR. K. SUBRAHMANYAM

1. Deterrence is a fact of life, and it has been resorted to on certain occasions to achieve morally commendable results but on others, reprehensible results.
2. Deterrence, as a concept, is as old as the ability of human beings to inflict pain on their fellow human beings and to anticipate the other person's capacity to inflict such pain. For centuries monarchs and terrorists have practised taking and holding hostages to influence the conduct of others, and many of those instances were exercises in deterrence, just as holding cities and populations hostage to nuclear annihilation is today. During the Second World War, mutual deterrence operated in respect of the use of chemical weapons.
3. Nations calculate the costs, risks, and gains of their actions, and where they find that the costs and risks of aggressive action will outweigh the likely gains, then the deterrent factor prevails. Such costs and risks need not be military.
4. In the present-day world, political consciousness has developed to such an extent that it is difficult for a country to overrun its neighbour and impose its will on its population, as used to happen prior to this century. Costs of occupation are usually high, even in cases where the military aggression itself can be carried out at a relatively low cost. That could become a factor of deterrence. Hostile reactions of other nations in the region could also be a deterrent factor. Even in this age of nuclear deterrence, non-nuclear factors operate as deterrents, especially outside the industrialized world. But for that fact, the insecurity of developing nations would be more pronounced than it is today. In assessing the efficacy of deterrent factors on nuclear-weapon nations, there is the ever-present difficulty of computing how much non-nuclear factors contribute towards the actual operation of deterrence.
5. In the case of non-nuclear deterrence, the power to inflict intolerable pain on a nation arises only after its armed forces have been vanquished, while in the case of nuclear deterrence, the capability to inflict such pain or unacceptable damage is available without a single soldier having to cross a border, and such pain or damage can be inflicted in a matter of hours. What distinguishes nuclear deterrence is the power to impose intolerable pain or unacceptable destruction irrespective of the outcome of military operations and the certainty of destruction (at least at the present stage, before the technology of intercepting warheads is developed).
6. That the doctrine of nuclear deterrence is effective and viable appears to be largely a matter of belief. There is no way of proving it or, for that matter, disproving it. So far, neither the United States Government nor its Western allies have admitted that any nuclear threat on the part of the Soviet Union has deterred them on any occasion. Nor has there been any explicit admission on the Soviet side that it has been deterred by any nuclear threat.
7. There are accounts of nuclear threats conveyed by President Eisenhower to China in 1953 on Korea and in 1958 on the Quemoy-Matsu issue. There may be strong reason to infer that deterrence worked in these cases. They occurred when the side

that threatened had overwhelming nuclear superiority - absolute superiority in weaponry. Nothing, however, has happened in the era of nuclear parity to give any clue whether nuclear deterrence would operate in the present strategic environment.

8. The widespread belief in the doctrine of nuclear deterrence is based on a series of unprovable - at least unprovable at present - assumptions that one's adversary had certain hostile intentions, but did not pursue them because of one's initial nuclear superiority, which was sustained for about two decades. These assumptions are themselves derived from certain perceptions.

9. In retrospect it is difficult to say who deterred whom, which instrument deterred which. It could also be argued that each side, in spite of all rhetoric, had enough sense not to push the other side too far and deterrence was not called upon to play a role at all.

10. Though the doctrine of deterrence may be based only on certain beliefs, it has not been possible to ignore it, since it forms the basis of the defence efforts and philosophy of the most powerful country on earth. Once a belief system in deterrence became entrenched, it was inevitable that the nations that subscribed to the doctrine of deterrence could be influenced within the framework of the same doctrine. It was not, therefore, relevant whether other nations subscribed to the doctrine of deterrence or not. So long as the most powerful group of countries (the United States and the rest of NATO) subscribed to it, the rest of the world had to take note of it. Those who believed that they were able to exercise deterrence through their nuclear arsenals were, in turn, bound to be deterred by the nuclear arsenals of others. In that sense, the doctrine of nuclear deterrence was a self-fulfilling prophecy.

11. Those who built the enormous arsenals of the 1960s, the dimensions of which still haunt us today, now admit that the elaborate quantifications put forward then were only rationalizations of certain compromise decisions and apparently the sizes of those arsenals were not derived from meaningful military criteria. The very elaborate debates of the 1960s about counter-force versus mutual assured destruction now sound totally unreal. First, the weapons of that period did not have the necessary accuracy. Secondly, in any war in which the capability for accuracy is not evenly matched between the two sides, bombing or missile attacks are bound to deteriorate into counter-value destruction. In the 1960s there was not adequate knowledge about the effect of electromagnetic pulse (EMP) and command and control problems. All such debates now end with the declaration: "A nuclear war can never be fought and won. It should never be started", and the doctrine of mutual assured destruction, which was once an article of faith, is being increasingly questioned. There is a growing amount of literature on the problems of command and control in a nuclear war at the tactical level and on the probability of its rapid escalation to theatre and strategic levels. Historical experience shows that wars have generally produced more damage and casualties than anticipated by their initiators.

12. Throughout the last four decades of the nuclear era, two strands of thought have been evident within the framework of the doctrine of nuclear deterrence. One might be termed "passive deterrence", and the other, "dominant deterrence". The latter concept allows one to take all initiatives below the nuclear threshold, while denying them to a rival. It evolved, together with efforts to project

nuclear weapons as a currency of power, to develop war-fighting capability, which was also euphemistically known as counter-force, and to contain the spread of nuclear weapons to new nations and the development of a global network of nuclear capability. The development of war-fighting capability or counter-force doctrine was justified on two grounds. First, it was argued that counter-force was more humane as it sought to avoid city targets. Secondly, it was felt that, without the projection of war-fighting capability, the posture of deterrence would not be credible. Whatever the justification, this approach led to an expanded programme of weapons production, since the targets for war-fighting or counter-force could be endlessly multiplied and various factors of uncertainty regarding availability, reliability, accuracy, vulnerability and so forth could be combined and cited to justify a large arsenal and the development of a whole range of tactical nuclear weapons and their associated infrastructure.

13. Now, in the period following the development by the two major Powers of somewhat comparable stockpiles, at levels which give each of them the capability of destroying the global industrial society several times over, the doctrine of nuclear deterrence has been reduced to a continuous arms race regulated only by resource constraints, and the obsolescence factor of weapons. In essence, it is an attempt to project an image of superiority over one's rival to use that image of power to exercise influence over the international system.

14. Nuclear weapons cannot normally be used as weapons of war when both adversaries have them in comparable quantities and levels of sophistication. They can be used only against non-nuclear-weapon States, which would amount to an act of terrorism. War implies the use of organized force in a controlled way to achieve objectives, the value of which will be commensurate with the costs and risks involved in the war. In a situation where both sides have enormous stockpiles of nuclear weapons, the risks that such wars will get out of control are quite high. The cost of such wars in terms of pain and damage are likely to be of unacceptable levels. Since this is so for both sides, neither side is in a position to claim to deter the other without itself being deterred by the existence of the nuclear weapons.

14. In such circumstances, one side's claim that resort to nuclear weapons and war-fighting constitutes an essential part of its strategy may not necessarily result in greater deterrent impact on the other side. It may make the former side appear to have greater risk-taking proclivities than the latter. Acting irrationally in order to have one's way is a strategy employed by many, including children. If the side that contributes to the belief system in deterrence has an image of being a risk-taker, that will have a certain negative impact on others. The logical step for the rival side is to enhance its image of punishing capability further, so that the risk-taker will not be in any doubt of the pain and suffering in store for him if he were to resort to nuclear weapons first. The assertion of a doctrine of first use of nuclear weapons and their consequent legitimization as weapons of war compel more nations outside the framework of the two blocs to practise nuclear deterrence by developing their own weapons.

16. At the military level, especially when projecting images, the tendency has been to develop a straight correlation between the level of stockpiles of weapons and the deterrent potential. In a sense, this is an extrapolation of the lessons of conventional war to nuclear strategy - that the side which runs out of its

ammunition will have to seek terms for capitulation. But in nuclear war, irrespective of the outcome of the war, pain and damage to both sides are certain. The deterrent effect is to be visualized not merely with reference to the pain and damage that one can inflict on the adversary but also with reference to the pain and damage one is able to bear and withstand. This is largely a non-quantifiable factor. For instance, the United States did not withdraw from Viet Nam because the latter was able to impose greater pain and damage on the United States than the other way around. Far from it. But in the view of United States public opinion, the pain the United States had to undergo in terms of casualties was not worth the objectives it desired to secure in Viet Nam. Similarly in Lebanon, the casualties suffered by the United States marines were not worth the objectives the United States had in mind. Hence its withdrawal.

17. The operation of deterrent effect on the decision-making of two adversaries equipped with nuclear weapons is far more complex than what can be reflected in the simple equation of the sizes of the two stockpiles. The arms-control approach is largely based on this equation and hence has proved inadequate. More important among the interacting factors generating deterrence are the degree of uncertainty regarding escalation and the ability to control and terminate a nuclear exchange, and the difficulty in calculating whether the pain and damage likely to be inflicted on oneself is worth the objective one desires to secure. Viewed from this perspective, it is logical to conclude that, rationally, there should not be a nuclear war between two adversary military blocs armed with large stockpiles of highly sophisticated nuclear weapons and deterrence should be operative. The real problem is the likelihood of irrationality and miscalculation.

18. It stands to reason that the posture of threatening to resort to nuclear weapons has greater risk of irrationality and miscalculation than the one of maintaining nuclear-weapon stockpiles for deterrence. Similarly, the undue emphasis on the pain and damage to be inflicted on the adversary without taking into account the pain and damage one's own side can withstand is likely to increase the probability of miscalculation. The strategic bombing of the Second World War and the use of five million tons of bombs on the Indo-Chinese States are instances of judgement made with undue emphasis on the pain and damage inflicted on the other side, without considering the consequences or alternative ways of achieving one's objectives. This decision-making tradition - of which the destruction of Hiroshima and Nagasaki are logical extensions - with all its proclivities for miscalculation born of undue emphasis on technological solutions to political problems is the engine of nuclear proliferation. Faced with such a decision-making tradition and the proclivities of miscalculation, an adversary is likely to compensate by projecting an image of retaliatory capability calculated not to leave people of such a decision-making tradition in any doubt about what will happen to them if they miscalculate.

19. Since the probability of using nuclear weapons - so long as they are treated as legitimate weapons of war - is higher in situations of asymmetry, there is pressure on non-nuclear-weapon States that are in a position to do so to acquire nuclear weapons to deter interventionist nations armed with such weapons. Those who subscribe to the belief system of nuclear deterrence can be deterred only by nuclear weapons. Viewed in this way, the doctrine of proportionate deterrence is both rational and attractive to nations with medium-level resources. The larger the number of nuclear-weapon Powers, the greater the effect of the overall

ambiance of deterrence on all nuclear-weapon Powers and hence the greater the stability of deterrence, argue the espousers of proportionate deterrence doctrine. The contrary view, more prevalent, that the risk of a nuclear war breaking out increases with an increase in the number of decision-making authorities is negated in practice. It is now public knowledge that the nuclear missiles in submarines are not under centralized electronic locking arrangements and can be fired by the submarines' crews themselves. In other words, every nuclear-missile submarine is an independent decision-making authority to launch weapons. Each nuclear-missile submarine has far more fire-power than incipient nuclear-weapon Powers are likely to have for a decade or two after they initiate a nuclear-weapon programme. Applying the law of probability generally extended to the proliferation of nuclear weapons among new nations, the larger the number of nuclear-missile submarines, the greater the probability of a nuclear war.

20. Murphy's law stipulates that anything that can go wrong in a system is bound to go wrong some time or other. All these laws of probability can be applied to the present situation. If the risk of nuclear war arising from the possession of enormous stockpiles of nuclear weapons by the major nuclear Powers is compared to the risk of nuclear war arising from the acquisition of nuclear arsenals by a few additional nations - an increase in risk suitably compensated by the increase in ambient deterrence consequent upon such additions - it is quite obvious that the current wisdom on the issue of horizontal proliferation is a dogmatic extension of the body of nuclear doctrine and its "theological" derivations without adequate rational basis. Contrary to current wisdom, the logic of nuclear deterrence, the doctrine as practised by the nuclear-weapon Powers points to the inevitability - even the desirability - of some further proliferation.

21. The war-fighting doctrine has led to the continuous buildup of stockpiles of nuclear weapons and improvement in their accuracy by analogy with doctrines for fighting with conventional weapons. The doctrine of defending oneself against nuclear weapons will give further impetus to the war-fighting approach and consequently will lead to an open-ended buildup of both offensive and defensive weapons. The war-fighting approach is based on the assumption that a victory is possible in a nuclear war and war termination is feasible since the nuclear exchange would not escalate beyond the control of central national authorities. To that extent the war-fighting approach is antithetical to the doctrine of existentialist mutual deterrence.

22. Those who still uphold the feasibility of fighting with nuclear weapons; in a war in which each side directs its weapons strictly against the military targets of the other side appear to envisage that they will be able to impose such a rule on the adversary and thus have the overall capability of controlling escalation. This does not appear to be a wholly realistic expectation. If one side can cross the nuclear threshold and engage in counter-force strikes to gain advantage for itself, there is no reason why the losing side should not threaten to cross a second threshold and start inflicting pain and destruction on the adversary's population. Deterrence should be able to prevent optimistic expectations of being able to initiate or continue with a counter-force strike to one's own advantage. In many of these scenarios, however, rationality and irrationality are mixed and used in a selective way to support a predetermined favourable conclusion. Crossing the nuclear threshold is considered rational by the side doing it. On the other hand, it may be considered irrational by the other side. Having crossed the

threshold and engaged in war-fighting with adequate survivable nuclear forces in reserve, the first side expects that the other side will abide by the rule and behave rationally, retaliating only in counter-force mode, since it will not be in its interest to escalate to counter-value level in view of the first side's survivable forces in reserve. That was not how the weaker Royal Air Force behaved while attempting to retaliate against the Luftwaffe's counter-force attack in the Second World War. With as much rationality as the initial decision to cross the nuclear threshold, the adversary can make limited counter-value strikes to deter continuation of counter-force attacks. In one's assessment of an adversary's reactions to one's decision to cross the nuclear threshold or one's attempt to engage it in counter-force exchanges, there is enormous scope for miscalculation, since such reactions are mostly culture-bound.

23. Today deterrence is looked upon mostly as an operational strategic doctrine. Thus, instead of politico influencing the strategy of deterrence, the latter tends to dominate relations among nations. Since the strategy of deterrence is based on the perceived need for a capability to dissuade an adversary or rival with hostile intentions, the pursuit of deterrence has tended to freeze political relations in a continuing hostile posture. Had deterrence been an instrument of politics over the last four decades, there would have been interaction between the posture of deterrence and changes in international politics that have been very profound and of a far-reaching nature - decolonization, the emergence of five nuclear-weapon Powers, the impact of technology on the international system and so forth. Obviously the perceptions of threats today are not what they were three or four decades ago. The interdependencies of nations have increased. Ideologies have declined in their appeal.

24. Unfortunately, the doctrine of deterrence remained de-linked from politics among nations and was mostly pursued as a mechanical, operational strategic doctrine, focusing excessive attention on weaponry, deployment postures and stockpiles. Even detente got linked up with arms control and its bean-counting approach. To sustain deterrence as a strategic posture, a basic adversarial relationship became a prerequisite. It was easier to explain failures of policy due to inadequate political understanding through a Manichean interpretation of the dynamics of the international system.

25. The doctrine of deterrence, unless vigorously counterbalanced by improvement in political relations, tends to sustain distrust and suspicion between the two nations concerned. It is virtually impossible for any two nations to pursue their weapon development at an equal pace. One nation is bound to be ahead of the other in developing a particular weapon at any point in time.

26. Excessive attention to weapon development in the deterrent posture leads to pressure on the other nation to catch up. If one nation is generally ahead technologically, the weaker is bound to resort to secrecy to hide its weakness, and this in turn generates further distrust and suspicion.

27. The strategy of deterrence is today exclusively geared to Weapon systems. Since technology is not static, there are continuous improvements in weapon systems and one generation is bound to be replaced by the next. Consequently, the strategy of deterrence continuously drives the arms race. Here again, the two sides are not

likely to be in a position to pursue the arms race at equal speed. The more advanced side builds up its arsenal and the less advanced side tries to catch up. This happens with a time-lag of several years. By that time, the first side is ready to move to a new generation of weapons. Consequently, the fact that the weaker side continued to build up its arsenal after the more advanced side had stopped and that it continued to incur a higher proportion of defence expenditure becomes the justification for the first side to start on a new bout of arms production. The second side is bound to follow suit after a time.

28. Deterrence devoid of politics has led to the demand that one arsenal should be matched mechanically by the other. But geography and differences in technologies available and in the performance characteristics of the weapon systems of the two sides make it virtually impossible to match the two arsenals in all their component systems. This in turn leads to endless arguments in arriving at agreements in the bean-counting arms-control approach. This is further complicated by differences in doctrinal positions. The side willing to take higher risks in resorting to nuclear weapons and favoured, moreover, by geography is bound to engender greater suspicion on the other side.

29. The thesis was formulated and has become widely accepted in certain quarters that, 4.3 the size of the nuclear arsenal of the second major Power grew and reached parity with that of the foremost Power, its risk-taking proclivities in the developing areas of the world also increased proportionately. This perception is a natural corollary of the doctrine of deterrence practised without taking into account political factors. If the foremost Power of the world is not able to control and shape events in the developing world, the reason is not traced to indigenous causation and its inability to understand events correctly and adapt to them. Instead, this inability is attributed to the machination of the rival Power. The entire international system is viewed as a two-person zero-sum game, in which the two immense nuclear arsenals control everything, and every event in the world has to be interpreted as the move or the countermove of one major nuclear-weapon Power or the other. Every failure of policy and every event in which one does not have a role is looked upon as a failure of the efficacy of one's own global deterrence or the success of the rival's deterrent posture. Hence the linkage between the global deterrent balance and the South African anti-apartheid struggle or Central American turbulence. The perception that nuclear deterrence maintains the international system in its existing orientation is yet another self-fulfilling prophecy, resulting in increased interventionism in the developing world.

30. The fixed and predictable hostile relationship between the two major Powers of the world predicated on the posture of sustained deterrence has in turn become a manipulable factor in the tensions between hostile pairs of nations in the developing world. If one member of the hostile pair leans to one side in the central deterrent equation, then the adversary is always in a position to invoke the countervailing influence and power of the other side. In that sense, the deterrent relationship between the two major Powers very often energizes the animosities in the developing world. (There have been occasional exceptions, like the war between the Islamic Republic of Iran and Iraq.)

31. It is not the contention here that a realistic alternative to the current deterrence-dominant international system would be totally co-operative in nature. That may be a long-term objective of humanity, but it is not likely to be achieved for many decades to come. Nations are bound to pursue their perceived national interests, attempt to further their gains and maintain and improve their relative positions and status in the international system. In the last four decades, pursuit of deterrent-dominance and deterrent-balance has been at the expense of all other international competitive dynamics, with the result that, even as the two major arsenals have grown, both Powers have lost out in respect of their status and power in the international system. Their single-minded pursuit of ideas of deterrent-dominance and deterrent-balance has not been so much vicious as unwise and counter-productive from the point of view of their respective national interests and overall global progress, stability and development.

32. The last four decades have seen very few meaningful arms-control measures. The Treaty on the Limitation of Anti-Ballistic Missiles, 3/ SALT I, the Antarctic Treaty, 10/ the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies 11/ and the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction 12/ are generally listed in this category. Only the first two of these are, strictly speaking, arms-control measures. The other three, one of which - the outer space Treaty - now appears to be in jeopardy, are arms-control measures. SALT I has been replaced by unratified SALT II, and the future of the ABM Treaty appears very uncertain. One is therefore unable to trace any positive impact of current nuclear deterrence doctrine on arms-control measures. However, the negative impact is quite evident.

33. Nuclear deterrence as it relates to the bean-counting approach to negotiation has inhibited arms control, since it is extremely difficult to balance two arsenals when they operate in different locations and have components with very dissimilar performance characteristics, and when there is an emphasis on counter-force or war-fighting doctrine in the background. It is likely to become far more difficult if the bean-counting approach with insistence on verification is to be continued, since a number of compact mobile and dual-capable systems difficult to verify are being developed. A mix of offensive and defensive systems, which necessarily implies war-fighting, will introduce additional factors of uncertainty with particular reference to weapon sophistication.

34. As verification becomes increasingly difficult because of developments in weapon technology, either arms control will have to be replaced by overall mutual deterrence, based on uncertainties in perception in respect of the size, sophistication and efficacy of each other's arsenals, or, if the present approach to deterrence continues, it will lead to an open-ended arms buildup, limited only by the obsolescence factor. Arms control is losing its appeal. Even those who originated the idea of arms control on the grounds that disarmament was Utopian and one could not invent nuclear weapons are veering round to the view that arms control, by focusing excessive attention on armaments, pushes political relations into the background and that, for reasons already outlined, arms control can never be stable since technology is not static.

35. The nuclear Powers and the industrialized world account for approximately 84 per cent of global military expenditure. Yet the industrialized world has had four decades of relative peace which, viewed historically, is a remarkable achievement. During the period that the industrialized world has not seen war, one industrialized nation or another has been engaged in war outside the industrialized world - in the developing world. The leaders of industrialized countries seek to explain this phenomenon by the thesis that nuclear deterrence has kept the peace in the industrialized world and that weapons by themselves do not result in war, but that weapons enveloped in adversarial politics do (as witnessed in the developing world).

36. This thesis begs the question on two counts. First, other parts of the world can also develop peaceful conditions, similar to those in Europe, if they can establish conditions of mutual nuclear deterrence. The self-serving argument that developing nations cannot be trusted with nuclear weapons and that the industrialized nations have behaved responsibly does not stand scrutiny. As I have highlighted, "city-busting" and genocidal bombing are dominant military traditions of the industrialized nations. Furthermore, in the last four decades one industrialized nation or another has been continuously at war, though not in its own area. Perhaps half of the casualties in the wars in the developing world have been caused by the armed forces of the industrialized world - in Korea, Viet Nam and Afghanistan and in various anti-colonial wars. Lastly, it is a group of industrialized nations which still insists on sustaining the legitimacy of nuclear weapons and its need to uphold the doctrine of nuclear deterrence. In these circumstances, the thesis that nuclear deterrence has maintained peace in the industrialized world will make it difficult for leading developing nations with a nuclear capability not to adopt the strategy of the dominant nations of the international system.

37. The argument that weapons by themselves do not create war but that the politics associated with the weapons do has a lot of appeal and makes sense. It follows from that argument that, if tensions are to be reduced, emphasis should be on politics and not on weaponry. Deterrence based on stockpiles of weapons cannot be the final objective, and the political perceptions which initiated the nuclear deterrent posture have to be reviewed to check on their continued validity. One of the crucial paradoxes to be addressed is why the two foremost military Powers, even as their arsenals grow, continue to lose their rating in the international hierarchy in all other respects relative to other nations.

38. The doctrine of nuclear deterrence is based on inducing fear of the possibility of extreme pain if one's adversary continues on a course of action that is perceived to be endangering the security or the vital national interests of the nuclear-weapon Power concerned. For this purpose, the cities of the adversary are held hostage to nuclear destruction. Nuclear deterrence has also been described as the "balance of terror". While perhaps it may be difficult to establish a direct relationship between the rise of terrorism in the world and the espousal of the doctrine of nuclear deterrence, which maintains that holding populations of various nations hostage to a nuclear strike is legitimate, the underlying commonality in values and approach is unmistakable. If nations that have the necessary resources at their command to resist conventional aggression still choose to threaten to resort to nuclear weapons in exercise of deterrence and hold vast populations

hoetage, it is only logical and legitimate for the weak to resort to terrorism against the strong. Terrorism is condemnable because it directs violence against the innocent, and that characteristic distinguishes terrorist violence from justifiable violence. Nuclear deterrence is wholly directed against the innocent populations of the world. Hence the churches have come out against the use and threat of use of nuclear weapons. One hundred and twenty-six nations have voted that the use and threat of use of nuclear weapons constitute a crime against humanity,

39. Apart from legitimizing the cult of terrorism, the doctrine of nuclear deterrence as it is practised and implemented today has grave implications for the development of nuclear terrorism in the future. There have been reports of large-scale losses of nuclear fissile material - "material unaccounted for" - from the military facilities of nuclear-weapon Powers. There also appears to be a black market in special nuclear materials, which is possible only if there have been leakages from the military nuclear facilities of nuclear-weapon Powers. Recently Mayor Koch of New York disclosed that there had been higher than explainable levels of deadly plutonium 239 in the New York water supply in April 1985 following a terrorist threat. Plutonium 239 could have emanated only from a military nuclear facility or associated laboratory.

40. United States Congressional committees have commented on the inadequacy of safeguard arrangements for nuclear weapons. Not all nuclear weapons can be kept electronically locked, since the quick-reaction-alert weapons will lose their significance if they are locked, and the deterrence doctrine, as it has evolved at the tactical operational level, requires their being ready and usable at all times. Attempts to steal such unsafeguarded nuclear weapons have been reported. Prevailing conditions provide terrorists with ample opportunities to steal usable nuclear weapons and special nuclear materials that could be fabricated into crude nuclear explosive devices. Highly toxic nuclear materials could be used as private radiological weapons by terrorist groups. The industrialized countries have more people knowledgeable about putting together nuclear devices and more efficient criminal organizations than have the developing. If we apply the laws of probability it is quite obvious that the larger the arsenals, the more compact the nuclear weapons, the wider their dispersal and the greater the throughput from unsafeguarded military nuclear facilities, the higher the risk of nuclear terrorism. All these factors are today operative in the industrialized world.

41. This harsh reality that stares us in the face is being ignored, and diversionary and obfuscating attempts are being made to focus attention exclusively on the possibility that some leader of the developing world might acquire a nuclear explosive device clandestinely and pose a threat of nuclear blackmail. Even in such scenarios, the nuclear fissile materials and the human talent to put them together would come from the industrialized world, not to mention the doctrine and philosophy of nuclear terrorism. If the industrialized world does not take steps to reverse the present trend and continues with the present policies of proliferating nuclear weapons, dispersing them more and more widely, ignoring the materials unaccounted for and upholding the legitimacy of doctrines of nuclear terrorism, the world may very well witness that the next use of a nuclear device or weapon will be made by terrorists in one of the cities of the industrialized world.

42. Since this study is also intended to deal with other related matters, it is in order to discuss the ways and means by which the international community can get out of the trap of nuclear deterrence. Today the industrialized nations have been conditioned to accept that nuclear deterrence is inescapable and there is no alternative to it. In this presentation, it has been argued that the doctrine of nuclear deterrence is not an eternal verity, but is based largely on a belief system. There are available in the world of today toxins, a few kilograms of which, if distributed in various river systems of the world, could cause enormous casualties. Such a situation might well arise in the future with certain radiological poisons too. If one were to accept the simplistic argument that nuclear weapons cannot be de-invented and hence nuclear deterrence will have to continue, one could stretch that argument to cover other means of perpetrating genocide. What prevents nations from using or threatening to use other means as weapons of mass destruction is certain built-in restraints and norms of behaviour and values. Ten or fifteen centuries ago, a victor put to death all men in the conquered land, castrated all male children and made all women slaves. Today, in spite of all the refined capabilities at the disposal of nations to implement similar courses of action, it is not done because of changes that have come about in our values and attitudes.

43. This has happened in a number of areas in our own lifetime. Concepts and institutions whose validity was not questioned have become totally unacceptable and have been discarded in the dustbin of history. Slavery was a hoary institution, and there was a civil war in the United States only 120 years ago, in which the question of retaining it as a way of life was one of the issues. Monarchy and the divine right of kings had their day and produced their quota of wars. Today no one will fight for a king. Religious and sectarian fervour resulted in wars and genocide, and though some of it still survives, most of humanity abhors killing people in the name of defending religious faith. Discrimination based on colour was prevalent even a couple of decades ago and is no longer defended as a way of life. Today women are agitating for equal rights. Some 60 years ago women were denied voting rights and today women are elected as heads of Governments. It used to be maintained that the domination of man and the subordination of woman were based on biological law.

44. In 1942, that great statesman Winston Churchill maintained that he had not become the Prime Minister of Britain to preside over the liquidation of the British Empire. Five years later the empire on which the sun never set started to dissolve, followed by other empires. Today colonialism is indefensible, though in its heyday it was hailed as a civilizing mission and as having established peace and order in a disorderly and turbulent world. The empire was the source of power and prestige for the metropolitan nations concerned and the Indian Army under the command of the British enforced the Pax Britannica. Within our lifetime all that has changed forever. The change came about when the colonial Powers realized that they could not manage to hold on to colonies except at unacceptable costs and colonialism was no longer a viable proposition. A few colonial Powers did not realise this in time and that led to some of the bloodiest anti-colonial wars in the last 40 years. Finally colonialism collapsed. Today the same is happening to apartheid.

45. It is now clear even to the followers of the cult of nuclear deterrence that nuclear wars cannot be fought and won. The doctrine of mutual deterrence is being pursued at ever-increasing costs to its subscribers, and in the last four decades the nations that attempted to project images of power on the basis of their possession of increasingly frightening nuclear arsenals have lost out on economic, technological and political fronts. The most powerful nation, as a nuclear-weapon Power, today is the most indebted nation of the world, in spite of all the advantages with which it started. The pursuit of an increasingly costly arms race is likely to result in further set-backs to these leading nuclear-weapon Powers. They may or may not succeed in dominating space, but they probably will lose their influence and power on Earth. That in itself is not something for humanity to worry about, but in the process, the world may have to face the perils of nuclear terrorism and the accidental and unintended outbreak of nuclear war resulting from the reduction of time of flight of weapons, more forward-based deployments, automation in decision-making and the consequent horizontal proliferation within the armed forces of the nuclear-weapon Powers.

46. Therefore the sensible way out is to delegitimize and outlaw nuclear weapons as instruments of war. There is general acceptance that the other three categories of weapons of mass destruction - bacteriological, chemical and radiological - have to be outlawed. On the first, there is already a convention. ^{12/} On the second, there is the Geneva Protocol of 1925 ^{13/} and further discussions are being held on their prohibition. A ban on radiological weapons is also being actively pursued. Only in respect of nuclear weapons do the followers of the cult of nuclear deterrence resist delegitimization and insist on the legitimacy of the weapons and the terrorist doctrine of nuclear deterrence. The irrationality of this approach is highlighted by the fact that 10 of the countries (Belgium, Canada, Denmark, the Federal Republic of Germany, Italy, the Netherlands, Norway, Spain, the United Kingdom and the United States) that oppose the declaration that the use and threat of use of nuclear weapons be deemed a crime against humanity have acceded to the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, ^{14/} of 1977, according to which the States parties have undertaken not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction. The use of nuclear weapons cannot be resorted to on a large scale without violating this Convention. Furthermore, the use of nuclear weapons would amount to a violation of the Hague Convention. ^{6/} There is a good case for obtaining an advisory opinion of the International Court of Justice as to whether the use of nuclear weapons would be in conformity with international law or not.

47. A convention to outlaw the use of nuclear weapons would not completely eliminate deterrence exercised by the existence of nuclear weapons, just as the Geneva Protocol of 1925 did not have an adverse impact on mutual deterrence, which operated during the Second World War because both sides possessed chemical weapons. A nuclear-weapon convention would, however, strip nuclear weapons of their legitimacy, their mystique and their use as a currency of international power. Over time it would help to change attitudes towards nuclear weapons and the doctrine of nuclear deterrence and make them as unacceptable to the world as are biological and chemical weapons.

CHAPTER VI

PAPER BY KR. V. ZHURKIN

The concept of deterrence

1. The world is racing towards the end of the twentieth century and the beginning of the third millennium. The accelerating arms race and international tension are viewed by the whole of mankind with mounting alarm, and the question "To be or not to be?" arises in all its complex and diverse forms. In present circumstances, it is no longer a question merely of two opposing social systems, but rather of the choice between survival and mutual destruction. The relentless pace of world affairs has propelled the questions of war and peace and of survival into the centre of the world political arena.
2. In the circumstances, there is a need for decisive actions leading to a genuine breakthrough in international relations. It is essential to stop the "death train" of the arms race and to begin reducing weapons. Today, as never before, we must learn to live together in harmony on this small planet and to master the difficult art of taking account of each other's interests. There is a need for a new approach in the political sphere corresponding to the realities of the contemporary world. Obviously, the world can emerge from the present spell of dangerous tension only through the efforts of all countries, both large and small.
3. Such a new approach, a turn for the better in present-day International relations, demands a fresh look at many issues and phenomena on the world political scene. It is therefore extremely important to consider to what extent any particular concept aimed at ensuring national security and international security as a whole corresponds to the new realities. In this connection, an analysis of the concept of "deterrence", to which this study is devoted, may be of a certain interest.
4. The concept of "deterrence" came into being and has been formulated, developed and fleshed out largely by the United States and its allies in the course of the long post-war period as the major modern Western concept of security in the nuclear age. The essence of this concept lies in using one's military might (whether nuclear or conventional) in order to intimidate the other side and to attain one's political objectives. Therefore, from the very outset it was based on the urge to attain military superiority over the Soviet Union.
5. In order to conceal its offensive character, the hypothesis of the "Soviet military threat" was put forward, and the need to counter that threat, so the theory went, called for the nuclear might of the West. The absurdity of the hypothesis of the "Soviet military threat" and the invalidity of the concept of "deterrence" have been clear ever since they were formulated. This concept cannot be accepted as a rational concept of security, since, rather than strengthening it, it undermines international security and the security of those very States which cling to the concept. There is a whole series of reasons to justify this conclusion.

First, the concept is founded upon the desire to ensure one's own security by denying it to others. This is a particularly selfish concept, presented in the guise of a respectable concept of defence of national interests. The concept of deterrence embodies the inherent need for the existence of an evil adversary, whose image is bolstered by all the means of propaganda and psychological warfare available to its authors. Hence the concept of deterrence invariably exacerbates the international situation and aggravates the world's political atmosphere, with the result that only in conditions of international tension can this concept develop and flourish.

7. The ideal underlying the concept of deterrence is absolute security for those who conceived it and who have been clinging to it doggedly for forty-odd years. However, when there is confrontation between two sides that is kindled and exacerbated during the process of applying the concept or deterrence, absolute security for one side signifies an absolute lack of security and an absolute threat for the other side. The persistent striving on the part of the authors of the concept of deterrence towards this unattainable "ideal" is a major reason for many of the adverse and dangerous processes occurring in the modern world.

8. Secondly, a particularly dangerous tendency is the urge to achieve military superiority over the other side. This urge embodies a feeling of nostalgia for the days of atomic monopoly, at least, nuclear superiority over the USSR.

9. This in turn is accompanied by the morbid perception of the existence of an approximate strategic military parity and by an indefatigable urge to break away from this state and to tip the existing military balance in one's favour.

10. In short, this reveals a striving to create an offensive capacity that would make it possible to count on depriving the other side of the ability to make an appropriate response to aggression, especially if, in order to achieve this aim, an anti-missile shield were deployed in outer space. Obviously, in such a case the aggressor may be tempted to deliver or to threaten to deliver a first disarming nuclear strike and count on going unpunished. This accounts for the extremely grave danger of striving for military superiority in the nuclear age.

11. Thirdly, the striving towards military superiority serves as the main driving force behind the arms race. Yet it is a fact that, while propounding the concept of deterrence, the United States was the initiator of all the major and most dangerous spirals in the nuclear-arms race. It was the first to develop and use the atomic bomb. It was the first to carry out the massive deployment of heavy strategic bombers carrying nuclear weapons, intercontinental ballistic missiles, and ballistic missiles on nuclear submarines. The United States was the first to equip intercontinental ballistic missiles with multiple independently targeted warheads, a situation that quickly led to a several-fold increase in the number of nuclear warheads on the strategic delivery vehicles. The United States initiated the development of a new type of offensive nuclear weapon - the long-range cruise missile with different kinds of basing.

12. It is precisely the United States which has set itself the goal of extending the arms race into outer space by developing space-strike weapons and is actually proceeding to carry out this task. In setting about implementing the so-called Strategic Defense Initiative (SDI), with components based in outer space, the United States is seeking to expand its capability to deliver a first disarming nuclear strike.

13. There is extreme danger in the view, whatever justification might be put forward to support it, that the problems facing the international community can be solved through the development and stockpiling of successive new and yet more destructive types of weapons, both on Earth and in space. The arms race is threatening to go out of control. Yet it is a fact that the United States and the USSR, West and East, are already, at the present juncture, finding it very difficult to enter into a fruitful dialogue and negotiations on curbing the arms race and on nuclear disarmament; tomorrow that will be even more difficult.

14. In addition to the dangers posed by the concept of deterrence in the field of material preparations for nuclear war, it should be noted, fourthly, that this concept engenders very immediate, direct dangers of a global nuclear conflict. Under cover of the argument that the ability of the armed forces to effect deterrence must be credible, the United States in recent years has been systematically building up its nuclear forces and enhancing their effectiveness, including their first-strike capability, as the main indicator of this "credibility" of deterrence. Moreover, in order to increase such credibility, the United States has also resorted to both oblique and direct nuclear threats (ostentatiously bringing its strategic nuclear forces into a state of heightened military alert; moving nuclear-weapon delivery vehicles closer to the frontiers of a potential enemy; having State officials utter threatening statements; and so on). In other words, the concept of deterrence embodies the constant risk that those who favour it may be the first to use nuclear weapons and unleash a nuclear war. The concept of deterrence is based on the first use of nuclear weapons.

15. Fifthly, the concept of deterrence has characteristically engendered new concepts concerning preparations for and the waging of a "limited" and a "protracted" nuclear war respectively. The concept of a limited nuclear war was propounded as an idea for excluding from an "exchange of nuclear strikes" the population of the countries engaged in the nuclear conflict, so that only the armed forces of the opposing sides would be involved. Thus the conclusion was drawn that a nuclear conflict limited (in time or space) would be morally justified, confined and relatively free from casualties. In fact that is not so.

16. To start with, such a nuclear conflict could not be contained within any bounds. It would inevitably lead to the use by the adversaries of their entire nuclear arsenals.

17. The scenario of a limited nuclear war, confined to one particular region, for example, Europe, is utterly inhuman. The hypothesis of a limited nuclear war in Europe reflects the desire on the part of the United States to deflect a nuclear threat from its own shores (or else to weaken that threat as much as possible) and make the Europeans its nuclear hostages. A nuclear war in Europe would signify the

destruction of that continent, the end of European civilization, and indeed not only European civilization, since a global nuclear disaster would inevitably ensue. World civilization as a whole and life itself on our planet would be threatened with annihilation.

18. All that the authors of the concept of a limited nuclear war could achieve would be to facilitate the unleashing of a nuclear conflict on the ground that a "limited" war is "better than a global one", even though a nuclear war would inevitably become global. It would seem that the very concept of a limited nuclear war is aimed at reconciling the international community to the idea of the "applicability" of nuclear weapons and the "admissibility" of nuclear war. The concept of a limited nuclear war, as a more refined element of the concept of deterrence, has in essence simply heightened the threat of a nuclear conflict.

19. All this fully applies also to the concept of a protracted nuclear war, which would represent a series of limited nuclear wars expanding in space or extending in time, or both simultaneously.

20. Furthermore, the concept of deterrence cannot be regarded as rational for the purpose of ensuring security, because, sixthly, its scope is defined by its authors as being practically unlimited. This is particularly evident in the concept of extended deterrence, which makes provision for the threat to use force (including nuclear weapons) in order to protect one's interests in any part of the world, thus, the scope of this concept is laid down arbitrarily. At times it has been applied exclusively to Europe; at others, it has been expanded to include the Middle East and Far East, the area of the Persian Gulf, Central America, the Indian Ocean and so on. The limits of the zone (declared unilaterally, that is, illegally), have been deliberately left vague in order to allow for the possibility of arbitrarily expanding the zone, extending the military threat to more and more regions of the world. This clearly reveals the offensive nature of the concept of "deterrence" and its imperial motivation and content.

21. The views of the political leadership of a particular State concerning crucial questions of war and peace can only be judged by conducting an objective analysis of its foreign and military policy, its military programmes and its position with regard to limiting and reducing armaments and armed forces, including the non-militarization of outer space, and, lastly, what the political leadership tells its own people about the possible consequences of nuclear war. As a rule, these issues, in their most condensed form, are expounded and embodied in the military doctrine of the State.

22. In any State's military doctrine, two closely interrelated and interdependent aspects may be distinguished, namely, the socio-political and the military-technical aspect. The views enunciated are periodically refined and amended, and new elements appear. The most stable of these are the ideas relating to the socio-political aspect of the doctrine, since they reflect the class nature and political aims of that State. The military-technical aspect is more variable, since it depends to a large extent on the ways and means of waging armed struggle, and these are constantly changing and being improved.

23. The technical side of the doctrines of the socialist and capitalist countries have several similar features arising from common tendencies in the development of the art of war and from the level of scientific and technical progress achieved. But the goals, methods and general orientation of these States' military development are mutually opposed on account of differing class aims.
24. In the USSR, where there are no ruling and exploiting classes, military doctrine is based on progressive, equitable ideas for defending the socialist achievement of the working people, peace and the security of peoples. As a class category, the military doctrine of the USSR flows from the nature of the Soviet socio-political system and from the domestic and foreign policy of the Party and the Government; it corresponds to the economic, scientific and technical, moral and political, and military capabilities of the socialist State. Soviet military doctrine is of a particularly defensive nature: it is designed to protect the USSR and the other socialist countries and not to permit aggression against them. The USSR does not seek military superiority, but nor will it permit military superiority over it. The purely defensive orientation of Soviet military doctrine is based on the fact that the USSR is firmly opposed to nuclear war in any form.
25. Since Soviet military doctrine is based on the fundamental and immutable principles of a foreign policy of peace and international security, it is an integral part of the foreign-policy practice of peaceful coexistence. The aims of Soviet military doctrine are determined by the Soviet Union's officially adopted political assessment of the role of military force in the historical controversy between two opposing systems, in which the USSR rejects the idea of using military force or the threat of force as an active instrument of foreign policy. In speaking of the essence of the policy of peaceful coexistence, Soviet leaders have repeatedly stressed in recent times that its most important feature lies in the fact that States, given all their differences, must learn to live together, to live in a civilized manner and to survive together on our small planet, after mastering the difficult art of taking each other's interests into consideration. When humanity faces a global nuclear threat and must at all costs survive, these demands become imperative.
26. The attainment of a strategic military parity with the United States and NATO was a historic achievement by the Soviet Union and its allies. This parity plays a constant stabilizing role in the world. Those who at times attempt to bring up the subject of the two super-Powers would do well to consider what would become of their independence and what conditions would be like in the world if the USSR were weaker than it is, and if the Soviet people did not devote so much labour, material resources and scientific thought to maintaining its economic and military capability at the necessary level.
27. The foreign and military policy of the Soviet Union is implemented in practice through a system of constraining factors which may be divided provisionally into a number of categories: political, military, legal, moral and psychological, and others. They encompass not only the armed forces of the USSR and its allies and the possession by the Soviet Union of nuclear weapons, but also the bilateral and multilateral negotiations on limiting the arms race, agreements to lower the level of military and, in particular, nuclear confrontation, and so forth. All these are

components of an overall approach based on unconditional recognition of the need to reduce the importance of the military factor and increase the role of the political and legal and the moral and psychological components.

28. For the time being, fear of unacceptable retribution is one of the obstacles to war and the use of military force. Nevertheless, lasting peace cannot be based on fear alone. The question is where to seek an alternative to fear or, to use a military term, deterrence. In order to answer this question, it is necessary to consider the Soviet attitude towards the concept of "deterrence".

29. This concept is alien to Soviet foreign policy and contrary to Soviet military doctrine. Being inherently unappealing, the concept of "deterrence" is entirely unfounded from our point of view and does not apply to the USSR either militarily or politically, because the question of deterring the Soviet Union and the other socialist countries does not arise in practice.

30. Nevertheless, the actual existence of the factor of deterrence as a function of the strategic military balance must be recognized. For the USSR, deterrence in this sense is neither a military doctrine nor the ultimate objective thereof. It is rather a reflection of the situation in which neither side is able to carry out with impunity an act of aggression against the other side. In other words, deterrence has a certain semantic significance in the military context.

31. It is precisely in this context that the above-mentioned constraining factors of a military nature embodied in the Soviet doctrine come into play.

32. Although the USSR does not pursue a policy of nuclear deterrence, the very fact that it possesses nuclear weapons will inevitably be perceived by its opponents as a deterring factor.

33. The fact that, in an interdependent world, an action by one side leads to a counteraction by the other must also be taken into account. Just as each new step taken by the United States in expanding the arms race led to countermeasures by the USSR, the attempt to implement the doctrine of deterrence also leads to counteractions by the Soviet side.

34. Is it possible to rely on or merely acknowledge the existence of deterring factors without resorting to the practice of deterrence or recognising this concept? Yes, it is possible, and the conduct of contemporary foreign policy clearly demonstrates this.

35. There are two radically different notions of deterrence. The first is the concept of "deterrence" (it would be more precise to say "nuclear deterrence") which was adopted by a number of NATO countries as a fundamental military (and politico-military) concept and was developed into a set of military, political, economic, psychological and other attitudes. It is characterized by the following elements: the intent to achieve military superiority, the tendency to engage in an unbridled arms race and increase military confrontation, the aggravation of international tension, heightened confrontation in all spheres and brinkmanship, the undermining of stability, a greater reliance on military force as a principal

tool of policy, A stronger emphasis on ideology in political affairs and increased psychological warfare, a broadening interpretation of national interests, and so forth.

36. The other notion of deterrence is not linked to the military (or politico-military) doctrine of any country. This deterrence comes into play as an objective category of the contemporary system of international relations. It has no conceptual characteristics and does not seek to justify the use of nuclear and other weapons. In objective terms, this deterrence to a certain degree is a stabilizing factor in the strategic situation.

37. The Soviet Union considers that it is strategic military parity, not deterrence, which ensures peace. Nuclear deterrence and intimidation cannot serve as a basis for lasting international security and stability because security cannot be based ad infinitum on the threat of force, which whips up the arms race. Putting into practice the tenets of nuclear deterrence undermines the strategic balance.

38. The greater the level of military confrontation in the nuclear and space age, the more precarious and less reliable the basis for international peace becomes, even if the balance is maintained. Under these circumstances, nuclear war may result not only from a deliberate decision, but also from attempts to blackmail or from an erroneous perception by one side of the intentions or actions of the other, or it may be caused by a rash act in response to a sudden aggravation of the situation or a breakdown in the computers which are used increasingly to ensure the functioning of the complex modern weapon systems.

39. Accordingly, the Soviet Union considers strategic military parity not an end in itself, but a point of departure for reducing and, ultimately, fully eliminating the threat of nuclear war.

40. As for Soviet military doctrine, it is based on the fact that the strategic balance, founded on the principle of equality and equal security, creates objective incentives for reducing the futile and dangerous competition in the military field and is a prerequisite for lessening military and political confrontation. In accordance with the Soviet concept, security cannot be guaranteed by using military technology, given the present level of development of weapons of annihilation and destruction. The problem is a political one and can be solved only by political means. First of all, it is necessary to have the political will to halt the arms race, which has become the main source of the threat of nuclear war, and to begin to move towards disarmament. There is no rational alternative to a world free of war and nuclear conflict. The recognition of this principle has been in fact the starting-point of Soviet military doctrine at all the post-war stages of its development.

41. During the post-war period, Soviet science and practice benefited from a number of important politico-military conclusions. The following could be included among them :

(a) The important general conclusion reached as early as the 1950s that henceforth war is not fatally inevitable;

(b) In recent times it has been particularly stressed that there are no contradictions that inevitably doom the USSR and the United States to confrontation, let alone war. This relates both to the system of relations between East and West and to the entire system of international relations;

(c) Nuclear war cannot be a means of solving political problems;

(d) There will be no victor in a nuclear war and mankind will perish as a result of it;

(e) The USSR, which advocates equal security, would not wish any change to its advantage in the strategic military balance. It would not benefit from less security for the other side, because that would increase the suspicion felt by that side and further destabilize the overall situation. The Soviet Union is guided by the view that security can only be mutual and, if one speaks of the world community as a whole, it can only be universal. Security cannot be achieved to the detriment of the other side. True political wisdom consists not only in looking after one's own security, but also in seeing to it that the other side does not perceive itself to be less secure;

(f) In spite of the complex political situation and the threats to its security, the Soviet Union was able to take such an important step unilaterally assuming the obligation not to be the first to use nuclear weapons, thus once again emphasizing that the nuclear component of the Soviet armed forces has a purely defensive function of a retaliatory nature)

(g) On the basis of its position of principle that the security of some States cannot be strengthened at the expense of the security of others, the USSR declared that it would never use nuclear weapons against countries which refused to produce and stockpile such weapons and did not have them in their territory;

(h) An arms buildup beyond a certain point ceases to play a decisive military role;

(i) The arms race, like nuclear war itself, cannot be won; the arms race and the striving for military superiority cannot objectively result in political gain for any side

(j) Objective conditions have developed such that the struggle between capitalism and socialism can proceed only and exclusively in the form of peaceful competition and peaceful rivalry;

(k) For the preservation of peace on Earth it is essential to establish a comprehensive system of international security whose basis would include the military, political, economic and humanitarian fields.

42. These and many other conclusions (some of them are cited in other sections of this report) are not only theoretical concepts. They were elaborated, concretized and put into practice to the greatest extent possible, and became key elements of the entire system of Soviet foreign and military policy as well as Soviet military doctrine.

43. When speaking of nuclear deterrence or nuclear intimidation, it is important to note the growing awareness that in the contemporary world there is a very acute need for a rational alternative to fear and intimidation, to everything the concept of "deterrence" stands for.

44. Judging by the latest trends in the development of politico-military thinking in its Western centre, the United States, one gets the impression that dissatisfaction with the concept of deterrence is growing there also.

45. The plans to create a large-scale anti-missile system with components based in outer space, which were formulated in the so-called Strategic Defense Initiative programme, were proclaimed in the United States as such an alternative to deterrence. Broad scientific and political circles named it more accurately and justly the *star wars* programme, a programme to develop space-strike weapons.

46. The SDI programme was formulated as a plan for the direct defence of the territory of the United States against nuclear weapons by all possible means, of which the space anti-missile shield is to be the main component. It was hastily declared that this shield would render nuclear weapons "impotent and obsolete".

47. The first aspect of the new, large-scale American project, which cannot but give rise to concern, is its aim to bring about a new gigantic spiral in the arms race and saturate outer space - which until now has been beyond the limits of this race - with weapons. If one wants to do away with nuclear weapons, it is logical to approach this task by the simple and clear means of reducing them and, in the long term, carrying out nuclear disarmament. Instead of this, it is being proposed that existing nuclear arsenals with their overkill capability should be supplemented with space arsenals having a new, as yet undetermined, potential for expanding the range of the means of destruction.

48. Everything falls into place if one considers the SDI programme as it is in actual fact - an element of the strategic complex for delivering a first disarming strike against a potential enemy.

49. The question of the role of anti-missile systems was already settled within the framework of the *great debate* a decade and a half ago, when American, Soviet and other scientists and politicians came to a unanimous conclusion: a large-scale anti-missile system is a shield against a retaliatory strike by the armed forces of a country subjected to aggression that have been weakened by a nuclear attack. Only someone who is preparing to deliver a first nuclear strike needs such a shield. In other words, this shield is a vital element in an offensive nuclear-weapon system.

50. The fact that preparations are now under way to station weapons in outer space in no way changes this assessment and, on the contrary, makes it all the more convincing. Space weapons are not defensive. They are a direct extension of the most dangerous offensive strategic weapons - first-strike weapons,

51. It should be recognised that, among the advocates and defenders of SDI, the concept of an impenetrable shield is becoming increasingly less prevalent. The sober scientific calculations made in numerous countries convincingly demonstrate

that it is impossible to Create such an impenetrable shield. Among the originators and defenders of the concept of SDI, stress has gradually been shifted towards its "limited" or "partial" version, which will be unable to ensure "absolute missile impenetrability".

52. The transformation the "star wars" plans are undergoing essentially serves to confirm what the critics of these plans said about them. From the very beginning it was a question, not of an alternative to the concept of deterrence, but rather of toughening it by making use of new possibilities in outer space. The projects concerning limited space war also lead to this same extreme form.

53. First of all, the "star wars" plan would undermine the basis for strategic stability. A situation would arise whereby vitally important decisions, irreversible by virtue of their possible consequences, would be taken essentially by electronic machines without the participation of human reason and political will and with no account taken of moral and ethical criteria. Such a turn of events could lead to a general catastrophe, even if the initial impulse that brought it about was an error, miscalculation, or breakdown in the extremely complex computer systems.

54. Furthermore, it is generally recognized now that space-weapon systems would be extremely vulnerable. This in turn would lead to increased instability in the strategic balance. A further element of instability would arise in connection with each side's satellite, if they were threatened by the anti-satellite systems, which are an important component of space weapons.

55. Although the scope of the negative consequences resulting from a violation of the Treaty on the Limitation of Anti-Ballistic Missile Systems between the USSR and the United States ^{3/} - which has no time-limit - is difficult to foresee, the "star wars" programme is inexorably leading to such a violation. In essence, the "star wars" programme not only gives impetus to the arms race with regard to all types of weapons, but will also halt any efforts to reattain this race. The whole foundation of agreements and understandings on arms limitation and disarmament which was created in past years will be undermined.

56. It should be stressed in conclusion that the "star wars" programme (in both its broader and its narrower versions), first, is in no way an alternative to the concept of "deterrence", but rather a toughening and sharpening of its most dangerous characteristics, and, secondly, constitute a large-scale programme of new weapons that threaten mankind.

57. The world community faced a similar turning-point once before, approximately 40 years ago, on the threshold of the nuclear-arm race, which in the end led to the creation of nuclear arsenals capable of putting an end to human history. At the time, efforts to prevent that very dangerous process were unsuccessful, although the Soviet Union proposed as early as 1946 that an international convention banning the production and use of nuclear weapons should be concluded and, since that time, has invariably been a staunch supporter of nuclear disarmament.

58. Today, 40 years later, the world community has a real chance to avoid the repetition of a historical error - the spread of the arms race to outer space. It is today faced with a choice: either outer space will be used to improve living conditions on our planet or it will be transformed into a source of a new mortal danger.

59. The Soviet Union's position on this issue is also unambiguous: to counterbalance the "star wars" plan, which threatens all mankind, the USSR suggests that the international community consider its concept of "star peace". This is the only reasonable alternative to "star wars".

60. What is the real alternative to the concept of "deterrence" - to peace based on the fear of unacceptable retaliation? The only alternative is to endeavour to strengthen international security, peaceful coexistence, detente and disarmament, and to build confidence and develop international co-operation.

61. That is a long and arduous path, especially as the mutual suspicion, distrust and prejudice which have been accumulating over the decades must be overcome. In addition, old stereotypes which do not correspond to new realities must be abandoned.

62. One of those stereotypes, a relic from the remote past that has survived into the nuclear age, is the still quite widespread belief that it is possible to build one's security by infringing on the security of others, or to base the security of a military bloc at the expense of the security of the world community. That stereotype (which is the basis of the concept of deterrence) is in complete contradiction with the realities of the nuclear age.

63. Those realities are quite unambiguous: a nuclear war cannot be won and must never be fought, and the desire to achieve military superiority is senseless since it can result only in dangerous instability. Those nuclear-age truths are gaining increasing recognition in the world community.

64. This being so, it is illegal to separate the national security of States (or the collective security of a coalition of countries) from international security. The modern concept of security is collective security. Security for one must at the same time signify security for all. That security must be achieved through the Collective efforts of the 'international community.

65. The problem of correlating military and political means for ensuring security is an extremely important factor in the concept of collective security - security for all - which is the only reasonable form of security in the nuclear age. The essence of the problem is that, in this age, international security (as well as national security, which is a component of international security) cannot be ensured by 'military means, that is, by military force. This is a completely new situation, which signifies a break with the traditions and ways of thinking and acting that have evolved over the centuries and even over millennia. Human thought does not adapt immediately to new ideas. However, it is necessary (and inevitable) that habitual thought and behaviour in the military and political spheres should be made to correspond fully with new realities.

66. The new approaches to contemporary realities require a constant search for ways to strengthen international security and for measures that would blunt the sharpness of the present confrontation between the United States and the USSR, NATO and the Warsaw Treaty Organisation, West and East.

67. Military-strategic equilibrium and strategic parity play an important stabilizing role in the present international situation. Both sides must become accustomed to military-strategic equilibrium and strategic parity as the natural state of affairs.

68. While strategic equilibrium plays an important role as a factor in ensuring international security, it cannot be considered an eternal panacea for preventing nuclear war. It is a specific threshold, which should be used as a starting point for reducing and, finally, completely eliminating the threat of nuclear war.

69. Mutual understanding must be reached regarding the Level of armaments on each side that may be considered relatively sufficient for ensuring a reliable defence. There is no question that the level of such sufficiency is much lower than what the United States and the USSR actually possess, if one speaks about the state of strategic parity between those two most important nuclear Powers. It has to be admitted that the present level of balance in the nuclear capabilities of the opposing sides is far too high. This means that important practical measures for limiting and reducing armaments are quite possible. Genuine equal security in our time is guaranteed not by the maximum but by the minimum level of strategic balance, from which nuclear and other types of weapons of mass destruction must be completely excluded. The same approach can be fully applied to the assessment of possibilities for reducing the armaments of the two powerful alignments of West and East - NATO and the Warsaw Treaty Organization.

70. Nuclear disarmament is the key to strengthening both international and national security. The Soviet Union was the first State in the history of the nuclear age to propose an extensive and concrete programme aimed at the complete and universal elimination of nuclear weapons within a precisely defined time frame. The USSR proposes that a process of ridding the Earth of Nuclear weapons while banning space-strike weapons should be implemented and completed within the next 15 years, that is, by the year 2000. That programme, whose principal strategic aim is to prevent a nuclear war, is imbued with a genuine concern for present and future generations and for civilisation on Earth.

71. Under that programme, the Soviet Union has proposed a 50 per cent reduction in the nuclear weapons of the USSR and the United States capable of reaching each other's territory, considering that this would be only a first stage to be followed by further reductions in the Soviet and American arsenals, as well as the inclusion of other nuclear Powers in that process. Reliable verification, including on-site inspections, would be established.

72. As is well known, the Soviet Union has long been proposing to rid Europe of both medium-range and tactical nuclear weapons. As part of the first stage of the programme, it believes that it is possible to reach an agreement on the complete elimination of medium-range missiles of the USSR and the United States in the

European zone - both ballistic and cruise missiles. The implementation of such an agreement would be a first step on the way to ridding the European continent of nuclear weapons. At the same time, the United States should, of course, undertake not to supply its strategic and medium-range missiles to other countries, while the United Kingdom and France should pledge not to build up their respective nuclear weapons. American and Soviet medium-range nuclear weapons would be completely eliminated during the further implementation of the programme.

73. The USSR also proposes the complete elimination in this century of chemical weapons, their stockpiles and the industrial base for their production - also subject to strict control, including international inspections. The Soviet Union proposes a ban on the development of non-nuclear weapons based on new physical principles and having a destructive capacity close to that of nuclear or other weapons of mass destruction.

74. In order to implement the programme for reducing and eliminating nuclear arsenals, the entire existing system of negotiations must be set in motion, and the greatest possible efficiency of disarmament machinery should be ensured.

75. The collectivist approach to problems of international security in the nuclear age creates favourable conditions for the complete and satisfactory solution of yet another extremely important problem: the inclusion in the security-strengthening process of all countries on our planet - both large and small, both those countries which are members of diverse military and political alliances, and non-aligned and neutral countries. If a concrete and tangible example is needed of the new way of thinking and political psychology in the approach to the problems of peace, co-operation and international confidence, the Final Act of the Conference on Security and Co-operation in Europe, signed at Helsinki on 1 August 1975, which was drawn up through the common efforts of Europeans and the United States and Canada, can in many respects serve as that example.

76. The tradition of concentrating issues of security in the nuclear age around the USSR and the United States and their allies, particularly the Warsaw Treaty Organization and NATO countries, has existed for quite a long time. This tradition undoubtedly reflects the actual state of affairs. Because of their military, economic, scientific and technological potential and international importance, the USSR and the United States bear a particular responsibility for the nature of world development, its course and consequences (it must be emphasized - responsibility, not privilege) •

77. This is also reflected in the fact that the USSR and the United States - the two most important nuclear Powers - must be the first to begin the many *processes* of arms reduction. It is the Soviet Union and the United States which are called on to begin a radical reduction of their nuclear arsenals. It is they which are charged with reaching an agreement on the prevention of an arms race in outer space. It would be useful if, as an initial measure, the USSR and the United States were to freeze their nuclear weapons, the size of their armed forces and their military budgets and undertake not to create new types of particularly powerful conventional weapons. An important step would be an agreement by the United States to follow the example of the USSR and commit itself not to be the

first to use nuclear weapons, or to undertake certain concrete measures in the sphere of arms limitation (for example, to halt the deployment of medium-range missiles in Europe or to join in the moratorium on nuclear explosions).

78. The Soviet Union believes that the complete and general prohibition of nuclear-weapon testing and - before the conclusion of such an agreement - the declaration by all nuclear-weapon States, following the example of the Soviet Union, of a moratorium on all nuclear explosions could be a significant contribution to the prevention of nuclear war and the strengthening of international security. This would be an important means for preventing the upgrading of nuclear weapons and the development of new kinds of nuclear weapons and, consequently, would effectively lead to the limitation of the nuclear-arms race. This would be a token of the responsibility borne by the USSR and the United States for the strengthening of international security.

79. Today's world is a very diverse combination of sovereign countries and peoples, which have their own interests, aspirations and policies. In such conditions, the development of a system of security requires the renunciation of global claims and the consideration of the legitimate interests of all. The building of security for all cannot be done by the efforts of a few states, no matter how powerful they may be. It can be constructed only through the efforts of all States, both large and small. All of them without exception face a task of fundamental importance: without ignoring their social, political and ideological differences, to master the science and art of conducting themselves on the international scene with restraint and circumspection and to live in a civilized fashion, that is to say, within the context of proper international intercourse and co-operation.

80. The solution lies not only in the settlement of international conflicts, which increase the overall number of threats to international peace and stability, but also in the direct and immediate contribution of all States and peoples on all continents to collective efforts aimed at lessening the danger of war.

81. In actual political practice, all countries are becoming increasingly concerned with the prevention of nuclear war and the strengthening of security for all. Representatives from many countries and practically all continents worked on the well-known Palme Commission, which formulated valuable proposals regarding the development of such a system of security. A growing contribution to the development of the idea of security is being made by the public forces of Europe, America, Asia, Africa and Australia.

82. It is difficult to overestimate the enormous political response to the statements made by members of the Movement of Non-Aligned Countries against the threat of nuclear war. In recent times, the leaders of six States - Argentina, Greece, India, Mexico, Sweden and the United Republic of Tanzania - have been actively proposing major initiatives (see A/40/114 and A/40/825-S/17596). Their calls for a freeze on all kinds of nuclear weapons and for an end to nuclear testing, as well as other proposals, have stirred up international political life and have given new significance and immediacy to the idea of nuclear disarmament.

83. A vivid manifestation of the greater involvement of the world community in efforts to prevent nuclear war is the growing concern of the United Nations with much problems. The everyday activities of the Organization strengthen the basis for a genuinely international security - security for all. The very existence of the United Nations and its positive activities reflect the desire of all peoples for peace and progress, since not one of them wants war. The Charter of the United Nations is the antipode of the desire to achieve military superiority and hegemony, of a "position-of-strength" policy, of "crusades" and of attempts to thrust on peoples systems that are alien to them. The ideals of the United Nations and the need for co-operation among States in achieving them are not only not obsolete - they are more timely than ever. Today all the people of the planet have a common enemy - the threat of a nuclear catastrophe, against which they must act as united nations. On the whole, the United Nations, following the precepts of the Charter, is reliably working to enhance realism and responsibility in international affairs.

84. In order to implement the principles of the Charter and the lofty objectives of the United Nations, the most important task now is to unite the efforts of all the peace-loving forces of the Organization in order to put an end to the arms race, first of all the nuclear-arms race, and not to allow its spread to outer space.

85. The growth of the role of an increasing number of States (and not only States but also mass social and political movements) in the solution of problems of international security is a natural and salutary phenomenon. It gives rise to new hopes that it will at last be possible to turn back the arms race and to begin disarmament, which was and remains the key to the fundamental and long-term strengthening of international security.

Pact Two

ARGUMENTS, COUNTER-ARGUMENTS AND COMMENTS

CHAPTER I

ARGUMENTS, COUNTER-ARGUMENTS AND COMMENTS BY THE EXPERTS
FROM THE NON-ALIGNED COUNTRIES

1. The experts from Argentina, Egypt and India jointly offer the following comments on the submissions made in part one by experts from the German Democratic Republic, the Federal Republic of Germany, the Union of Soviet Socialist Republics and the United States of America. Separate remarks on each submission have been avoided and comments on all these submissions taken together are presented in a coherent narrative form which presents some of the perspectives prevalent among the non-aligned nations.

2. While nuclear weapons have not been employed in war since their initial use in 1945, and while the industrialized areas of the world - which were the most combustible and conflict-prone for centuries and up until the end of the Second World War, only four decades ago - have been at peace for a period of time unprecedented in history, those weapons, none the less, have spread all over the globe and are deployed in all oceans except one, and the command, control, communication and intelligence facilities and infrastructure to fight a nuclear war have come into being in all populated continents and involve nearly 40 per cent of the nations of the international community. Irrespective of their professed commitments to the first use of nuclear weapons or not, the overwhelming majority of the industrialised nations in the two alliance systems or associated with them - barring a small number - rely on nuclear-weapon arsenals and nuclear-war doctrines for their Security. In other words, out of approximately 130 nations that have signed the Treaty on the Non-Proliferation of Nuclear weapons, 1/ 21 industrialised nations still rely on nuclear-weapon doctrines for their security. They are also among the leading militarily significant nations of the world. Therefore, besides the five nuclear arsenals acknowledged in the non-proliferation Treaty, the doctrines of nuclear deterrence have a relevance for all nations. Since conflicts between industrialized and developing nations have been frequent in the last four decades - although direct conflict between the two military blocs of industrialized nations has been almost absent - and since there are no caveat-free assurances that nuclear weapons will not be used in such conflicts, the doctrines of nuclear deterrence have implications going far beyond the peace in Europe that is believed to have been maintained by mutual nuclear deterrence over the last four decades. The application of doctrines of nuclear deterrence should be analysed in both contexts - situations of symmetry and of asymmetry in various conflicts in the developed and developing worlds. Unfortunately, in some of the papers presented by experts from the developed world, there is a total obsession with applying the doctrine of deterrence entirely to the East-West context, and all other factors are ignored as irrelevant or exaggerated. There is a view in certain sections of the industrialised world that the fears of the third-world countries regarding the dangers of a nuclear war are "inflated" or just not true; in other words, there are

attempts to minimize what the non-aligned States perceive as a serious, realistic and well-founded feeling of insecurity dominant in third-world countries. Along the same line of thinking, the analysis by the non-aligned States is criticized as "the worst-case assumption". In answer, it could be said that, when nuclear weapons are involved, the worst-case analysis cannot be ignored. Most of the Western scenarios are themselves based on worst-case analysis. The non-aligned States could also say that, in the light of 40 years of peace in Europe, most of the scenarios of expected threats of various categories in the European context are even more inflated and unreal and perhaps peace has prevailed in Europe not because of nuclear deterrence, but because the threats have been mostly imagined. While the industrialized world has been at peace, there have been ten⁶ of interventions by the industrialized countries in the developing world and there have been more nuclear threats conveyed in the context of conflict situations in the developing world than in the developed world.

3. All nuclear-weapon Powers maintain that their arsenals have been and continue to be developed only for the purposes of defensive deterrence, proclaim their own peaceful intentions and assert that, because of their own values, traditions, societal structures and national goals and aspirations, their nuclear arsenals are never likely to be used except in defensive deterrence and, if that fails, for intra-war deterrence and for war-termination, if feasible. Some consider it necessary to project an image of nuclear capability to be credible in exercise of deterrence, and others are of the view that such capability should not be left asymmetrical, but be balanced. Such balances can never be exact, given the differences in geography, technology, resources, and so forth.

4. Even while declaring their own peaceful intentions, each side has developed a historical perspective of the rival tending to project the impression that the other side feels insecure and is expansionist, ideologically or otherwise, and that its actions indicate potentially non-peaceful intentions. Given the mixed histories of all nations of the world, it is not difficult to persuade oneself and one's own allies, through a selective listing of historical events and their wanted interpretations, that the powerful rival can be deterred only by an ever-advancing - quantitatively or qualitatively or in both ways - nuclear-weapon capability.

5. An essential point often overlooked in this debate is that, in the current international system, if a powerful nation develops a strategic doctrine based on certain weapon capabilities, then other major Powers that feel insecure vis-à-vis that nation are bound to feel compelled either to match that nation through similar doctrines and weapons or counter them through other doctrines and alternative weapon systems. In a world order not operated, dominated or managed wholly by a single nation and where the use of force is prevalent, either of the two reactions is inevitable, and what is not likely is that the dominant nation's strategic doctrines and weapon systems will be ignored or accepted as benign by the rest of the nations of the world. Therefore, once the doctrine of nuclear deterrence is espoused by one nation and it embarks upon a continued evolution of its nuclear arsenal quantitatively and qualitatively, it has to be expected that other nations of the world will react.

6. This reaction takes different forms. An overwhelming majority of the nations that do not have the capability to react to this development within their own resources adjust themselves to acceptance of an international order influenced and managed by the dominant nuclear-weapon Power - especially if it also happens to be the most advanced economically, technologically, agriculturally and in many other ways. This applies to the overwhelming majority of developing nations that signed the non-proliferation Treaty. Those which have the immediate capabilities to develop nuclear weapons and the requisite resources do so. Others which have some constraints in terms of resources or otherwise postpone their decisions and reserve their options. These are mostly the nations that can produce nuclear weapons and have chosen not to sign the Treaty. Yet others find it advantageous to belong to alliance systems and yet the protection of extended nuclear deterrence. As the international system following the development of nuclear weapons and nuclear strategic doctrines evolves, it is only natural that the reference point is the first nation which developed the weapons and the strategic doctrine related to their use and which has continued to keep in the forefront most of the time in the development of technology related to the weapons. If there is an overwhelming focus on a particular nuclear arsenal and one school of strategic doctrine, this is not necessarily due to any bias; it reflects the compulsions of reality.

7. In this framework, there is no contradiction in a number of major nations of the world either possessing nuclear arsenals or reserving the option to have nuclear weapons in the future and at the same time advocating a world without nuclear weapons and calling for conventions to outlaw them. A person can totally abhor killing and yet ethically and legally have the right of private defence. A person can be for a gun-control law to introduce the total prohibition of weapons in the hands of all citizens and yet may be compelled to carry a gun so long as some of his fellow citizens refuse to hand in their excessive arsenals. A nation need not believe in the doctrine of nuclear deterrence to rationally devise a policy that must necessarily take into account the commitment to the doctrine of deterrence of others, especially powerful nations. Some of the perceptions that the world can be permanently divided into nuclear-weapon and non-nuclear-weapon nations appear to arise from the history of the dominance of certain nations in the international system over the last three centuries. Such perceptions, possibly rooted in a Eurocentric tradition, overlook the rise of the universal nation-State system represented by the United Nations, which is the result of the decolonization process. Apart from nuclear weapons and nuclear strategic doctrine, the most powerful factor that has shaped the international order in the last four decades is the decolonization process and the emergence of nearly 100 new nation-State actors. Some of the significant actors in the international system are in Latin America, Africa and Asia. Therefore, consideration of nuclear strategic doctrines, either solely in the European context or even mostly in that context, does not provide satisfactory answers to the globalization of nuclear war-fighting capabilities, the spread of nuclear-weapon carriers to the ocean waters in the vicinity of the developing world, and the search to link balances of arsenals at the most advanced levels and developments in the decolonized nations. It is difficult to confine nuclear doctrinal issues to certain theatres in Central Europe and ignore their impact on the international order.

8. There can be no disputing the fact that nuclear strategic doctrines were initially developed with reference to perceptions of security requirements in the European theatre. These perceptions had strong historical roots. So did the responses to the unfolding of the nuclear strategic doctrines and the deployment of nuclear weapons in Western Europe. Fortunately, whatever the validity of the espoused doctrine may be, peace has been maintained in Europe over the last four decades. It is difficult to prove or disprove whether this has been solely the result of nuclear war doctrine and nuclear-weapon deployments, or whether there have been other reasons as well. It is possible to argue that in today's world, with heightened political consciousness among people, it is extremely costly to keep occupying a nation, although it may not be difficult to invade it. This is being demonstrated even in the wars in the developing world and this would apply to a much greater extent to the populations of nation States of Europe, with longer traditions of nationalism and sovereignty. Consequently, the Clausewitzian maxim of using war in the sense of occupying populated territory as an instrument of policy to gain political ends is losing its credibility, and instead of war, it is coercive diplomacy which is increasingly used as an instrument in international politics.

9. Though not articulated specifically in these terms, perceptions on both sides of the dividing line in Europe have changed over the years in this direction. The fear of actual use of military force has been replaced by the fear of use of coercive diplomacy. If there has not been a war in Europe in the last four decades, it may NOT necessarily be entirely due to the enormous nuclear arsenals; it may also be due to the tacit realization that war as such is no longer a viable instrument of policy.

10. Assertions today that what is feared is not an invasion, but projection of force capability, which will evoke anticipatory compliance, tend to confirm this statement. In the last four decades the industrialized nations have intervened several times in the conflicts and affairs of the developing nations instead of directly invading to annex territory. Similarly, there have been hundreds of instances of the demonstrative use of force without war by major industrialized nations in both the developed and developing worlds, and the trend is growing in the latter case. In other words, coercive diplomacy has come to be more often employed than occupation as an instrumentality of power. In this respect, nuclear forces have become a potent currency of power in international relations. In Europe, on both sides of the Central European line, coercive diplomacy employing this awesome currency of power is feared more than outright attack. While there is adequate recognition of this factor in both Eastern and Western Europe and in North America, it is often overlooked that this factor of coercive diplomacy is of equal concern in the developing world too. Tactical nuclear and conventional weapons are becoming so integrated that there is no longer much difference between nuclear and non-nuclear threats for any developing nation facing a show of force from a major nuclear-weapon power.

11. The proposition that nuclear deterrence has preserved peace in Europe reminds one of the view strongly asserted in the nineteenth century that the doctrine of the balance of power was able to stabilize Europe from 1815 onwards. While the world is able to live and learn about the failure of that doctrine, it may not be

able to survive the failure of the doctrine of nuclear deterrence. Even while recording the fact of peace in Europe for the last four decades, one must keep a sense of proportion in advancing claims that nuclear deterrence was solely or even largely responsible for that development.

12. There are inevitable time-lags between developments on the ground and their comprehension and understanding by political and military leaderships of nations. The normal tendency is to over-insure oneself in terms of past experience. It is possible to explain the enormous growth of nuclear arsenals in the two military blocs in terms of such over-insurance and lag in understanding. The past over-insurance is evidenced by some of the announced plans to reduce tactical weapons and the proclaimed desire on both sides to eliminate some categories of missiles only very recently employed and to cut back by half the strategic arsenals. Given this background, there are two ways of looking at the developments of the last four decades. The first - more prevalent in one part of the industrialized world - is to regard the policy of over-insurance as justified and productive of results, in that it has maintained peace and led to an era of negotiations and confidence-building. This stand can be claimed by both sides, each maintaining that its policy of nuclear and conventional weapons buildup in response to the moves made by the other side - nuclear and non-nuclear - brought about this situation.

13. The second way of looking at it is to re-evaluate the history of the last four decades and reassess whether the assumptions on which the past arm-buildup policies were formulated were wholly justified and to re-examine the bases for future policy in the light of the better understanding of the situation, both Past and present. Both military blocs claim that this is what they have been doing. In spite of such claims, a new spiral in the qualitative arms race is under way, which is justified in terms of the need to reach for greater stability, towards a world where defence-dominated structures will reduce incentives for attack and nuclear weapons will be rendered obsolete and impotent. There are also unspecified promises of such technologies being shared and such a transformation being brought about in consultation with the rival side. It is also argued that both the current practice of deterrence and the proposed transformation towards greater stability through defence-dominant structures are being pursued within a larger political framework.

14. At least at this stage, it is not known whether this approach, a mix of the political and technological, will, within the foreseeable future, lead to technology dominated by politics or vice versa. Continuity with past history and policies, especially if they are viewed as having been largely productive of positive results, may carry a higher risk that technology will outpace politics. Past experience tells us that there are no ultimate technological solutions for the world's political problems.

15. Before the First World War and the Second World War, the military and political establishments felt that they had all the answers. The result was the offensive charges in the First World War, which ended in terrible massacres of infantrymen, and the Maginot Line in the Second World War, which proved of no avail against the blitzkrieg. Very elegant and structured arguments about nuclear

deterrence being defensive and contributing to increased stability are being put forward with the same degree of assurance with which arguments were advanced in the 1950s and 1960s to build up arsenals, and now those who originally built them up are very virtuously demanding that they be reduced. Those who argued against defence-dominant structures with great fervour in the 1960s are advocating them with equal fervour today. The strategic arguments formulated within like-minded communities often tend to overlook the uncertainties, irrationalities and foibles of the real world.

16. One could not be certain that defence-dominant structures, even if they were at all feasible, would not be succeeded by offensive weapons and that, in the race between offensive and defensive weapons, the latter would win. Against the background of current distrust between the two major nuclear-weapon Powers, the promise of future sharing of defence-dominant technologies is not likely to evoke much credibility, particularly when very much less sophisticated technologies are today withheld. Consequently, the probability of interpreting defensive-system development as providing a defence-offence mix of systems that may make nuclear war-fighting more likely is quite high. For reasons already set out, it is not only a question of maintaining credibility with the principal rival Power, but also with the other major nations of the world. In this respect also, an approach that focuses attention solely on the military relationship between the two major Powers only or their allies, to the exclusion of the security concerns of the rest of the world, is not likely to be productive.

17. An alternative approach has been proposed - to eliminate all nuclear weapons from the Earth by the year 2000. This approach is more in tune with the aspirations of the overwhelming majority of the nations of the world. The Final Document of the Tenth Special Session of the General Assembly, ^{2/} the first special session devoted to disarmament, and the approach of the non-aligned nations have emphasized the need to work towards disarmament, with the highest priority given to nuclear disarmament. It is an encouraging sign that the idea of eliminating nuclear weapons from the Earth has not been rejected on the ground that nuclear weapons cannot be dismantled. An appropriate question raised is: What will the world be like without nuclear weapons and how do we get from here to there?

18. As pointed out earlier, nuclear weapons and nuclear-war doctrines have become a crucial determinant shaping the international order. Consequently, a world without nuclear weapons will be a new international order. Proposals to eliminate nuclear weapons go far beyond an arms-control approach, the primary aim of which is to preserve the status quo at mutually agreed levels of weapon stockpiles. This transformation to a new international order has to be thought through. One argument could be that a world without nuclear weapons need not be a world without deterrence. There are so many chemical and nuclear power plants in the industrialized world that even a conventional war could produce devastation of a magnitude very close to that of a nuclear war. The factor of political deterrence, which would make it unattractive to occupy populated territories, would still operate. The long reach of precision-guided non-nuclear weapons can still inflict such high levels of damage on both sides engaged in hostilities, irrespective of the tactical outcome at the battle-front - a level of damage incommensurate with any gains that could be expected and could serve as rational bases for initiating

limited wars. In other words, deterrence and coercive diplomacy may still survive in a world without nuclear weapons. Others could argue that such a deterrent posture could pueh up costs - a thesis which could again be disputed. Attractive as a world without nuclear weapons is, it will require considerable intellectual effort to persuade the military and political leaderships of many industrialized nations accustomed to taking for granted a world of nuclear deterrence that non-nuclear deterrence, besides leading to a eafier world, would also provide nations with security at more economical costs. Not all experts contribute to this conclusion at this stage. There may be a case for a directed international study to examine the full implications of a world without nuclear weapons and the optimum strategies for moving from here to there.

19. In this context, the draft resolution, submitted by a group of non-aligned States in the United Nations, proposing a convention to prohibit the use or threat of use of nuclear weapons 15/ becomes highly relevant, since outlawing the use or threat of use of nuclear weapons will condition the world to the prugreseive decay of the doctrines of nuclear deterrance and make the transition to a world without nuclear weapons smoother.

20. It is argued that the Charter of the United Nations does not qualify or limit in any way the means by which defensive action is to take place and that the very general legal clauses in the preamble to the fourth Hague Convention of 1907 6/ have failed to change international law in respect of nuclear weapons. These arguments apply to all nations of the world and do not justify the cartelized possession of nuclear weapons by a few nations.

21. In attempting these moves to outlaw or eliminate nuclear weapons, the world is confronted with the familiar argument that nuclear weapons cannot be disinventied. This argument negates the historical experience in respect of biological and chemical weapons. The prohibition of biological weapons is based on their delegitimization and outlawing. The negotiations in regard to chemical and radiological weapons are also based on the same principles. None of these weapons in capable of being disinventied. Therefore, there is no reason why nuclear weapons cannot be eliminated just as biological weapons have been eliminated and as attempts are being made to eliminate chemical and radiological weapons.

22. Over the last two decades the philosophy of arms control has tended to dominate the interaction between the major weapon Powers, presumably on the basis that nuclear weapons cannot be eliminated. While the prohibition and elimination of nuclear weapons will constitute an act of collective political will on the part of major Powers, arms control has generally been an exercise in expedient technological fixes. There is increasing criticism of the philosophy of arms control. First, it tends to focus on weaponry, and since technology does not stay static, any agreement based on the levels of armaments can only be temporary, lasting until a new generation of arms replaces the earlier one. Secondly, arms-control agreements of limited duration act as incentives for preparing for the next round of agreements by developing newer weapons, and they thereby presuppose a continuing competitive arms buildup. Thirdly, the arms-control approach ignores subtler aspects of deterrence and concentrates exclusively on quantitative and qualitative aspects. The less visible aspects of force efficiency and

force-multiplier infrastructure are not taken into account, and consequently, to make up for such factors of uncertainty, conservative military establishments over-insure themselves at higher numbers of highly visible items of weaponry. Fourthly, with the development of dual-capable systems and more compact and mobile systems, arms control based on verification will become increasingly difficult.

23. There is also a growing sense of dissatisfaction in regard to the policy of nuclear deterrence as practised over the last four decades. The search for defence-dominant structures to replace the present of fence-oriented mutually deterrent nuclear-weapon systems, the idea of making nuclear weapons obsolete and impotent, the joint declaration that a nuclear war cannot be won and must never be initiated and the proposal to eliminate nuclear weapons are all symptomatic of this growing disillusionment with the doctrine of nuclear deterrence. The current predicament has led some to look for a way out based on technology, and others, on politics. Compared to the earlier periods, there is a progressive lessening of assertiveness in upholding the validity of nuclear deterrence.

24. It is not likely to be very useful to investigate whether the strategy of nuclear deterrence has had positive or negative results over the last four decades. If it is recognized that nuclear deterrence was an expedient policy of a particular era, pursued in the light of a set of perceptions which might not always have been objective, it will be possible to look at the viability of nuclear deterrence as a strategy to be pursued in the future in the interests of the major nuclear Powers themselves. Nuclear deterrence was a credible policy in a world where the possibility of nuclear war could be envisaged. The theorists of deterrence have emphasized that the credibility of deterrence requires explicit preparations to fight a nuclear war if deterrence fails. Will nuclear deterrence continue to be credible in a world where, increasingly, leaderships come to believe that a nuclear war cannot be controlled if it breaks out and that, beyond a certain level of use of nuclear explosives, disastrous climatic consequences are likely? Even if one accepts that, in certain contingencies, such threat of committing suicide and taking the aggressor along will be credible, it stands to reason that such contingencies will be very rare and that threats will not be credible in most other cases. Even in such extreme cases, nuclear deterrence will make sense only if such contingencies have a reasonable likelihood of success and there are no alternative ways in which to deter the aggressor. It is debatable whether this is so.

25. Nor is it quite clear whether, in calculating if the nuclear deterrent posture is a cost-effective security policy, the overall political and economic costs of such a posture have been considered. The nuclear deterrent posture is based on the continuance of a controlled adversarial relationship with the rival group of nations. Such a controlled adversarial relationship has an inhibiting effect in regard to trade and financial flows, technology transfers and so forth, and it also acts as a generator and sustainer of insecurity among nations. Both these factors generate costs not always accounted for purely in terms of the defence burden of nations. Even if one accepts that the probability that one side will have to exercise the threat of use of nuclear weapons in order to deter a possible exercise in coercive diplomacy, though low, is not non-negligible, then, to arrive at an optimal policy, one has to compare the cost of such a deterrent posture to sustain that security with the costs of insecurity generated by that very posture. In

today's situation, the nuclear deterrent posture, meant to safeguard the security of a group of nations, also generates insecurity. The net balance appears to be insecurity rather than security, and that insecurity encompasses non-military areas as well. Arguments advanced on the ethical underpinnings of nuclear deterrence have to be viewed in the light of the above. If one's own actions tend to generate net additional risks to one's security, one cannot use that fact as the basis for arguing that nuclear deterrence is morally justifiable to meet such risks. If one were to accept the argument that nuclear deterrence is ethically justifiable between NATO and the Warsaw Treaty Organisation, it would be equally justifiable in other parts of the world and for nations facing the coercive diplomacy of the major nuclear-weapon Powers.

26. There are perceptions on both sides that the economy of the other side has been highly militarized, that this militarisation has caused distortions in structures and processes of societal decision-making and that it is responsible for the perpetuation of a sense of animosity. These perceptions are genuine, whether they are objectively true or not. Some maintain that the slow economic recovery of industrial nations, the consequent impact on developing nations and their inability to pay debts, and the uncertain future international economic outlook are attributable to high defence spending and high budgetary deficits of certain, leading locomotive economies, and that this high defence spending is directly related to sustained development and production programmes of new generations of nuclear and space-based weapon systems. Such perceptions, by themselves, irrespective of their objective validity, become self-fulfilling prophecies and generators of insecurity - military and non-military.

27. Some perceptions have acquired atavistic characteristics because of historical memories. In view of the technological constraints, the existence of second-strike capability and now the nuclear-winter hypothesis, it is difficult to understand how there could be a credible threat or a disarming first strike with or without defensive shields, yet much has been done on both sides to engender a sense of insecurity among populations on the basis of an alleged threat to main deterrent systems.

28. The strategy of deterrence always needs someone to deter, and this compulsive need to have an adversary and the historical legacy of mistrust and misperceptions reinforce each other to such an extent that they create a closed system of logic somewhat disconnected from the ongoing developments outside this framework. Thus, nuclear deterrence appears to have become an end in itself. Perhaps this development was not deliberately sought after. It was probably the result of a sub-optimized thought process based on highly specialized disciplines and at levels lower than an overall integrated national and international goal-setting level. It is also possible to view the nuclear deterrent posture as an inevitable, competitive game of the leading nations in the nuclear age - nations with perceptions and understandings shaped by the historical legacies of a combustible European nation-state system which had seen two world wars in quick succession.

29. There is general agreement that major Powers are not likely to resort to the use of nuclear weapons in the industrialized world in any deliberately pre-planned conflicts. It is the risks of the accidental or unauthorized use of weapons and

their use by terrorists that cause worry. A section of the population in the industrialized world feels that, with reduction in the flight-time of missiles and increase³ automation in decision-making, the risk⁸ of the accidental or unauthorized release of nuclear weapons have increased. Others argue that improved technology is likely to increase the effectiveness of command and control over nuclear weapons and reduce, if not totally eliminate, such risks. Similarly, some people consider that the risk of terrorists getting hold of usable nuclear weapons⁸ and fissile materials is higher in the industrialized world, with a higher density of deployment of nuclear weapons⁵ and a larger number of unsafeguarded military nuclear facilities, than in the developing world. Others, however, consider that the risk of terrorist diversion in the developing world, with a lesser number of unsafeguarded facilities, is likely to be higher.

30. Besides the risks mentioned above, there are those arising from the spread of the nuclear weapons of the acknowledged nuclear-weapon Powers⁸ around the globe and in the oceans, and the likelihood of their use in interventionist operations⁵ in the developing world or in operations⁵ undertaken in fulfilment of certain treaty obligations of major industrial Powers. Those who strongly espouse the doctrines of nuclear deterrence and nuclear war in the major Powers rate these risks⁸ low, while some others, especially from the developing world, rate them significantly high. In most of the strategic literature published, the risks⁵ of use arising from proliferation of nuclear weapons in developing countries are highlighted. In the last 22 years, acknowledged proliferation of nuclear weapons has not taken place in the developing countries, and, in the light of the record of this period, some consider these risks to be somewhat overblown and exaggerated. Others disagree, and consider that the prime risk is proliferation in developing countries..

31. Concern is being increasingly expressed in respect of the ambiguous nuclear status of certain countries which, it is widely believed, could achieve full nuclear status at short notice. As pointed out earlier, strategic doctrines cannot be quarantined. With the global spread of nuclear weapons and nuclear command, control, communications, intelligence and logistic infrastructures, it is unrealistic to expect that examples set by major Powers will not be followed elsewhere. The theory that the East-West confrontation is unique and requires nuclear weapons and war doctrines to insure security while this is not the case elsewhere in the world may sound convincing to its advocates, but, not to others.

32. The argument that the approximately 132 nations that have signed the non-proliferation Treaty have thereby acknowledged that the possession of nuclear weapons is not required for their own security is fallacious. Among the signatories are three nuclear-weapon Powers and members of military alliances that rely on nuclear weapons for their security. Most of the signatories have no capability to acquire nuclear weapons. The nations not signatories to the Treaty that have the potential to make the weapons and have reserved their options have as much ethical, legal and strategic justification to have nuclear weapons as the nations of the two military blocs. Proliferating nations (preaching non-proliferation not only do not create credibility) they also create distrust as to their intentions to exercise coercive diplomacy and dominance over the rest of the world.

33. The non-proliferation Treaty has been converted into an unlimited licence for proliferation. The charge of discrimination against the Treaty is not that it discriminates between nuclear-weapon Powers and non-nuclear-weapon Powers in terms of possession of weapons, as ardent advocates of the cartelized, unlimited proliferation of nuclear weapons misleadingly affirm. The charge is that it discriminates in favour of nuclear-weapon nations by not enforcing the Treaty obligations they solemnly undertook and have evaded ever since. Those who reject the charge of discrimination would like the world to believe that the so-called non-proliferation Treaty laid an obligation on nuclear-weapon Powers to proliferate without limits, allow their military nuclear facilities to lose fissile materials to other nations and share nuclear weapons with their allies when they need to be shared at times of high tension.

34. The non-proliferation Treaty and the failure of the nuclear-weapon Powers to fulfil obligations under article VI highlight the enormous gap between profession and practice of the sponsors of the Treaty. This gap between profession and practice in regard to the obligations they themselves have undertaken} the frequent mutual charges of violation of treaty obligations; the non-signing of initialled treaties; the possible erosion of treaties, like the ABM Treaty 3/ or the outer space Treaty, 7/ which is being actively discussed; press disclosures of contingent plans to violate the Treaty of Tlatelolco 16/ by the emplacement of nuclear weapons in Puerto Rico, an area included in the Latin American nuclear-weapon-free zone; the use of nuclear-weapon carriers during the South Atlantic war without disclosure of whether or not they carried nuclear weapons; the fact that the number of nuclear threats conveyed in situations of asymmetry exceeds the number conveyed in situations of nuclear symmetry; and the policy of interventionism and the exercise of coercive diplomacy by major nuclear-weapon Powers in areas far away from those of their security interests - all these taken together have resulted in a total loss of credibility in assertions of the defensive intentions of major nuclear-weapon Powers as they spread their nuclear weapons all over the globe. For the same reasons, one side's protestation of its defensive and non-aggressive intentions evoke little confidence in the other.

35. Security, sovereignty and freedom from coercive diplomacy are of equal value to all countries of the world, big or small, east or west, developed or developing. Therefore, in the view of some, as long as nuclear weapons are legitimate for certain nations of the world, they are bound to be acquired at least by a few other nations, either explicitly or ambiguously. Others, especially those from the nuclear-weapon countries and their allies, disagree with this view and consider that those which have not acquired nuclear weapons so far have no need for them. Most of the countries in the world (126 according to the vote at the fortieth session of the General Assembly 15/) feel that no country needs nuclear weapons, and that their use and threat of use should be outlawed.

36. The doctrine of nuclear deterrence is under increasing challenge. In the originating Power itself, the public favours freeing the world from being held hostage to nuclear weapons and nuclear deterrence. The other major Power has now proposed the elimination of nuclear weapons by the end of the century. The overwhelming majority of nations have expressed themselves in favour of outlawing the use and threat of use of nuclear weapons and are in favour of nuclear disarmament.

37. Whenever ideas, concepts, doctrines and institutions start to lose their viability, there is bound to be a time-lag between the beginning of the process and its completion. This has happened in the cases of monarchy, slavery, colonialism and apartheid. The intervening period has certain risks, since those who espouse the doctrines and institutions resist the inevitable change, and that generates conflict. In the case of the doctrine of nuclear deterrence too, the world has entered the era in which the doctrine is losing its acceptability, viability and credibility. The problem before the international community is how to manage this era of change peacefully and without major conflict involving nuclear weapons.

CHAPTER II

ARGUMENTS, COUNTER-ARGUMENTS AND COMMENTS BY THE EXPERTS FROM THE SOCIALIST COUNTRIES

1. The papers presented by the experts from the non-aligned countries, though different in tone and intensity, have one distinctly outstanding common feature. They all insist on the necessity of eliminating the concept of deterrence from the practice of civilized international relations. Some experts consider the inadmissibility of this concept from legal, some from moral, and still others from purely military angles. But, as regards the main tenets of deterrence, the result of this analysis is invariably negative - whipping up the arms race and undermining security and international stability.
2. It is difficult not to agree with those who consider it impossible to find military-technological fixes for political problems. Some of the experts stress that the nature of new weapons does not leave any State with the hope of defending itself by new, even highly sophisticated, defensive weapons, whether in space or on Earth.
3. It is easy to understand the approach of some experts to the arms race as an action-reaction phenomenon. But it seems strange, to say the least, when the country that was the instigator of the arms race in the name of the concept of deterrence and the country obliged against its own will to answer challenges are placed on the same footing and measured by the same yardstick.
4. The notion expressed by some experts in their papers that deterrence belongs to the yesterday of mankind and that it should be replaced by some new viable security concepts, such as collective security for example, can only be due to their realizing that deterrence cannot serve as a basis for international security, contrary to what might be said by the authors.
5. We share the view that concrete steps to decrease the reliance on deterrence are long overdue and that, without active measures on the part of each and every State, this concept will haunt all of mankind for many years to come.
6. One should note that some experts are suggesting a kind of phased outlawing of nuclear weapons. Others consider of paramount importance a ban on nuclear weapons, a complete ban on testing, prevention of the extension of the arms race to outer space, and so forth.
7. All these thoughtful deliberations reflect the increasing uneasiness of the world community and its rejection of the concept of deterrence.
8. Looking into the paper prepared by the experts of the United States and the Federal Republic of Germany (see part one, chap. IV above), one should stress from the very beginning that this paper gives a description of the concept of deterrence that does not correspond to reality. The concept of deterrence by the United States and NATO is presented as defensive, promoting peace, and so forth. Nothing could be further from the genuine state of affairs.

9. In its basic provisions this concept is aimed at achieving military superiority, intensifies the arms race, exacerbates the international situation, increases the danger of war and includes the threat of the first use of nuclear weapons as its major element. In practice, the implementation of the concept of deterrence by the United States and NATO confirms this appraisal.

10. As certain leading American public figures (especially after retirement) have acknowledged, the United States was prepared on many occasions to use nuclear weapons against the Soviet Union, the German Democratic Republic and other countries of Central and Eastern Europe, India, China, Cuba and other States. The cases of demonstratively putting on alert the strategic nuclear forces of the United States in connection with crises in Europe, the Middle East, the Far East, the Caribbean and other regions are well known.

11. It is stated in the Western paper that these forces are not intended to be used against the civilian population. This does not correspond to the facts. In the first plans for nuclear attack against the Soviet Union, a nuclear strike against major Soviet cities was included. All contemporary American plans include targeting of nuclear forces against a great number of cities, not only of the Soviet Union, but of other countries as well.

12. It is stated in the Western paper that the concept of deterrence enhances defence. What kind of defence is it, when, in the name of deterrence, the United States concentrates its naval forces with nuclear weapons (such as strike-aircraft carriers) in various regions of the world - near the shores of Europe and Eastern Asia, in the Persian Gulf and the Caribbean and, lately, especially often in the Mediterranean?

13. The Western experts assert that no threat to third countries emanates from the concept of deterrence. In addition to what was mentioned above, it is necessary to say that, in reality, the United States armed forces have been engaged in action many times during the post-war period. One cannot forget about American intervention in a number of countries.

14. Thus, the concept of deterrence has nothing in common with defence, promoting peace and other such qualities attributed to it in the Western paper.

15. One cannot fail to notice that the Western experts, when dealing with problems of nuclear weapons do, in fact, substantiate this conclusion. The problem of nuclear weapons is central in the contemporary strategic situation. There exists a clear dividing line between those who strive to ban and eliminate nuclear weapons and those who strive to perpetuate them. The Western paper belongs to the second category. Though its authors pay lip-service to the idea of nuclear disarmament, the central idea running through their paper is the legitimization of the first use of nuclear weapons.

16. They return again and again to attempts to justify this paramount tenet of the concept of deterrence, understanding how unpopular this position is. Their inventiveness in defence of this extremely dangerous position defies the imagination.

17. The Western experts promise that the first use of nuclear weapons will be "defensive". They glorify nuclear weapons as a more economical means of annihilation, declare them "moral" and so forth. In the process of this exercise, they go so far as to equate the first use of nuclear weapons with a second, retaliatory, nuclear strike. All these deliberations are aimed at trying to prove the unprovable, to defend the concept of deterrence based on the first use of nuclear weapons, with its apocalyptic consequences for the whole of humanity.

18. It is not our intention to counter one by one all incorrect statements, of which there is an abundance in the Western paper. But since many of them are attributed to the Soviet or to the Warsaw Treaty Organisation's military doctrines, we consider it necessary to clarify some of the most important points.

19. It is rather disturbing that the Western experts go out of their way to ascribe to Soviet military doctrine some key elements and pronouncements which are completely alien to it and have nothing whatsoever to do with Soviet military thinking on this important matter. Clearly, this either reflects innocent ignorance of the basic facts (in which case it may be easily dismissed), or it is just an exercise in propaganda.

20. Whatever the case may be, the suggestion in the Western paper that the Soviet Union is trying unilaterally to improve its own security at the expense of others bears no relation to the facts. The long-standing policy of the Soviet Union and Warsaw Treaty countries on this subject is well known. But let us address the other side of the Western experts' thesis. This argument deliberately leaves the position of the Western countries in the same area open to interpretation. It is supposed to be antipodal to what is ascribed to the Soviet policy. Since when did concepts of "limited", "protracted" and other kinds of war and threats of first use of nuclear weapons become a factor in strengthening collective security? Or, maybe, constant and practically limitless arms buildup in the name of "credible deterrence" is supposed to instil in other countries a feeling of security?

21. The Western paper contains many statements that are in absolute opposition to the facts, like the statement suggesting that the Soviet military doctrine presupposes carrying war into the enemy's territory and inflicting total defeat with a crushing blow. Without going into a meticulous, reasoned repudiation of such statements, we simply refer to the jointly agreed statement at the Geneva summit that there will be no winners in a nuclear war and that it must never be unleashed. This formula has received universal support. By depicting Warsaw Treaty countries as adversaries plotting against the peace, the Western paper practically negates the Geneva summit statement and opens vast, particularly disturbing areas of mutual suspicion, in which "deterrence" can prosper and be justified.

22. Being over-anxious to prove that some elements of "deterrence" are so good that they could not be refused by anyone, the Western experts suggest that the Warsaw Treaty countries as well have adopted and highly developed their own concept of limited nuclear war, for example, in Europe. Nothing could be further from the truth than this allegation. We do not intend to repeat here the approach of the socialist countries to this problem. It is well known. One thing should be

mentioned, however. By persisting in promoting the concept of "limited nuclear war", NATO and especially the United States are trying to somehow reconcile the peoples of Europe to the possibility, even acceptability, of the use of nuclear weapons in Europe.

23. As far as the socialist countries are concerned, they were and are against the concept of deterrence and everything the concept of deterrence preaches, from "limited" and "protracted" nuclear war to first use of nuclear weapons.

24. The reader of the Western paper should be puzzled, to say the least, by the conflicting descriptions of the intentions of the Soviet Union and Warsaw Treaty countries concerning Europe. We note with interest the statement of the western experts that the socialist countries do not want war. But at the same time, it is confusing to learn from the same source that, despite the fact that the socialist countries are against war, their armed forces and weaponry are structured for a first strike. It is very strange to discover that, despite unilateral Soviet commitment never to be the first to use nuclear weapons, as well as the proposal of the Warsaw Treaty countries for an agreement on the non-use of force between the Warsaw Treaty and the NATO countries, the unfounded statement about a Soviet first strike has entered the Western paper. Is it because we have here a case of mirror images of one's own views? This seems to be the most plausible explanation.

25. Similarly, the innuendoes about the dominant role of military power in the Soviet economy do not hold water. Moreover, it is suggested that the growth rate of military spending of the USSR and the other Warsaw Treaty countries is automatic and far exceeds legitimate security requirements. Here again, one can clearly see the familiar effort to justify the tremendous military buildup of the United States in the 1980s and the 3 per cent automatic growth rate in NATO.

26. Striking discrepancies appear in those parts of the Western paper where its authors cite figures regarding military balance. Statements that the USSR was whipping up the arms race in the 1960s and 1970s and the United States was not developing a single new nuclear strategic weapon or new strategic bomber do not correspond to the historical facts. Quite the contrary. In the beginning of the 1960s, much was made of the so-called missile-gap. On that pretext, the United States was the first to undertake massive deployment of land-based ICBMs, "Minutemen". After 1,000 of those missiles were in place, it was discovered that the "Soviet missile threat" had been exaggerated more than 20 times. During the same period, the construction of Polaris SLBMs was initiated. By the mid-1960s, the United States had started to fit MIRVed warheads on SLBMs. By 1967, the United States had already deployed 41 SLBMs with 656 launchers and 1,552 nuclear warheads. (By way of comparison: in 1967, the USSR had 2 SLBMs with 32 launchers and 32 warheads.) In 1968, the United States strategic triad was completed, with 1,054 land-based ICBMs, 656 SLBMs and 615 strategic bombers. The effort covered all directions - strategic as well as European. In 1969, 65 FB-111A bombers armed with 6 SRAM missiles each were deployed. United States armed forces in Europe received new operational-tactical nuclear missiles of various types. Tactical aircraft capable of carrying nuclear weapons were introduced in forward bases along the perimeter of Soviet territory as well as the territories of other socialist countries.

27. The beginning of the 1970s was marked by fresh United States efforts to increase its military arsenal. ICBM and "Minuteman-3" and Poseidon SLBMs were fitted with new, highly accurate MIRVed warheads. At the same time, 268 heavy strategic bombers were modified to carry 20 new SRAM missiles each. New major steps were taken by the end of the 1970s. It was during this period that a new type of weapon - the neutron bomb - was developed and the scientific-technical foundation for the wide-scale United States military programmes of the 1980s was laid: ICBM, MX, SLBM, Trident-II, B-18 bombers, cruise missiles of different modes of basing, medium-range Pershing II missiles, and so on.

28. The argument that the Warsaw Treaty military forces have any superiority over those of NATO cannot be accepted. There was and is equilibrium or rough parity in the conventional as well as the strategic forces of NATO and the Warsaw Treaty Organization. This parity is recognised and confirmed by authoritative sources. If one compares the armed forces and weaponry of the two sides, not for the purpose of propaganda but objectively, the following correlation takes shape.

29. By the beginning of the 1970s, the rough parity of strategic forces between the Soviet Union and the United States was established. At the present time, the USSR has approximately 2,500 strategic delivery vehicles, the United States, 2,300; the United States was and is still superior in the number of warheads. While land-based ICBMs constitute the backbone of the Soviet strategic forces, with 70 per cent of all strategic warheads, heavy bombers and SLBMs claim over 80 per cent of United States strategic warheads. These disproportions of strategic forces do not upset the existing balance. The Soviet advantage in some areas is fully compensated by the United States advantage in others. Moreover, one has to take into consideration the geographical asymmetries. The United States has intermediate nuclear systems deployed in such a way that they are capable of reaching targets deep in Soviet territory. It is well known that the Soviet Union has no analogous systems deployed near United States borders. It is also very important to take into account the fact that some of the United States allies possess nuclear weapons of their own.

30. The Western paper also introduces some figures on the balance of forces in Europe. These figures bear absolutely no relation to the real ratio of forces existing at present. As regards medium-range weapons, NATO enjoys an advantage in the number of both delivery vehicles (missiles and aeroplanes) and nuclear charges (USSR: 850 delivery vehicles and about 2,000 nuclear charges; NATO: more than 1,000 carriers and over 3,000 charges). The ratio for medium-range nuclear charger is 1.511 in favour of NATO.

31. One of the most fervently argued points in favour of nuclear deterrence is the alleged conventional force superiority of the Warsaw Treaty Organization over NATO. Since these assertions are mostly made for purposes of propaganda, it is strange to see them repeated in the Western paper.

32. There is a rough parity between the conventional forces of NATO and those of the Warsaw Treaty Organization. The picture of the actual correlation of these forces has been systematically and purposely distorted by the West. For example, the West does not count on the NATO side the armed forces of France and Spain, nor

are the former under direct national command, mobilization capacities, human resources, weapons supply depots, military technology and so forth.

33. The population of NATO countries exceeds the population of the Warsaw Treaty States by the ratio of 1.5:1, which gives NATO an advantage in mobilisation contingency plans. The armed forces of NATO are larger than those of the Warsaw Treaty Organization. NATO has 94 combat-ready divisions (France and Spain included); the Warsaw Treaty Organization has 78. At the same time, one has to bear in mind that a United States Army division has 16,000 to 19,000 men and a division of the Federal Republic of Germany has 24,000 men. Fully deployed divisions of the Warsaw Treaty countries have 11,000 to 12,000 men.

34. The NATO and the Warsaw Treaty countries have about the same number of tanks (approximately 27,000 each); the capabilities of tactical aircraft forces are also comparable, though one side has more of some types of aeroplanes and the other has more of others.

35. The Western paper sets out a completely unfounded comparison of naval strength. In reality, in major classes of combat ships, NATO greatly exceeds the capacity of the Warsaw Treaty countries. NATO has 15 big strike-aircraft carriers with 1,500 aeroplanes. The Warsaw Treaty Organization has no such carriers. NATO enjoys superiority over the Warsaw Treaty Organization in marine corps - 14 times greater, in big combat ships - 3 times, and in naval aviation - 2.5 times. The overall tonnage of the United States Navy equals 4.5 million tons; that of the Soviet Navy, 2.6 million.

36. The preceding brief comparison of military forces of the two opposing sides clearly demonstrates that the myth of "overarmament" of the Soviet Union and the Warsaw Treaty countries was introduced and is constantly supported by those who want to justify the limitless arms race and striving for military superiority over socialist countries.

37. The major characteristic of the Western paper is that it does not contain a reasonable alternative. The paper proposes dragging on with the "deterrence" concept. It counters constructive proposals for a stable and secure world with artificial pictures of a world from which deterrence is suddenly removed, though it is quite obvious that the transfer to a stable and secure alternative to "deterrence" should develop by stages, with the increase of new measures of arms reduction, confidence building, decreasing the level of confrontation. The authors of the Western paper - intentionally or unintentionally - do not propose a real way out of the present difficult international situation.

38. Moreover, the Western experts speak in essence of perpetuating the nuclear-arms race, attempting to explain it by referring to the impossibility of stopping the development of military technology and other far-fetched reasons. And this is logical. Those who preach the continuation of the "deterrence" concept cannot but project the continuation of the nuclear-arms race into the future. All in all, the Western paper paints a bleak picture and does not propose a realistic way out.

39. In the end, the Western paper asserts the desirability of dialogue. Certainly the dialogue between East, West and non-aligned nations is indispensable. Whatever the disagreements, constructive dialogue is necessary in the contemporary difficult international situation. It should pave the way to understanding and agreements which should lead to arms limitation and nuclear disarmament, and to radical improvement in international relations.

CHAPTER III

ARGUMENTS, COUNTER-ARGUMENTS AND COMMENTS BY THE EXPERTS FROM THE NATO COUNTRIES

1. After reviewing the papers submitted by the other experts, we find that almost every substantive statement and argument that disagrees with our own views is fully answered in our presentation and that, moreover, our paper makes a number of points that other papers neglect or misunderstand. Therefore, the best amplification of our views, in the light of the other contributions, is to be found in a careful reading of our basic text. Nevertheless, some portions of the other papers call for specific comment, and some differences of approach to deterrence are so fundamental that they warrant a brief reminder of the essence of our own approach.

Comments on Mr. Subrahmanyam's paper

2. The particular merit of Mr. Subrahmanyam's analysis lies in his choice of a high vantage-point for the assessment of deterrence. In a carefully detached view, he embeds the concept of deterrence in a rich historical perspective, drawing his examples and metaphors from a broad background of knowledge. His analysis of deterrence being a structural one, Mr. Subrahmanyam avoids the pitfalls of any partisan East-West view, and seeks to provide a global perspective, marked by an attempt at value-free realism and third-world-oriented equidistance between the two major military systems. This approach allows for many new, and sometimes surprising, insights.

3. Yet, in our view, the very heuristic advantages of Mr. Subrahmanyam's methodological approach make it the source of a number of analytical deficiencies. Some of his findings stem from his perception that "nuclear deterrence" - even in our age, and even with regard to nuclear Powers - can be strictly differentiated from other forms of deterrence, while our own use of the concept of deterrence proceeds on the assumption that the major Powers practise a continuum of deterrence from which the nuclear factor cannot be artificially extracted. We cannot exclude the possibility that some misperceptions may have resulted from this definitional difference.

4. Mr. Subrahmanyam's intention to place the two major nuclear Powers rigorously on an equal footing and his - correct - diagnosis that both of them practise deterrence in equal measure make him lose sight of one important, and indeed basic distinction: that between deterrence as an existential condition of great-Power antagonism in the nuclear age and deterrence as the distinctive and deliberately shaped strategies of each of the two systems. He thus attributes intentions and consequences to deterrence in general that are manifestly not part of Western doctrine and strategy.

5. There is also a marked tendency on his part - his own definition of deterrence notwithstanding - to inflate the concept beyond recognition in order to attribute to it most of the negative features of current Power politics, especially as it affects third world countries and their painful passage through the development process towards more prosperity and fewer conflicts and weapons.

6. Although Mr. Subrahmanyam objectively sees deterrence, including the nuclear factor, at work, as an observable feature of the East-West relationship throughout the last 40 years, he qualifies it as a mere "belief system", thus ascribing to it a somewhat whimsical nature, as if the States that practise it could just as well have placed their "belief" elsewhere. By the same token, Mr. Subrahmanyam sees the effect of deterrence on the deterred as a mere reflection of the "belief" of the deterrer in the operability of deterrence - again, as if one could extract oneself from such effect by ignoring the belief and adopting a somehow more benevolent view of the world. Closely allied to this perception is his view that deterrence, given its potential consequences, includes an element of irrationality. It is, in his view, a mix of rationality and irrationality and must lead to irrational and incalculable actions and reactions, especially in the event that deterrence should fail in its primary, war-preventing function.

7. This view overlooks the fact that doctrines of deterrence - and this is particularly true of the Western approach - are not arbitrary choices, but have evolved within alliances in a long and painstaking thought-process, based on much experience and adapted over time to changing technological and strategic conditions. Far from being irrational or appealing to the irrational, the Western approach to deterrence - and certainly also the Soviet Union's - is predicated upon rational behaviour on the part of the potential adversary, and is designed to demonstrate that in the nuclear age war is irrational, and the avoidance of war the only rational behaviour. It is true that deterrence must make certain assumptions about the behaviour of the other side, under various circumstances, but these assumptions are based on the premise that survival in the nuclear age presupposes - for one's own sake - a rational, responsible participation in the joint management of the nuclear environment. These assumptions have been proven right so far, at least to the extent that nuclear Powers have become increasingly prudent and circumspect, both in the management of their own weapons and in their elaborate mutual arrangements designed to hedge against the risks of unintentional nuclear war. In fact, one of the underlying realities of the nuclear age is that no nuclear-weapon State can afford to assume the possibility of irrational behaviour on the part of another nuclear Power, since such an assumption might force it to resort to irresponsible and self-destructive behaviour on its part. This effect of mutual restraint and the inevitable tendency towards basic rationality of behaviour are peculiar to the nuclear era. One should thus be careful in the choice of one's historical analogies from earlier periods. Mr. Subrahmanyam's somewhat one-sidedly selected examples - predicated upon situations of military asymmetry in history - are all taken from periods where the penalty for irrational damage or cruelty inflicted upon an adversary in war was absent or negligible.

8. As evidence of rationality in the elaboration of concepts of deterrence, it should be noted that one of the principal features of the Western approach is its reasoned and painstaking attempt to heighten the potential of deterrence to prevent war at the lowest possible cost, both as regards nuclear arsenals and as regards destruction and loss of life should deterrence fail.

9. Mr. Subrahmanyam attributes to deterrence a number of effects that, in reality, bear no causal relationship to the concept or reverse the cause-and-effect relationship.

10. This holds particularly for his thesis, echoed by other experts, that deterrence locks nations into hostility and distrust or may even heighten these adverse feelings. No evidence is adduced to substantiate this claim; indeed, the contrary is much easier to prove. The prevalence of mutual deterrence between East and West has by no means precluded long periods of relative détente or the far-reaching process of the Conference on Security and Co-operation in Europe; nor has it prevented President Reagan and General Secretary Gorbachev, at this very juncture, from establishing a relationship in which former distrust is apparently lowered and a number of important rules of mutual behaviour are agreed upon. The reality is that hostility and lack of mutual confidence flow from the secular antagonism of the two great Powers, not from any of the security devices they employ in the framework of their adversarial relationship.

11. Deterrence can instil in such a relationship a measure of reassurance that war has become unlikely and has ceased to be a viable option. It may thus reduce fear and all-pervasive apprehension and enable nations to work more calmly on the construction of a modus vivendi, a durable peaceful relationship that may harness the continuing antagonism and at the same time dispel some of the distrust emanating from it. As we have pointed out in our presentation, the reassurance that derives from a functioning system of mutual deterrence may also - far from fomenting an endless, mechanically conceived arms race - create the prerequisite for negotiated arms control. Mr. Zhurkin, in his own terms, acknowledges that only a stable strategic military balance would be conducive to negotiated arms reductions.

12. In fact, Mr. Subrahmanyam's thesis that the maintenance of a basic adversarial relationship becomes a prerequisite for the maintenance of deterrence is a case of circular reasoning. Deterrence would become superfluous if the underlying antagonistic relationship were resolved. The political approach to deterrence for which Mr. Subrahmanyam insistently calls already exists as an essential feature of the Western concept, as our own presentation substantiates.

13. In his assessment that deterrence is predominantly geared to weapon systems and in his implied criticism of arms control, Mr. Subrahmanyam assumes deterrence to have engendered the full range of modern weapon systems, and indeed makes it responsible for the entire dynamics of weapons technology in our age. That causal relationship would be difficult to establish. It is easier to demonstrate that deterrence has promoted only certain specific arms technologies, thought to lead to safer and less destructive weapons, thereby increasing both strategic stability and weapons economies.

14. At times, Mr. Subrahmanyam narrows deterrence to a merely mechanical competition of weapon-builders; at other moments, he inflates the concept to a point where it appears as the principal culprit in distorting and poisoning the international politics of our time. He thus charges that deterrence has bent the world view of the two great Powers in the direction of a Manicheist perception of friend and foe, where all incipient conflicts in the third world become a mere function of enhancing the East-West deterrence relationship. This attribution of blame for all - or nearly all - indigenous third world conflicts to a few extraneous originators has little basis.

15. Our own presentation attempts to take stock in a sober fashion of outside interference in third world conflicts - nobody der ices that it has occurred - but it also points to the constraints on direct super-Power involvement and the prudence that has dictated to East and West the avoidance of armed encounter. In that sense, the existence of deterrence has had an attenuating and limiting influence on conflicts outside the East-West context. The remedy for crises and conflict in the third world is not the gesture of the accusing finger, pointed at the super-Powers and at bipolar deterrence, but the conscientious search for regional conflict solution and regional security arrangements.

16. There is no doubt that the presence of vast nuclear arsenals mainly along the East-West axis cannot be ignored by other members of the international community in an interdependent world, and existing fears and even nuclear traumata around the world demonstrate that they are not. However, a non-alarmist view of the nuclear phenomenon, taking into account the effective war-preventing effect of deterrence and the remoteness of any use of nuclear weapons, will discount Mr. Subrahmanyam's contention that deterrence structurally spreads fear in the third world, to which no direct threat has been or is directed, the comprehensive negative security guarantee of all nuclear-weapon States being one piece of evidence. One can hardly escape the impression that the cultivation of this threat perspective may be intended to justify reserving the option of an eventual acquisition of nuclear weapons. However, as our own paper demonstrates, the argument against the proliferation of nuclear weapons to third world countries is not based on any doubt about their trustworthiness or maturity, but on the conviction that none of these countries would enhance its security by the acquisition of nuclear weapons, and that these weapons play their singular, historically developed role only a part of the East-West security equation. For this reason also, Mr. Subrahmanyam's analogy between horizontal and certain aspects of "vertical" proliferation appears flawed. Nuclear submarines of the two major Powers are not independent nuclear decision-making agencies, but instruction-bound agents of a hierarchical military system, where the precautions against unauthorized weapon use are elaborate and effective and, at that, subject to ongoing improvement.

17. In our presentation we have pointed out the defensive nature of deterrence, clarifying that no threat emanates from it, and that the happily remote prospect of weapon use would be predicated solely upon the perpetration of an armed attack. The insistence on the threat aspect which pervades much of Mr. Subrahmanyam's paper thus shifts the moral onus from the feared potential aggressor to its victim - an inversion of moral values that cannot be rejected strongly enough. It is part of Mr. Subrahmanyam's evocation of the threat and terror he associates with deterrence that he draws a parallel to present-day terrorism, including its potential nuclear aspects. It should be said in all clarity that no possible link can be constructed between the two. Indeed, no attempt has ever been made to justify terrorist violence with the continued existence of policies of deterrence or the non-success of nuclear-arms control; terrorism applies violence and inflicts damage, while deterrence seeks to prevent them; individual breach of international and domestic law has nothing in common with State action in matters of security and peace.

18. There is, no doubt, the awesome possibility of terrorist use of nuclear materials and devices, one of the risks of modern civilization. Vigilance and

added precaution must undoubtedly be applied to guard against such calamities, but it appears arbitrary, in the presence of large and diversified civilian nuclear industries, to lay the risks of nuclear terrorism exclusively at the doorstep of military nuclear establishments that are among the most protected and shielded and can, with little effort, be shielded further.

19. The remedy that Mr. Subrahmanyam prescribes for the evils of deterrence - a growing delegitimization of the use of nuclear weapons by legal fiat - is hardly convincing. In the first place, it is hard to see how such theoretical Proaction - without physical destruction of weapons, sanctions or verification - could produce effects in the real world, the frequent breach of the 1925 Geneva Protocol 13/ over so many decades providing an ominous parallel. Delegitimizing the ultimate effective means of preventing aggression without making sure that aggression is also effectively precluded only bestows a premium on aggression.

20. As we pointed out, the fundamental objective of deterrence is to prevent any war. As regards NATO, the use of nuclear weapons as well as the use of any other weapons is already excluded except in the crucial scenario of an attack on member countries of the Atlantic alliance. 'In order to make a convincing case for delegitimization in that particular case as well, a security alternative with an equal or higher potential for the prevention of war of any kind would have to be provided. Regrettably, however, that aspect is missing in Mr. Subrahmanyam's paper.

Comments on Mr. Carasales' paper

21. This paper offers a concise and clearly argued third world perspective and reflects the line of argument generally used in the context of disarmament debates in the United Nations. Since a good many of these arguments are standard, they have been fully addressed in our own presentation.

22. Mr. Carasales depicts the presumed threat emanating from nuclear weapons to third world countries in stark colours, leaving it open whether this perceived threat is a result of the mere existence of nuclear weapons, the present state of mutual deterrence between the two major Powers or, specifically, the Western approach to deterrence. There is some evidence that he believes that it is the latter. His threat analysis is unfortunately based on the worst-case assumption of an all-out nuclear war, set in motion under unclear circumstances by distant, anonymous decision-makers in a possibly psychologically disturbed state of mind. No account is taken of the joint resolve of the nuclear Powers to avoid a nuclear confrontation.

23. If the threat analysis is overdrawn, Mr. Carasales' description of prevalent nuclear fears in the third world is equally inflated. It is factually not true that such concerns are "overwhelming", that the feelings of insecurity are becoming "unbearable" or that the existence of nuclear weapons rules out a life in peace and tranquillity. The Lomé Declaration and Programme of Action adopted at the recent Ministerial Regional Conference on Security, Disarmament and Development in Africa, held under the auspices of the Organization of African Unity (see A/40/761-S/17573, annex), or the Peruvian initiative for regional conventional disarmament in Latin America 17/ demonstrate the more balanced security perception of many third world countries, and recent debates in the General Assembly show a more realistic and less excited view of the threats to security that plague the third world.

24. In Mr. Carasales' paper there is a somewhat cavalier treatment of moral issues. While in his view deterrence is inherently immoral, despite its avowed purpose of preventing war and, should it occur, terminating it at the lowest cost, his judgement on an act of aggression that would evoke an adequate defensive response appears less harsh. Despite some added argumentative effort in the revised version of his paper, the distinction between aggression and defensive response continues to be blurred, and the moral significance of preserving one's society from armed attack and preventing war do not seem to enter into his moral equation.

25. We note, however, that the paper in its final portion recognizes that the nuclear dilemma exists and is not easily resolved, and that the world will have to live with nuclear weapons until security can be provided by other means. He correctly sees the key to security in the crucial central European region where deterrence unfolds its most direct effect in the construction of a conventional balance. His observation that this would best be done by a reduction of Warsaw Treaty Organization forces deserves fullest support.

Comments on Mr. Fakhr's paper

26. Mr. Fakhr's perspective of deterrence is visibly and advantageously shaped by his experience as a military man. Realistically, he sees the quest of nations for power and the competitive relationship of armed adversaries as an endemic part of international relations. He also understands very clearly the way in which the military potentials of nations interact. This leads him to acknowledge that deterrence is a permanent feature of inter-State relations in order to prevent or limit conflict, and to a useful general definition of deterrence. Mr. Fakhr thus has no difficulty in recognizing that East-West deterrence has been successful in precluding a third world war.

27. In postulating that deterrence is at work everywhere, and in an attempt to describe its effects, especially with respect to the third world, Mr. Fakhr seems, however, to exceed his own definition of deterrence which, at times, is blown up into an all-pervasive mechanism of international and, especially, super-Power politics.

28. Mr. Fakhr's realistic - and, in the final analysis, positive - assessment of the principle of deterrence leads him to suggest how a policy of deterrence should be shaped. It should be: designed to effectively discourage war and its escalation, defensively structured, endowed with a stable mix of military forces, conducive to a steady reduction in global armament, oriented towards arms control and especially the elimination of surplus warheads, and guided by safer and more sophisticated C³I installations. From a Western standpoint, we have no difficulty in approving this list of requirements, which are largely met by Western deterrence.

29. Overstating somewhat the current nuclear threat - there is no basis to assume that the risk of an all-out nuclear conflict is steadily increasing - Mr. Fakhr also exaggerates the involvement of third world countries in the deterrence relationship of the super-Powers. But otherwise, he analyses correctly the basic

political and economic interdependencies, for instance, when he points out to what extent third world economies depend on a stable and peaceful super-Power relationship. Mr. Fakhr is rightly troubled by the possibility of nuclear proliferation in the third world, and the unspecified threat that emanates from the ambiguous policies of nuclear threshold States that have not renounced the military nuclear option. His concern may have regional origins, but his call for the lifting of such existing ambiguities undoubtedly deserves universal application.

30. Mr. Fakhr is correct when he demonstrates how States that practise deterrence attempt to maximize its effectiveness by the continuous competitive development of military technology, but he overlooks the fact that such restructuring of deterrence need not - and often does not - take a quantitative dimension, so that his general conclusion that deterrence policies foment the (quantitative) arms race appears unfounded. Mr. Fakhr is, however, well advised when he points out how such technological improvements aim at enhanced stability.

31. Mr. Fakhr closes on a particularly constructive note when he calls for more openness in military matters and other confidence-building measures.

Comments on Mr. Zhurkin's and Mr. Müller's Paper

32. Mr. Zhurkin and Mr. Müller assert a description of the Western concept of deterrence that is diametrically opposite to the concept formulated and practised by Western authorities. The Western concept, as they describe it, is entirely malevolent in its intentions and adverse in its consequences; whereas the socialist States have no concept of deterrence at all and are, therefore, not implicated in its evil results. Mr. Zhurkin, however, departs from the rigidly negative line that preoccupies Mr. Müller by acknowledging that a factor of deterrence exists "as a function of the strategic military balance", that "to a certain degree" it is a "stabilizing factor in the strategic situation", and even that the Soviet Union's foreign and military policy is implemented in practice through a "system of constraining factors". This acknowledgement opens the dialectical door to some promising, if ambiguous, areas of agreement with our own paper. We are glad to entertain the hypothesis that this reformulation of Soviet views on deterrence - if taken together with other recent Soviet utterances on strategic matters -- may indicate an increasingly sober, more mature acknowledgment of the realities of the nuclear age and of the shared responsibility of both major nuclear Powers for the establishment and maintenance of a stable strategic relationship and the avoidance of war, both nuclear and conventional.

33. Mr. Zhurkin's formulation converges with the Western concept of "existential deterrence", which holds that the super-Powers' possession of nuclear weapons, objectively and apart from their military doctrines or political intentions, imposes prohibitive constraints against war between them, because they know that war would entail an intolerable risk of unacceptable destruction. Moreover, Mr. Zhurkin attributes to "Soviet military doctrine" a number of tenets that are central to the Western concept of deterrence: that the strategic military balance and its accompanying fear of nuclear retaliation promote peace, that such a balance depends on mutual acceptance of parity, not the pursuit of superiority; that the stability of the balance is incompatible with the search for absolute security!

that a nuclear war cannot be won and must never be fought; and that the strategic balance should not be an end in itself, but must be only one of a "system of constraining factors" - political, legal, moral and psychological, as well as military - intended to reduce the role of the military factor and promote lasting peace.

34. The only problem with this list of tenets is that Mr. Zhurkin insists that they are the exclusive property of Soviet military doctrine, while he accuses the West of violating every one of them, even though he has borrowed the very words in which they are expressed from Western sources. This is a curious inversion of strategic reasoning. It is particularly curious because, in adopting the tenets of Western strategic thought, he still denies that they have anything to do with a conscious Soviet strategy of deterrence.

35. Since Mr. Zhurkin has adopted this much of the Western concept of deterrence and since he also characterizes Western foreign and military policy conducted in the name of this concept as so aggressive and threatening to the USSR, whose military posture he describes as purely defensive, it is puzzling and somewhat disturbing that he goes out of his way to deny that the Soviet Union ever thinks about deterrence let alone pursues a policy of deterrence.

36. Generically, deterrence is, after all, simply the effort of one armed adversary to dissuade another from taking hostile military action. The Soviet Union would not have to associate itself with Western military strategy or foreign policy in order to have a reasoned concept of deterrence of its own. By insisting that deterrence is, at best, only the unpremeditated, seemingly automatic, consequence of the Soviet pursuit of a "strategic military balance", Mr. Zhurkin's paper leaves open the question of what this objective really means in Soviet operational terms. If in Mr. Zhurkin's view it means the operational doctrine that dominates Soviet professional military writings, then it is nothing more than the unilateral pursuit of a war-fighting and war-winning capability, based on the capacity to defeat the enemy's forces at every level of violence - hardly a concept conducive to stability or the moderation of the arms race. If it really means mutual deterrence under another name, then the proponents of a strategic military balance should recognize that mutual deterrence is not automatic and that it cannot be safely left to the reciprocal pursuit of conflicting national security objectives. Mutual deterrence, by its very nature, must scrupulously take into account the psychological and political interactions of armed adversaries. It must be consciously and systematically implemented with vigilance and flexibility, in the light of such factors as changing technology, the relationship of defence policies to arms control, and the shifting overall context of bilateral and multilateral relations. Moreover, mutual deterrence must be based on more than a strategic, that is, an intercontinental nuclear balance) indeed, that balance heightens the importance of offsetting the conventional imbalance in Europe with a Western nuclear-response option.

37. Equally disturbing, if not so puzzling, is the caricature of the Western concept and practice of deterrence in Mr. Zhurkin's and Mr. Müller's papers. Since their description is the exact opposite of countless authoritative Western statements and public documents, which have had to stand the severe test of

endorsement in domestic and inter-allied democratic processes, and since the papers present no evidence that these statements do not mean what they say or are not the actual basis of Western foreign and military policies, the least disturbing explanation of their erroneous descriptions is that they fall into the category of polemics rather than analysis. In order to correct these descriptions there is no need to repeat here the comprehensive presentation of the Western approach to deterrence in our paper.

38. There is also the more disturbing possibility, however, that the Soviet assumptions about military doctrine and operations are so deeply fixed that it is unable to appreciate the true tenets of mutual deterrence as practised in the West, but is instead compelled to see the Western concept of deterrence as the mirror image of its own strategy, merely parading in the guise of the propaganda of peaceful coexistence. This interpretation seems to be confirmed by Soviet operational strategy, as formulated and implemented by the Soviet military establishment. This strategy, undeniably, reflects the professional military preoccupation, not with deterrence - not with the prevention or avoidance of war, the reciprocal restraint of military operations, or intra-war deterrence aimed at the rational termination of war - but with counterforce war-fighting intended to defeat the enemy quickly and massively. Unconstrained and unqualified by democratic processes and civilian "interference" in military affairs, this war-fighting and war-winning orientation is free to pursue strategies of an offensive surprise attack into Western Europe, overwhelming nuclear superiority in Europe (about 15 to 1), and a quest for a first-strike strategic nuclear capability that reflects no standard of sufficiency - all far exceeding defensive deterrent requirements.

39. Of course, words must be interpreted in the light of actions and the full context. Unlike our socialist colleagues, we tend to think that the other side's military doctrine, in both its professional formulation and operational practice, is more prudent than the public explanation of it and somewhat less dangerous than Soviet military writings suggest. The repeated references over the years by Soviet civilian and military leaders to deterrence, in word and concept, belie the view that the USSR devotes no thought to this central concept of the times. Nor does Soviet military doctrine ignore the changing requirements of deterrence. Rather, it devotes the most intensive and systematic attention to them, although not for public consumption. Even though in Soviet military writings one still finds references to the necessity of winning victory through a "crushing blow" in an East-West war and even to the need for pre-emptive options against western nuclear forces, we are impressed by Soviet recognition of the unacceptable, self-destructive potential of any nuclear war or, for that matter, any major conventional war. Although civilian leaders continue to proclaim the inevitable escalation to an unlimited world catastrophe of any clash of arms in Europe, we note that, since 1965, Soviet military writers have quite consistently and thoroughly developed a doctrine of limited conventional options and that this doctrine has been implemented by major changes in military organization and structure and in weapons and technology.

40. In another respect, too, Soviet military doctrine is obviously more explicitly and intelligently reasoned than the Soviet public posture: limited nuclear options. No feature of military strategy associated with the Western concept of deterrence is condemned more vehemently by Soviet public spokesmen than the effort to hold open the possibility that, if deterrence should fall and nuclear exchanges should occur, the war might be terminated for some rational purpose by restricting the use of nuclear weapons. Yet it is quite clear from lectures at Soviet military academies and from such professional periodicals as Military Thought that, since 1965, the Soviet military have developed as an integral counterpart of the new conventional strategy, a detailed strategy of limited nuclear options, which distinguishes between geographical areas, types of targets, extent of employment, and explosive yield. And, again, as in the case of conventional doctrine, developments in Soviet nuclear weapons and weapons deployment (such as the SS-20s, SS-12/22s, SS-23s, SCUD and SS-21s) have been designed to implement this strategy.

41. One can only conclude from the contradiction between Soviet military writings and Soviet public declarations about the impossibility of limiting force and the wickedness of 'trying, that the public posture is intended to intimidate. But the professional doctrine is more disturbing than the public propaganda. Despite the evidence of systematic Soviet concern with the discriminating use of force and the apparent convergence of Eastern with Western doctrine that it manifests, the fact that these doctrinal points are linked to a military and foreign policy that, in Mr. Zhurkin's view, absolutely rejects any systematic concern with the concept of defensive deterrence is anything but reassuring. The development and articulation of the conventional option takes place in the context of growing Soviet conventional superiority plus nuclear superiority in Europe, keyed to an operational strategy of quickly overrunning and seizing forward positions and territory. The role of deterrence is reserved for limited nuclear options that are intended to deter (or to pre-empt, according to some Soviet military authorities) the nuclear response of NATO to conventional aggression. The major reasons stated for limited nuclear options pertain to the physical requirements of using combined conventional and nuclear force most effectively under political control rather than to intra-war deterrence or rational war termination. Nowhere in Soviet writings is there a guiding concept that stops short of defeating the enemy's forces, despite public recognition that the effort to achieve this military objective would soon lead to irrational levels of destruction. Thus, it is not Western strategy, but Soviet strategy that envisages fighting a "limited nuclear war", as Mr. Zhurkin describes as the objective of Western strategy. The Western objective is to avoid the indiscriminating use of nuclear weapons, if deterrence should fail, and to apply nuclear escalation towards a negotiated termination of the war. Evidently, the Soviet objective is the traditional military goal of military victory.

42. This does not lead us to the conclusion, which Soviet spokesmen attribute to Western strategy, that Soviet military or civilian leaders are looking for opportunities to wage war, but only that they have not taken sufficient precautions to prevent war from becoming an unmitigated catastrophe and that they have adopted a strategy that can only aggravate the arms race. The danger is not that the Soviet Union will be encouraged to launch a military attack as long as Western deterrence is sufficient, but that it will pursue redundant capabilities which can only be employed for intimidation. The sad fact about this tendency is that it impedes the improvement of political relations that must underlie any constructive arms negotiations.

43. The fact of the matter is that East and West are not locked into a completely zero-sum game. We are both contending with a nuclear dilemma, which springs from the simple fact that nuclear weapons have imposed unprecedented constraints upon the most powerful adversaries resorting to war or even coming close to the brink, but if nuclear weapons were used there would be an unprecedented risk of mutual destruction and perhaps of an ecological disaster for civilization itself. We take heart from evidence, in Mr. Zhurkin's paper as well as in Soviet military pronouncements, that both sides recognize this dilemma. We are encouraged by the evidence of post-war history, which shows that East-West relations are becoming more, not less, safe and stable as both sides learn to mitigate the dangers they face. Nevertheless, we share the grave dissatisfaction with the fact that this modus vivendi is so largely based on mutual fears of nuclear retaliation.

44. In seeking alternatives to this predicament, it should be obvious from the historical record that exhortations, declarations and resolutions about ending the arms race and getting rid of nuclear weapons, by themselves, offer little more than self-satisfaction or deception. To be constructive, they must reflect an ameliorated adversarial relationship in which neither side's security makes the other insecure, and positions of real mutual security must be achieved by hard bargaining and accommodation, not by pronouncement. Just as a military equilibrium provides the indispensable basis for peace under conditions of nuclear armament, so it must provide the basis for reducing our reliance on nuclear armament. Therefore, as active negotiations to reduce nuclear weapons resume, we must realize that, as long as the political sources of East-West animosity persist, the success of any arms agreement, and especially one that proposes to eliminate nuclear weapons, depends on preserving a mutually satisfactory military balance during the transition and at the culmination of the disarming process.

45. SDI is a research programme that envisions the possibility of achieving a radical decrease in reliance upon nuclear retaliation as the basis of mutual deterrence, but it recognizes that the feasibility and durability of such a transformation of deterrence depend on the achievement, by negotiated agreement, of a mutually acceptable military balance in which neither side can advance its security to the disadvantage of the other. It postulates that this military balance might be reconstructed on the basis of new defensive technology that would provide both sides with assured national protection against nuclear attacks, and it recognizes that this restructured balance must be reached through agreed transitional stages in order to prevent a destabilizing arms race, driven by the fear that one side might achieve a first-strike advantage. Clearly, such a restructured balance would also have to incorporate a mutually satisfactory non-nuclear equilibrium. It will take decades to determine whether this kind of defence-reliant non-nuclear balance is technologically, economically and politically feasible. The fact that Soviet descriptions of SDI ignore or contradict every one of these points and simply argue by repetitive assertion that SDI is designed to achieve a first-strike capability and strategic superiority reflects either crude propaganda or, as in other erroneous caricatures of American strategy, a mirror image of Soviet doctrine, which underlies the earlier and much larger Soviet strategic defence programme.

46. In the foreseeable future we must place our hope, not in alternatives to mutual deterrence, but in unilateral and co-operative measures to make this deterrence system safer and less costly. Soviet acceptance of the long-standing American objective to reduce substantially the number of strategic nuclear warheads and Soviet willingness to negotiate about the reduction of medium-range missiles are hopeful moves in the right direction. The West, in any case, is determined to pursue every opportunity for achieving a stable military relationship at the lowest possible military level with the aim of enhancing the prospects for peace and security.

Part Three

COMPILATION OF THE RESPECTIVE POINTS OF VIEW OF THE EXPERTS EXPRESSED IN THEIR OWN WORDS

In this section of the report, the Group of Experts presents a compilation of their respective points of view on the concept of deterrence: its impact on the arms race, its implications for arms control and disarmament, international security and other related matters. The views presented here are in the words of the respective groups of experts, from the North Atlantic Treaty Organization (the Federal Republic of Germany and the United States of America), the Warsaw Treaty Organization (the German Democratic Republic and the Union of Soviet Socialist Republics), and the non-aligned countries (Argentina, Egypt and India).

A. The concept of deterrence

1. Definition, meaning and scope of deterrence

1.1. According to the experts from the NATO countries, military deterrence, in the most general sense, is the dissuasion of one adversary by another from undertaking hostile military action by convincing him that such an action would be unsuccessful or too costly since it would incur military counteraction.

1.2. In so far as deterrence depends on the possibility of a nuclear response to Eastern aggression, it applies in almost all conceivable circumstances only to the defence of the core of the Western security system: that is, the North Atlantic alliance, Japan and countries closely associated with them.

1.3. The West views deterrence as one important kind of relationship among armed adversaries, which, in general, exerts a moderating effect on the provocative and tension-producing aspects of the adversarial relationship.

1.4. The West relies not only on punitive or nuclear deterrence, but also, and very importantly, on conventional denial deterrence and on a range of non-military as well as military deterrents. Beyond that, the West has always emphasized the political context of deterrence: Western strategy is predicated upon both the prevention of war by deterrence and credible defence, and the pursuit of a political dialogue aiming at a more stable and co-operative East-West relationship.

1.5. The experts from the Warsaw Treaty countries underline that the States Parties to the Warsaw Treaty do not base their foreign policy or their security on concepts of nuclear deterrence. The essence of their security policy lies in the prevention of war by political means and peaceful and mutually beneficial relations with all States irrespective of their social systems.

1.6. In the view of the experts from the non-aligned countries, deterrence constitutes dissuasion of one adversary by another from undertaking hostile action - military or otherwise -- by persuading him that such an action would risk

being unnuccesful or too costly. Its meaning has been stretched, on occasion, to include containment of an adversary.

1.7. The exercise of deterrence has varied in scope, from a single application in respect of an imminently perceived threat to one's security and interest to a continuous application seeking to bring about major systemic changes in the adversary's political, economic, social and power structures. It has ranged from one-time application to avert a specific threat to global application over decades.

2. Rationale, origin and development of nuclear deterrence

2.1. The experts from the NATO countries emphasized that their concept and practice of deterrence is a rational response to a real threat of a hostile armed attack that might otherwise occur. They regard confidence in this deterrence as a source of allied cohesion and protection against intimidation and other forms of the adversary's political exploitation of a military advantage.

2.2. What is distinctive about deterrence in the nuclear age is that the overt use of nuclear weapons by either of the principal nuclear States against the other would almost certainly result in enormous damage to both and, perhaps, in an ecological catastrophe for civilization.

2.3. Western deterrence is entirely defensive politically and prohibits military offensive action. It rejects a first-strike strategy and proscribes strikes against population centres; regards parity of second-strike capabilities rather than superiority as the principal measure of strategic sufficiency; stresses crisis stability, based on the mutual incapacity of East and West for a rational first strike, as the basic requirement of mutual deterrence; disavows a war-winning strategy; and plans as carefully as possible to limit the use of force, including nuclear force, so as to hold open the option of rational war-termination through intra-war deterrence. The experts from the Warsaw Treaty countries cite no evidence in their denial of these positions. The credibility of the Western statements is guaranteed by the open and democratic process through which they were reached, which prevents a disparity between real and declaratory positions. The Western experts, on the other hand, have many reasons, as substantiated in their papers in parts one and two, to doubt the correspondence of real and declaratory positions in the East, and find that authoritative Soviet military writings contradict key public positions and reveal a disturbing commitment to dangerous war-winning doctrines.

2.4. In the view of the experts from the Warsaw Treaty countries, the concept of nuclear "deterrence" came into being and has been formulated, developed and implemented by the United States and its allies essentially in the course of the post-war period in pursuit of their aggressive strategies. There are different schools of thought behind this general doctrine, but all of them are characterized by the drive for military superiority, instigating a nuclear or other arm race and increasing the threat of war. Contrary to its alleged defensive character, the essence of this doctrine of nuclear deterrence is imposition of one's own will on other States through recourse to a policy of strength - the superior might of nuclear weaponry, combined with other modern means of destruction, and the threat

of inflicting incalculable damage for political purposes. To this end, States following this doctrine try to upset the existing military equilibrium to make "credible" the threat of use of their military force. The understanding that a nuclear war can have no winners has not led to the abandonment of this concept and the related weapons programmes, especially the Strategic Defense Initiative, by their authors.

2.5. The experts from the non-aligned countries point out that deterrence has been exercised through the ages and was practised before Hiroshima. It can survive even without nuclear weapons. However, nuclear deterrence as practised between the nuclear-weapon Powers is different from other forms of deterrence, since in this case both the aggressor and the victim of the aggression are bound to suffer unacceptable levels of damage, irrespective of the decisions on the battlefield. The damage likely to be suffered in a nuclear war, including catastrophic climatic consequences, are wholly disproportionate to any conceivable political, economic or other gainful objectives any Power can have in view. The origin of doctrines of nuclear deterrence may be traced to the 1940s and 1950s, when the United States developed a significant nuclear arsenal and formulated doctrines to justify its deployment vis-à-vis a perceived Soviet threat in terms of conventional superiority. Over a period of time, as the Soviet nuclear arsenal developed, the doctrines tended to shift their emphasis from mere deterrence to ways and means of safeguarding one's forces, to projecting a credible image of being able to enforce deterrence, to invulnerability of one's second-strike force, counterforce, and so forth. Today, the body of literature on both sides is so voluminous that it is possible to interpret the doctrine offensively or defensively, according to one's choice of the moment.

3. Role of nuclear weapons in sustaining deterrence

3.1. According to the experts from the NATO countries, in East-West relations the very existence of nuclear weapons imposes novel constraints on the super-Powers and their allies with respect to taking actions that might lead to a military encounter because both know that such an encounter would incur inordinate risks of suffering unacceptable damage. In this sense, mutual deterrence is the existential result of the nuclear armament of the principal East-West adversaries.

3.2. The West sees Soviet military efforts as having achieved rough parity and subsequently pursuing substantial quantitative superiority of conventional and nuclear forces in the European theatre, backed by strategic parity plus a numerical superiority in hard-target kill capabilities against United States land-based systems. In addition, it sees the danger of an ABM and ATBM break-out from deployments of defensive systems for which the West has no counterpart.

3.3. The West does not attribute a high likelihood of armed attack to the USSR or the Warsaw Treaty Organization, because it believes that deterrence is working, but it does view with apprehension the present and future consequences of the Soviet buildup beyond parity or defensive needs, particularly because Moscow disavows a deterrent intent in favour of a war-winning capability that seems to have no ceiling of sufficiency.

3.4. The experts from the Warsaw Treaty countries recognise that the doctrine of nuclear deterrence exists and that their countries are referred to as "enemies" by the United States. The military strength of NATO is mainly directed against socialist States. This has forced members of the Warsaw Treaty Organization to build up their own defence, including the nuclear weapons of the USSR. These States do not seek military superiority, but will not permit the military superiority of others. Although the Warsaw Treaty Organization does not pursue a policy of nuclear deterrence, the very fact that it possesses a powerful defence will inevitably be perceived by its opponents as a deterrent. It is necessary to stress that the military equilibrium under present circumstances is a peace-preserving factor. The Soviet Union and other members of the Warsaw Treaty Organization have adapted their military strategy and tactics to the new situation of the 1980s as it becomes absolutely clear that there will be no winners in a nuclear war and that any military conflict can potentially lead to nuclear war. Forced to maintain their military capability at the necessary level, the States parties to the Warsaw Treaty strongly oppose any further growth in the stockpiles of weaponry, especially nuclear weapons.

3.5. In the non-aligned view as expressed by the experts, while there is no doubt that nuclear weapons have contributed to deterrence, given the enormity of the damage likely to be suffered by the aggressor as well as the victim, it is difficult to prove that nuclear weapons are the sole factor in the exercise of deterrence. Other factors such as the enormous costs of war, the difficulty of keeping under occupation areas with populations possessing a high degree of political consciousness, and change in the role of force in international relations have all contributed to deterrence.

3.6. The crucial difference between deterrence in the nuclear and non-nuclear eras is the nature and extent of damage that the aggressor will suffer together with the victim and the time-factor within which such destruction can be caused. Lastly, there is the possibility of climatic catastrophic consequences engulfing the aggressor, the victim and the bystander.

3.7. The non-aligned experts also differentiate among schools of nuclear deterrence. According to their view, one school of deterrence emphasizes the factors of certainty needed to project an image of capability to inflict punishment on the adversary after absorbing his first strike. The same school has also tended to argue that deterrence will not be credible unless capability for intra-war deterrence and for war-fighting are demonstrably projected. From there the line of reasoning leads to a need for the development of very accurate weapons causing less and less collateral damage.

3.8. A second school, though practising a somewhat similar strategy, envelops it in some factors of uncertainty to reinforce deterrence. Understandably, the former strategy is practised by the technologically most advanced Power and the latter by the second-most-advanced Power.

3.9. There is a third school, which advocates proportionate and minimum deterrence, arguing that deterrence is generated when an adversary perceives that the damage he will suffer will not be worth the stake he has in securing his

objective through aggression if the victim resorts to nuclear weapons in self-defence. This line of strategic reasoning has been found attractive by Powers with a medium range of resources.

3.10. Lastly, a new strategy of ambiguous nuclear deterrence is emerging, which does not exhibit overt nuclear-weapon capability but leaves it to be inferred. The reasoning underlying this strategy is analogous to that of minimum deterrence, further refined in the sense that even the possible risk of facing retaliation with a nuclear weapon, when its possession is only suspected, can operate as a deterrent on potential adversaries.

3.11. Major nuclear-weapon Powers' strategies for implementing nuclear deterrence combine varying mixes of overt projection of capabilities and uncertainty in regard to options to be exercised and demonstrations of use of force. The ambiguous nuclear Powers use ambivalence in pronouncements and signals in terms of exercises, operational procedures, and so forth to project deterrence.

B. Impact of deterrence on the arms race

4.1. The NATO approach attributes the "arms race" - that is, the competitive qualitative and quantitative strengthening of military capabilities - to the basic relationship of armed adversaries, springing from the underlying political conflict coupled with modern technological capabilities. It regards deterrence as a kind of adversarial relationship that protects States against the destabilizing, potentially dangerous aspects of the arms race and that also makes possible an economy of force because it requires only a parity of defensive options.

4.2. It follows that the arms race cannot be literally stopped as long as the political sources of the competition for military strength persist. It can, however, be usefully curbed and rechannelled if both adversaries will pursue the standards of mutual deterrence rather than a first strike or other counter-force advantage linked to a war-winning strategy.

4.3. The history of the East-West arms race shows that each side has introduced new weapons and each side has soon offset its adversary's new weapons with its own, but Soviet arms efforts have followed a pattern of steady increase, whereas Western efforts have periodically decreased until Soviet-precipitated crises, such as those in Berlin, Korea and Cuba, induced rearmament. In recent years NATO has been reducing its nuclear weapons in Europe, while the Soviet Union has vastly increased its nuclear weapons in several categories. Apart from this important quantitative aspect, the real issue in terms of strategic stability and prevention of war is not which side introduced what weapon systems at what time, but what contribution to the stability and effectiveness of the deterrence régime these competitive moves have made. In this connection, it should be noted that the Soviet Union, its verbal protestations notwithstanding, has been the first, over time, to introduce and deploy a number of then highly destabilizing weapons, like super-heavy ICBMs, mobile MIRVed intermediate-range nuclear weapons threatening Europe and Asia, and ASAT weapons.

4.4. In the view of the experts from the Warsaw Treaty countries, since the concept of nuclear deterrence is based on the "credibility" of using military power, it is aimed at achieving military superiority. In contradiction to its alleged readiness to accept parity, the United States, preaching the doctrine of nuclear deterrence, is generating ever-new spirals in the arms race with the aim of increasing nuclear war-fighting capabilities. The United States has been the initiator of all the major and the most dangerous new weapon systems. Now it is trying to carry the arms race into space. There is no other logic behind this than the desire to achieve superiority. The experts from the socialist countries are convinced that this aim is not achievable. But even efforts to this end will inevitably undermine confidence, stability and security. The assertion that developments in technology must unavoidably lead to ever-new weapon systems would put mankind on a level with the sorcerer's apprentice, who did not know how to control the spirits he had conjured up.

4.5. The experts from the non-aligned countries point out that the arms races of the pre-nuclear era inevitably ended in wars and the resolution of the question of the hierarchy of power. In the nuclear era, such a resolution through war is ruled out. Deterrence calls for a visible adversary to be deterred. Nuclear deterrence has resulted in a situation where the dominant Power can express its superior status only through a buildup of weaponry, deployment of its forces world wide and exercise of coercive diplomacy all over the globe. The responding Power, too, can formulate its response only in terms of competitive weapons buildup, deployment of its forces as widely as possible and exercise of its share and style of coercive diplomacy. In this sense, the exercise of deterrence is not confined to Europe; its play and counter-play are seen all over the world.

4.6. The changing pace of technology has accelerated and results in newer generations of weaponry and new categories of weapons. Since the projection of forces through global deployments has become the more significant way of projecting power, newer and more sophisticated categories of weaponry are the primary means of communicating one's superior or balancing capability to an adversary. They also serve as an effective instrumentality in coercive diplomacy. In an era of deterrence each adversary has to anticipate the other's moves and it is taken for granted that the other side will develop all categories of weaponry made possible by advances in science and technology. Since these categories of weaponry have long lead times in development and production, each side has to take every measure not to be surprised by the other side. The interaction between the doctrine of deterrence and the accelerated pace of technological development has had a synergistic effect on the arms race.

C. Implications of deterrence for arms control and disarmament

5.1. The experts from the NATO countries feel that mutual confidence in the effectiveness of deterrence against aggression is a necessary condition for arms agreements. In that sense, deterrence provides more advantageous conditions for the initiation and conduct of arms-control negotiations than does a situation in which unmitigated fears and perceptions of inferiority and risk prevail. Deterrence - in the Western interpretation - does not only facilitate arms control

in a general sense but, since it is predicated upon parity in defensive options - not numerical equality or superiority - and aims at lower equilibrium points in nuclear as well as conventional forces, it also facilitates negotiations towards the reduction of nuclear weapons to substantially lower levels. Current United States arms-control proposals testify to this tendency.

5.2. The primary purpose of arms control is to make mutual deterrence less likely to result in war. It is a necessary and feasible method of making East-West military competition safer, more predictable and less costly. In contrast, disarmament, in the sense of getting rid of all arms, is not practicable, since it would require the equivalent of a well-ordered State with a monopoly of force and a set of agreed laws and instruments of enforcement.

5.3. The West believes that arms agreements should aim to stabilize a military balance at a substantially lower level of armament, and that this requires, among other things, reducing the ratio of nuclear warheads to launchers and aim-points in order to curb first-strike capabilities.

5.4. The West also believes in the arms-control objective of reducing the reliance of both sides on nuclear retaliation, providing that a non-nuclear balance can be preserved at the same time. By the same token, it believes that nuclear reductions, free zones, and the like can be destabilizing if they do not reduce first-strike capabilities and allow for non-nuclear deterrents to preserve a military equilibrium.

5.5. The experts from the Warsaw Treaty countries argue that negotiations are always a delicate and complex matter, but not so delicate as to allow the line of mutual understanding to be cut and dialogue to come to a standstill. Making an effort to achieve a mutually acceptable balance of interests is of cardinal importance here. The logic of the deterrence concept, however, turns the whole mechanism of negotiations on nuclear disarmament into a system of so-called control over nuclear weapons, control which does not lead to their limitation and reduction. In order to make any negotiating mechanism more effective, especially on nuclear armaments, it is highly important to decrease and completely eliminate the adverse influence of the deterrence concept on the efficiency of the negotiations.

5.6. Contemporary peace is assured by strategic equilibrium. At the same time, it is necessary to realize that the present level of the balance of the nuclear potentials of the opposing sides is much too high. For the time being it ensures equal danger to each of them, but only for the time being. Continuation of the nuclear-arms race will inevitably heighten this equal threat and may bring it to a point where even parity will cease to be a factor of military political restraint. It is vital, in the first place, to greatly reduce the level of military confrontation. In our age, genuine equal security is guaranteed not by the highest possible, but by the lowest possible level of strategic parity, from which nuclear and other types of weapons of mass destruction must be totally excluded.

5.7. On the other hand, from the very beginning the cornerstone of the concept of deterrence has been the goal of attaining military superiority over the other

side. This, in turn, is accompanied by a morbid view of the prevailing approximate military and strategic parity, and an urge to break away from this situation, to turn to one's favour the existing military balance. As a whole, nuclear deterrence undermines strategic equilibrium and strategic stability.

5.8. The experts from the non-aligned countries feel that arms control is inherently an unstable process in an era of accelerated technological development, since it attempts to develop a balance with respect to the weapons in existence, while new weapons are under development. Since deterrence implies a continued adversarial relationship, each arms-control agreement cannot be an end in itself and has to take into account continuous armaments development in the future. Armaments by themselves do not lead to tension among nations. It is adversarial politics inherent in the deterrent posture and enveloping the armaments that is at the heart of the issue. Whether deterrence creates adversarial politics or vice versa is a question of: Which came first, the chicken or the egg?

5.9. It can be argued that because of mutual deterrence both sides are compelled to enter into arms-control agreements. But such arms-control agreements are not very stable.

5.10. The strategic balances between the two major Powers are only transient stages in history, since the synergistic impact of interaction between technology and the adversarial relationship will result in newer arms. The concept of strategic balance along with arms control will imply a regulated arms race at a mutually agreed pact for the time being, till some new concept or new development upsets the arrangement.

5.11. Disarmament and nuclear deterrence are antithetical. Disarmament is possible only when the doctrine of deterrence based on armaments is given up. An alternative to deterrence based on new attitudes, values, structures and processes must be built up. While it may take a long time to achieve it, the time to begin the process is now.

D. Deterrence and international security

6. The record: To what extent, if at all, has deterrence contributed to 40 years of peace and security?

6.1. The experts from the NATO countries are of the view that throughout the nuclear age, deterrence - although it has not been the only factor - has been indispensable to the avoidance of war between East and West, and has provided the basis for an unprecedented period of peace along the East-West axis and, indeed, for most countries of the world. Beyond that, it has taught the major antagonists to avoid and mitigate crises that might escalate to war.

6.2. The experts from the Warsaw Treaty countries do not agree. They argue that it is impossible to strengthen peace and security by constantly threatening its very existence. Mankind has succeeded thus far in keeping the peace and not falling into a nuclear war in spite of, not owing to, the concept of deterrence. The world has survived because the forces of peace have always been stronger than the forces of war.

6.3. The experts from the non-aligned countries feel that the claim that deterrence has contributed to 40 years of peace in Europe can be neither proved nor disproved, Nuclear deterrence has perhaps played a role, and so perhaps have various other factors, the most important being that occupation of nations with people possessing high Political consciousness is not cost-effective. Recovery from the ravages of war, a certain balance of power in terms of conventional forces, and the loss of Europe's lead in world affairs consequent on the decolonization process may have been other factors.

6.4. It could also be claimed that nuclear weapons have induced as much self-deterrence as deterrence in the adversary. On the whole, especially in the last two decades, there has been far more restraint in international security transactions in Europe than in behaviour outside Europe on the part of the major nuclear-weapon Powers. If a conclusion were to be drawn that nuclear deterrence induces more restrained behaviour, then by the same logic some developing countries might have to acquire nuclear weapons to induce responsible behaviour among, and discourage intervention by, major nuclear-weapon Powers in the developing world.

7. Is deterrence making East-West relations safer or more dangerous? Does it ameliorate or aggravate the adversarial relationship?

7.1. The experts from NATO feel that deterrence has made the East-West relationship safer and facilitated its control. On the other hand, admittedly, it has not eliminated the basic antagonistic relationship between the two major Powers and has, at most, attenuated crises and conflicts short of war that have expressed their antagonism. Yet, by providing to both military systems a measure of assurance that war will not break out, deterrence has facilitated long periods of détente and political accommodation between the two alliances. There is no evidence to suggest that deterrence by itself enhances hostility or existing antagonisms: the current attempts at improving the East-West relationship occur while deterrence continues to be practised.

7.2. The experts from the Warsaw Treaty countries disagree and point out that the deterrence concept cannot be recognised as a viable security concept, because it does not strengthen, but, on the contrary, undermines the basis for international relations. Since this concept can develop and prosper only in conditions of international tension, it invariably leads to the worsening of the international situation and deterioration of the political climate in the world. This concept inherently needs a built-in image of a maliciously scheming foe, a notion that is permanently supported by all the means of propaganda and psychological warfare available to the authors of this concept.

7.3. In the very beginning, to cover up its offensive nature, the myth of the "Soviet military threat" was introduced. Moreover, the basic trend of the concept of deterrence is striving for absolute security for one side, which implies an absolute threat for the other. This trend becomes even more dangerous when it is coupled with attempts to achieve military superiority over the opponent. The deterrence concept has introduced and is introducing new highly aggravating and destabilising elements into East-West relations.

7.4. The experts from the non-aligned countries feel that nuclear deterrence has, according to one view, **stabilized** and made the East-west relationship safer. Another view is that it is not deterrence but the balance of nuclear arsenals that has brought this about and that the adherent of the doctrine of deterrence has been deterred by his own belief system. While in many respects it could be claimed that the East-West relationship is safer than it was until the mid-1960s, there is no guarantee that it will not run into trouble if based on the deterrence doctrine, which always needs an adversary to be deterred. The very fact that the two major Powers do not have the identical interpretations of Caterrence highlights risks of possible deterioration in the relationship.

8. Does deterrence contribute to stability?

8.1. The experts from the NATO countries are certain that deterrence contributes to stability in that it makes **aggression** extremely unlikely. In addition, it enhances crisis stability by enabling the one who deters to resist nuclear intimidation and to avoid the brink of war.

8.2. **However**, for deterrence to unfold its full stabilizing effect, both military systems would have to contribute to achieving and maintaining a military equilibrium, including a strategic balance, in which the adversary would be reassured by a non-provocative weapons-posture of the other side against an unprovoked armed attack.

8.3. The experts from the Warsaw Treaty countries argue that stability in the modern age is not caring exclusively for oneself, especially to the detriment of the other side, but seeing to it that all should feel equally secure, because the fears and anxieties of the nuclear age generate unpredictability in policy and concrete actions.

6.4. In the present situation, there is no rational alternative to c-operation and interaction between States. This is to identify a common task of fundamental aignif icancet without neglecting **social**, political and ideological differences, all have to master the science and art of restraint and circumspection on the international scene, to live in a **civilized** manner, in other words, under conditions of civil international co-operation.

8.5. The non-aligned experts are of the view that nuclear deterrence may contribute to a stability of sorts in the industrialized world, but it is a dangerous world, subject to the **risks** of the operation of Murphy's law: If something can go wrong, it will, some time or another. In the interests of some of the developing countries, the Powers that actively practise deterrence will themselves have to be deterred by a number of other Powers exercising similar deterrence. This is not the preferred way to bring about stability, but the global **operation** of the strategy of **nuclear** deterrence and the continued legitimization of nuclear **weapons** will demand or **impose** it. If deterrence contributed to stability, then the greater the number of nuclear-weapon Powers the greater stability would be. There is a school of thought which advocates this view. If it were postulated that deterrence could contribute to stability only in a world model that is a **two-person zero-sum** game, it is not likely that that world would come into being.

9. What are the risks and dangers of deterrence in the nuclear age?

9.1. The experts from the NATO countries are optimistic. Despite the awesome properties of nuclear weapons and their role in present-day deterrence, the West is convinced that deterrence can effectively fulfil its war-preventing function over long periods of time and that it has a very considerable margin of safety within which it can operate. Under all objective assessments, the prospect of its failure is extremely remote, but should deterrence ever fail, there is a reasonable chance - even under the difficult and in part unpredictable circumstances that would then prevail - that control and early war-termination could be achieved. Similarly, the precautions all nuclear-weapon States have taken against the unintentional use of nuclear weapons are elaborate and effective.

9.2. There is thus no place for the technically conceived worst-case scenarios frequently advanced to question or denigrate deterrence.

9.3. The experts from the Warsaw Treaty countries do not agree with this over-simplification. They argue that the lower the threshold of military confrontation in the nuclear era, the more fragile and less reliable - even if the equilibrium is preserved - become the foundations of world peace. Under these conditions, a nuclear war can result not just from someone's deliberate decision but also from attempts at blackmail or from misinterpretation by one side of some intentions or actions of the other either it can result from someone's ill-considered actions, from the sudden aggravation of the situation, or from a technical failure of computers, which are more and more widely used in contemporary complex weapon systems. The situation in the world may assume such a character that it will no longer depend upon the intelligence or will of political leaders. It may become captive to technology, to technocratic military logic.

9.4. The experts from the non-aligned countries focus on other dimensions. Deterrence in the nuclear age as practised by major nuclear-weapon Powers has led to ever-increasing nuclear arsenals and their wide deployment. Inherent in this situation is the risk that terrorists may get hold of these weapons and use nuclear fissile materials as radioactive poisons and radiological warfare devices. There is also increasing risk of accidental and unauthorized release of nuclear weapons, not all of which are under strict centralized command and control. As dual-capable weapons become more mobile and compact, there are likely to be greater difficulties in developing satisfactory verification systems.

9.5. Deterrence in the nuclear age has to take into account long lead times in weapon development and consequently has a tendency to perpetuate animosity. This animosity spills over into economic and technological relationships among major nations of the world. This hampers global development not only by diverting scarce resources away from development into armaments but also by severely curbing opportunities for increased trade, greater international technological flows and development of both developed and developing worlds.

10. The effects of East-West deterrence on the third world

10.1. Here again the experts from NATO have an optimistic perspective to offer. In their view, nuclear weapons and their role in deterrence are a singular **feature** of the **East-West** security equation. Deterrence, therefore, does not impinge directly upon the security of third-world countries, nor does any threat to these countries emanate from it. On the contrary, a durable and stable East-West **relationship** on the basis of functioning deterrence can help third-world countries to promote their development without the disruptive effect of a great-Power conflict.

10.2. Whatever the political interaction of either major Power with countries of the third world, and whatever elements of coercion' this interaction may contain in the perception of these countries, **deterrence** cannot be held responsible for basically indigenous conflicts and crises in these regions, *nor* *CM* a coercive element be **imputed** to it.

10.3. The likelihood of a failure of East-West deterrence and the dimensions of such a remote calamity are often vastly overstated by third-world spokesmen. The all-too-ready and unwarranted assumption of a **world-wide** holocaust as a consequence of deterrence is **occasionally** used as an argument for nuclear proliferation to third-world countries, but the West sees such proliferation as destabilising relations among third-world countries, not because of any inferior **sense** of responsibility on the part of these countries, but because of the special political and military contexts in which such proliferation might take place, and because of the **uselessness** of nuclear weapons in these contexts.

10.4. The experts from the Warsaw Treaty countries do not share this optimism. In their view, the main absurdity and immorality of the deterrence concept is that the whole world becomes a hostage to nuclear weapons. Furthermore, today's world is an extremely diversified aggregate of sovereign countries, which have their interests, their aspirations and their politics and are in a process of swift change. Under these conditions, the setting-up of an all-embracing system of international security makes it necessary to refrain from global claims, to take into consideration the legitimate interests of all.

10.5. The concept of deterrence undermines stability in the third world. It involves these countries in military competition, in the **arms race**, and diverts much-needed material and human **resources**, which are already **scarce**. *A B* a whole, this concept does nothing to enhance their security, and the disadvantages are immense.

10.6. The experts from the non-aligned countries explain the reasons for their concern. In view of their adversarial relationship and the fact that nuclear deterrence operates at a global level, the *major* nuclear-weapon **Powers** have spread their nuclear **weapons**, **nuclear-weapon** carriers, and command, control, communication and intelligence facilities to all oceans of the world and to territories **outside** North America, Europe and Japan. This has resulted in deployment of nuclear weapons close to the **shores** of the developing countries and in territories adjacent to them. This spread of nuclear **weapons** and the nuclear guarantees with caveats"

that have been given to non-nuclear-weapon countries and can be interpreted in any way to suit the purposes of major **nuclear-weapon Powers**, have increased the sense of insecurity of many developing nations. Nuclear weapons at the tactical **level** have been so integrated with the conventional forces of some major nuclear-weapon **Powers** that any exercise of coercive diplomacy by a major nuclear-weapon Power against a developing country is bound to be seen in the future as having a nuclear dimension to it. Such exercise of coercive diplomacy has been seen on numerous occasions and continues to be practised by major nuclear-weapon Powers.

E. The future of deterrence: alternatives to deterrence

11. Restructuring of deterrence

11.1. The view of the experts from NATO is that while one can continue to rely on deterrence with confidence, **and** while it has to be adapted constantly to new political and technological needs, one should not be satisfied forever with a system of deterrence that is too heavily dependent on the residual possibility of catastrophic destruction.

11.2. In the Western view, there is a permanent need for restructuring deterrence - not only by unilateral measures designed to make deterrence safer and more stable by, inasmuch as possible, diminishing its reliance on the nuclear component but also by co-operative measures, including, in the first **place**, negotiated arms control, but also measures intended to build mutual confidence and to guard against any unintentional use of nuclear weapons.

11.3. The need for replacing deterrence instead of restructuring it is emphasized by the experts from the Warsaw Treaty countries. They feel that no restructuring of the concept of deterrence can change the dangerous and offensive substance of this doctrine, with all its negative consequences for world security and international stability. This conclusion is confirmed by the previous attempts to restructure the concept of deterrence (**limited** or protracted nuclear war concepts, and so forth).

11.4. The only correct way of dealing with deterrence is to replace it with the peaceful and constructive concept of security - common security, peaceful coexistence and disarmament.

11.5. In the present situation there **is** no alternative to co-operation. The objective conditions, in which confrontation between capitalism and socialism can **proceed** only and exclusively in forms of peaceful **competition** and a peaceful contest, have taken shape.

11.6. The experts from the non-aligned countries list the three major approaches to the restructuring of deterrence. The **three** approaches are:

(a) Nuclear deterrence will continue, but nuclear weapons **will be** made impotent and obsolete by defence-dominant technologies that will be able to intercept weapons;

(b) Nuclear weapons will be eliminated in a phased manner, but deterrence based on non-nuclear factors will continue;

(c) Nuclear weapons should be outlawed on the model of the Geneva Protocol in respect of chemical weapons 13/ and the Convention in respect of bacteriological weapons. 12/

12. Offensive-defensive relationship: deterrence and the Strategic Defense Initiative

12.1. The experts from NATO explain that in a longer perspective, and as the ultimate development in an attempt to restructure deterrence in the sense of a more defence-reliant defence, the United States proposes to explore through the SDI research programme the feasibility of constructing, through co-operative stages, a non-nuclear balance in which defensive weapons would protect nations in the East and west from nuclear devastation under an equilibrium guaranteed by an arms agreement. The West insists that any future defensive régime must be compatible with strategic stability and parity, thus enhancing effective deterrence, and it must be achieved through a co-operative transition.

12.2. The experts from the Warsaw Treaty countries express their strong dissent. In their view, the character of contemporary weapons does not leave hope for any State that it can defend itself only by military-technological means, by creating even the mightiest defence. Today it is impossible to win not only the war but the arms race too. Continuation of the arms race on Earth and, moreover, its proliferation into space will quicken the already critically high tempo of accumulation and modernisation of nuclear and other weapons.

12.3. So far as the "star wars" (or SDI) concept is concerned, it is an extremely dangerous programme, which is increasing the possibility of a nuclear war. It represents a new, gigantic step in the arms race, which will saturate outer space with various types of weapons. The SDI programme is part of a strategic complex for the first disarming strike: it is aimed at creating a "shield" against a retaliatory strike launched by the victim of a first strike by the SDI owners. Plans for "star wars" actually mean the toughening of the concept of deterrence with the utilisation of new space capabilities.

12.4. The "star wars" programme would undermine the fundamentals of strategic stability. It would create a situation in which major decisions would be taken by electronic machines without participation of human reason or political will, and without consideration of moral criteria. The "star wars" programme would become a stimulus for a further arms race and a road-block to radical disarmament.

12.5 There is still time to prevent the arms race from spilling over into outer space. This is one of the most challenging tasks facing humanity.

12.6. The experts from the non-aligned countries are not certain that defence will prevail technologically over offence, nor that defence will not subsequently be upset by an offensive system that can get through, even if SDI proves successful. Even now, SDI can offer no protection against artillery short-range missiles and

low-trajectory sea-launched cruise missiles. The offer to share SDI technology lacks credibility in the light of the fact that less sophisticated technologies have been withheld.

13. Alternative political and disarmament measures, including delegitimization of the use of nuclear weapons and the concept of common security

13.1. The experts from the NATO countries argue that any restructuring of deterrence - or any proposed alternative - must be compatible with the existing International system and the security needs of States protected by the deterrence régime. Many of the alternatives to deterrence do not stand this vital test and do not address the question of how peace and security can be reliably preserved with equal effectiveness once deterrence is removed, especially in view of an overwhelming Soviet conventional superiority in crucial regions.

13.2. This is, for instance, true for the proposal to delegitimize nuclear weapons. The West does not have confidence that this measure would, in fact, by itself, get rid of either the weapons or the threat of their being used, and it views as destabilizing the proscription of nuclear weapons as long as there is still a threat of aggression and unless there is a reliable non-nuclear balance of mutual deterrence.

13.3. In the view of the experts from the Warsaw Treaty countries, such an alternative can only be found through strengthening international security and peaceful coexistence, which should become the highest universal principle of relations between States, detente, disarmament, building-up of confidence and development of international co-operation. An all-embracing system of international security that would embrace military and political as well as economic and humanitarian spheres should be built.

13.4. Such a system in the military sphere should be built on the following principles: the renunciation of war - both nuclear and conventional - by the nuclear Powers against each other as well as against third countries; prevention of an arms race in outer space; cessation of all nuclear-weapon tests and the total elimination of such weapons by the end of this century; a ban on and the destruction of chemical weapons; and renunciation of the development of other means of mass annihilation. This system should further include a strictly controlled lowering of the levels of military capabilities of countries to limits of reasonable adequacy; the disbandment of military alliances and, as a first step towards this goal, the renunciation of their enlargement and of the formation of new ones; and the balanced and proportional reduction of military budgets.

13.5. With regard to the political dimension of such an international security system, it should be based on strict respect in international practice for the right of every people to choose the ways and forms of its development independently. It should include the principles of the just political settlement of international crises and regional conflicts as well as the elaboration of a set of measures aimed at building confidence between States and the creation of effective guarantees against attack from without and of inviolability of their frontiers. Elaboration of effective methods of preventing international terrorism,

including those ensuring the safety of international land, air and sea communications, should also be one of the principles of such a security system.

13.6. The all-embracing system of international security should also be based on recognized principles in the economic and humanitarian spheres. For instance, an important role should be played by the establishment of a new world economic order guaranteeing equal economic security to all countries. Together with disarmament, an all-embracing system of international economic security could become a dependable pillar of international security in general.

13.7. The philosophy of shaping a safe world in the nuclear space-age should be coupled with the platform of concrete actions, strictly measured in terms of time. The main thrust of the programme should be the elimination of nuclear weapons and other weapons of mass destruction by the year 2000, prevention of an arms race in outer space and reduction of military potentials to limits of reasonable efficiency.

13.8. The ideas expressed in other papers as alternatives to deterrence - such as the prohibition of the first-use of nuclear weapons, "demilitarization" of nuclear weapons and the destruction of existing ones, complete prohibition of all nuclear-weapon tests and prevention of an arms race in outer space - provide a sound basis for developing a solid system of international security.

13.9. The experts from the non-aligned countries argue that the vicious circle of nuclear deterrence and adversarial political relationship has to be broken. The proposal to outlaw nuclear weapons is based on two agreements, which have already come into force, and on the concept underlying negotiations to eliminate the first three out of four (biological, chemical, radiological and nuclear) categories of weapons of mass destruction. The outlawing of nuclear weapons will have a positive impact on international relations and create a climate conducive to the improvement of political relationships.

13.10. The elimination of nuclear weapons is an attractive idea, but the implications of a new world order without nuclear weapons as currency of power have to be worked out. The outlawing of these weapons could be used as an intermediate stage in moving towards their elimination. That would allow more time for nuclear deterrence to decay.

13.11. Common security is basically an arms-control approach. It puts together a number of significant arms-control and confidence-building measures that can serve as an intermediate stage in any proposal for the restructuring or replacement of deterrence. From this perspective, the proposals underlying common security are an important contribution towards a stabler international system.

Notes

- 1/ General Assembly resolution 2373 (XXII), annex.
- 2/ Unilateral Nuclear Disarmament Measures (United Nations publication, Sales No. e.85.1X.2).
- 3/ Treaty on the Limitation of Anti-Ballistic Missile Systems, signed at Moscow on 26 May 1972 (see A/C.1/1026).
- 4/ General Assembly resolution S-10/2.
- 5/ Timothy W. Stanley and Darnell M. Whitt, Detente Diplomacy: United States and European Security in the 1970's (New York, The Dunellen Company, Inc., 1970), appendix B.
- 6/ Carnegie Endowment for International Peace, The Hague Conventions and Declarations of 1899 and 1907 (New York, Oxford University Press, 1915).
- 7/ Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water, signed on 5 August 1963 (United Nations, Treaty Series, vol. 480, No. 6964, p. 43).
- 8/ Interim Agreement between the United States of America and the Union of Soviet Socialist Republics on certain measures with respect to the limitation of strategic offensive arms (United Nations, Treaty Series, vol. 944, No. 13445, p. 3).
- 9/ Treaty between the United States of America and the union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms (see CD/53/Appendix III/vol. I, document CD/28).
- 10/ United Nations, Treaty Series, vol. 402, No. 5778, p. 72.
- 11/ General Assembly resolution 2222 (XXI), annex.
- 12/ General Assembly resolution 2826 (XXVI), annex.
- 13/ Protocol for the Prohibition of the use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June 1925 (League of Nations, Treaty Series, vol. XCIV (1929), No. 2138, p. 65).
- 14/ General Assembly resolution 31/72, annex.
- 15/ See General Assembly resolution 40/151 F.
- 16/ United Nations, Treaty Series, vol. 634, No. 9068, p. 326.
- 17/ Declaration of Ayacucho, December 1974 (see A/10044, annex).