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Online Study Materials on

DEFENSIVE SECURITY AND ARMS REDUCTION

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DEFENSIVE SECURITY: CONCEPT, POLICY, STRATEGY AND MEASURES FOR IMPLEMENTATION

Introduction

The 1990s can be described as a decade filled with new hopes, worries, and challenges. The final years of the 1980s witnessed the end of the East-West conflict that had dominated international politics for more than 40 years. Cooperation among former adversaries replaced decades of political, ideological and military confrontation, centred foremost in Europe, but extending beyond it to affect all regions of the world. New avenues of cooperation opened up as a result, allowing the United Nations as well as regional organisations to play a more effective role. The increasing willingness of States to turn to regional and other multilateral institutions as a means to resolve conflicts, represents a welcome step towards fulfilling the commitment embodied in the Charter of the United Nations to settle international disputes by peaceful means.

Encouraging as these trends are, there remain risks and threats—both long-standing and newly emerging that disturb the climate of international politics. Age-old regional disputes that remained unaffected by the end of the cold war continue to exist, in some cases taking on a new intensity, thus, increasing the risks of violence and war. The expression of ethnic, national, cultural and religious differences, long suppressed by the political and ideological confrontation between East and West, is re-emerging. At times, these differences have led to conflicts that may become sources of international instability and unpredictability. Furthermore, the level of armaments in parts of the world still far exceeds what is required for legitimate security and defence needs.

In addition, even where the military security of States is no longer an issue of overriding national and international concern, other factors

of insecurity persist and grow. Whether these take the form of environmental degradation, extreme poverty, disease and epidemics, drugs, political upheaval, refugees, discrimination and oppression or the systematic suppression of human rights principles and commitments, each represents threats and risks to the security of individuals, communities, societies and, indeed, the world at large. Security in this sense is an all-encompassing concept, that is dependent not only on the absence of violence and the effective prevention or removal of aggression, but also on the improvement of basic human and societal needs.

These threats increasingly require the vigilant attention of the international community. Many of them can be effectively countered only within the framework of global or regional cooperation. One can expect that progress towards security—in the political and military sense of the term—will release additional economic and human resources that could be partly devoted to the solution of problems of non-military security. In this regard, the United Nations has a critical role to play.

These issues are not covered by the mandate of the Group, but in view of their importance, they are briefly dealt with here in the introduction. It must be noted, however, that some of these threats may require military means and affect the security of neighbouring States. This could be the case, for example, of political upheavals degenerating into civil wars, which might spill over beyond national frontiers.

The end of the East-West confrontation combined with the enhanced role for regional and other multilateral institutions and organisations in securing international peace and stability certainty raises prospects for adequate and effective common approaches to cope with the military dimension of existing and emerging threats and risks in accordance with the purposes and principles of the Charter of the United Nations. In a world, where the maintenance of armed forces beyond genuine security needs and their use for other than defensive purposes continue, these prospects are only likely to be realised, if resort to armed force can reliably be restricted to actions legitimised by the Charter of the United Nations.

It is in recognition of this interrelationship that, the General Assembly of the United Nations in its resolution 45/58 of 4 December 1990, entitled "Defensive security concepts and policies", addresses the role of military capabilities and strategic concepts in that field. Recognising the new opportunities that have emerged for arms control and disarmament, for ending regional conflicts and for developing constructive and

cooperative relations among States, the Assembly in its resolution seeks to ensure that the armed forces of all States exist only to prevent war, as well as for individual and collective self-defence and for collective action in accordance with Chapter VII of the Charter of the United Nations with respect to threats to the peace, breaches of the peace and acts of aggression, and that defensive capabilities reflect true defensive requirements". The practical question is, how this can be best translated into reality.

The General Assembly sought to address this question in the operative paragraphs of the aforementioned resolution, by stating that it:

"1. *Considers* the development of an international dialogue on defensive security concepts and policies to be of great importance for promoting the process of achieving disarmament and strengthening international security;

"2. *Invites* Member States to initiate or intensify the dialogue on defensive security concepts and policies at the bilateral level, particularly at the regional level and, where appropriate, at the multilateral level;

"3. *Requests* the Secretary-General, with the assistance of qualified governmental experts and taking into account the views of member states and other relevant information, to undertake a study on defensive security concepts and policies to be submitted to the General Assembly at its forty-seventh session."

This study responds to the request in operative paragraph 3. It explores whether defensive security concepts and policies might be one way in which to address the existing and emerging threats and risks as well as to strengthen the positive developments of recent years. While recognising the growing importance of other dimensions of security, the study focuses on the military dimension and ways in which its defensive content can be strengthened in an effort to promote international peace and security more generally.

With regard to the military component of security, it is acknowledged that what constitutes legitimate defensive military capabilities and force postures is to some extent open to question. A framework for developing common standards is provided by the Charter of the United Nations. Article 2, paragraph 4, states that "Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations". Furthermore, Article 51 states that "Nothing in the present Charter shall impair the

inherent right of individual or collective self-defence, if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security". Together, these provisions imply an obligation of self-restraint and an emphasis on defence in the development of military capabilities.

To be effective, the obligation of self-restraint and defensiveness in military affairs must be readily discernible in both the declarations and the actual military capabilities of States. In other words, it is necessary for States to give practical content to defensive security "concepts by pursuing policies that are consistent with the defensive orientation of these concepts and their visible expression of corresponding force postures. These denote the totality of the components that are indispensable for the effectiveness of a military system and comprise doctrine, organisation, equipment and armaments, command, control and communications, operational planning and logistics. There is no clear-cut distinction between "concepts" and "policies". Security concepts are the different bases on which States and the international community as a whole, rely for their security, such as collective security. Security policies generally are seen as means to maintain security and promote stability and peace through, among other things, the maintenance and development of military capabilities.

While exploring the various existing defensive security concepts and policies, and taking into account that each region of the world has its own characteristics and security conditions, as well as political and security requirements, the study aims at determining the general elements in those concepts and policies that could make a useful contribution to the strengthening of international peace and security. On the basis of this analysis, the study introduces the notion of "defensive security", which, as a working tool, is defined as a condition of peace and security attained step-by-step and sustained through effective and concrete measures in the political and military fields under which:

(a) Friendly relations among States are established and maintained;

(b) Disputes are settled in a peaceful and equitable manner and the resort to force is consequently excluded;

(c) The capacity for launching a surprise attack and for initiating large-scale offensive action is eliminated through verifiable arms control and disarmament, confidence- and security-building measures and a restructuring of armed forces towards a defensive-orientation.

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TOWARDS GLOBAL DEFENSIVE SECURITY

Defensive security concepts and policies could be a means to fulfilling the purposes and principles of the Charter of the United Nations. Its focus has been on practical measures in the political and military fields that are both consistent with and a means towards implementing the crucial notions of defensiveness and self-restraint that are enshrined in the provisions of the Charter calling on member states to refrain from the threat or use of force in their international relations and recognising their inherent right to individual and collective self-defence.

"Defensive security" is based on the recognition that its achievement depends upon creating the political and military conditions necessary for eliminating threats to international peace and security. Its goal is to promote awareness of the indivisibility of security by forgoing measures in the political and military fields that might appear threatening, offensive or provocative, establishing a concerted dialogue among States, strengthening collective security and other cooperative arrangements, adopting confidence- and security-building measures, pursuing a gradual restructuring of military force postures and reducing armaments. These and other steps would contribute to establishing a condition of "defensive security".

It is recognised that the introduction if "defensive security" on a global basis in international relations will be a gradual process. The achievement of "defensive security" on a global basis requires a step-by-step approach that will differ from region to region and from one bilateral relation to another. In some regions, major progress has recently been achieved in transforming relations among States, and the possibility of achieving a system of cooperative security based on principles of "defensive security" is, therefore, clearly present. In many regions, however, basic conflicts persist, although some rudimentary steps towards "defensive security" are being taken.

Bearing in mind the distinctiveness of the security situations facing States, there are certain steps that all States can take to implement "defensive security". Foremost amongst these is respect for the principles and provisions of collective security embodied in the Charter of the United Nations. The strengthening of cooperative arrangements, regional or otherwise, is also fully consistent with and an important contributor to a strategy for promoting "defensive security". Similarly, political and military confidence-building measures aimed at enhancing openness and transparency can reduce secrecy and suspicions and create the degree of mutual trust necessary to convince States to, adopt more defensively oriented military postures. Constraints on certain military activities, limits on and reduction in specific military equipment holdings and the reduction and ultimate elimination of weapons of mass destruction, if verified effectively and adequately, also form vital components of a defensive restructuring of a State's armed forces.

In pursuing these steps, however. States should be aware that the implementation of defensive security concepts and policies faces a number of problems. The present study demonstrates the inherent difficulty, if not impossibility, of clearly distinguishing between "defensive" and "offensive" weapons and weapon systems. Like military formations, weapons and weapon systems can be used in an "offensive" as well as "defensive" mode. It is only within the context they are used that clear distinctions become apparent. This context, however, is by definition particular to specific circumstances. Similarly, it is recognised that the principle of collective defence requires that some States possess military capabilities that may exceed those necessary for the defence of their own national territory. In those situations, the possession and eventual use of such capabilities should be for the sole purpose of implementing collective self-defence in accordance with the relevant provisions of the Charter of the United Nations.

Since the specific security situation States face within their own region are likely to differ, there are no universally applicable, ready-made schemes for implementing defensive security concepts. Thus, in order to identify possible measures for promoting "defensive security" within their own regions, States should feel encouraged to initiate an assessment of the security situation in their own regions and identify possible steps and measures to implement defensive security concepts and policies. On the basis of these voluntary assessments, States within a region could commence a dialogue aimed at defining the regional security situation, identifying possible measures for promoting defensiveness and self-restraint and finding a basis for implementing

"defensive security" in the future. This dialogue might be conducted at a bilateral or multilateral level, including through various regional and subregional organisations and other such cooperative arrangements.

The United Nations, through the Office for Disarmament Affairs, could promote regional/subregional dialogues along these lines by convening expert meetings, seminars and conferences designed to discuss regional/subregional security questions in an informal setting. Such meetings could be modelled after the seminars/conferences that the Office has organised in the past, particularly within the framework of the Regional Centres for Peace and Disarmament established by the General Assembly in Africa, Latin America and the Caribbean and Asia and the Pacific.

Collective Security and Cooperative Arrangements

The strengthening of regional and other cooperative efforts in recent years is a positive development. Political and economic cooperation within and between regions is a valuable basis for building mutual trust and confidence between States. Enhanced confidence and greater trust in inter-State relations will lay a secure and stable foundation for implementing "defensive security" overtime.

The prevention of conflict, the management of crises and the resolution of disputes should whenever possible be undertaken at the regional level. The States concerned are most directly affected by the circumstances and best able to assess for themselves the necessary steps to build peace and strengthen security among them. Success in these endeavours may further strengthen regional cooperation and enhance confidence and mutual trust. Regional dialogues on security in general and military matters in particular would be of great importance. All States should be encouraged to engage in such regional dialogues in the future.

The strengthening of the United Nations in recent years and its positive role in solving a number of conflicts throughout the world is a welcome development. The maintenance and expansion of this role, however, is to a large extent dependent upon a non-discriminatory treatment of all conflict situations by the United Nations. The enhanced role of the United Nations in peacemaking and the increasing number of peace-keeping missions undertaken by the United Nations since the late 1980s attest to a commitment by States to resolve their disputes peacefully. At the same time, the financial, human and technical resources required for fulfilling the rapidly growing demands placed on the United Nations should be forthcoming and the organisation's capability

to deal with these demands enlarged. In this regard, the Secretary-General's recent report entitled "An Agenda for Peace: preventive diplomacy, peacemaking and peace-keeping" (A/47/277-S/24111) contains a number of suggestions the Group of Experts found particularly relevant to "defensive security", especially those relating to preventive diplomacy.

The ability to conduct military operations collectively and in a manner fully consistent with the principles of collective security as embodied in the Charter of the United Nations can provide valuable incentives for all States to adopt defensive military postures and remove incentives for acquiring offensive, threatening and potentially provocative military capabilities. In so doing, prospects for the peaceful settlement of disputes will be enhanced, thereby contributing to reducing the role of military force in international relations.

To ensure that the force projection capabilities necessary for collective military action are not perceived as threatening or provocative by other States, the idea of role specialisation is worthy of further study.

Openness, Transparency and Confidence-building

The concept of "defensive security" rests on an awareness on the part of States that their security is indivisible. Such awareness can be promoted through political and military measures. Common to both sets of measures is the notion of openness and transparency in political and military affairs. Excessive secrecy breeds distrust and thus promotes a sense of insecurity; on the other hand, openness in political and military affairs is likely to build confidence in relations between States.

The present study has identified practical political and military steps that can promote openness and build confidence over time. States have little incentive to greater openness without reciprocity. Therefore, bilateral and regional negotiations on confidence- and security-building measures—including information, communication, access, notification and constraint measures—are a valuable way in which to promote the Implementation of "defensive security". At the same time, it may be more difficult to take steps towards greater openness in regions of conflict.

Recent experience from such negotiations in a variety of regions may have practical implications for future efforts in this area. These include the following:

  (a) While there are a host of conceivable confidence- and security-building measures, negotiating agreements on specific measures will take time. The prevention of conflict and the building of

confidence between States is a gradual process that requires a just treatment of the case and time to achieve its intended effect;

(b) The building of confidence between States in the military field requires openness and transparency. Although some aspects of military activities involve inevitably an element of confidentiality and secrecy, this element should be strictly limited in order to dispel misperceptions and misunderstandings leading to mistrust and worst-case assumptions;

(c) States are more willing to reduce their military capabilities once they gain confidence regarding the defensive orientation of opposing military force postures;

(d) An effective confidence-building process may, in certain situations, benefit from third-party participation. The involvement of third parties that are regarded as impartial by all sides in a conflict is often necessary to get negotiations going. A third party may be a country, a group of countries, a regional organisation or the United Nations.

Restructuring Military Forces

Once a sufficient degree of mutual trust has been established or a modicum of common interests has been identified, States may decide that their security is best served by placing mutual restrictions on their forces. In this manner, the traditional goals of arms control—to reduce the cost of maintaining military forces, the probability of war and the extent of damage in case of war—can be achieved. In addition, arms limitation and disarmament agreements can serve the more specific purpose of promoting "defensive security". Depending on the details, the defensive nature of military force postures can be enhanced by agreements that limit or reduce particular aspects of these postures.

In the area of weapons of mass destruction, major progress has been made in recent years. It can be expected that the 1972 Convention banning biological weapons will be followed later this year by a convention banning ail chemical weapons. In the nuclear area, the East-West arms race has already ended and has been reversed. However, serious problems still exist, including the continued presence of large numbers of nuclear weapons in the arsenals of some States and the continuance of nuclear weapons tests by some States, as well as problems relating to the proliferation of such weapons, both vertically and horizontally. Consequently, nuclear disarmament should continue to be pursued with increasing resolve. Within the framework of general

and complete disarmament, an objective which shall need a long transitional period, the nuclear weapon States should undertake further substantial reduction of their nuclear weapons stockpiles as a step towards their total elimination.

Arms limitation and disarmament agreements designed to enhance the defensive nature of conventional military capabilities should focus on three elements. First, the ability to generate strategic thrust through a combination of high mobility and concentrated firepower should be reduced in a balanced fashion. Secondly, forces capable of destroying targets deep in an opponent's territory should be adequately curtailed. Finally, the readiness and sustainability of conventional military formations should be limited commensurate with defensive requirements. In so doing, the ability to conduct large-scale strategic offensive operations or launch a surprise attack will be eliminated. In each of these cases, it is important to ensure that capabilities are reduced on a reciprocal, equitable and balanced basis within a given region or subregion.

Arms limitation agreements that cover these areas could help to strengthen the basic defensive orientation of military capabilities. Although the agreements would not in any of themselves guarantee the absence of an ability to conduct offensive operations, they would make such operations both more difficult and less likely to succeed. As a result, the inclination to use military force offensively will have been reduced and mutual confidence in the basic defensive nature of respective intentions will have increased. Of course, mutual confidence requires the assurance that agreements, once concluded, will be complied with. This is why adequate and effective verification of agreements plays a crucial part in the promotion of "defensive security".

As the present study makes clear, there have been only a few instances of successful bilateral or multilateral negotiations designed to effect a fundamental restructuring of military forces towards a defensive orientation. The modalities of achieving such a restructuring are complex and difficult to negotiate. To enhance the prospect for success in the future, States could start a dialogue on how a restructuring of their military forces towards a defensive orientation could be achieved through negotiations. The United Nations, through the Office for Disarmament Affairs, should contribute to this dialogue by convening periodic meetings, seminars and conferences of governmental and non-governmental experts designed to investigate this issue in greater detail.

Towards "Defensive Security"

A study of the state of security in the world reveals some situations in which "defensive security" is closer to reality, others in which the prospects for "defensive security" seem promising and, finally, others in which relations are marked by tension and disputes and where a concept of security based on military strength prevails. Although the modalities of implementing "defensive security" could vary, strict adherence to the principles and purposes of the Charter of the United Nations and a respect for international law provide a necessary basis. Wherever possible, increased openness and transparency in political and military affairs is also necessary. Other measures and steps have been identified in the present study as well. Above all, however, States should commit themselves to regional and other forms of dialogue designed to identify possible steps they could take individually or in concert to move towards "defensive security". In this manner, all States may over time arrive, albeit by different routes, at a situation in which "defensive security" may prevail.

The General Assembly, in its resolution 45/58, invited "member states to initiate or intensify the dialogue on defensive security concepts and policies at the bilateral level, particularly at the regional level and, where appropriate, at the multilateral level". To this end, member states could:

(a) Express their views on the concept and objective of "defensive security", as defined in the present study;

(b) Examine their current situation with respect to the political and military aspects of "defensive security";

(c) Determine to what extent their international relations, their security commitments and their regional situation might enable them to consider taking measures, on the basis of reciprocity, to achieve a situation of "defensive security" at the bilateral, regional or multilateral level. The States that share common security interests at a regional or other level might consider undertaking consultations among themselves;

(d) Consider, individually or jointly, problems relating to the resources needed to fulfil collective security commitments consistent with the Charter of the United Nations;

(e) Keep the Secretary-General informed of progress or initiatives in the field of "defensive security".

In view of the above, the General Assembly may wish to keep itself informed of the state of "defensive security" and the progress achieved in this regard.

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DEFENSIVE SECURITY:
CONCEPTS AND POLICIES

The intense debate on variations of new security policies, commonly defined as "non-offensive defence", concentrates on quantitative indicators concerning military capabilities and defence postures aimed at reducing the possibility of surprise attack or major offensive operations. This debate is accompanied by sceptical criticism, mostly due to the character of modern weapons and the difficulties encountered in distinguishing between offensive and defensive war-fighting. The decrease of military conflict, normalisation of East-West relations have renewed the vigour and focus of the debate, widening it to include broader problems of security concepts, even relating to military doctrines, a term used, as a rule, very loosely. All these problems are treated mostly, if not solely, from the narrow perspective of East-West rivalry, almost totally excluding local or regional competitions.

Military dictionaries have, in general, failed to develop a definition of military doctrine appropriate for a changing world in which all military matters, in their political, strategic or tactical aspects, tend to constitute a unity of action and concept. My contribution would, therefore, be mainly to focus on basic factors determining military doctrine as a concept that shapes a country's long-term position on the political and strategic dimensions of military matters.

Two groups of questions seem to be particularly relevant. First, to what extent can the current adjustments in security policies and postures be equated with the evolution of military doctrine in its basic political significance and military relevance, and secondly, to what extent are the new trends in international relations sufficient to lay the foundation for qualitatively new security concepts?

The answers to these questions, of course, can be found only through concrete analyses of political and social developments in the world. However, certain *theoretical clarifications* establishing a *basic concept-meaning,* if not a complete definition, are needed. This task obviously cannot be accomplished within the framework of a seminar. But, it should be mentioned in order to underline the fact that there is a substantive difference between military doctrine that reflects a country's *basic position on war,* and military doctrine that reflects a *temporary change* in some aspects of that basic position owing to changes in the country's security policies.

The term "military doctrine" is used in different ways, even in academic essays, professional analyses and official documents, and relatively little attention has, until recently, been given to the study of the concept. A growing number of analysts are now recognising that military doctrine in various ways serves as a general guide to modern strategy and is a fairly accurate indicator of main trends in military-related matters. Yet, observers are rarely unanimous with respect to the concept and its objectives.

Military doctrine varies from country to country, but a certain body of rules and principles remain essential for its conceptual understanding. They go beyond the changes in current security policies, which derive mostly from the evolution of political relations, military technologies, social structures, etc. These different interpretations are gradually converging in the nuclear age, but they still remain deeply divergent in both their definitions and their applications.

Study and research in the field of military doctrine face manifold difficulties and limitations, both technical and conceptual, such as: lack of accurate information owing to secretiveness on sensitive military matters; rhetoric or political ambiguities in official documents; preconceptions regarding potential enemy intentions, which distort the evaluation of the real threat perception; differences in terminology; and rapid developments in military technology, military art and science. Particular difficulties appear when one attempts to determine the criteria for distinguishing military doctrine from strategy, operational tactics and battlefield concepts. On a less general level, there are difficulties in distinguishing offence from defence and offensive activities from defensive ones, and in *ensuring defence without engaging in offensive operations,* although defensive operations do require adequate offensive capabilities.

It is, therefore, difficult to grasp even the outlines of a "correct" definition. In general, to get closer to the meaning of this elusive concept, military and political analysts cover a variety of subjects from which they derive the main thrust of military doctrine. They point mostly to four areas:

- The long-term evaluation of the international system; its evolution and the character of State interaction; views on the nature of conflict in the international community; identification of long-term political goals; the relationship between goals and means; the character of the socio-political system;

- Basic considerations with regard to war, its origins, scope, typology and relationship to policy; war-aims; preparation for war; evaluation of its inevitability, "winnability", duration, effects;

- Evaluation of the general security environment, potential threats and dangers; perceptions at different phases of the balance of military power; geopolitics, economic development and security policies deriving from them;

- Ways and means of waging war; use of armed forces, their structure, deployment, equipment, weapons development, combat readiness, training, control of combat decisions, battle concepts, etc.

None of these general approaches could, however, be considered valid by itself. One of the first questions is, therefore, how to state the problem, taking into consideration the "cause-effect" relationship between all political and military matters, and the fact that, in general, most aspects of military doctrine belong to the category of political decisions. One has, therefore, to differentiate between what is temporary and what is firmly rooted in a country's tradition, political and military culture or geography. A system of traditional vested interests based on military strength is slow to evolve into a concept of purely defensive security as a cooperative undertaking. For example, many analysts point to the tradition of a strong continental army for the former USSR, and a strong navy and air force for the United States.

Whatever approach is taken in the search for an approximate definition, military doctrine cannot be reduced to a rigid formula or be inferred from temporary military capabilities or changes in the political climate in any given politico-strategic environment. As a point of departure for a working definition, one can say that military doctrine

is a dynamic, unified body of thought on military matters in the process of change, with strong links to fundamental political thinking, especially the basic principles concerning the overall use of military power to attain political goals. Although to a large extent, military doctrine is a "question of politics", it is not the mere result of political decisions already adopted and imposed upon the military, whose duty it is to elaborate the means to implement them. It cannot be equated with an ideological model or with any "scientific theory" either. Furthermore, it cannot simply be reduced to providing only answers to anticipated questions, excluding the search for solutions to qualitatively new problems posed by the evolution of the international and domestic systems. Its body of long-term principles and objectives, based on a steadily evolving political, geographic and cultural environment, is vital to military theory in general at the highest strategic level and to anticipating modes of war-fighting.

The evolution of such a body of thought cannot be equated with the changing postures of armed forces and weapons, partial measures of disarmament, confidence- and security-building measures (CSBMs), elusive concepts of trust and confidence, fragile security structures, or non-offensive defence. It can be neither identified with nor separated from strategy, politics, security policies and objectives, even on an operational tactical level. It is, in fact, difficult to determine whether, or to what extent, military doctrine shapes military policies in their strategic and operational aspects. Many aspects of warfare, for example, forward defence (called also operational doctrine), air-land battle concepts, attrition warfare, flexible response, mutually assured destruction (MAD), offensive defence, training doctrines, combat readiness, postures, etc., are used interchangeably to refer to both strategy and doctrine.

The United States and the former USSR, as the main actors in world competition, had different views on how to define military doctrine. According to official documents, many aspects of their doctrines evolved in the post-war period together with their mutual relations, military technologies and reactions to what they considered each other's strategic intentions.

The Soviet concept of doctrine united the political (relationship between war and policy, nature of war, "correlation of forces") and the military aspects (character and function of armed forces, principles of military construction, combat readiness, deterrence and war-fighting capabilities, preemption, targeting, etc.), but separated both aspects

from the strict definition of the mode of warfare. Soviet analysts described Soviet doctrine as "scientific" because it was based on ideological principles as well as ON conventional military science; they considered it as "progressive" and "peaceful" because its aim was to defend the USSR and other socialist States against aggression emanating, in their opinion, from the Western world.

Military doctrine as such was always given the highest priority and it exerted considerable influence on the political goals of the Soviet State both in war and in preparing for war. While political aspects of the doctrine were considered constant, its military aspects (limited to means and methods of waging war) were susceptible to change. Soviet military doctrine was also largely deduced from the Soviet and Russian tradition, and was "reactive" to the real (or assumed) strength or weakness of the Western bloc. In its purely military dimensions, Soviet doctrine gave preference in general to offensive warfare, emphasising surprise, speed and coordination of all forces, arms and services. In cases where war was judged imminent, fear of attack made consideration of preemptive strikes acceptable. Soviet doctrine was based on strict rules.

The Western, largely American, view of military doctrine is less theoretical and more pragmatic. It governs strategic thinking, including operational tactics even on the lowest level. In Western military and political thought, doctrine includes basic views on war preparation and modes of war-fighting, but focuses mainly on variations of nuclear strategies/doctrines—from mass retaliation to different levels of limited options. In the American view, often expressed in lengthy operational manuals, there is no place for ready-made solutions or permanently "valid principles of war".

The doctrines of the cold war were based on a belief in the inevitability of conflict between two basically antagonistic and irreconcilable States and societies, and on non-acceptance of defeat under any conditions. Hence, the predominance of military factors, global conflictual competition with the entire world as the arena, and the unrestrained pursuit of objectives. In such a world, military doctrine tended to be offensive both in defining security in terms of expansion, and in war-fighting. This mentality generated endless arms races, perpetual political tensions and regional conflicts.

The cause-effect relationship between the new emerging political and strategic reality, on the one hand, and subtle and gradual changes

in the basics of military doctrine, on the other, cannot be examined without taking stock of the nature of the transformation of international relations in terms of *rapport deforce,* degree of acceptance of common values and standards of behaviour, leading to common security as a system of peaceful management of global contradictions.

The crucial question is to what extent the new international situation reflects a qualitatively new concept. Is the "problem of war" considered in a radically different way? Obviously, the world of today is different: the security dilemma between East and West has softened, and security is now perceived less in terms of conflict and more in terms of a balance of mutual interests; there are enhanced possibilities for the resolution of new disputes and more open polities; there is greater momentum towards war prevention and de-escalation of regional tensions in different parts of the world; there have been important breakthroughs in two fields of disarmament, namely conventional weapons in Europe and strategic nuclear arms, with less provocative military postures and weapons deployment. The world is closer to recognition and even implementation of some basic principles of international law, contained in the United Nations Charter and related to human rights, self-determination and security; there are greater possibilities for unity of purpose and action between major military powers and convergence of concerns and views on the rationality or irrationality of war and on its effects; and the United Nations is beginning to be recognised as a focal point of international cooperation. If one cannot say that a new world has been born, it is indisputable that events and ideas are evolving in a positive way in at least one part of the world; there is less global bipolar rivalry as one Super-Power, while remaining nuclear, is unable to marshall geopolitical power.

We are, however, too close to events to fully assess their significance and to judge the importance and durability of the changes. Certain sources of offensive military doctrine are gradually disappearing in response to new realities, but important traits of that doctrine have remained the same. To ignore them would be dangerous. There is greater clarity on threat perception, on the role of the United Nations, on the effects of the arms race, on the non-application of nuclear weapons and on the role of deterrence, but, at the same time, the level of military power, with the continuous building of new weapons and modernisation of old ones, can fulfill a variety of purposes, including the achievement of hegemony. Even if the danger of a "big war" has diminished, new risks have arisen with new centres of power and new political actors

born of the disintegration of multinational States and the erratic creation of new ones, often on the basis of ethnic groups.

The changes that have taken place, except those with respect to *rapport de force,* are more quantitative than qualitative. Growing interdependence and a lessening of the danger of nuclear war should not hide the fact that the transformation of the global situation is only marginal. The replacement of one totalitarian system with a new, truly democratic alternative is only a process at the initial stage. Strong tendencies towards authoritarianism in the form of aggressive ideologies and nationalism on the part of "small and big" nations and opinion-moulding machines efface the boundary between war and peace; aggressors and liberators; truth and semi-truth; protection of human rights and abusive intervention. Different, often opposed, criteria are used for identical or similar situations dictated by *realpolitik.*

The system of common security has not yet been institutionalised, and the United Nations does not yet serve as a nucleus of initiatives, decision-making or even coordination. Multilateral interaction is fragile; the role of military force, as a source of strength, remains an important tool of policy; deterrence and new technologies will be, for a long time, the basic framework for the survival of doctrines requiring the ability to carry war deep into the territory of the aggressor. On the global level, there are even greater social and economic inequalities and military imbalances. The Third World remains tumultuous, with increased capabilities of provoking conflicts of global import through the diffusion and proliferation of new technologies. Such a situation may give rise to new arms races.

One trend is clear: important tenets of what was Soviet military doctrine are rapidly changing as Russia's capabilities are reduced and its social system, views on war, concepts of security and foundation of foreign policy undergo deep reform. At the same time, the doctrines of other powers are responding peacefully to these changes. This has generated important adjustments in security policies in different parts of the world and has removed the global dimension from many regional crises.

In order to discern the scope of transformation at the global scale, one has to see the situation not from a narrow Western or Northern perspective. Indeed, in that part of the world, a high degree of homogenisation of common values and behaviour is taking place under the influence of common threat perception, economic development,

the pressure of technology and the free market. On the other hand, these integrative factors cannot yet remove or control centrifugal forces, even in Europe, let alone in the rest of the world.

Defensive military doctrine or security policies only make sense if they serve the interests of all States willing to abide by the rules and participate in establishing them. The South, on the other hand, did not benefit from such development and has become even less relevant—certainly more marginal—in decision-making in the "new world order". On the global scale, there is not yet sufficient acceptance of common values and interests to preserve peace everywhere. Thus, the world may stumble into a situation which would be more unpredictable and chaotic than any we faced during the cold war. The developed world has become a safer place, but its security structures have not yet been adapted to other regions.

Although important battles for the new world have been won, the real battles have yet to begin. It is, therefore, not yet certain whether security has become a "positive sum game". Can turbulence or violent regional conflicts be confined to the point where they don't escalate into major crises? How long can economic under development or an all-out "trade war" be kept under control? Will "open" societies necessarily be more peaceful towards societies that do not share their values? Are new responsibilities emerging, or just a new balance of power? Can military doctrine be defensive, with nuclear weapons as a pillar of security? To what extent is the world ready to receive and absorb the shock of further fragmentation? Will the power vacuum be filled with qualitatively new forms of coordination on the planetary level, with common security as the framework? Will arms control and disarmament become a permanent process covering all military activities, or will it remain only partial and quantitative?

The creation of a supersystem with deeper inequalities in economic and military power and absolute security for one part of the world would blur the traditional view of hegemony and security, replacing war with subtle coercion, intervention and weapons modernisation. The hallmark of our civilisation is a kind of dictatorship of military technology. Despite changes in some aspects of military doctrine, reflected in new security policies and an unprecedented degree of cooperation, the balance of power remains the chief arbiter, and a new foreign policy agenda is still unfolding. The process of integration is limited to the developed world, and militarily and economically strong States continue to dominate in matters of war and peace. Peace is

becoming more divisible. In the midst of epoch-making change, positive reactive behaviour should not obscure the lack of an integrated approach and of a global vision.

TRANSITION TO DEFENCE-ORIENTED CONFIGURATIONS

Political Aspects of Defensive Transition

Developments in international relations over the last few years indicate a clear tendency towards a growing recognition of States' interdependence in all respects. In the military domain, this recognition can be seen in the gradual acceptance of the idea that a State cannot achieve lasting security unilaterally, or one-sidedly, but only in a cooperative way that takes into account the threat perceptions and anxieties of other States. The most obvious consequences of this new attitude are the arms limitation agreements of the past few years and the ensuing growth of stability and confidence in the regions deemed for decades to be on the edge of conflagration. It is too early to say that military force has ceased to be a tool of foreign policy, but it has undoubtedly lost its former value as a decisive yardstick of States' power and security.

Because radical disarmament on a wide scale is not attainable in the foreseeable future, other ways of strengthening international security are being sought. The most promising one seems to be a transformation of the existing military potentials into non-threatening, less destabilising and, as far as possible, defensive ones. This transformation, which in theory should finally result in exclusively defensive military capabilities, is conceived as something much more complex than disarmament or arms control. It may actually entail arming in specific types of weapons.

Being the result of political change and part and parcel of this change, defensive transformation is bound to be implemented in concert with other aspects of international relations. It may even be undertaken in its rudimentary forms in the context of antagonistic relations between States. But, its more advanced forms, as prescribed by the theory of non-offensive defence, will probably necessitate gradual improvements in a wide range of political and economic interactions of States. Left alone, without attention being paid to the non-military aspects of security, defensive transformation would probably falter sooner or later. It may, therefore, be said that defensive transformation is equally a military and a political concept.

So far, the intensive theoretical and political debate on exclusively defensive postures has focused predominantly on the individual State's

military forces or, at best, on bilateral military relationships. The multilateral setting, particularly one involving a number of small, medium and great powers, has not been elucidated sufficiently by the theory of the concept, indicating a potential difficulty in its practical implementation. To be viable and durable in real life, defensive transformation cannot be confined to a limited number of States. It must address a wider spectrum of the international military order. Emanating from the old East-West military ramifications, it naturally developed in and focused on Europe.

However, for obvious geographical, military and political reasons it cannot, even if applied there in practice, be sustained for long in isolation from other regions. This observation, if correct, seems to underline the very early stage of the formulation of the concept of a defensive posture. The one developed for Europe will hardly be adaptable to other regions, each with vastly different military, political and economic conditions. The defensive posture of the European States, defined, for example, by the structural inability to launch large-scale offensive operations, might be, in the case of the African States, defined by entirely different arrangements and behaviours, some of them altogether non-military in character.

Defensive Structures and Great Powers—Incompatible Notions?

Even at a cursory glance, the military structures of the nuclear powers with global military reach are the structures most visibly incompatible with the notion of non-offensive defence. The nuclear weapons' fire-power and the range of their means of delivery cannot be considered as being in the realm of non-offensive defence. Moreover, such powers possess extensive air- and sea-lift capabilities, large ocean going navies, global space- and ground-based command, control, communication and intelligence-gathering facilities, and military bases in foreign countries, all functionally tied to a global or regional power-projection. Although they are in the process of reducing their forces deployed abroad, they are ready to introduce an effective military force anywhere in the world on short notice if their interests are at stake. Power-projection of this kind requires extensive preparations of logistical support and adequate military material. The military doctrine of these powers presupposes an ability to wage both offensive and defensive operations on strategic, theatre (operational) and tactical levels.

The possession of a long-distance and overwhelming conventional force-projection capability seems to be again, as it was in the pre-

nuclear era, the most conspicuous quality differentiating a global great power from all other, even nuclear, powers. Possession of nuclear weapons alone endows a State with strategic deterrence potential, which is, however, useless as a tool of coercion in a local or limited regional conflict. Without a technologically fully developed ability to project decisive conventional force over long distances, such a nuclear State cannot be considered today a real global power. It is doubtful whether a State or States enjoying such a unique position in the international community will agree to relinquish it for the sake of the rather elusive idea of defensive international military structures.

Although their military potentials are incompatible with the concept of unequivocal defensiveness, the behaviour of nuclear powers during recent years has played an important role in facilitating the developments leading to the widespread acceptance of the concept of defensive military posture. There is no need to argue at length about the impact on the world scene of the end of the great powers' ideological and political confrontation, of the agreements on reduction and withdrawal of their nuclear weapons, and of the withdrawal and reductions of their ground forces deployed in third countries. Despite the fundamental role played by these developments in initiating the course of events on a wider scale, their influence has, however, had mainly a political character. Their military value, as far as the concept of defensive posture is concerned, seems limited, due to the fact that the offensive substance of the great powers' military potentials has not been altered (except in the case of the former Soviet Union).

The postures adopted by nuclear powers and those who aspire to a global role have a decisive influence on the nature of the international military order and thus, in the long run, will delimit the chances for a world-wide transition to defensive military configurations. In specific and confined geographic areas such as East Central Europe, for example, such a transition will probably proceed regardless of what is happening in the United States or in French military forces. Once, however, the Russian or German potentials become shaped according to the prevailing technological and organisational tendencies set up by the American or French example of offensive structures, the continuation of the process of defensive transition in the region may be called into question. The great powers are involved in all regions of the world. If their offensive capabilities are to be left unchecked while the military potentials in the respective regions undergo defensive transitions, the situation will become politically untenable. It is hardly possible that the international

community would acquiesce to the prolonged existence of the present exclusive club of States endowed with an offensive power projection, nor is it likely that it would help to widen the gap in military capabilities in favour of these States.

The influence of the great and major powers on the implementation of the concept of non-offensive defence is seen in a situation in which these powers have small or even medium-sized States as neighbours. According to prevailing opinion, any effective defence, including one designed as non-offensive, calls for a counter-offensive potential on the tactical and, to a degree, operational level. In the case of a major military power undertaking a truly defensive orientation for its armed forces, such a potential would most probably be quite large and in a state of readiness. According to traditional wisdom, one cannot doubt that, whatever the justifications for its existence, this counter-offensive force would always be seen by the smaller State as an offensive threat that would have to be reckoned with in case of political crisis. Despite the defensive posture adopted by the major power, the outcome of such a situation would, in all probability, be a perception of lack of stability and subsequent recourse to armaments. Such a result would be likely to occur despite the argument, put forward by the proponents of non-offensive defence, that the best remedy to the inequality of military potentials is not competition in offensive capabilities—a competition which could never be won by a smaller State—but an intensive investment in the weaker State's defence.

NATO and the Non-Offensive Posture

Until recently one of the obstacles to the wider European acceptance of defence-oriented military postures was a fear that their application on a national level would be detrimental to the cohesion of the North Atlantic Treaty Organisation (NATO). Because the early debates on non-offensive defence often presupposed a radical elimination of the offensive potentials of the two antagonistic blocs, including in particular nuclear weapons, that is, the linchpin of the Alliance's military doctrine, the whole idea was anathema to NATO. The theoretical solutions proposed by the advocates of defensive-posture constituted a drastic departure from the traditional NATO doctrine without, however, indicating how they could be realised in practice. The concept of non-offensive defence foresaw a strong territorial national defence. Since such forces were non-existent in a number of NATO States, they would have to be financed probably through resources thus far devoted to Alliance-oriented forces. Moreover, such territorial forces would be

less responsive to the unified command structures. Thus, cohesion of NATO could be undermined.

The events of the last two years have permitted a more positive re-evaluation of the concept of defensive posture by NATO. It actually turns out that the Alliance may have to absorb some of the basic features of non-offensive defence if it wants to survive the disappearance of any serious military threat on the continent. The adoption of the new strategic concepts and the ongoing reorganisation of NATO forces seem to make possible not only a substantial numerical reduction of forces but, more importantly, a gradual shift in the entire NATO apparatus towards a defence-oriented configuration. While nuclear weapons, flexible response, and forward defence were preserved as principles of Alliance doctrine, the decisions adopted during recent months indicate that the role of nuclear weapons is being de-emphasised; national contingents have gained in weight in relation to the stationed ones; reinforcement forces are becoming decisive in comparison to the forces deployed along borders; and the overall readiness of forces has decreased. All these changes have strengthened the non-provocative and non-aggressive nature of the Alliance.

On the other hand, certain issues of consequence have not yet been addressed adequately by NATO, and other factors lead one to think that it is not detensiveness but other concerns that have impelled the recent decisions of the Alliance. Among the issues that sooner or later will have to be addressed and that have clear repercussions for regional and international stability, one could enumerate the problems of military technology (weapons' modernisation and military innovation) and the arms trade and dissemination of high-tech weaponry in the world, for which the NATO States, the main sellers of modern weaponry, bear major responsibility.

It also has to be admitted that, from a purely military point of view, increase in mobility, enhancement of a unit's fire-power and of command, control and reconnaissance, the steady drive for greater stealth in weapons and other forms of qualitative improvements result in an expansion of the offensive potential of NATO's forces, despite the reductions or other aforementioned positive measures. The expression "leaner but meaner" accurately describes the state of affairs.

Transition to a Regional Defensive System—The Case of Europe

Among the world's regions, Europe seems at present most likely to make a successful transition of local military potentials into a defensive

configuration. This prospective transition appears to have a solid foundation: the political and economic evolution of the East and Central European States, the dissolution of the Soviet federative State, the growing economic integration of the continent, the steady maturation of the CSCE process, the establishment of far-reaching confidence- and security-building measures, and the conclusion of the CFE 1 agreement, to name but the most obvious examples. However, it seems that this strong political base for further changes in the military domain may not be sufficient for their implementation.

The situation in the new States in the Eastern Europe is volatile and will remain so, for an unspecified period of time. The ethnic conflicts, economic disturbances, social unrest and conflicting territorial and border claims—all these factors may force the authorities of the new States to try to hedge their bets against worst-case scenarios by resorting to the one relatively stable State institution, that is, military force. Such a situation may prevail in the region for a number of years to come. All this may not and should not inhibit the continuation of defensive restructuring by adjacent States, even if they are in some way embroiled in the developments in the East. However, such a prospect is not encouraging and may be detrimental to the general political processes on the continent.

Mindful of the overly quantitative character of the first CFE agreement, the parties involved in the preparatory consultations on the future mandate of negotiations seemed generally to opt for measures encompassing, in particular, the reduction of the existing offensive potentials, and on establishing constraints that would include schemes for the appropriate structures and deployment of forces. This, when implemented, would be tantamount, for the first time in history, to a multilaterally binding system of defensive military structures.

Regrettably, these expectations did not materialize, as is evident from the content of the CSCE Helsinki Document 1992, "The Challenges of Change", regarding, *inter alia,* the future negotiations on arms control, disarmament and questions of security. The stated objectives of these negotiations are measures which aim at "keeping or achieving the *levels* [emphasis added] of armed forces to a minimum commensurate with common or individual legitimate security needs within Europe and beyond". There is no mention of the problems of defensive structures or of qualitative arms races.

However, this visibly less ambitious programme is probably more suitable, given the aforementioned instability of the Eastern half of the

continent. Thus, it will probably be more appropriate to establish fairly general rules on structures and deployment, stressing instead and elaborating new and more ambitious confidence, security, constraining and control measures.

East Central Europe—The First Test of Transition

Although the transition to a defensive military posture may be discerned in the actions of several major and small military powers and in various regions of the world, the East Central European States, particularly Poland, the Czech and Slovak Federal Republic and Hungary, are the first to undertake a complete defensive reorientation of military potentials in line with an officially adopted policy. These three States belong to the most numerous and typical category of small or medium-sized countries. Their experience in the transition may therefore be of interest to other States, and not only to those in Europe.

The three States under consideration here are no longer linked by an alliance. The abolition of the Warsaw Pact has given them complete freedom of action in the military domain, but not without a price. Because the entire spectrum of their military affairs—their military doctrine, force and command structures, weapons' acquisition, military R&D and production—was moulded according to the Soviet pattern, departure from Soviet tutelage has forced them to undertake a profound revision of all these old patterns. The sheer dimensions of the problems involved have often overburdened the newly established, hence inexperienced, political bureaucracies, and the lack of any precedents in such an endeavour on an international scale has raised the financial, material and social costs. The increasing role of civilians in these States' security decision-making processes has opened up heretofore unknown, thus often difficult, points of military-civilian interaction. Equally novel has been the opening of military policy to public scrutiny and the growing involvement of society in the States' security matters.

Their newly established military and political independence, though cherished by all sectors of their respective societies, brought about a very unpleasant and disquieting feeling of strategic loneliness in each of the three States. Their trilateral cooperation in foreign and security matters has been slow to start, and it will never be able to replace the sense of security stemming from a formal guarantee issued by a great power or a whole Alliance. The irreversible Western orientation of these States prompted them to seek such a guarantee from their new friends, but to no avail. Strategic interests and intra-Alliance politics

foreclose the possibility of such a guarantee being issued by NATO or by any of the major Western Powers in the foreseeable future.

The complexity of transition to the new security requirements and to the defensive configurations of the military potentials of East Central European States is enormous. Several far-reaching processes had to be undertaken simultaneously, though only a few of them are complementary and a number of them are even contradictory. Even the most cursory recapitulation of them produces a long list. The processes in questions are: de-ideologisation and re-nationalisation of military forces, humanisation of military service, reform of the legal system on which the military postures are based, redefinition of the national military doctrine, geopolitical reorientation of military cooperation, professionalisation of the armed forces, deep reductions of forces both under international agreement (CFE 1) and on a unilateral basis, redeployment of forces, restructuring of forces and of their command systems, redeployment of the logistical assets, modernisation of weaponry and equipment, reorganisation of the air defence system, conversion of military industry, and substitution of old foreign sources of weapons procurement with new ones.

In all three States an intensive debate on national military doctrine is taking place. The intention is to give the doctrine an official character in order to give its defensive aspects greater international credibility. The "defensiveness" consists of several elements: none of the States feels threatened or sees an enemy among the members of the international community. Their defences are to be established on the principle of "sufficiency", that is, the ability to defend their territory and the inability to wage major offensive operations. The task of the military forces is the defence of national borders and territory; by law they cannot be used in aggression. The level of forces, their deployment, structures, and weapons' composition should unequivocally be perceived as defensive. The States have obligated themselves to strive for a peaceful solution of any international disputes in which they may become involved.

Foreign and military policy is to be aimed at the creation of a system of common security in Europe. The doctrine postulates drastic reductions of the present overall levels of forces down to and sometimes below the levels prescribed by the CFE 1 agreement. The ground forces are to be composed of operational and territorial forces. The small operational forces are to be much more manoeuvrable and with high fire-power. They are envisaged as being strong enough to launch a

counter-attack to regain lost territory. This postulate entails in the case of each of the three countries a substantial increase in certain categories of weapons (anti-tank, anti-aircraft) and in the mobility of forces (self-propelled artillery, combat and transport helicopters). The territorial forces are to be more numerous but in a low state of readiness in peacetime and armed only with light weapons and deprived of high mobility. To redress the pattern of deployment of their forces poised westward, the three States plan to move several large units and their logistic bases in order to spread them more evenly over their territories. Such a deployment is to give flesh to the concept of "circular" defence, in which all directions are treated as politically and militarily equal. The air defence is to cover all territorial airspace.

In reaction to the former substantial or, in some types of weapons and equipment, total dependency on Soviet sources, the three States plan to remedy the situation by, first, preserving and strengthening their own production capacities; second, undertaking intraregional cooperation; and third, utilising multiple sources of military technology to the extent made possible by their budgets.

In terms of general indications of military preparedness, such as military expenses and the so-called "social density" of military forces, the East Central European States are planning to stay at the level of some 3 per cent of the State budget devoted to defence and of some 0.6-0.8 per cent of the population serving in the armed forces.

All the above described directions for the defensive transition of the military potentials of the three States are already in the second year of implementation. However, as it turns out, the implementation has proved to be exceedingly difficult and costly. In several instances the plans could not be fully executed and some have been postponed to a more distant future. The main difficulty stems, however, not only from the costs incurred by the military transformations, particularly those of transarmament, modernisation and redeployment, but from the overall economic conditions in the States as they undergo fundamental reforms and are, at the same time, battered by inflation and recession. The implementation of the defensive structures, at least initially, needs apparently much greater economic resources than those possessed by the East Central European States.

As a result of restructuring measures, the central military authorities were reshuffled, streamlined, and put under civilian control. The military districts were reorganised and, in the case of Poland and the Czech and Slovak Federal Republic, new ones were created in the eastern

parts of the countries. Several officer schools were disbanded or integrated into larger units. In Poland the two types of divisions, tank and mechanised, were reshaped into uniform mechanised divisions, with a lesser component of tanks. Each mechanised battalion of the seven Polish operational divisions received additional units of anti-aircraft and anti-tank artillery. The strengths of the armed forces of the three States have been reduced by one fourth to one third of the total numbers. Military service has been shortened to 18 months. Several engineering and supporting units were disbanded. The reduction and destruction of weapons prescribed under the CFE 1 agreement proceed apace, with several hundred units already decommissioned and scrapped.

The planned redeployment of forces was to shift about 20-30 per cent of the ground and air forces to the eastern regions of the States. This relocation of forces had to be slowed down or postponed, however. The reason was simple: the military budgets of the States could not sustain the great costs of transporting several thousand tons of equipment and material, constructing new barracks and other technical infrastructure, new communication lines, roads and training grounds, new flats for officers, schools and health care centres.

The modernisation of the aging armed forces of the three States was one of the priority tasks of the transition. The actual quality and age of different weapons systems varied from State to State; nevertheless, in several instances, particularly in aircraft, air defence systems, and anti-tank weapons, the armies lagged far behind modern standards. In consonance with the new military doctrine, the planned modernisation was to concentrate on air defence systems (aircraft and missiles), guided anti-tank weapons, mine warfare equipment, and command and control systems. After the experience of the last two years and in view of ongoing economic difficulties, it may be safely assumed that, notwithstanding the improvements emanating from the relative increase of modern weaponry in their arsenals due to decommissioning of the old weapons under the CFE 1 Treaty, the modernisation plans of the three States are beyond their reach for several years to come.

The price of Soviet weapons has soared and now equals those of Western origin, thus making them similarly unaffordable. Because of the internal disturbances in the former Soviet Union, cooperation in maintenance of weapons and timely delivery of spare parts, lubricants and other indispensable materials are more than haphazard. The present difficulties in the technical maintenance of the armed forces are

approaching a catastrophic dimension with a highly damaging impact on their overall level of combat worthiness and on morale. Turning to the Western arms markets does not help, since Soviet weapons are incompatible with Western technology. The reorientation to other than Soviet or Russian hardware, if the financial situation permits at some time in the future, will proceed through all categories of weapons systems and will certainly take a long time. International cooperation in weapons procurement is only a partial and uncertain solution. The three States signed an appropriate agreement but, so far, the cooperation is limited to simple exchanges of spare parts and mutual maintenance support, whereas the prospects for industrial co-productions are dim. The hurdle is that the military industries of these States are competitive rather than complementary. Moreover, the industries are undergoing radical conversions, and the chaos created by this and other aspects of economic reforms in these States makes it difficult to enter into joint procurement arrangements.

The range of military production in the three East Central European States is quite extensive, particularly in Slovakia and Poland. Until recently these industries constituted a kind of economic enclave, ruled by its own specific principles and composing a part of a huge, Alliance-wide military-industrial complex. This explains why in all three States extensive investments were made even in the 1980s, when all of them were already in deep economic crisis. The large credits making the investments possible are now to be repaid. The burdens of the financial conditions and the disappearance of internal and foreign markets for their productions have caused an unprecedented crisis in this industry. Dozens of factories and labs are being closed down and tens of thousand of workers and technicians are being laid off. The States have lost a large portion of their military-industrial base, some of which is indispensable for the modernisation and preservation of viable armed forces.

The budgetary allowances for the national defence in the States in question have shrunk steadily over the last three years, both in nominal and real terms. At present the military operates on less than one third of previous levels of financial allowances. Despite the greatly diminished strength of the Polish army, for example, nearly 60 per cent of the military budget goes to the costs of personnel, with no money for purchase of weapons, training, and maintenance, not to mention the task of restructuring. This trend will apparently continue, despite the alarmingly rapid deterioration of the armies. The reason for this trend

is first of all the deepening recession and secondly the anti-military attitude of society, especially among the younger generation—a factor unknown before but increasingly decisive on the internal political scene.

Although from a certain point of view such a situation may be seen as positive, in reality, when both the economic crisis and the anti-military tendency work together, the result may be counterproductive in terms of State security. As an officer writing in a soldier's daily in Poland remarked, the restructuring as seen from the bottom of the military hierarchy resembles "all-out destruction". The process that had originally aimed at a defensively-oriented transition may eventually lead to no defence at all. The strategic vacuum considered by some to exist in this part of Europe would turn out to be a military vacuum, with the prospects for stability in the region uncertain.

DEFENSIVE SECURITY: THE CONCEPTUAL CHALLENGES

Defensive security, as a concept, born of the military doctrine of "non-offensive defence", which was formally adopted at Berlin by the Warsaw Treaty Organisation (WTO) for the first time in May 1987, still remains in the very early stages of evolution. However, it holds out the promise of a fundamental change in the security paradigms that have existed since 1641. As it is, matters of national and international security constitute a complex interplay of various factors and elements in which perceptions play a crucial role. Therefore, the potential for applicability of the emerging concept of defensive security in different/ dimensions—bilateral, regional, and global—can at best be examined only in the broadest conceptual framework, where one can seek to apply some of its principles to a specific environment. As it is, the bilateral framework of security varies tremendously across the globe. The South is concerned much more with security issues arising out of an inadequate pace of development, and the security of the industrialised countries of the North has assumed substantively different dimensions. In either case, military power and its application can be expected to continue to play a crucial role in the security calculus, while political-economic-technology relations move on to become the real determinants of security in all its manifestations.

The first issue related to applicability that must be addressed is whether to treat the concept of defensive security strictly in military doctrinal terms or in a political framework, or perhaps in politico-military paradigms. This author has earlier argued that the optimum approach, if one is to translate the doctrine of non-offensive defence

into practical effects on a more universal basis, is to deal with it at the politico-military level. The reality is that if the political ideology and doctrine are aggressive and offence-dominated as in export of revolutions, military doctrine will have to be offensive. If the political ideology is defensive, then the military strategy can be offensive, defensive, or a mix of the two. The concept of defensive security will therefore definitely need to be considered in essentially political and politico-military terms, so that purely military doctrines will flow from political policies rather than the other way around.

Framework for Application

At the outset there can be very little disagreement about the need for improving the foundations of security in the world. The integration of the global economy, the interdependence of political processes, the linkage between potential instability due to the South's underdevelopment and the industrial North's vulnerability to the spillover of turbulence from the South, and the potential of military power to destabilise the security environment—all these require a restructuring of the prevailing strategic doctrines and security paradigm. While conflict and application of military power have been integral components of human progress and history, two aspects deserve attention.

The rise of the concept of the "sovereign" nation-State in the Westphalian order reoriented the national security paradigm. Sensitivity to the concept of national sovereignty itself channelled the security paradigm towards an open-ended search for national security which inevitably contained the seeds of the concept that security might be attained at the cost of the security of another sovereign country and also imparted a certain aggressiveness to the pursuit of national security. Security became competitive and, in specific circumstances, confrontational and conflictual. Cooperation in security matters arose out of the compulsion to work together in "collective" security— inevitably against perceived threats. This itself created a similar competitive process—the Allies versus the Axis Powers in World War II and the North Atlantic Treaty Organisation (NATO) versus the Warsaw Teaty Organisation (WTO) in the cold war. In many respects, the political and economic processes of increasing interdependence and integration gradually transformed the parameters of national sovereignty towards voluntary adjustment in a cooperative framework under supranational institutions, in which national sovereignty was partially subsumed. Hence, the European Community (EC), Western European Union (WEU)

and the concept of "Europe 1992". Similar development did not take place in Eastern-bloc States because of the absence of the voluntary basis for inter-State cooperation. In fact, sovereignty of WTO members was subordinate to that of the USSR and the Eastern-bloc alliance structures.

The fundamental modification of the concept of "sovereignty" of a nation-State permitted the application of the principle of non-offensive defence to arms control and security-building measures in Europe (like the process of the Conference on Security and Cooperation in Europe (CSCE) and the conventional forces in Europe (CFE) agreements), in a regional framework. The alteration of the paradigm of *political* relations between the United States and USSR—an essentially bilateral process which has had global implications—provided the motive force for change. This change was expedited by the voluntary opening up of the closed, authoritarian and dogmatic system of the Eastern bloc. The over-arching umbrella of nuclear deterrence provided a security guarantee under which it was possible to apply a degree of non-offensive defence doctrine (as in the CFE agreements). This points to the second important factor necessary for any concept of defensive security to take root: some form of guarantee is necessary to cover the risks involved (to national security) of moving from a competitive to a cooperative and defensive security paradigm. It is not my intention to argue here that nuclear deterrence and strategic parity provide the only means of insurance against risks in the transitional period, but to emphasise that nations—especially those whose sensitivity to their "sovereignty" and independence is very high (as indeed is the case for most of the developing world and for the newly independent States of the former USSR)—have a strong need for means and methods of reassurance to enable defensive security concepts to be accepted and translated into policies.

The second fundamental point is the high dependence on the Clausewitzian concept of "war as an instrument of policy" that has guided the security and national policies of nation-States for more than two centuries. The validity of this concept has increasingly become untenable. The concept also operates as the antithesis of any formulation of a defensive security paradigm. War with nuclear weapons, obviously, cannot serve any rational political objective. However, the industrially developed countries have become increasingly vulnerable even to a conventional war. The proliferation of nuclear installations, chemical industry and the highly developed, but integrated, functioning of the

State and society places these countries at grave risk in case of a war with conventional weapons. The accidents at Chernobyl (USSR) and Bhopal (India) provide enough data to support the above. At the same time, the developing countries are extremely vulnerable to the risk of conventional war, which could destroy their limited high-value economic-industrial assets.

India's persistent efforts to get an agreement with Pakistan on non-attack on nuclear installations was motivated by this logic. The consequences of initiating the war against Kuwait has set back Iraq's developmental processes for decades. As the recognition grows that war implies not just the victory or defeat of military forces, but fundamental damage to the State and society, acceptability of the concept of defensive security (which, logically, should aim primarily at the prevention of war) will increase. In fact, pursuit of defensive security doctrine requires a basic conceptual, as well as objective, operational, re-examination of the effects of (conventional) war and the Clausewitzian concept of war as an instrument of policy. This would provide one of the important conceptual bases on which defensive security could be built at the bilateral, regional, and global levels.

The international community today has a renewed, reinforced interest in disarmament. In recent years there has been a perceptible shift in the approach to the issue: from the arms control approach of managing the arms race to first tentative steps towards disarmament through arms reduction agreements. The reduction of levels of armament by itself does not enhance security, but interfaced with doctrine and the concept of defensive and cooperative security, it starts to assume a special significance. Progressive disarmament and arms reductions (for that matter even arms control) within a conceptual framework, of which defensive security is the centre-piece, would be really meaningful, especially in providing the direction for arms reductions: not merely for the sake of reduction, but as the means to the larger end.

Selective arms reductions, for example of offence-oriented military forces, would not only make a positive contribution to disarmament, peace and security, but help establish the principles of defensive security. Defensive security concepts and policies have the potential for such selectivity. Indeed this has been in evidence in the arms reduction agreements in Europe, where the doctrine of non-offensive defence provided an important basis and rationale for what was desirable for both sides. At the same time, the very concept of defensive security requires increasing transparency.

Mistrust is one of the most powerful motives for adopting policies and postures that lead to national security paradigms based on imposing insecurity on another State. The process of eliminating mistrust really lies in the domain of political relations. At the same time, it needs to be noted that at purely military levels, any viable doctrine, for a variety of reasons, tends to rely heavily on offensive action and posture. Military efficiency is heavily weighted in favour of the offensive and aggressive spirit. In recent centuries this was reinforced by the politico-military doctrine of war as an instrument of policy, and at the political level by the self-centred concept of security and sovereignty of the nation-State and of transnational ideologies. It was also possible for States to pursue this approach unilaterally, although efforts to enhance security at the cost of the security of other States did lead to the action-reaction phenomenon of the arms race.

Defensive security, on the other hand, cannot really be pursued on a unilateral basis, and this is both its greatest limitation and strength. By definition, the concept requires a degree of cooperation and reciprocity between States and must concede to other States the right to equal security. States considering adoption of defensive security concepts must pay special attention to improving political relations, especially with countries which might pose a security problem. Confidence-building measures, arms control and reduction processes would naturally constitute important ingredients of a non-threatening basis of inter-State security.

One of the important factors reinforcing mistrust is the military posture and potential for *surprise.* In purely military terms, surprise is an important ingredient of an efficient military doctrine, since it helps to generate the favourable asymmetry in time and space so critical in military conflict. But, the potential for surprise not only reinforces mistrust, but, with current rapid advances in technology, constitutes a powerful factor of instability. As it is, with every increase in accuracy, mobility range, and fire-power of military systems, the incentive for pre-emption increases significantly. Fundamental change in security doctrine through a shift towards defensive security can hardly be achieved without addressing the destabilising element of surprise. This also needs to be tackled at the strategic, operational and technological levels.

In order to reduce the destabilising role of surprise and pre-emption, *predictability* has to be strengthened without endangering the security paradigm. Transparency is an element of critical importance in improving

predictability and removing mistrust. Transparency can be sought and instituted at different levels and in different ways. Transparency is needed in relation to military capabilities, postures and activities as much as it is needed in relation to technological dimensions of a State's military power. In order to apply the concept of defensive security, bilateral and multilateral steps are needed to enhance transparency at the local, regional and global levels. At the same time, States must be encouraged and assisted in establishing national technical means of monitoring and verification as part of the transparency objective. This would require a major reversal of policies, since surveillance systems have been held back and countries, especially in the South, have been discouraged from acquiring such capabilities. From this standpoint, many of the non-proliferation regimes, like the Missile Technology Control Regime (MTCR), are retarding the growth of transparency.

Prevention of War

One of the means of application of the concept of defensive security is through appropriate changes in the national security objectives of States. Almost without exception, modern States include *defence* as the key national security objective even if it is not expressly stated in these terms. Defence itself then is based on the strategy of either *forward defence* or *territorial defence.* In both cases the doctrine also rests on a very high degree of willingness to use force and to resort early to it. Where possible, national defence is sought on the basis of deterrence through punishment. This is where nuclear and other weapons of mass destruction, offensive air power, etc. assume not only a legitimate role, but form the basis of national security calculus. In all cases, defence inherits the experience of the ages: that "offence is the best means of defence".

In order to successfully achieve national security goals, an increasing degree of military efficiency becomes important. Now, military efficiency itself requires heavy reliance on offensive action and doctrine. Advances in technology and changes in the very nature of warfare have increased the premium and pay-offs of an offence-dominated strategy. At the same time, where countries have adopted a forward defence posture, they have inevitably created military power projection capabilities. Such capabilities and, hence, the posture and doctrine) generate a strong contradiction with the concept of defensive security. Forward defence had assumed a special significance in cold war military confrontation, but with the demise of the cold war this requires re-examination, especially if the application of defensive security concepts is to be

given an opportunity to succeed. The trend, however, is towards justifying power projection in relation to "new threats" from the South.

For a variety of reasons, States need to give serious consideration to altering their national security objectives: to shift from "defence" to "prevention of war", while safeguarding their territorial integrity. There would obviously be serious problems if prevention of war were sought at all costs where abject surrender and passivity are allowed to take the lead. But, what is being proposed here is that conscious steps be taken to prevent armed conflict from taking place *without* detriment to vital national interests. Deterrence, thus, would continue to be an integral component of national security strategy, but it would need to redefine its goal and would be weighted much more in favour of denial than punishment. More important, the war prevention objective and strategy would require re-orientation of the concepts of and plans for employment of military power, exploration of new ways and means for *conflict prevention* and, where war prevention strategy fails, the application of limitations and restraints to the level of conflict and its early termination by seeking minimum goals. Overall, national objectives of war prevention would provide a powerful base for the application of defensive security concepts and non-offensive defence doctrines.

It may be argued that one of the areas where the concept of defensive security cannot be applied successfully is that of intra-State conflicts and low intensity warfare. It must, of course, be emphasised that defensive security concepts essentially relate to inter-State security paradigms and thus would have little relevance to intra-State conflicts. On the other hand, if defensive security concepts are constructed as politico-military doctrines and based on sound principles, they also begin to offer new opportunities to deal with the threat and dangers of intra-State conflict. The attenuation of intra-State conflicts is basically not incompatible with the concept of defensive security, and there is potential to draw upon the latter to try to avoid intra-State conflicts.

Global and Regional Dimensions

The applicability of defensive security concepts at the bilateral, regional and global levels greatly depends on how the concept itself evolves and is then applied. As it is, one cannot escape the conclusion that the concept of non-offensive defence has been perceived by many as providing an acceptable, respectable label for arms control and the management of the arms race in Europe, where arms build-up, had, in fact, gone far beyond even what an offensive doctrine would have

required. At the same time, if the concepts of defensive security and non-offensive defence are to be perceived and applied essentially as only military doctrines (whether at strategic, operational or tactical levels), their application on the global, regional and bilateral (local) levels will, perforce, remain highly restricted.

In fact, aside from the arms control rationale, they face the prospect of strongly contradicting military doctrines that seek military efficiency. On the other hand, the full potential of defensive security doctrines can be realised through much wider and durable application, provided the concept is seen essentially as a *politico-military* doctrine with political philosophy on one end and military efficiency on the other, modified to support a more cooperative framework of security.

As noted earlier, power projection strategies are in contradiction with defensive security concepts at the global and even regional levels. Given the nature of the international system, power projection strategies, forces, and postures are likely to remain in existence and have validity, as indeed the United States-led multinational force projection in the Gulf War demonstrated. What defensive security concepts will need to address, therefore, is the resolution of the contradictions. This would necessitate redefining the parameters of power projection strategies, for example, by applying them through international organisations like the United Nations in a multilateral, rather than a unilateral, framework.

The same applies to interventions. Not every intervention is destabilising, and States, especially small ones, opting for defensive security may even need external intervention in support of their security needs. On the other hand, extraregional interventions and coercive diplomacy threaten the concept of defensive security, since the creation of capabilities to resist extraregional, especially great-power, interventions would distort the paradigm in the more limited regional/bilateral framework. The solution appears to lie in seeking a global consensus on the norms, conditions, and methodologies of intervention. This would be an appropriate task for the United Nations, especially since the issue is closely linked to peace-keeping operations.

At the global level, defensive security will have to address itself to weapons with global reach and to nuclear and other weapons of mass destruction. Such weapons systems, by their very nature, are not only offensive; there is no credible defence against them. States inevitably resort to acquisition of similar capabilities to create deterrence for defence.

This, in fact, characterises the security paradigm of the nuclear age, in which, with the offensive power of nuclear weapons, security has been built by generating tremendous insecurity and exploiting vulnerability. Attempts have been made to apply non-offensive defence doctrine to strategic weapons through making distinctions between first-strike "attack" capabilities and second-strike "retaliatory" capabilities—the former being placed in the class of offensive and the latter in that of counter-offensive "defence" capabilities. This holds true only in a limited way, and only if the basic reality that all nuclear weapons are essentially offensive by nature is ignored. Defensive security, to be viable, will need to push towards progressive elimination of nuclear weapons.

The basic paradigm in the global context has primarily been constructed in an East-West framework. The fundamental alteration of the political architecture of East-West relations has opened up opportunities for a wider application of defensive security concepts (which in turn, has reinforced the development of a political cooperative framework). But, there is a new trend to formulate the emergence of threats to the North's security from the South. In some regions—like the Mediterranean—this has a specific meaning. However, when expressed in more vague but global terms, it appears to be an effort to construct a North-South security paradigm based on mutual suspicion and insecurity. The need for universally accepted norms and principles assumes great importance if the potential confrontational security paradigm now being formulated is to be pre-empted. Even in the Mediterranean context, defensive security concepts offer the optimum approach to the security of not only the North African/Middle Eastern States, but also the States of Europe.

The application of defensive security concepts in a regional/bilateral framework offers the greatest opportunities and challenges. Problems of security and stability are largely region-specific. For example, the security environment in the Middle East is quite different from that, say, of North-East Asia or Southern Asia. Moreover, strategic and security issues cannot be addressed properly in narrow geographical and sometimes arbitrary cultural terms (like the South Asia construct), or in terms to suit the convenience of management structures in Governments. A more comprehensive and broader concept of "regions" will need to be accepted if security issues and the applicability of concepts—old and new—are to be objectively pursued. In security terms, the overlapping of regions must be accepted as normal, and the compartmentalisation of regions needs to be avoided.

Given this context, defensive security concepts would have little chance of success if they were not also able to address fundamental reasons for or causes of regional instability and insecurity. For example, most of the Third World is suffering from problems inherited from the process of decolonisation. National frontiers were set in many cases in an arbitrary way and on an artificial basis. Ethnic and subnational divisions caused by the establishment of new borders have left serious problems of security. There may be as many as 120 cases of disputed borders (and sovereignty) in the world today. Defensive security will have no prospect of succeeding if it does not seek to freeze these disputes and maintain the status quo. The lessons of the Helsinki process, which finally made a definite movement towards defensive security in Europe possible, are clear pointers towards meeting the needs in other regions.

At the regional/bilateral levels there are other problems affecting the implementation of defensive security concepts. Defensive security, to be successful, has to be adopted by all countries in a region and in a cooperative framework, with corresponding reciprocal commitments. This is not a concept that can be applied with any degree of success in a unilateral manner. It may be unrealistic to expect States with mutual security problems to adopt a uniform doctrinal approach to security.

The application of defensive security in regional/bilateral contexts requires that a range of activities be pursued concurrently. Binding political commitments on the lines of the Helsinki process (and the Indo-Pakistani Simla Agreement of 1972) should form the foundation for a range of confidence- and security-building measures. At regional levels, it is necessary to establish instrumentalities (modelled on the post-cold-war CSCE) to initiate and pursue the dialogue necessary for such measures. The "region", or course, must not be so restrictive as to be practically bilateral. For example, Asia itself needs three overlapping regional instrumentanlities—one each for North-East, South-East, and Southern (including Central) Asia—to provide an interlocking, integrated approach able to address the security concern of all States in the region. Deep cuts in conventional forces which are predominantly offensive in character are possible in a bilateral framework, even in an otherwise tense security environment such as that which exists between India and Pakistan. This creates tremendous opportunities to restructure security doctrines and reshape the security environment. On the other hand, defensive security (and non-offensive defence) doctrines run the risk of obsolescence if they are conceived and/or applied in purely military terms.

MILITARY ASPECTS OF DEFENSIVE SECURITY

Basic Principles

The distinction between defensive and offensive strategy has a long history. Debates about the relative merits and strengths of defence and offence go back at least to Clausewitz. But, the debate was traditionally conducted on the assumption that war was a way of life, not an outlawed activity, and conquest was respectable. We now live in an era in which the aim is to avoid war, for moral reasons to which all Governments subscribe formally, and for the compelling reason that nuclear weapons might bring our civilisation to an end. Military forces are increasingly kept in order to avoid war rather than to make war. This gives defensive conventional strategy a new significance.

To start from first principles, strategy can be defined as the art of pursuing political aims by the use or possession of military means. If your political aims are offensive, you must have offensive forces. If your political aims are defensive, you can adopt either an offensive strategy—keeping the enemy at bay by the threat of retaliation—or a defensive strategy— keeping him at bay by denial, that is, by the prospect that he will get bogged down and cannot hope to achieve his political objective.

With nuclear weapons there is little or no choice. They are so destructive that they will always be held and perceived as possible weapons of retaliation; their use for defence means that you risk blowing yourself up. With conventional forces, on the other hand, there is a choice of strategy and forces within limits that depend upon geography, technology and other factors.

The reasons for preferring a defensive strategy when your aims are peaceful can be put under two headings: feedback and stability. By feedback I mean the effect that the strategy of one side in a confrontation has on the political perceptions, the strategy and the military programme of the other, including the size of its future military spending. An offensive strategy can be expected to produce negative feedback in the form of fear, political hostility and an arms race. A defensive strategy can be expected to produce positive feedback and to contribute to reassurance, political reconciliation and an easing of competitive arming.

Two kinds of stability are normally distinguished: crisis stability and escalation stability. A classic form of crisis instability is a race to mobilise and strike first, of which the summer of 1914 is a classic example. In the words of Liddell Hart, describing what happened then:

"The rush to the abyss now gathered unbreakable speed—driven by the motor of 'military necessity'". Nowadays the development of highly effective yet vulnerable offensive weapons—aircraft, missiles, armoured forces and warships—has produced instability in a new form, namely pressure to undertake a pre-emptive strike by suddenly attacking, for example, aircraft on the ground, because you fear that if you do not attack your opponent's aircraft first, he will attack yours.

Escalation stability is a particular problem in a nuclear setting (that is, where both sides in a confrontation possess nuclear weapons). If, in these conditions, you pursue decisive victory in mobile armoured warfare, you risk provoking the use of nuclear weapons. If you go for denial, checking your enemy and then seeking a political solution, you will avoid, or at least reduce, this risk.

It will be seen that feedback concerns how your choice of strategy and force structure influences your opponent's choice of strategy and forces and vice versa. It expresses itself over time. Stability concerns how the strategy and forces you have adopted and those of your opponent influence what happens in a crisis or a war. It expresses itself at a moment in time.

The aim of a defensive conventional strategy is to get rid of instability of both kinds and in so doing to create positive feedback. The main methods of achieving these aims that have been suggested in the considerable work that has been done in Europe are these:

1. In order to avoid a race to mobilize, have forces *in situ*, whether professional, full-time forces or militia raised from the region.

2. In order to avoid the pressure for pre-emptive attack, reduce your offensive capability so that the other side does not fear pre-emptive attack, and design your forces so that they do not offer "rich targets, for example, exposed aircraft on airfields, concentrations of forces or vulnerable control and command centres."

3. To avoid the risk of nuclear escalation, introduce a strategy of denial and attrition and structure forces so that they can slow down, halt and press back the attacker in a manner that gives time for political resolution of the conflict.

4. Minimize, and be seen to minimize, your capability to attack by reducing reliance on mobile armoured forces and avoiding the deployment in forward positions, suitable for offensive

operations, of logistics, bridging and other engineering equipment and such armoured forces as you need for your defensive stance.

5. Maximise your capability to defend by developing, as far as possible, barriers in depth, dispersed logistical supply and forested areas; by developing and relying on passive munition such as mines and exploiting modern technologies which may permit you to dispense mines in the path of attacking forces. Use light infantry armed with anti-armour weapons as well as anti-personnel weapons; use remote control anti-tank and similar weapons so that soldiers who operate them are not too fearful of giving away their positions when they fire. For bombardment of concentrations of attacking forces, use dispersed launchers of smart modern munitions of limited range (so as not to reach too far into the territory of the other side) and provide multiple communication systems so that there is a high chance that command and control will Survive. Invest in stocks and facilities that will help the population to survive.

By pursuing principles of this kind, it is clear that the offensive capability of land forces can be reduced and their defensive capability increased, or vice versa within some limits. We shall come to air forces and navies in a minute. Those who make decisions about strategy, training and weapons development are in fact making choices, consciously or unconsciously, about these matters all the time.

In applying these principles it is important to distinguish between the strategic, operational and tactical level of operations. Our concern is that a defensive policy, where it is feasible, should be adopted at the strategic level by clear political choice. That will dictate what is decided at the operational level, and that in turn will, to some extent, dictate what choices are made at the tactical level. But, it is important to remember that to adopt a defensive strategy does not mean that you become passive at all levels. For example, if one part of aline you are holding is yielding, you will wish to be able *at the tactical level* to take the initiative and push back the attacker by local counter-attack; and the same will be true on some scale at the operational level.

A general proposition that has emerged from the recent debate about defensive strategy is that as the accuracy of conventional weapons increases, it matters more and more who shoots first. The appropriate defensive response to accuracy is to be concealed and invulnerable so

as to avoid being shot at first and to be in a position to shoot first. With land forces, the defender enjoys the possibility, where suitable cover can be found or created, of using dispersed, concealed forces to lie in wait for the attacker who must show himself in order to advance. This potential advantage for the defender is at the core of many of the models of defensive defence in land warfare. On the other hand, the development of indiscriminate area weapons and of increasingly acute methods of observation tell in the other direction: they may permit an attacker to eliminate or reduce concealed defending forces.

Aircraft and navies pose more difficult problems than land forces. They inevitably generate instability because aircraft and ships are highly vulnerable and there is a great premium on attacking first so as to gain air superiority or naval superiority. One cannot classify some warships as defensive, some as offensive.

It is a little easier to do that with aircraft, but even then the lines are very difficult to draw.

Two further factors which may be important to defensive security, particularly with reference to land forces, are mobility and transparency. They tell in different directions. The faster land forces can move (that is, the more mobile they are), the greater the distances and the larger the area from which forces can be brought to a given point of concentration for attack within a given time. Hence, if the warning time within which one side can react to preparations for attack by the other and prepare its defences is fixed, an increase in mobility will increase the chances that an attacker will succeed. On the other hand, if transparency is increased, it will have mixed effects: it will increase the warning time and so improve the chances of the defender; and it will increase the ability of an attacker—and defender—to find targets and strike first. Technical developments seem to be increasing both mobility and transparency. But, there is another aspect to it. Transparency between hostile nations, based on reconnaisance of areas and facilities which are closed to foreigners and where camouflage is in use, will be an uncertain asset which can engender fear as well as confidence. On the other hand, where nations become reconciled and open up, as has happened between NATO and the WTO, fear is eased and confidence induced.

Implementation: The One-Sided Case

If one considers only the one-sided implementation of a defensive strategy, as I have done so far in this paper, one can only be rather

tentative about what results can be achieved. Having reviewed the problem, I recently reached the following conclusions:

1. Nations can choose, within limits dictated by geography and technology, between land forces designed with offensive emphasis and land forces designed with defensive emphasis; they can thus choose between emphasis on retaliation and emphasis on denial by wars of attrition. As regards geography, Israel, for example, is so small that it probably has rather little scope for a defensive stance compared with larger countries; Europe is better placed but still does not have great space.

2. There is much less scope for changing the structure of air forces and navies. But, land forces are the heart of the matter. Air forces and navies, using non-nuclear weapons, can do great damage by bombardment and blockade, but they are unlikely to have a quick, decisive effect on the outcome of a war in the absence of land forces that can advance and take territory.

3. Comparison of the military expenditures of non-allied countries in Europe and those of countries in the alliances indicates that, over a long period, the costs of the two strategies are not decisively different: defensive strategies are significantly cheaper in terms of budgetary costs in relation to gross domestic product (GDP), but they entail larger unpaid contributions and indirect costs (which are not readily measurable); and they require investment in defensive infrastructure, which is a moderate burden if spread over a long period but would be a heavy burden if undertaken quickly.

4. It is impossible to say whether denial or retaliation will be a more effective short-run strategy (at a given cost) for dissuading a potential enemy from attack; but a defensive strategy will be better than an offensive strategy for stability and feedback; it will provide a greater opportunity for a confrontation to be ended and competition in arms reversed, if your opponent, like you, has peaceful intentions.

5. A transition by one country from offensiveness to defensiveness can appear menacing to a neighbour and hence be destabilising if it is not achieved by reductions in offensive forces that substantially outweigh the additions, if any, that are made to defensive forces.

Implementation: The Two-Sided Case

As soon as you consider the idea that, in order to settle their differences, both parties to a two-sided confrontation might in unison adopt the objective of defensive security, the problem is transformed; many of the difficulties resolve themselves and most criticisms become irrelevant. Instead of trying to introduce defences that will stand up to offensive forces, the task is to remove offensive capabilities from both sides. There may be no need to add to existing defences of any kind. As we have seen in Europe recently, progress is unlikely to be made if there are adversarial negotiations in which the parties continue to seek relative advantage.

But, once the parties are keen on reconciliation and ready to step forward, rapid progress may be possible through a combination of unilateral actions, co-operative negotiation and informal understandings. The substance of what needs to be done is that each side should remove those weapons, forces, elements of secrecy and other things that most add to its offensive potential and to the fear it generates in the mind of the other. It should be possible, as in Europe, to pick upon a selection of key weapons which, if removed from *both* sides, would reduce the offensive capability of each relative to the other.

It is important to distinguish this approach from that adopted at the 1932 Disarmament Conference of asking if it was possible to make a general distinction between offensive and defensive weapons, an approach which led to Hopeless wrangling and obfuscation. For just as the laying of a mine-field can augment the offensive potential of a nation by releasing forces for attack, so any weapon will in some degree add to its offensive (as well as defensive) capability. All of which is beside the point. What you need to ask is: Are there certain weapons which, if removed from *both* sides, will diminish their power to attack each other? To which the answer is clearly yes, and experts will have no difficulty in picking out the key items.

Implementation: Many Parties

When you come to the case of many nations, possibly of different sizes, seeking security through the adoption of defensive strategy, the problem becomes more difficult.

The general problem is that any one nation out of a group of nations of similar strength that can attack one another might, in theory at least, have to face a combination of all or a substantial number of the

others in the group. In most circumstances it will be very difficult if not impossible for one nation to produce defences sufficiently strong to withstand an attack from the others. Even if the others have twisted their force structure and strategies in a defensive direction, their remaining offensive capabilities may be such that, if combined, they will be sufficient to overwhelm one victim. Such a scenario may or may not be politically plausible, but it is a theoretical case which must at least be considered.

A particular problem, exemplified by Germany in 1914 and perhaps by Israel now, is that of one country which, being located between two potentially hostile neighbours, fears attack from both sides, and to avoid a "war on two fronts" prepares to be able to attack and defeat one neighbour before the other can mobilize, and then to concentrate its forces against the latter. This strategy gives an incentive to the neighbours to plan for swift mobilisation so that they cannot be caught in this way but can, together, pose a sufficient threat to the country in the middle to deter it from attack. This in turn makes the centre country feel surrounded and threatened on the two fronts.

The politico-military solution to these multi-country (as distinct from two-party) problems, which has been enshrined in the League of Nations Covenant and the United Nations Charter but not yet often put into practical effect, is to use a system of collective security, meaning a political commitment on the part of the members of a group of nations to go to the aid of one that is attacked. In other words, the classical solution is to seek political commitments which ensure not only that groups of nations do not gang up against one victim, but that they should combine to go to the defence of a victim—which may not be militarily easy.

How far then do nations need to keep offensive forces in order to be able to go to the defence of the victims of aggression? At the moment, the arguments being made in favour of Western nations maintaining rapid reaction forces for intervention presuppose that we need substantial offensive forces for a repetition of the war in the Persian Gulf, or something like it. If you ask yourself why we needed strong offensive forces to deal with Iraq, the answer is that the permanent members of the Security Council had armed Iraq with large forces of that kind. If nations did not acquire mobile armoured ground forces supported by modern air forces, and instead opted for more defensive forces, the need for intervention forces with offensive capability would be less.

DEFENSIVE SECURITY IN REGIONS OTHER THAN EUROPE

Conceptual Aspects of Defensive Security

"Defensive security" is part of a conceptual rubric that encompasses "sufficient defence", "defence sufficiency", "cooperative security", "non-offensive defence" and "non-provocative defence". While all these concepts imply non-threatening military postures, defensive security is perhaps closest to non-offensive defence or non-provocative defence. Cooperative security is a broader concept, subsuming other forms of security, such as collective self-defence. Sufficient defence or defence sufficiency seem more concerned with competitive or imitative tendencies towards excessive military build-up, while defensive security and non-offensive defence are conceptually more sharply focused on the problems posed by competitive reliance on offensive capabilities for ensuring or enhancing security.

For present purposes, the terms "defensive security" and "non-offensive defence" will be used interchangeably, where convenient. Non-offensive defence has been defined as a reciprocal relationship in which both sides have "ample forces for defence and, by implication, insufficient forces for attack or when their forces are stronger in defence than when used in an attack". Defence sufficiency has also been defined in ways similar to non-offensive defence. Several years ago, Gorbachev spoke of defence sufficiency as a situation in which the armed forces of a State "would be sufficient to repulse a possible aggression but insufficient for offensive operations".

These overlapping concepts do not necessarily imply disarmament or significant arms reduction. However, achieving their objectives would normally involve negotiated regimes for arms limitation or reduction and perhaps even disarmament in specific areas. There could also be some scope for unilateral measures. In effect, defensive security implies a shift (absolute, relative or comparative) from the doctrine of deterrence (threat of use of force) to assured defence (mutual inability to use force for meaningful offensive purposes). Inter-State structures devoted to defensive security would require a manipulation of bilateral or multilateral military equations to reduce offensive capabilities or restrict the offensive use of armaments, thereby altering the nature of the military balance in favour of defence rather than offence.

Defensive Security Efforts in Non-Western Regions

Thus, far, efforts involving non-offensive defence measures have been witnessed almost wholly in the Middle East and Central America.

An important arrangement is the Sinai force disengagement regime established under the Israeli-Egyptian Peace Treaty of 1979, which led to Israel's phased withdrawal from Egyptian territory. A demilitarised buffer zone was established inside Egyptian territory together with contiguous force-limitation zones where both sides were restricted to 4,000 troops and light arms. An additional, force-limitation zone was created for Egypt covering the rest of Sinai. The United States played a crucial role in facilitating the Treaty of Peace and the preceding Camp David Framework Accords, which provided the political context for the disengagement agreement. The United States also operated an elaborate control system covering an area of some 38,850 square kilometres.

In Latin America the Contadora Group (Colombia, Mexico, Panama and Venezuela) began concentrated efforts in the early 1980s to end the civil wars, inter-State tensions and foreign military intervention that plagued the Central American region. The initiative envisaged a restructuring of regional military arsenals in order to reduce offensive capabilities, limit the size of armed forces and prohibit destabilising weapons systems. The Contadora Act of 1985 proved abortive. Attempts to address United States objections to earlier draft agreements left Nicaragua dissatisfied. Essentially, ideological tensions between the United States and the Sandinistas remained unresolved.

The Contadora effort was replaced by the Central American Security Commission established under the Esqui-pulas II Agreements of 1987 and 1990 (involving Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua). The Commission has been working on a model for establishing a proportionate and reasonable balance of forces in the region. The progress of peace efforts in El Salvador should facilitate the Commission's task, previously encumbered by internal conflicts in El Salvador and Nicaragua.

Role of Defensive Security in Non-Western Regions

The end of United States-Soviet rivalry, the collapse of Soviet power and certain regional developments have sharpened the focus of international attention on the security situation in non-Western regions. The perception has become fairly widespread that international security is more likely to be threatened in the foreseeable future by developments within such regions, where old rivalries, traditional threat-perceptions, latent if not patent ambitions, and possible eruptions of domestic instability could lead to crises and conflicts unless these dangers are contained within new security structures.

Arms control *per se* is often viewed with some misgivings in many non-Western regions, partly because of misperceptions or lack of familiarity and, to some extent, because of the West's controversial approach, reflected in the nuclear non-proliferation Treaty (NPT) and Missile Technology Control Regime (MTCR), which are widely perceived as promoting a system of "have" and "have-not" States. Lack of familiarity seems understandable in the case of defensive security and other related concepts, since these were conceived against the background of the cold war by arms control advocates concerned about the European and East-West situation. Perhaps more problematic in the foreseeable future (but perhaps not in the long term) are deficiencies in the national technical means (NTMs) of regional States for devising arms control regimes and verifying compliance.

Differentiating offensive from defensive weapons also presents some problems. In 1974 the United States Army adopted a weightage system for various categories of armament. Only tanks and armoured personnel carriers (APCs) were evaluated as being more effective in their offensive role. But, such attempts at categorisation have been criticised for their oversimplification, partly because of the rapid development of weapons technology and the resultant changes in warfare witnessed in recent years. However, some weapons systems are clearly defensive in nature (unless used as "shields" to brandish the "sword"), while in many other cases, the nature of a weapons platform could be modified along with supportive changes in force structure.

Technological progress now provides the means to increase defence, thereby enabling less reliance on offensive capabilities, provided the adversary's offensive capabilities can be contained. For example, fighter aircraft could be configured to reduce their capability for ground-attack or interdiction. Qualitative controls have been an important part of major-power negotiations on strategic nuclear weapons, especially with regard to the payload capacity of certain missiles. But, engendering an across-the-board non-offensive balance could entail a complex manipulation of military equations between States. While such complex exercises are conceptually conceivable, verification measures could be regarded as being too intrusive or too burdensome, or technically inadequate for enabling a timely detection of violation and remedial action. Such problems would be greater for technically less advanced States in regions where tensions and mutual distrust may be pronounced.

Nevertheless, limited objectives could be explored which are technically and politically less demanding. Elements of non-offensive

defence could be introduced in order to contain militarisation trends and lower the vulnerability of States to the growing lethality and range of modern weapons systems. Such efforts could initially focus on those regions or subregions where militarisation trends and the security structure need more containment and stability and where, consequently, greater security imperatives exist for arms control efforts.

The Middle East and Defensive Security

The American scheme for security in the Persian Gulf area rests, above all, on a forward carrier battle group presence, backed by Central Command's rapid deployment forces. Opposing the prepositioning of United States military hardware in its territory, Saudi Arabia has instead sought an enlarged indigenous force. The prospects of creating a pan-Arab force envisaged in the Damascus Declaration of March 1991 continue to fluctuate. The Islamic Republic of Iran remains strongly opposed to foreign military presence. This is potentially destabilising for the Gulf region.

In order to deal with any future Iraqi threat through non-offensive defence measures, a United Nations monitored, demilitarised or force-limitation zone could be established covering Iraq's borders with Saudi Arabia and Kuwait. Controls on arms supply to Iraq would further reinforce the force-limitation zone. In return, the Gulf Cooperation Council (GCC) States could seek Iranian reciprocity, while the Gulf States as a whole could limit naval expansion (particularly in view of the region's tight and highly sensitive maritime environment) by accepting restrictions on off-shore force-projection capabilities. While Iran is reportedly acquiring Russian Kilo-class submarines, the Gulf navies in general are upgrading their capabilities, which were previously confined to coastal defence with the partial exception of Iran.

Iraq's United Nations-sanctioned denuclearisation has removed the danger of Arab-Israeli nuclear rivalry for the foreseeable future. However, unlike the Arab States, Israel stands outside the NPT, enjoying a covert nuclear weapons monopoly and possessing delivery systems that could threaten all its neighbours. With United States financial and technical assistance, Tel Aviv has also been working on an advanced anti-missile defence under the Arrow project, which could enable Israel to use its short- and intermediate-range missiles (Jericho I & II) for offensive purposes with impunity.

A breakthrough in the Middle East peace process would provide the political context for overcoming Israel's intransigence on the nuclear

issue and reversing ballistic missile proliferation. However, Israel may still wish to retain its nuclear arsenal, and a change of Israeli attitude may then depend on the strength of United States pressure. A territorial settlement would provide the context as well as the imperative for a robust security structure involving measures of defensive security. The Sinai disengagement arrangement would continue to retain its importance.

South Asia and Defensive Security

Past Indo-Pakistani wars have been far less destructive than many wars in other Third World regions. But, prevailing political and technological trends provide little comfort. In general, the deplorable Indo-Pakistani situation, which has already done considerable damage to both sides, calls for new political thinking and a restructuring of relations. At a minimum, India and Pakistan should seek to contain escalatory pressures should an armed conflict erupt. This could be done by limiting the offensive use of armaments or prohibiting their excessive use. A step in this direction was taken when the two adversaries ratified an agreement in April 1991 prohibiting attacks on each other's nuclear facilities. The scope of this agreement could be enlarged by including other assets and targets whose damage or destruction could cause a deadly escalation. Such steps may also help to retard nuclear proliferation trends by reducing the military utility of nuclear weapons and ballistic missiles.

The prospects of defensive security in South Asia would improve markedly if India and Pakistan agreed to resolve the Kashmir dispute as part of a larger effort to reverse their adversarial relationship. An innovative approach towards resolving the Kashmir dispute could include the disputed territory's demilitarisation, while a broad arms control regime would help to neutralise any adverse security implications arising from a territorial settlement. A wide-ranging regime would also enable both sides to demonstrate more convincingly their intention to establish conditions of durable peace. As part of a comprehensive approach, demilitarised zones along the Indo-Pakistani border could be coupled with contiguous force-limitation zones in order to eliminate the threat of surprise attack and the capability to launch meaningful offensive operations. As a general rule, geographical peculiarities would have to be taken into account. A United Nations monitoring presence would enable the violator to be identified in case of a serious breach. This in turn would help the Security Council to react promptly. Regular reconnaissance by aircraft could be supplemented by satellite data

obtained from a third party perhaps the United States at an affordable price. The United States could also help the parties, including the proposed United Nations monitoring body, in devising and initially operating a monitoring system in the demilitarised and force-limitation zones.

In addition, if only to strengthen military stability, India and Pakistan could move towards bilateral defence sufficiency by agreeing to a ceiling (say, on a 2:1 ratio in India's favour) for major categories of conventional armaments, together with a staged 50 per cent reduction of armaments (say, over a ten-year period) on the basis of India's current level. This would also help to ease the defence burden on their strained national budgets. Jasjit Singh, Director of the Indian Institute for Defence Studies and Analyses, has suggested that India and Pakistan, over a five-year period, carry out substantial reductions of their armour and multi-role strike aircraft and also establish a ceiling on reservists. The definitional and verification measures adopted for the agreements on conventional armed forces in Europe (CFE) could be a model. But, existing Indo-Pakistani NTMs are quite inadequate. Thus, much would depend on obtaining outside assistance at an affordable cost.

In the absence of a peace process for resolving the Kashmir dispute or a framework for a comprehensive settlement of all outstanding issues, certain confidence-building measures could be adopted to address the danger of surprise attack or the use of military force for political intimidation. Prohibitions could be imposed on large-scale military exercises close to the border, while such exercises in adjacent zones could be subject to advance notification. Provision for compulsory on-site observation of notifiable military movements would constitute a confidence-building measure in its own right. Defensive security could also be promoted by the non-introduction of new weapons systems likely to trigger an unwieldy military competition.

A ballistic missile race, being difficult to control, would open up a new dimension to military instability in South Asia—a region already ridden with various instabilities. The time available for averting such a development is fast shortening. However, monitoring compliance with non-deployment would, again, require technical means which are currently beyond the capabilities of both parties. Intrusive on-site verification would involve a degree of military transparency that is likely to be regarded as disproportionate or politically premature. In the circumstances, both sides could observe a temporary moratorium, thus, avoiding legal undertakings.

Defensive Security in North-East and South-East Asia

Defensive security is particularly relevant to the Korean peninsula, where a relatively simple North-South context exists and where the imperatives for engaging in demilitarisation are clear and pressing. The Korean peninsula is one of the most heavily armed regions faced with the delicate task of achieving national reconciliation. The political situation has been improving steadily, even if a little erratically, since the end of the cold war. Such a pattern could continue. The declared commitment by both sides to national reconciliation provides the framework for pursuing demilitarisation and defensive security. Unification is the ultimate goal of national reconciliation, but until that is achieved, defensive security could be seen as the penultimate security objective of national reconciliation as well as an interim stage on the way to future unification.

The prevailing concentration of armaments and armed forces not only has become anachronistic, but also poses a potential threat to the delicate and incipient process of North-South reconciliation. North Korea has finally signed and operationalised its safeguards agreement with the International Atomic Energy Agency (IAEA). But, suspicion of Pyongyang's intentions and activities have not been fully laid to rest. Once this is achieved (for which there is ground for optimism), the two sides could build upon their non-aggression pact of December 1991. North Korea could announce a moratorium on ballistic missile tests as a first step.

In South-East Asia, arms control has to contend with the unique archipelagic nature of the region, where the naval dimension is clearly more important but, as yet, of only nascent concern. As the largest South-East Asian State, Indonesia is the anchor of regional stability. Its military posture, in effect, conforms to the idea of defensive security. Within the Association of South-East Asian Nations (ASEAN), the established norm of mutual non-interference, moves towards greater economic regionalism (as in a free trade area) and economic growth-oriented policies are important factors for regional stability, although traditional threat perceptions, unresolved disputes and mutual suspicions still exist. All the regional States are parties to the NPT, while the dangers of ballistic missile proliferation are more likely to arise in the context of external developments or threats. But, reciprocal measures are needed to stabilise the sensitive multilateral dispute over the oil-rich Spratly Islands in the South China Sea. Maintenance of the *status quo,* which no side has respected, would help ease tensions until the

attitudes of claimants become more conducive to settling a complicated issue that could otherwise unhinge regional stability in the foreseeable future.

Defensive Security in Other Regions

The situation in South America has improved greatly. Fears of nuclear proliferation have been virtually put to rest following the recent agreement between Argentina and Brazil establishing an elaborate system of mutual inspection along with a safeguards arrangement with the IAEA. Meanwhile, ballistic missile proliferation has been contained as a result of Argentina's decision to disband its Condor-II project.

Trends towards the production of nuclear-powered submarines have also slowed down, dissipating any near-term possibility of their introduction. More broadly, Brazil and Argentina have substantially improved their bilateral relations, reversing their past pattern of rivalry and mutual suspicion. Prompted by these developments, Chile may become a full party to the nuclear weapon free zone regime established by the Treaty of Tlatelolco.

A major advance has been made towards Africa's denuclearisation following South Africa's accession to the NPT in July 1991 and its stated readiness to participate in a nuclear weapon free zone regime. Recent revelations have confirmed past suspicions that South Africa was engaged in a nuclear weapons programme. This is an important development for the Organisation of African Unity (OAU), which has been seeking a denuclearised status for Africa since its inception in 1964.

Role of Extra-Regional States

The Bush initiative of September 1991 and Moscow's reciprocal response regarding tactical nuclear weapons have eased long-standing concerns about the stationing and transit of nuclear weapons in regional territories. This development has removed an excessive and highly offensive element in the maritime environment and is now being reinforced by prospects of greater reduction of strategic nuclear weapons than envisaged in the START agreement. However, stepped-up American efforts to contain ballistic missile proliferation in the developing world should be combined with incentives to assist in building anti-missile defence. Otherwise, missile proliferation could create new offensive threats if significant disparities arise between regional States. Assistance against ballistic missile threat could also discourage proliferation by

States seeking to acquire military advantage or superiority over other States.

Of continuing concern is conventional arms trade involving the major suppliers at a time when declining defence budgets have reduced the domestic demand for weapons manufactured by Western firms. The initial five-power agreement of October 1991 and the follow-up agreement of May 1992 have raised hopes, but it remains to be seen how these agreements on rules of restraint will impact on conventional arms sales and regional stability. Similarly, there is uncertainty about the effectiveness of fledgling Western schemes to induce former Soviet scientists to reject possible recruitment offers by some Third World countries. The prevailing disarray in the Russian Federation could get worse.

Defensive Security and the Maritime Environment

The global naval presence of the former Soviet Union has decreased significantly and Moscow's naval force projection capabilities could suffer a greater decline. Although the United States naval forces will see some planned reduction in overall size over the next decade, its overseas presence is likely to remain considerable. At the regional level, naval forces are unmistakably expanding not only because of perceived force-modernisation requirements, but also in terms of absolute size. This unfolding process will lead to a more dense naval environment, heightening the potential threat posed by maritime boundary disputes and other military as well as non-military issues.

The physical and legal characteristics of the maritime environment provide considerable military transparency with regard to surface combatants, thus reducing the problems of verifying arms control with respect to such weaponry. Yet, partly because of organic linkages between naval and land forces, naval arms control presents greater difficulty than arms control on land. Traditional United States opposition to naval arms control, which remains firm, is also a limiting factor. As such, more reliance may have to be placed on confidence-building measures. However, there is some scope for promoting defensive security in the naval field at a time when regional navies are expanding and a new maritime situation is steadily emerging. For a start, the non-introduction of certain weapons systems could contain military tensions and limit naval build-up.

In particular, nuclear-powered submarines and aircraft carriers could be prohibited where they have not already proliferated, or their

deployment levels could be frozen. If a freeze is maintained long enough, existing deployments could be reversed as a result of obsolescence. Similarly, restrictions could be imposed on the introduction of large amphibious assault vessels and helicopter carriers.

Defensive Security and the United Nations

Freed from the restrictive cold war structure, some major regional States may seek to enhance their politico-military status in the international system. In the past, many small and medium States could obtain security assurances and assistance from one of the Super-Powers by taking sides in the cold war. The cold war context no longer exists, while the ad hoc United Nations-sanctioned multilateral action against Iraq's attempted annexation of Kuwait has not generated sufficient confidence with respect to international responses to future threats.

Defensive security seems implicit in the United Nations Charter. Its security concept rests on collective security and measures to regulate and limit the armed forces of member states. Collective security can work best if the military capabilities of member states are oriented towards defensive security, since it would enable the Organisation to enjoy assured superiority in offensive capability in case military action is required under Chapter VII. Yet, progress towards defensive security by member states may depend on initial moves towards collective security by the Organisation.

Strengthening the United Nations collective security role under Chapter VII would be an important macro-level development, providing some security assurances to the small and medium States and a measure of deterrent against the pursuit of aggressive design by the major regional States. Despite some complexities, unprecedented circumstances currently exist for restoring the United Nations centrality in the international system.

Prospects of Defensive Security in Non-Western Regions

Defensive security presupposes the renunciation of aggressive designs or the pursuit of big-power ambitions. The end of United States-Soviet rivalry has sharpened concerns regarding the future role of some major regional States and the implications of militarisation trends in some regions. There are also wider concerns about regional stability and the impact of defence spending by many States on their economic and social development at a time of a global resource crunch. The arms control effort, however, must be cognizant of political sensitivities,

the complex issues involved, the usually unexpressed concerns of some States about their politico-military status in the regional and international hierarchy, and the importance of creating a political context for translating a security imperative into an acceptable political reality. There are no standard formulas that could be operationalised for genera] application. Models developed in the West during the cold war are, at best, of limited relevance.

The non-Western regions generally constitute a more challenging environment than the simpler East-West context when the United States and the former Soviet Union engaged in arms control efforts during the cold war. The risk of nuclear war and the inherent danger of global devastation provided the basic impetus for those efforts. Despite such a powerful impetus and the bipolar context, the arms control effort proved tedious and yielded limited results until the underlying political tensions began to dissipate rapidly in the late 1980s.

Arms control in general—not to mention such ambitious concepts as defensive security—has to contend with the problems posed by major territorial disputes, other political tensions, geographical complexities, disparities in power-potential and the multiplicity of independent actors that exist in many non-Western regions. In general, some States may be more capable of posing threats than others or be geographically better placed. Similarly, some States may be landlocked or coastal, while the maritime interests of littoral States may vary significantly. Military capabilities directed at one State could have unintended implications for another. Security linkages between adjacent regions may have to be taken into account. Similarly, arms control may have to be pursued more often in a multilateral context. The United States and the former Soviet Union regarded each other as military co-equals and their arms control efforts were based on the principle of parity. Such a context hardly exists in any non-Western region.

The non-Western States are also handicapped by limited NTMs. Technology transfers would be necessary but may not be forthcoming or fully adequate. The United Nations could play an indispensable third-party role, but its capabilities are currently limited. Proposals by France, the former Soviet Union and Sweden in recent years to create an international agency for satellite monitoring and telecommunications remain dormant. In any case, a significant United Nations capability cannot be developed at short notice or without the commitment of substantial funds. As it is, the United Nations remains hamstrung by basic financial difficulties.

Conclusions

Though clearly desirable, defensive security has to deal with questions of feasibility. Geographical and other structural complexities, not to mention the current problems of verifying arms control obligations, are among the major factors limiting the scope of defensive security. A piecemeal approach aimed at reducing the offensive aspects of militarisation is more feasible, rather than a major restructuring of military relationships between States. Nevertheless, significant non-offensive defence arrangements could be attempted where a dominantly bilateral context exists and the political and security imperatives are clear, such as between India and Pakistan or North and South Korea.

Generally speaking, the prospects of defensive security as a distinct arms control concept would depend, in large part, on macro-level developments in the international system, such as progress towards "collective security", "comprehensive security" or "common security". The imperatives for making efforts in these directions are clear—not only to effectively contain military threats in a fatefully interdependent world and in a potentially dangerous technological environment, but also to direct greater energy and resources towards tackling the various non-military threats to security, which have assumed awesome proportions.

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CURRENT TRENDS IN THE INTERNATIONAL SECURITY ENVIRONMENT

From Cold War Confrontation to Cooperation

Throughout the post-war period, the cold war dominated global politics in at least three important respects. First, it divided most of the industrial world into two opposing systems, each led by a major power. Second, vast economic and human resources were devoted towards military ends. Finally, the cold war was virtually global in nature, affecting to a large extent all countries. During this period, the Non-Aligned Movement was formed in 1961 to provide developing countries with a forum for pursuing common goals and interests away from the polarisation of the cold war. Until the end of the cold war in the late 1980s, international politics were greatly influenced by these factors.

The degree of interaction between the two opposing systems was limited because confrontation tended to take precedence over cooperation. However, this confrontation—which was contained by fears of escalation in case of military conflict—froze the territorial and political status quo throughout Europe. Dialogue, including dialogue on arms control, was pursued largely to reduce tensions and was generally limited to areas of mutual concern.

During the cold war, security tended to be defined primarily in military terms. The result was most evident in Europe, where large forces were arrayed on either side of the East-West divide.

Another feature of the cold war was the competition for influence that developed in other parts of the world, each side trying to take advantage of ethnic or national conflicts or tensions. At the same time, local leaders, were tempted to drag the major powers into the conflict on their respective sides. Such outside involvement tended to lead to

the aggravation of regional conflicts by providing opposed parties with military and other means.

Partly as a result of the cold war and its extension into other parts of the world, 25 States came together in Belgrade in 1961 to form the Non-Aligned Movement. The Movement charted an independent political course away from the competing major powers. The Movement played a useful and constructive role in ensuring that, rather than being dominated by issues emanating exclusively from the cold war, the international agenda was broadened to reflect the specific concerns of developing countries. Furthermore, by making the United Nations a primary arena in which to pursue its goals, the Non-Aligned Movement influenced the context in which international issues were addressed, including development issues and disarmament.

Patterns of international politics began to change, first slowly including the dramatic challenge posed by the Solidarity Movement to the communist system in Poland in 1980 and then with increasing rapidity, in the latter half of the 1980s. The new Soviet leadership brought to power in 1985 realised that the political and economic stagnation that characterised Soviet and East European societies demanded an urgent response. The resultant policies of *perestroika* and *glasnost* were based on the belief that their success depended largely on changing economic priorities from the military to the civilian sector and on Western technical and financial assistance. This led to "new thinking" in Soviet foreign policy, which consisted in part of an effort to convince the West that the Soviet Union harboured no aggressive intentions. The West welcomed these changes with deep satisfaction and responded positively to policies that permitted the end of the cold war. As a result, Europe's division was ended, cooperation prevailed over confrontation and some regional problems could be addressed with renewed vigour.

The end of Europe's division was demonstrated most dramatically by the collapse of the 'Berlin wall in November 1989 and the subsequent unification of Germany the following October. The unfreezing of the territorial and political status quo was explicitly recognised by the States most directly involved in the cold war in November 1990. In their "Joint Declaration of Twenty-two States" (A/46/68, annex), the members of the North Atlantic Alliance and the Warsaw Treaty Organisation (WTO) affirmed "the end of the era of division and confrontation" and declared that "in the new era of European relations which is beginning, they are no longer adversaries, will build new partnerships and extend to each other the hand of friendship."

The end of the cold war had major implications for the region. In the East, the Warsaw Treaty Organisation was formally dissolved in July 1991, and new patterns of cooperation, consistent with the aspirations of the States concerned to pluralism, democracy and market economy, emerged in its stead. In another historic development, the Union of Soviet Socialist Republics ceased to exist in December 1991 when newly independent Republics of the former Soviet Union decided to create the Commonwealth of Independent States. Earlier, the Baltic States had regained their independence.

In the West, the North Atlantic Alliance responded to these changes by reaffirming the importance of achieving its objectives by political means, in keeping with Articles 2 and 4 of the North Atlantic Treaty. At the Rome Summit in November 1991, NATO leaders declared that the Alliance's "security policy can now be based on three mutually reinforcing elements: dialogue; cooperation; and the maintenance of a collective defence capability". These elements were given practical content in the "Alliance's New Strategic Concept", adopted on the same occasion. The commitment to dialogue and cooperation was institutionalised in the creation of the North Atlantic Cooperation Council, which includes all NATO and former Warsaw Treaty members.

The end of the cold war has also resulted in an intensification of European-wide deliberations within the context of the Conference on Security and Cooperation in Europe (CSCE), in which Canada and the United States of America also participate. In the Final Act adopted at Helsinki in 1975, the then 35 participating States accepted a number of commitments concerning respect for human rights' and fundamental freedoms, economic cooperation and social justice, as well as military security. At a number of follow-up meetings and conferences, the implementation of these commitments was discussed and new measures were agreed upon. In this way, the Helsinki process contributed substantially to the new era we are now witnessing in Europe. It has allowed a new quality of political dialogue and cooperation, transforming the CSCE process into a more institutionalised relationship.

At the conclusion of the CSCE Summit, held in Paris from 19 to 21 November 1990, the then 34 CSCE member States adopted "The Charter of Paris for a New Europe", in which they recognised that the "era of confrontation and division of Europe has ended". They also reiterated the continuing validity of the Ten Principles of the Helsinki Final Act of 1975, stating that these would form the basis of their relations. Finally, the CSCE members agreed to begin the institutionalisation of

the CSCE process by creating a Council composed of their foreign ministers that would meet at least annually; a Committee of Senior Officials that would meet more frequently; a Conflict Prevention Centre (CPC) to be based at Vienna; a Secretariat located at Prague; and an Office for Free Elections to be housed at Warsaw (later renamed the Office for Democratic Institutions and Human Rights).

The first significant step in accelerating the process of winding down the military confrontation was the successful conclusion of the Stockholm Conference on Confidence- and Security-Building Measures and Disarmament in Europe in September 1986. The. Conference extended the initial confidence- and security-building measures (CSBMs) agreed to as part of the Helsinki Final Act in a number of areas. It called for prior notification of military activities above a certain level; specified mandatory invitation of observers from all CSCE States to attend notified military activities; instituted an annual exchange of forecasts regarding all notifiable military activities; and provided for on-site inspections from the air and/or ground to verify compliance with agreed measures without a right of refusal.

Aside from the notable increase in transparency that these measures implied, the most remarkable feature of the CDE agreement related to verification, including mandatory on-site inspections. This was the first time that on-site inspections were accepted as an integral part of an arms control verification regime.

In the late 1980s, political changes considerably brightened the prospect of significant reductions in conventional forces in Europe. By November 1990, the 22 NATO and Warsaw Treaty countries had agreed in the Treaty on Conventional Armed Forces in Europe (CFE) to reduce their conventional armaments in the five categories that were considered to be the most critical to offensive actions, to significantly lower levels. When fully implemented, the Treaty will ensure the destruction or permanent removal from Europe of over 125,000 tanks, artillery pieces, armoured combat vehicles, combat aircraft and attack helicopters. In addition to the force limitations and required reductions, the other major contribution of the CFE Treaty consists of its information exchange and verification provisions. Together with the new CSBMs agreed to in Vienna in 1990 and 1992, which expand on the Stockholm Document in a number of areas, these provisions will ensure a high degree of transparency in the organisation and deployment of military forces throughout the European continent.

The CFE Treaty reverses a decades-long build-up of conventional military power in Europe and goes a long way towards achieving the objective, first set out in the mandate to the negotiations and repeated subsequently in the Treaty's preamble,

> "of establishing a secure and stable balance of conventional armed forces in Europe at lower levels than heretofore, of eliminating disparities prejudicial to stability and security and of eliminating, as a matter of high priority, the capability for launching a surprise attack and for initiating large-scale offensive action in Europe".

The military confrontation has also been reversed as regards the nuclear capabilities of the two major powers. In December 1987, the United States of America and the Union of Soviet Socialist Republics signed the Treaty on Intermediate-Range Nuclear Forces (INF), which eliminated their ground-based missiles with ranges between 500 and 5,000 kilometres. Four years later, in July 1991, the two countries signed the Strategic Arms Reduction Treaty (START), under which both sides will reduce their strategic offensive nuclear weapons by about 30 per cent from current levels the first-ever reductions agreed to as a part of a strategic nuclear arms control agreement. The extensive verification regimes in the INF and START treaties encompass national technical means, routine and challenge on-site inspections and operational constraints affecting heavy bombers and mobile missiles.

More far-reaching nuclear reductions have emerged since the signing of the START Treaty. In September 1991, President George Bush of the United States announced sweeping unilateral changes in strategic and tactical nuclear forces. A week later, then President Mikhail Gorbachev of the Soviet Union responded positively to this announcement. Under the initiatives, ground-based tactical nuclear weapons will be eliminated, and all non-strategic nuclear weapons have been removed from surface vessels, attack submarines, and land-based naval aircraft. Many of these weapons will be dismantled; the remainder will be secured in central areas on United States and Russian territory. With regard to strategic forces, the two countries agreed to take heavy bombers off alert status, to cancel a number of strategic and air-launched missile programmes and to deactivate some land-based missiles. Following these initiatives, and in response to further dramatic changes in the security environment, NATO and the Russian Federation announced additional reductions in their remaining sub-strategic nuclear forces. As a result, sub-strategic nuclear forces on both sides have been reduced by roughly 80 per cent.

With the dissolution of the Soviet Union in December 1991, further nuclear arms reductions became possible. After just five months of negotiations, the United States and Russia agreed in June 1992 to reduce their respective strategic nuclear arms by 70 per cent room current levels. Under the agreement, both sides would each deploy no more than 3,000 tot 3,500 warheads, eliminate all multi-warhead land-based missiles and limit the number of warheads at sea to 1,750 on each side. These levels must be reached by 2003 at the latest, but they may be achieved by 2000 provided the United States can assist the Russian Federation with the task of destroying the forces to be reduced.

The totality of the arms control achievements to date represent a dramatic reversal of the arms race that characterised the East-West conflict since its inception. The net effect of the combination of agreements is increased security at lower cost and force levels for all States party to them. In addition, the verification regimes put in place by the agreements expose all countries to intrusive inspections that will not only discourage non-compliance but also provide mutual information on armed forces, military activities and force planning in each of these countries. The result is increased transparency of military activities and capabilities and enhanced mutual confidence. These agreements together represent a major step towards creating a monitored security area throughout the European continent.

An Enhanced role for Regional Cooperation and the United Nations

The move from the cold war to cooperation has done more than unfreezing the status quo in Europe; a more general thawing is taking place on a global level. The international security environment is at present characterised by a positive evolution in some areas of the world. In those areas, conflicts are being resolved largely through peaceful means, and compromises acceptable to all sides in a dispute seem in many instances to be more readily at hand or acceptable. The new opportunities, as well as the added demands for addressing international disputes, have, raised the potential for multilateral approaches to conflict resolution, both at the global and the regional levels.

Regional organisations and forums have been provided with a greater opportunity to play a role in settling international differences in their respective regions. In Central America, the "Contadora Process" played a vital role in forging agreement among the five Central American Governments to settle their internal and external disputes and conflicts. In South-East Asia, the Association of South-East Asian Nations (ASEAN)

was instrumental in getting the peace process going in Cambodia. The Organisation of the Islamic Conference (OIC) has started to play a serious role in addressing regional situations, particularly those relating to the Middle East. In Africa, the Organisation of African Unity (OAU) has been involved in mediating disputes in a number of areas. And in Europe, regional organisations are facing a serious challenge in this regard in the Yugoslav crisis.

In addition, the present cooperative attitude among the members of the Security Council, particularly the permanent members, has in many instances unblocked the mechanisms enshrined in the Charter of the United Nations for effectively addressing international disputes, thus allowing the United Nations to play an active role in the settlement of many disputes. This increased role of the United Nations is also demonstrated by the fact that while the United Nations launched 13 peace-keeping operations through its first 43 years of existence, an equal number of such operations have been launched since 1988. Working often in concert with regional organisations, the United Nations has played an active role in such areas as Central America, South-East Asia, Africa, the Middle East and Europe. A brief survey of some of these efforts underscores the recently enhanced role of multilateral institutions.

Central America

Efforts to resolve the internal and international conflicts in Central America were first undertaken by States in the region. In 1983, the so-called "Contadora Group", composed of Colombia, Mexico, Panama and Venezuela, initiated consultations with five Central American Governments (Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua) to find a negotiated solution to the political problems of the region. Despite the creation of a Support Group consisting of Argentina, Brazil, Peru and Uruguay in 1985, progress on the issues remained elusive until the five Central American Governments proved willing to tackle the issues themselves.

This happened in February 1987, when President Oscar Arias Sanchez of Costa Rica set out a plan for the region. The "Arias Plan" formed the basis of the agreement on "Procedures for the establishment of a firm and lasting peace in Central America" signed by the five Central American Presidents at Guatemala City, on 7 August 1987 at the Esquipulas II summit meeting (A/42/521-S/19085, annex). In the Esquipulas II agreement the five concerned Central American countries

agreed to launch a process of democratisation in their countries, promote a national dialogue, decree a general amnesty, bring about a genuine cease-fire and hold free and fair elections. They also requested all concerned to halt their support for irregular forces and insurrectional movements and to reiterate their earlier commitment to prevent the use of their own territory for destabilisation of other countries in the region. In order to achieve these objectives, the countries set up an International Verification and Follow-up Commission composed of the ministers for foreign affairs of the Contadora and Support Groups, the ministers for foreign affairs of the five Central American countries and the Secretaries-General of the United Nations and the Organisation of American States.

In order to implement the Esquipulas II agreement it was necessary to resolve three issues, all of which the United Nations was asked to undertake. First, to implement the process of democratisation, the Government of Nicaragua agreed to call for free and fair elections, to revise its electoral laws and procedures and to invite international observers of the elections. The latter was undertaken by the United Nations Observer Mission for the Verification of the Elections in Nicaragua (ONUVEN). This was the first time the United Nations had been invited to monitor elections in a sovereign State and represented the first major United Nations operation in the western hemisphere.

Second, in order to verify compliance with the security commitments of the agreement— including a halt to aid to irregular forces and insurrectional movements and a commitment not to allow the territory of one State to be used for attacks on another—the Security Council agreed on 7 November 1989, in resolution 644 (1989), to create the United Nations Observer Group in Central America (ONUCA).

Finally, in December 1989 the five Central American Governments requested the Secretary-General of the United Nations to expand the mandate of ONUCA to include verification of any cease-fire and the demobilisation of irregular forces that might be agreed to in the region. Following the elections in Nicaragua on 25 February 1990, the new Government asked the Secretary-General to assist in the voluntary demobilisation of the members of Nicaragua's resistance. In March 1990, the Security Council agreed, in resolution 650 (1990), to expand ONUCA's mandate, giving it the responsibility of taking delivery and disposing of the weapons, *material* and military equipment of the resistance. This mission was completed in June 1990.

The success of the United Nations in dealing with the situation in Nicaragua subsequently led the Security Council, in; resolution 654 (1990), to welcome the efforts of the Secretary-General to promote the achievement of a negotiated political solution to the conflict in El Salvador. These efforts resulted in agreement between the two parties that the United Nations would monitor any accords reached between them, including one concerning human rights that was agreed to in July 1990. On 20 May 1991, the United Nations Observer Mission in El Salvador (ONUSAL), created by the Security Council under resolution 693 (1991) at the request of both sides in the Salvadoran conflict, entered El Salvador to begin the task of monitoring the human rights agreement.

A settlement to the conflict in El Salvador was reached in September 1991, when the two sides met in New York for negotiations under the auspices of the United Nations Secretary-General. The "New York Agreement" (A/46/502-S/23082, annex) called, *inter alia*, for the establishment of a National Commission for the Consolidation of Peace—to be composed of representatives of the Government, the FMLN, political parties, churches and the United Nations—to carry out the accords. The Accords called for the "purification" of the armed forces, a reduction in the size of the army, no discrimination for former FMLN combatants who apply for membership in the new police force to be created under civilian leadership, and the right of FMLN families and sympathizers to hold onto lands they have previously occupied".

Final details of the settlement were reached in negotiations at the United Nations, on 31 December 1991. A Treaty (the Peace Agreement) to this effect was signed on 16 January 1992. In this connection, the Security Council decided in resolution 729 (1992) to expand the mandate of ONUSAL to include the verification and monitoring of the implementation of all the agreements, in particular the Agreement on the Cessation of the Armed Conflict and the Agreement on the Establishment of a National Civil Police.

South-East Asia

Regional efforts to find a comprehensive political settlement of the conflict in Cambodia were initiated by the Association of South-East Asian Nations (ASEAN). The initiative gained momentum in 1988 with the holding, in Indonesia, for the first time, of an informal meeting of the Cambodian parties involved in the conflict. The meeting, known as the Jakarta Informal Meeting I (JIM I), was also attended by a Special Representative of the Secretary-General of the United Nations. Following

further regional efforts, the Paris Conference on Cambodia was convened in August 1989 under the co-chairmanship of France and Indonesia and in the presence of the Secretary-General. Although all Cambodian parties had agreed to accept free and fair elections in the exercise of the right to self-determination of the Cambodian people, a serious dispute concerning power-sharing arrangements during the transitional period leading to the elections remained unresolved.

To break the deadlock, further efforts to find a comprehensive political settlement were focused on a proposal by Australia, taking into account the broad previous regional efforts. The elements of that proposal include the establishment of a Supreme National Council under the leadership of Prince Norodom Sihanouk, as the unique legitimate body and source of authority in which, throughout the transitional period, the sovereignty, independence and unity of Cambodia would be enshrined. The proposal also anticipated the delegation of authority by the Supreme National Council to a United Nations Transitional Authority in Cambodia (UNTAC) to prepare and conduct the elections. In order to create a neutral political environment necessary for the conduct of elections, UNTAC would supervise the running of key ministries, including defence, foreign affairs, public security, finance and information. In addition, United Nations peace-keeping forces would be responsible for verifying the withdrawal of Vietnamese forces, a cease-fire agreement and a halt to arms supplies to the Cambodian parties.

The permanent members of the Security Council have also made an important contribution to the efforts towards a comprehensive political settlement to the conflict in Cambodia. Elaborating on the progress reached through the regional efforts, they developed a framework for the political settlement (known as the "framework document") which included the formation of a Supreme National Council (SNC). At a meeting in Jakarta in September 1990, the Cambodian parties accepted the "framework document" in its entirety as the basis for settling the conflict in Cambodia. After its subsequent endorsement by the Security Council in its resolution 668 (1990), the "framework document" was elaborated into draft agreements.

Since mid-1991, efforts to reach a comprehensive political settlement to the conflict in Cambodia have accelerated. The Cambodian parties themselves played a major role in a series of meetings of the SNC. In June 1991, they reached agreement on an indefinite cease-fire and a halt to foreign arms supplies; in July, they agreed to invite a special

United Nations team to visit the country to supervise the cease-fire, and decided that the Cambodian seat in the United Nations would be occupied by the SNC; in August, the parties agreed to reduce the number of troops and weapons in the Cambodian army and the resistance forces by 70 per cent and to deploy the remaining soldiers and equipment in cantonments to be supervised by the United Nations; and finally, in September, the Cambodian parties reached agreement on how to conduct elections—the last major obstacle to an overall accord. These achievements paved the way for the reconvening of the Paris Conference on Cambodia and the signing of the Agreements on a Comprehensive Political Settlement of the Cambodia Conflict on 23 October 1991.

Against the backdrop of the vastly improved international political and security climate, as well as the gradual transformation of military structures and nuclear strategies that are now underway, ASEAN, in its Summit Conference held in Singapore on 27 and 28 January 1992, welcomed the accession by all countries in South-East Asia to the Treaty of Amity and Cooperation in order to provide a common framework for cooperation; endorsed the role of existing forums and intra-ASEAN dialogue to enhance cooperation in security matters; expressed the determination to realise the Zone of Peace, Freedom and Neutrality and a South-East Asian Nuclear Weapons Free Zone; and recognised the centrality of the United Nations role in the maintenance of international peace and security.

Africa

The Organisation of African Unity (OAU) has since its inception mediated and settled regional disputes and, wherever possible, it has done so in active cooperation with the United Nations. OAU's efforts have largely been made through the informal mechanism of the Assembly of Heads of State and Government, acting either collectively or by mandate of the serving Chairman of the organisation rather than through the formal organ specifically set up for that purpose and known as the Commission of Mediation, Conciliation and Arbitration. Notable OAU efforts in the last 10 years are described below:

   (a) The conflict between Chad and Libya was mediated by OAU, and in 1981 led to the Organisation's first attempt at peace-keeping—only Nigeria sent troops to Chad but they were later withdrawn due to difficulties in cost-sharing by member States;

(b) The current intra-State conflict in Rwanda has lately abated due largely to the OAU mediatory intervention;

(c) The Sudan talks held in Abuja last May were part of OAU's efforts at solving the nine-year-old internal strife in southern Sudan;

(d) In West Africa, the situation between Ghana and Togo has been eased in the last five years through the timely intervention of influential member States in the subregion, acting in the common interest of OAU;

(e) In 1988, the Economic Community of West African States (ECOWAS) was instrumental in alleviating tensions between Burkina Faso and Ghana;

(f) In addition, the current ECOWAS monitoring effort in Liberia known as ECOWAS Monitoring Group (ECOMOG) has greatly contributed to bringing the warring factions closer to peace.

Some of OAU's efforts are either complementary or have served as propellers to those of the United Nations, for instance, the two cases of Western Sahara and Somalia.

In August 1988, the Kingdom of Morocco and the Frente Popular para la Liberacion de Saguia el-Hamray de Rio de Oro (Frente POLISARIO) accepted a joint proposal by the Secretary-General of the United Nations and the Chairman of OAU to hold a referendum on self-determination for the people of Western Sahara. The proposal stipulated that the referendum would be organised and supervised by the United Nations in cooperation with OAU. In April 1991, the Security Council, in resolution 690 (1991), approved the establishment of the United Nations Mission for the Referendum in Western Sahara (MINURSO) to administer and supervise the referendum. A cease-fire agreement was signed in June of the same year and went into effect three months later when MINURSO arrived in the region. The United Nations-supervised referendum originally scheduled to take place in January 1992 has been postponed until such time as Morocco and Frente POLISARIO have resolved their differences on the question of criteria for eligibility to vote in the referendum. In June 1992, representatives of both Morocco and Frente POLISARIO participated in separate consultations in Nigeria in order to find ways and means of resolving the situation.

The basis for the settlement of the question of Namibia, ending its occupation by South Africa, was Security Council resolution 435 (1978),

adopted on 29 September 1978. In late 1988, South Africa accepted the terms of the resolution in exchange for Cuba's agreement to withdraw its forces from Angola. An accord to this effect was signed by South Africa, Angola and Cuba on 22 December 1988. With the Angolan accords signed, the cease-fire between the South West Africa People's Organisation (SWAPO) and South African forces was set to go into effect on 1 April 1989, thereby setting in motion the seven-month programme leading to the independence elections. The civilian component of UNTAG was put into place in May 1989 to supervise voter registration and organise the elections. Elections were held on schedule in early November, giving SWAPO a majority of the seats in the Constituent Assembly. A constitution was agreed to thereafter, and full Namibian independence was established on 21 March 1990.

Furthermore, in an effort to bring current United Nations efforts in Somalia to fruition, Nigeria has given former President Siad Barre temporary political asylum.

In an attempt to refine its aforementioned informal method of conflict prevention and resolution, the Assembly of Heads of States and Government of Africa adopted in 1990 the Declaration on the Political and Socio-Economic Situation in Africa and on the Fundamental Changes taking Place in the World, in which they committed themselves, *inter alia*, to the peaceful and speedy resolution of all conflicts through the establishment of a comprehensive and permanent system or machinery for the twin functions of peacemaking and peace-keeping. To concretize and institutionalise the new thinking, the Council of Ministers in 1991 approved an appropriation in the budget to be used for conflict resolution and, by March 1992, a Division on Conflict Management was set up within the OAU General Secretariat to assist the Secretary-General, on a permanent basis, in the tasks of conflict prevention and resolution in consultation with member States.

The envisaged OAU permanent mechanism consists of four organs as follows:

(a) Office of the Secretary-General

Backed by the General Secretariat, the Office of the Secretary-General is expected to act as an early-warning system in conflict prevention through the monitoring of latent and potential conflict situations and as a mediator in the resolution of conflicts. The early-warning system will be the repository of a conflict-related database and information put at the disposal of the Secretary-General, the analysis of which will

form the basis of the Secretary-General's recommendations to the Bureau of the Assembly of Heads of State and Government. The Secretary-General will subsequently implement decisions in conflict prevention and resolution taken by the Bureau.

(b) Bureau of the Assembly of Heads of States and Government

This organ is favoured above other existing or newly proposed ones because of its manageable size and past experience. The Assembly of Heads of State and Government will entrust the Bureau with the responsibility of dealing with conflict situations. The Bureau will assume, on behalf of the Assembly, the overall supervision of conflict prevention and resolution and will be the supreme organ responsible for peacemaking and peace-keeping operations. The Bureau, which will meet at the request of the Chairman or the Secretary-General of OAU, will be composed of the Chairman and eight other members representing the five, regions in accordance with the established practice. The Bureau will exercise its mandate between the ordinary sessions of the Assembly and is to meet at the level of Heads of State and Government whenever possible. Otherwise, it will meet at the level of Ministers or Ambassadors.

(c) Defence Commission

The relevance of the Defence Commission regards essentially conflict resolution through peace-keeping operations. The Bureau of the Commission is expected to make recommendations on the training and harmonisation of the different components of a possible inter-African peace-keeping force to be identified at the national level for possible deployment in conflict situations.

(d) Interim Arbitral Tribunal

The Interim Arbitral Tribunal is to arbitrate on issues of a legal nature, such as the interpretation of treaties and the determination of fishing rights and border claims, pending the establishment of an African Court of Justice.

Middle East

The United Nations has had a long-standing role in the Middle East, a region where conflict has been endemic for most of the post-war period. The Arab-Israeli conflict, in particular, with the question of Palestine at its core, has been an area of United Nations involvement since its early years, and the subject of numerous United Nations resolutions covering both its territorial political dimension and

transcending peacemaking and peace-keeping operations. These resolutions have, *inter alia,* affirmed the legitimate right of the Palestinian people to self-determination; the necessity of Israeli withdrawal from occupied territories; the necessity to guarantee the security of all States within internationally recognised borders and to terminate states of belligerency; the illegal character of Israeli settlement activity in occupied territories; and the necessity of convening an International Peace Conference on the Middle East.

While regrettably this conflict remains unresolved, it is noteworthy to underline that the framework for all peace efforts in the Middle East since 1967 has continued to *be* Security Council resolutions 242 (1967) and 338 (1973). It is also noteworthy that the peace process on the Middle East, initiated in Madrid in October 1991, which the General Assembly welcomed in its resolution 46/75 of 11 December 1991, has since then commenced both its bilateral and multilateral tracks. In the meantime, the United Nations peace-keeping forces and observers continue to play an invaluable role in preventing the exacerbation of the conflict as they are deployed in Lebanon (UNIFIL), the Golan Heights (UNDOF) and the Sinai desert (UNTSO).

United Nations peace-keeping forces have also been deployed in other parts of the region, on the Iran-Iraq border, and more recently, along the Iraq-Kuwait border. This last mission was a direct result of the most intense use of United Nations mechanisms in recent history, which followed the Iraqi invasion of Kuwait on 2 August 1990. During the course of the conflict, the Security Council passed a total of 15 resolutions, which dealt with such issues as: the imposition of mandatory sanctions (resolution 661 (1990) of 6 August 1990), the enforcement of these sanctions by means of a naval, air and land blockade (resolutions 665 (1990) of 25 August 1990 and 670 (1990) of 25 September 1990), and, most dramatically, the authorisation to member states to "use all necessary means to uphold and implement [previous resolutions] and to restore international peace and security in the area" if Iraq failed to withdraw unconditionally from Kuwait, by 15 January 1991 (resolution 678 (1990) of 29 November 1990). Iraq's refusal to comply with this and previous resolutions resulted in its forceful ouster from Kuwait by a United States led coalition of forces.

The role of the United Nations expanded considerably in the aftermath of that war. In addition to the United Nations observer unit established to monitor the demilitarised zone along the Iraq-Kuwait border, the cease-fire resolution passed by the Security Council on 3

April 1991 (resolution 687 (1991)) invested the United Nations with the responsibility to administer a fund to pay for compensations, which would be drawn from future Iraqi export earnings. In addition, under section C of the resolution, the United Nations took on the task, through the creation of a United Nations Special Commission (UNSCOM), to inspect and seize Iraq's capability for producing weapons of mass destruction, including existing stocks of weapons, as well as ballistic missiles with ranges greater than 150 kilometres. UNSCOM is also responsible for destroying chemical and biological weapons and production capabilities, for verifying destruction by Iraq of banned ballistic missiles, and, in cooperation with the International Atomic Energy Agency (IAEA), for the destruction, removal, or rendering harmless of all nuclear weapons and nuclear weapons usable materials. Once this task is completed, UNSCOM and IAEA will be responsible for future monitoring and verification of Iraq's compliance with the provisions of section C of Security Council resolution 687 (1991). The involvement of the United Nations in the disarmament of Iraq's nuclear, chemical, biological and missile capabilities constitutes a remarkable effort on the part of the United Nations regarding facility inspection, verification of compliance and destruction of weapons.

In recent years, the Organisation of the Islamic Conference has taken a serious role in addressing regional situations and issues, particularly those relating to the Middle East. The Organisation has exerted diplomatic efforts in resolving a wide range of other regional and international problems. These include ongoing conflict between Azerbaijan and Armenia, conflict in Bosnia and Herzegovina, the situation in Afghanistan, the plight of Myanmar refugees, etc. Most importantly, it has served to get its member States together on a regular basis, which has had the very positive effect of reducing suspicions and promoting trust and friendly relations among them.

Europe

Since the transformations in Europe in 1989, the various frameworks dealing with the situation in that region faced their first test when the Yugoslav Republics of Slovenia and Croatia declared their independence in June 1991. In the course of responding to these and other developments, the States participating in the CSCE process, the European Community (EC) and the North Atlantic Alliance adjusted their practices and mechanisms for dealing with conflict in Europe. In Helsinki, CSCE institutions and structures established by the Charter of Paris for a New Europe were further developed in order to enhance the capacity

for conflict prevention and crisis management. At the CSCE Summit held at Helsinki on 9 and 10 July 1992 the Helsinki document "The Challenge of Change" was adopted, which strengthened the role of the CSCE Council of Ministers with its Chairman in Office, as well as the Committee of Senior Officials, acting as its agent, devising means to assist them. The CSCE capacity in the field of early warning was strengthened in particular by the activities of the newly established High Commissioner on National Minorities. Provisions for CSCE peace-keeping according to agreed modalities were also adopted. CSCE peace-keeping activities may be undertaken in cases of conflict within or among participating States to help maintain peace and stability in support of an ongoing effort to arrive at a political solution.

In this respect, the CSCE may benefit from the resources and experience and expertise of existing organisations such as EC, NATO and the Western European Union (WEU), and could therefore request them to make their resources available in order to support it in carrying out peace-keeping activities. A CSCE Forum for Security Cooperation was also established to give new impetus to the process of arms control, disarmament and confidence- and security-building, to the enhancement of consultation and cooperation on security matters and to furthering the process of reducing the risk of conflict. Efforts in these fields are to be coherent, interrelated and complementary.

The European Community and its member States have strengthened their ability to act in a coordinated manner by establishing a Common Foreign and Security Policy, which is to be implemented after ratification of the Treaty on Political Union signed at the Maastricht Summit in December 1991. The North Atlantic Treaty Organisation adopted a new strategic concept and strengthened its role as an integral part of security in Europe. Through the creation of the North Atlantic Cooperation Council (NACC) it has established patterns of cooperation with new partners in Europe and Eurasia in harmony with the goals of CSCE.

The Yugoslav crisis was the first time that the CSCE mechanisms agreed to in Paris in November 1990 and in Berlin the following June could be put into effect. One such mechanism concerns "unusual military activities" of military forces outside their peacetime locations that are militarily significant. At the request of the Government of Austria the consultative committee of the Conflict Prevention Centre met to discuss the crisis. An emergency meeting of the Committee of Senior Officials was also convened at the CSCE secretariat in Prague on 3 July 1991.

The member States decided to give the European Community, the task of finding a solution to the conflict.

The Community's effort proved only partly successful. Meeting on the island of Brioni on 8 July 1991, the Federal Republic of Yugoslavia and the Republic of Slovenia agreed to accept a compromise proposed by the Community that, *inter alia*, involved: the suspension of implementation of the Slovenian and Croatian independence declarations, though not the declarations themselves; an immediate end to all hostilities; an order to federal armed forces to return to their bases; the deactivation of the Slovenian militia and the lifting of Slovenian blockades of federal armed units; and a three-month cooling-off period, during which time there would be negotiations among the six Republics and two autonomous provinces. Seventy monitors from EC countries were dispatched to monitor implementation of these provisions.

Although the Brioni Agreement contributed to diffusing the situation in Slovenia, it did not halt the fighting in Croatia. A peace conference, convened at The Hague was unable to halt the fighting. Since September 1991, the United Nations at the request of EC has become actively involved alongside EC in seeking a solution to the Yugoslav crisis. A plan for United Nations peace-keeping operations in Yugoslavia drawn up by the Secretary-General was accepted by the Serbian Government, the Government of Croatia and the Federal Armed Forces on 2 January 1992. A cease-fire was also agreed.

In resolution 743 (1992), the Security Council decided to establish a United Nations Protection Force (UNPROFOR) in Yugoslavia. The first peace-keeping units arrived almost immediately thereafter. By July 1992, UNPROFOR was fully deployed in the eastern and southern parts of Croatia along the borders of Serbia and Bosnia and Herzegovina, to supervise implementation of cease-fire agreements in these regions. Furthermore, the Sarajevo airport was reopened under UNPROFOR protection after the adoption of Security Council resolutions 758 (1992) and 761 (1992), in order to allow for humanitarian assistance to Bosnia and Herzegovina by way of airlifts. These resolutions were adopted following the deterioration of the situation on the ground, in particular in Bosnia and Herzegovina. Parallel to these activities, CSCE declared Serbia in mid-April 1992 to be mainly responsible for the deterioration of the situation in Yugoslavia and warned it not to persist with its clear,, gross and uncorrected violations of relevant CSCE commitments. In May 1992, Yugoslavia was for that reason temporarily suspended from participating in the decision-making process of CSCE, and on 8 July it was excluded altogether from participating in any CSCE meeting.

Unfortunately, the deteriorating situation in Yugoslavia was not the only serious crisis Europe had to face. With the admission into CSCE of the former Soviet Republics during the meeting of the CSCE Council of Ministers at Prague in January 1992, tensions and conflicts erupting in Nagorno-Karabakh and Moldova in particular, became regular topics on the CSCE political agenda. A peace conference on Nagorno-Karabakh under the chairmanship of Italy, to be held at Minsk, which had been decided upon in March 1991, had not been able to convene as of the time of the completion of this study.

Existing and Emerging Threats and Risks

Notwithstanding recent encouraging trends toward resolving outstanding conflicts through peaceful means, many States continue to face traditional threats to their security. Weapons of mass destruction still pose a serious threat. In many parts of the world, violations of international law, competing territorial claims, aggressive behaviour, and mutual suspicion of aggressive intentions remain sources of conflict. In most cases, these conflicts are fuelled by the acquisition of military capabilities far in excess of legitimate security needs of the countries concerned. The resulting arms race adds to mutual suspicions and thus reduces security for all. Increased threats to security can also be posed by ethnic, national, cultural or religious differences within States, which could lead to the outbreak of violence and have inter- as well as intra-State implications.

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AFRICA: THE CASE FOR DISARMAMENT

African States do not, as a general rule, spend a lot of money on armaments. Those that do are few, and the really big spenders can afford it. But, the little money that they spend is "costly money" they can ill afford to throw away on arms. It comes in the form of foreign exchange from export earnings or of loans from abroad. The Libyan Arab Jamahiriya, reputed to be a big spender on armaments, is oil-rich and "people-starved": Hence, what it spends on the import of arms comes from its oil exports. The Republic of South Africa, in defence of its unpopular *apartheid* policies, invests heavily in defence and sells gold, mined by African labour, to buy arms. But, according to Gann and Duignan, South Africa still spends relatively very little on defence per capita. Uganda, ravaged by many years of internal civil strife and fratricidal wars, is known to have devoted 80 per cent of its national budget to the army during the first year of the government of the National Resistance Army (NRA); with wars raging in the north and east of the country, armies and armaments—not development—may be President Museveni's preoccupation for some time to come. Uganda, unlike Libya, cannot afford to spend as much on arms and men in uniform as it can on the building of railway lines. The same may be said of Somalia, Ethiopia and the Sudan. In short, Africa needs development, not armies and armaments.

In his book *Africa: Perspectives on Peace and Development*, Emmanuel Hansen has argued that "the civil strife and war industry" has thrived at the expense of development in Africa. We have made the same point, and have underscored the need for "stable structures of peace" so as to create an enabling environment for development in Africa. This is not to suggest that conflicts, which civil strife and wars thrive on, will be gone for ever. It is to make the point that a structure of peace establishes legal and political mechanisms through which social conflicts can be resolved or contained without resort to the use of

armaments or the threat of the use of armaments. A "balance of terror" (the threat to use armaments to resolve conflict) can be even more debilitating to development than the actual use of arms in the process of violent conflict resolution. For a lasting and reliable peace to be attained, it is important to fashion economic systems that can generate sustained economic growth, guarantee for the mass of the population enough to meet at least a certain minimum of material existence or basic needs, and establish "conflict managers" (States and governments) which are not only legitimate but have the authority and capacity to rule. How is this going to come about and to what extent are the "armaments industry" and the "armaments race" depriving Africa of the opportunity to travel along this development route?

Arms, the Man and the State

The International Institute of Strategic Studies periodically publishes *The Military Balance,* which gives an account of the number of men under arms in various countries and of the weapons they carry. We know, for example, that in 1983 and 1984, Angola, Ethiopia, Mozambique, Nigeria, Somalia, South Africa and the Sudan were the most militarised States in Africa (Tables 1 and 2). While the absolute figures must have changed over the past four years, the proportional relationships have remained more or less constant. These figures, by themselves, do not tell us much; what we need to ask is whether the way they have been growing (Table 3) or whether their impact on development and policy (Table 4) calls for a case to be put in favour of disarmament.

Army Size and National Development

South Africa, Nigeria, Ethiopia and the Libyan Arab Jamahiriya have armed forces larger than those of many members of the North Atlantic Treaty Organisation (NATO). In South Africa, Nigeria and Ethiopia, the armies have grown as a result of the need to contain internal strife; external aggression—particularly in the cases of South Africa and Ethiopia—has become prominent as a factor dependent on the internal situations. In the case of Libya, the army has increasingly become a way of "busying giddy minds with foreign quarrels", to quote Shakespeare. Rather than spend lavishly on the army and arms, conflicts can be resolved politically—and hence much more cheaply. Further, as conflicts continue to be resolved militarily, the size of armies will continue to increase, and eventual demobilisation when peace is established—as the cases of Nigeria and Zimbabwe show—will become even more difficult.

TABLE 1

African Ground Order of Battle

Country	Tanks[a]	Armoured Cars APCs	Field artillery[b]
Angola	375	350	250
Benin (Dahomey)	0	7+	4
Botswana	0	30+	0
Burundi	0	47+	0
Cameroon	0	30	15
Central African Republic	4	18	0
Chad	0	26	na
Congo	17	85	31
Djibouti	0	34	na
Equatorial Guinea	0	20	0
Ethiopia	930	810	700
Gabon	0	61+	0
Gambia	0	12	0
Ghana	0	100	0
Guinea	50	65	na
Guinea - Bissau	10	na	na
Ivory Coast	5	42	4
Kenya	72	130	16+
Liberia	0	12	8
Madagascar	na	18+	na
Malawi	0	10	9
Mali	49	60	na
Mauritania	0	112	na
Mozambique	195+	237	250
Niger	0	54	0
Nigeria	115	211	400+
Rwanda	0	12+	0
Senegal	0	62+	6+
Sierra Leone	0	na	10
Somalia	240	424+	210
South Africa	250+	1,700	165+
Sudan	242	463	176
Tanzania	96	70	290
Togo	9	89	4
Uganda	13	150	80
Upper Volta (Burkina Faso)	0	55+	na
Zaire	60	227+	na
Zambia	34	13	128+
Zimbabwe	28	63+	34+

Source: International Institute for Strategic Studies. *The Military Balance 1983 - 84* (London: IISS), pp. 66-81.

  na = not available and/or unreliable.

  [a] Includes light tanks.

  [b] Includes guns/howitzers, 75 mm or larger.

TABLE 2

Number of Personnel in African Armies, by Country

Under 5,000	5,000 - 20,000	20,000 - 50,000	50,000 - 100,000	Over 100,000
Benin (Dahomey)	Burundi	Angola	Somalia	Ethiopia
Botswana	Congo	Madagascar	South	Nigeria
Cape Verde	Ghana	Tanzania	Africa	
Central African	Guinea	Zaire	Sudan	
Republic	Guinea -	Zmababwe		
Chad	Bissau			
Djibouti	Kenya			
Eq. Guinea	Mauritania			
Gabon	Mozambique			
Gambia	Rwanda			
Ivory Coast	Senegal			
Liberia	Uganda			
Malawi	Zambia			
Mali				
Niger				
Seychelles				
Sierra Leone				
Upper Volta				
(Burkina Faso)				

Source: International Institute for Strategic Studies, *The Military Balance 1983-84* (London: IISS, 1983), pp. 66-81.

Even in the "non-conflict areas", the sizes of armies are too big for both the size of the populations and the per capita gross national product (GNP) of these countries. For example, in 1977, the International Institute of Strategic Studies estimated that the defence expenditures, per man, range from around $31,000 for NATO down to $8,000 and less for the developing countries. When these figures are reduced to defence expenditure per man and per capita GNP, it is found that developing countries are shouldering a much heavier burden in maintaining men in uniform that their "national wealth" can afford.

It is sometimes argued that the army is a good source of employment in developing countries. After all, with few opportunities for work, it is only fair that the public sector—the army included—should be expanded to solve the unemployment problem. This would, however, lead to a vicious circle. First,—except for the army corps of engineers, which rarely exists in Africa—army work is very unproductive work. The armed forces survive on social surplus without producing this surplus. Secondly, the most productive labour force within an economy

TABLE 3

**Personnel Strengths of African Armed Forces (Army. Vavy. Air force),
Rounded to the Nearest Thousand**

Country	1966	1971	1976	1981
Angola[a]	—	—	30	33
Benin (Dahomey)	2	na	2	3
Botswana	—	—	—	2
Burundi	1	na	na	6
Cameroon	4	na	6	7
Central African Republic	1	na	na	2
Chad	1	na	5	3
Congo	2	na	7	10
Djibouti[a]	—	—	—	2
Ethiopia	35	43	51	230
Gabon	1	na	na	2
Ghana	17	19	18	15
Guinea	5	5	6	10
Guinea - Bissau[a]	—	—	na	6
Ivory Coast	4	4	4	7
Kenya	5	7	8	15
Liberia	3	na	5	5
Madagascar	4	4	5	20
Malawi	1	na	2	5
Mali	4	na	4	5
Mauritania	1	na	5	8
Mozambique[a]	—	—	na	27
Niger	1	na	2	2
Nigeria	12	252	230	156
Rwanda	2	na	4	5
Senegal	6	6	6	10
Sierra Leone	1	na	2	3
Somalia	10	15	25	63
South Africa	22	44	52	93
Sudan	19	28	49	71
Tanzania	2	11	15	45
Togo	2	na	2	4
Uganda	6	9	21	8
Upper Volta (Burkina Faso)	2	na	3	4
Zaire[b]	32	46	43	22
Zambia	3	6	8	16
Zimbabwe[c]	4	5	9	35

Source: International Institute for Strategic Studies, *The Military Balance 1970-71, 1975-76,* and *1981-82* (London: IISS 1970, 1975, 1981); and International Institute for Strategic Studies, Adelphi Paper No. 27 (London: IISS, 1966).

na = not available.

[a] National armed forces did not exist before the mid - 1970s.

[b] Figures may have included the gendarmerie before 1981.

[c] Figures probably do not include reserves mobilized for counterinsurgency duty before 1981.

TABLE 4

African States: Resources and Expenses, 1979

Country[a]	Population (1,000s)	Area (1,000s sq.km.)	GMF ($ millions)	Military expenses ($ millions)	Education expenses ($ millions)	Armed forces (1,000s)	Militar expenditure ($ per capita)	Public expense per soldier ($)
Entire continent	413,803	28,172	299,135	9,836	13,846	1,171	24	8,719
Algeria	18,256	2,382	31,218	602	2,387	89	33	6,764
Angola	6,543	1,247	4,728	—	109	40	—	—
Benin (Dahomey)	3,379	113	953	16	46	2	5	8,000
Botswana	769	600	531	27	45	1	35	27,000
Burundi	4,192	28	798	25	23	5	6	5,000
Cameroon	8,323	475	5,062	88	155	8	10	11,000
Central African Republic	2,284	623	619	14	27	1	6	14,000
Chad	4,528	1,284	558	40	14	5	9	8,000
Congo	1,508	342	1,053	52	84	7	34	7,429
Equatorial Guinea	244	28	147	6	na	2	24	6,000
Ethiopia	29,977	1,222	3,937	349	83	222	12	1,572
Gabon	637	268	2,586	69	96	2	108	34,500
Cambia	585	11	126	—	9	—	—	—
Ghana	11,742	238	4,470	60	136	20	5	3,000
Guinea	5,275	246	1,443	—	62	9	—	—
Ivory Coast	7,761	322	8,790	98	752	5	13	19,600
Kenya	15,778	583	5,881	291	359	12	18	24,250
Lesotho	1,305	30	469	—	11	1	—	—
Liberia	1,839	111	939	13	53	5	7	2,600
Libya	2,920	1,760	23,249	500	1,045	42	171	11,905
Madagascar	8,349	587	2,767	82	139	11	10	7,454
Malawi	5,862	118	1,279	47	30	5	8	9,400
Mali	6,464	1,240	1,268	37	54	4	6	9,250
Mauritania	1,474	1,031	488	70	25	9	47	7,778

TABLE 4 contd..

Mauritius	941	2	1,019	2	64	na	2	na
Morocco	20,368	447	15,479	896	994	98	44	9,143
Mozambique	11,839	802	3,725	114	37	24	10	9,143
Niger	5,346	1,267	1,547	12	66	2	2	6,000
Nigeria	74,595	924	75,369	1,991	2,575	193	27	10,316
Rwanda	4,955	26	959	18	25	4	59	4,500
Senegal	5,532	196	2,524	59	100	8	4	7,375
Sierra Leone	3,309	72	865	8	35	3	11	2,667
Somalia	3,474	638	1,351	95	25	46	2	2,065
South Africa	27,967	1,221	52,633	2,269	2,263	63	27	36,016
Sudan	18,155	2,506	6,124	199	319	63	81	3,159
Swaziland	541	17	353	10	21	1	11	10,000
Tanzania	18,018	945	4,561	267	260	52	18	5,135
Togo	2,544	57	991	23	60	3	15	7,667
Tunisia	6,312	164	7,234	363	426	22	9	16,500
Uganda	12,418	236	5,730	161	117	21	58	7,667
Upper Volta (Burkina Faso)	6,661	274	1,010	32	35	4	13	8,000
Zaire	27,931	2,345	7,419	110	372	21	5	5,238
Zambia	5,649	753	3,083	294	145	14	4	21,000
Zimbabwe	7,254	391	3,800	427	163	22	52	19,409

Source: Data compiled from information in Ruth Leger Sivard, World Military and Social Expenditures 1982 (Leesburg, Va.: World Priorities, 1982), pp. 29-30.

— = negligible or none.

na = not available.

[a] Egypt is included among Middle Eastern States in the source.

tends to be in the male 18-45 age group, and it is precisely from this group that the armed forces are recruited. As this age group comprises about 50 per cent of the total population in Africa, about 24 per cent of it will almost invariably be engaged in military activities in a country such as Egypt, and perhaps a higher percentage in Uganda and Mozambique.

Arms, the Armaments Industry and National Development

Historically, wars have been known to be both destructive and constructive; wars can spur national development as well as industrialisation. Thus, during the Second World War, the armaments industry thrived in the United States; there was full employment, and the demand for agricultural raw materials and food destined to fuel the war machinery created an overall economic boom that made the depression look like a bad dream. Yet, in the struggle to defeat fascism, Europe suffered extreme destruction, Japanese cities were razed to the ground by the atomic bomb, and the whole world was shattered by the sheer savagery of what man could do to his fellow man in the fascist quest for national glory, imperial arrogance and global domination. There are times, therefore, when it has been necessary to fight wars; and the end has perhaps justified the means.

In Africa, the only war that is justifiable today is that against the fascist *apartheid* regime in South Africa. But, there is no African country that is playing the role that the United States played among the Allies during the Second World War. For the front-line States, the war against *apartheid* is a "spending war"; it is not, in any dialectical way, spurring industrialisation within the economies that are fuelling the war machine against *apartheid* in Africa. If anything, the need to consume arms in Africa only leads to more foreign exchange problems for African countries, balance-of-payments crises, and foreign indebtedness.

Even when we leave the "legitimate war zone", that is, southern Africa, and look at the arms expenditure of other African countries, it is found that, except for Egypt, most African countries are arms-consumers without being arms-producers of any magnitude. Moreover, the arms imported are used largely for internal purposes and for regional conflicts, which frequently arise as a result of border disputes. Arms imports, especially in the conflict-ridden regions such as the Horn of Africa, have very adverse effects on national development.

In his study "Conflict in the Horn of Africa", Michael Chege notes that "the already impoverished economies in the region have had to

bear the increased defence expenditure necessitated by additional military mobilisation and importing of arms". Although, as Chege notes, establishing statistical measures that can illustrate the effects of arms expenditure on national development is not very easy, it is fair to assume that arms expenditure drains export earnings, has an adverse effect on the balance of payments, and adds to the external debt burden for most non-oil-exporting economies of Africa.

The Case for Disarmament

It is quite clear that conflicts, both regional and internal, have led to the increase in military expenditure in Africa. In the case of southern Africa, *apartheid* is the basic cause of the militarisation of the region. While this militarisation has benefited the Republic of South Africa by stimulating its arms industry, the extent to which this is a positive development in the industrialisation process of the economy is not quite clear. At the regional level, however, militarisation has had a negative effect on development. The neighbours of *apartheid* have been forced to spend more on defence at a time when the urgency of socio-economic development should command all of their resources. Resolving the *apartheid* problem politically not only would create an environment that would foster regional development, but it would presumably allow more of the armaments technology developed in South Africa to be used for development.

Elsewhere, the armaments and arms race, given its obvious adverse effects on development, can be brought to an end only through the political resolution of regional and internal conflicts. Disarmament in Africa, therefore, does not mean destroying superfluous or costly arms: the arms are neither superfluous nor are they costly by international standards. They are only costly in the sense that they are paid for from meagre resources, and resources African economies can ill afford to waste on arms and armies. Disarmament would also mean deploying men who are now in uniform in more productive work and limiting the size and rate of growth of armies. If armies are growing at the same rate as, or even faster than, the GNP, then this will, *ipso facto*, have adverse effects on socio-economic development.

NEW NEGOTIATIONS ON CONVENTIONAL FORCES AND CONFIDENCE- AND SECURITY-BUILDING MEASURES IN EUROPE

The breakthrough to nuclear disarmament initiated by the INF Treaty opens new prospects for the possibility of passing from

confrontation to co-operation in the area of security and co-operation in Europe. Under the Treaty the Soviet Union and the United States will eliminate highly sophisticated missiles, and this will, in a tangible way, improve the international political atmosphere in general and East-West relations in particular.

Commenting on the subject, Erich Honecker, State Council Chairman of the German Democratic Republic, underlined that the INF Treaty was creating more favourable conditions for "eliminating tactical nuclear weapons, drastically reducing conventional forces and armaments, establishing a nuclear weapon free corridor and a chemical weapon free zone in Central Europe, and reaching agreement on measures to prevent surprise attacks".

Efforts to cut conventional forces and armaments in the area from the Atlantic to the Urals have become a central theme in European politics. The German Democratic Republic sees many important reasons for this. Europe is bristling with armed forces and conventional weapons of a magnitude unprecedented in any earlier peace-time period. This imposes enormous economic burdens on the two military alliances, NATO and the Warsaw Treaty. About 90 per cent of what is spent in Europe on the military goes to the procurement of conventional military equipment and to the maintenance of the armed forces.

Apart from the obvious need to reduce these economic burdens, there is a need for conventional disarmament in order to prevent reductions in the nuclear field from being offset by greater efforts in regard to conventional weapons and to guard against a higher risk of a conventional war in Europe fought with intelligent weapons and on a "computerised battlefield"

In view of its geographical situation, irreparable damage would be inflicted on the German Democratic Republic even if only conventional weapons were used. This is of great relevance to its security interests. For the German Democratic Republic as well as other countries, conventional disarmament is just as pressing a need as the continued pursuit of nuclear disarmament.

Military Detente, Confidence-building and Disarmament

Situated at the dividing line between the two alliances in Central Europe, the German Democratic Republic has a special interest in disarmament. It decided, unilaterally and independently of any negotiations, to reduce the strength of its National People's Army by 10,000 men by the year 1990, and to scrap or convert 600 tanks and

disband one air force group (that is, to decommission 50 combat aircraft) in the process. At the same time, spending on national defence will drop by 10 per cent. As part of this measure, the National People's Army of the German Democratic Republic will be restructured "in such a way that it will become even more strictly defensive in nature"

This programme fits in with the statement made by Mikhail Gorbachev before the United Nations General Assembly that over the next few years Soviet armed forces would be unilaterally decreased by 500,000 men, including 200,000 in Europe, 10,000 tanks, 8,500 artillery systems and 800 combat aircraft. As agreed among the allies, the scheme involves the withdrawal and disbandment of six armoured divisions from the German Democratic Republic, Czechoslovakia and Hungary (four from the German Democratic Republic and one each from Czechoslovakia and Hungary). Other troops to be withdrawn include airborne assault units, among them airborne engineer units complete with their arms and equipment. Soviet troops stationed in these three countries will be reduced by a total of 50,000 men and 5,000 tanks. A detailed Soviet troop withdrawal schedule was drawn up in close consultation between the Governments of the German Democratic Republic and the Soviet Union and announced by Mr. Honecker. In January 1989, other Warsaw Treaty States also decided to make significant unilateral cuts in their armed forces, armaments and military expenditures.

With these unilateral advance concessions, the Warsaw Treaty States have begun to implement their concept of conventional disarmament from the Atlantic to the Urals. These moves are a clear indication of their resolve to pursue the policy of reducing their military potentials to the level needed for sufficient defence. A convincing first step towards scaling down military confrontation and eliminating the capacity for surprise attacks has thus been taken.

What matters now is to draw the greatest possible benefit from this situation in the forthcoming negotiations when it comes to agreeing on measures designed to diminish and eventually eliminate the danger of surprise attack. The two German States could and should make contributions of their own to these efforts.

Negotiations on Conventional Forces in Europe

On 6 March 1989, negotiations involving the 7 Warsaw Treaty States and the 16 States members of NATO began in Vienna within the framework of the CSCE process on conventional forces in Europe.

The mandate for these negotiations sets out ambitious and far-reaching goals. The strengthening of stability and security in Europe through the establishment of a stable and secure balance of conventional armed forces at lower levels, the elimination of disparities and the elimination of the capability for launching surprise attacks are tasks that call for a constructive contribution on the part of all participants.

The subject of the negotiations will be the land-based conventional armed forces in Europe from the Atlantic to the Urals. Also included are the air forces, which NATO originally sought to exclude. Dual-capable weapons, that is, those delivery systems that can carry both conventional and nuclear weapons, are also covered by the negotiations. Not included, however, are the nuclear ammunitions for these systems.

In order to make these negotiations possible, the Warsaw Treaty States agreed that "the 23" would not address nuclear weapons, chemical weapons or naval forces. They believe, however, that those categories must be taken into account, at least indirectly, since they are a major element in determining the capability for launching a surprise attack and they are an important factor in the European balance of forces.

In the view of the German Democratic Republic, the mandate for the negotiations between the States of the Warsaw Treaty and of NATO offers ample scope for initiating a process of mutual conventional disarmament in Europe. Proceeding from a realistic and comprehensive assessment of the balance of forces, both the Warsaw Treaty and the NATO States will have to redress historical asymmetries and to envisage cuts from the very outset.

The ultimate objective of agreements, which might include partial agreements, should be a situation in which the States of NATO and the Warsaw Treaty would retain forces and means sufficient for defence but not sufficient for launching surprise attacks or offensive operations. With this in mind, the Warsaw Treaty States, in their Statement of June 1988,[5] put forward concrete ideas and suggested a stage-by-stage approach. Accordingly, the aim of the first stage should be the establishment of approximately equal collective ceilings as regards the numerical strength of the armed forces and stocks of conventional armaments, ceilings which would be considerably lower than current levels on either side. Such ceilings for Europe as a whole but also for individual regions should be fixed, in the first place, for the most dangerous offensive weapons. After having achieved the *de facto* parity of the chief military components by the end of the first stage, both

sides could then effect further cut-backs in a second and then a third stage, the ultimate objective being such ceilings and structural changes in the armed forces of either side as would ensure their incapacity for attack. Each stage of reduction and restriction would be coupled with appropriate measures of notification and verification.

If the Western participating States accepted this approach, specific steps leading to real results could soon be agreed upon. Major tasks during the initial phase will be to have a formal exchange of data on a mutually accepted basis; to use the data to define those categories of arms and forces which, because of their offensive capability, would have to be reduced as a matter of priority; to fix balanced ceilings and parameters for intermediate steps and for the desired final level of arms reduction; to co-ordinate activities at an all-European, regional and subregional level; and to work out effective measures of verification. By publishing data, the German Democratic Republic and the other Warsaw Treaty States have once more proved that their intentions are serious.

Both sides will have to show a businesslike attitude, a sense of judgement and a readiness to accommodate interests as a prerequisite for the achievement of results of benefit to all. Attempts to change the military balance in favour of one side or the other through negotiations would be totally anachronistic, especially in the present international situation. The Warsaw Treaty States are indeed ready to include major parts of their own military potential in the disarmament process. This is evident from decisions recently taken to this effect. Now, more than ever before, it is NATO's turn to make substantial changes in its military potential, practices and plans.

Likewise, NATO should reconsider its position with regard to the question of tactical nuclear weapons. The German Democratic Republic deems it necessary for the remaining tactical nuclear weapons with ranges below 500 km to be included in the disarmament process. Their reduction could be effected in stages. An appropriate next step might be to reduce and eventually eliminate altogether the most destabilising nuclear arms—battlefield nuclear weapons. To this end, the German Democratic Republic launched some initiatives *vis-a-vis* the Federal Republic of Germany and it strongly supports the proposal of the Warsaw Treaty States for separate negotiations on tactical nuclear weapons.

The Stockholm Document—A Political Achievement and Point of Departure

While the new negotiations on conventional armed forces will cover new ground in many respects, the 35 CSCE participating States will not start at zero when resuming their negotiations on confidence-and security-building measures. In the Concluding Document of the Vienna Follow-up Meeting they noted "that the adoption of the Stockholm Document was a politically significant achievement and that its measures are an important step in efforts aimed at reducing the risk of military confrontation in Europe". What has already been done with regard to mandatory notification, observation and verification of military activities from the Atlantic to the Urals is concrete evidence of the efforts to bring about a turn from confrontation towards co-operation, and has also had a stimulating effect on arms limitation and disarmament negotiations.

The measures already applied improve the climate in East-West relations, raising the level of trust in the other side's peaceful intentions. At the same time, it should be noted that the measures stipulated in the Stockholm Document are limited in terms of both their military significance and their political impact. This is evidenced by the fact that there are no signs of major changes in the practice and pattern of military exercises.

The exchange of annual calendars and prior notifications have no constraining effect. NATO, for example, has still retained the practice of carrying out military activities on a massive scale. Another serious deficiency is that independent exercises of air and naval forces are not covered by the system of notification, observation and verification. Therefore, confidence- and security-building measures are growing in significance, particularly in the light of the negotiations on conventional disarmament in Europe. In accordance with the Madrid mandate, the principal criterion for such measures remains whether or not they serve to lessen the risk of military confrontation in Europe. In the view of the German Democratic Republic it is now crucial to keep in mind the following facts:

1. The value of new or more far-reaching confidence- and security-building measures will depend on whether and to what extent they prepare the ground for, or accompany, limitations and reductions of military potentials;

2. In extending the Stockholm regime, it is essential to ensure that surprise attacks are excluded.

In this context, it is evident that there is a close link between the reduction of armed forces and conventional armaments from the Atlantic to the Urals and the extension of confidence- and security-building measures in Europe within the framework of the CSCE. Militarily significant confidence- and security-building measures acquire greater importance. At its Budapest session in October 1988, the Committee of Foreign Ministers of the Warsaw Treaty adopted a Statement on confidence- and security-building measures which embodied a comprehensive concept for the continuation of the process of confidence-building in the military field initiated by the Stockholm Document. In accordance with that Statement, the German Democratic Republic believes that further negotiations on confidence-and security-building measures should have a higher aim than "putting the finishing touches" to the Stockholm Document. One main thrust of the negotiations should be measures to restrict military activities because these form the bridge to the limitation and reduction of military potentials and would prevent a situation in which undiminished military activities would be considered a matter of course.

Notwithstanding the importance of the European dimension of conventional disarmament and military confidence-building, the German Democratic Republic would like to see these problems receive greater attention in the United Nations. It is worth recalling in this connection that resolution 43/75 F on conventional disarmament, introduced by the People's Republic of China at the forty-third session of the General Assembly, was adopted by consensus. In that resolution the General Assembly urges the countries with the largest military arsenals and the member States of the two major military alliances to conduct negotiations on conventional disarmament with a view to reaching agreement on the reduction of armed forces and conventional weapons, particularly in Europe.

The expectations of the international community reflected in the resolution must be met. Prospects for further headway in disarmament have not for a long time been as favourable as they are at present. It is now imperative to seize the opportunities offered: 1989 may prove to be a good year for disarmament.

CUTTING BACK THE NATO-WARSAW TREATY CONFRONTATION

Following the ratification and entry into force of the Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF

Treaty) in the late spring of 1988 and the announcement by General Secretary Gorbachev, in his address to the United Nations General Assembly in December 1988 of significant unilateral reductions in Soviet armed forces, long-term prospects for a continuing build-down of the NATO-Warsaw Treaty military confrontation in Europe are generally good, although there are many complications that could impede the build-down process.

New talks on Conventional Armed Forces in Europe (CFE), aimed at reducing the armed forces of the NATO and Warsaw Treaty alliances deployed in the area from the Atlantic to the Urals will begin in March in Vienna. The outlook for these talks is mixed, but positive factors outweigh the negative ones, and there may be some specific outcome within the next five years. However, achieving an outcome that would provide for deep cuts in the European confrontation would require revision of the current Western position, which is limited in scope, especially as regards NATO reductions. The prospects are good for earlier positive results from the parallel Conference on Confidence- and Security-building Measures and Disarmament in Europe, CDE-2 for short. That Conference will also begin early in March in Vienna and will continue the work of the successful Stockholm Conference on the same subject, with the participation of 12 neutral and non-aligned European States in addition to the 16 members of NATO and 7 members of the Warsaw Treaty Organisation. All members of the two alliances will participate in the CFE force reduction talks.

The factors that will have a positive influence on the new CFE talks include the conclusion and successful implementation of the Stockholm Document of September 1986, which much expanded the provisions of the 1975 Helsinki Accord on pre-notification and observation of military activities in the area from the Atlantic to the Urals and provided for on-site inspection to assure compliance. Still more important has been the initial successful implementation of the INF Treaty, which initiated the process of building down the confrontation in Europe by providing for the destruction of all ground-based, surface-to-surface United States and Soviet missiles with ranges between 500 and 5,500 kilometres, prohibition of their manufacture, and an intensive regime of on-site inspections.

A third positive factor, one which bears directly on one agreed aim of the new CFE talks, namely the establishment of "a stable and secure balance of conventional armed forces ...at lower levels", is General Secretary Gorbachev's announcement in December 1988 of substantial

unilateral reductions in Soviet forces over the next two years. This was followed by the announcement of parallel actions by other Warsaw Treaty countries. Full implementation of the announced unilateral reductions can be expected; failure to carry them out would be counterproductive to the aims of the Soviet and Warsaw Treaty authorities in deciding on this action, namely to effect economic savings and to convince Western opinion of the determination of their Governments to enter on a more constructive relationship. When implemented, the reductions, especially the withdrawal of six Soviet armoured divisions and additional tanks and artillery from Central Europe, will also contribute directly to a second agreed aim of the new CFE talks, namely "the elimination of the capability for launching surprise attack", and should significantly decrease long-standing Western worries about this possibility.

The agreement in January 1989, within the framework for the third periodic follow-up conference of the 1975 Conference on Security and Co-operation in Europe, on the mandate or terms of reference for the CFE talks is a further positive factor. In addition to the two aims already cited here—the establishment of a secure balance of conventional forces at lower levels, and the elimination of the capability for launching a surprise attack—the mandate includes two further agreed aims: "the elimination of disparities prejudicial to stability and security" and "the elimination...of the capability.. .for initiating large-scale offensive action". The fact that both alliances have been able to agree on these four goals is an important positive factor.

However, although East-West agreement on these goals is important, it should be noted that the mandate itself is worded in general terms. It gives no indication at what point "lower levels of forces" might be set. It establishes the goal of eliminating "disparities prejudicial to stability and security" but does not contain an agreed identification of these disparities. This omission indicates one of the points of contention on which negotiation in the CFE talks will focus: Which are the existing armament disparities and which of them should be reduced? Data published by the NATO alliance in November 1988 and by the Warsaw Treaty in January 1989 diverge widely as regards the number of military personnel, tanks, armoured personnel carriers, helicopters, combat aircraft, and other armaments held by members of the two alliances.

As noted, negotiators of the mandate have agreed to eliminate "the capability for launching surprise attack" and the capability "for initiating large-scale offensive action". But, the mandate does not contain

an agreed definition of these capabilities, and it is clear from many statements that Western and Eastern participants are emphasising different weapons systems and capabilities in this regard, each pointing to what it considers superiorities of the other side. NATO is emphasising Warsaw Treaty superiority in tanks, artillery, and armoured troop carriers; the Warsaw Treaty claims NATO superiority in attack aircraft, armed helicopters and naval forces. The latter are, however, outside the terms of the agreed mandate.

Finally, the general approach to reductions published by the Political Consultative Committee of the Warsaw Treaty Organisation meeting in Warsaw in July 1988 should also be included in a listing of positive factors. Its communique suggests a first phase of negotiation, the goal of which should be roughly equal levels for manpower and armaments through elimination of imbalances and asymmetries; a second phase of reduction of forces and armaments by 25 per cent on each side; and a third phase of still deeper cuts in which "the armed forces of both sides would acquire a strictly defensive nature".

What is most positive in this statement is the official endorsement by the Warsaw Treaty Organisation of the concept of eliminating imbalances and asymmetries between the forces of the two alliances. (This language is reflected in the goal set in the CFE mandate, namely elimination of disparities prejudicial to security and stability.) Conceptually, this statement represents acceptance by the Warsaw Treaty of the reduction approach which NATO participants had been seeking in the mutual and balanced force reduction talks. Warsaw Treaty offers to exchange detailed data on the forces of the two alliances and to agree to on-site inspection in the event of disagreement over the accuracy of these figures, and Warsaw Treaty endorsement in the July 1988 document of equal collective ceilings at lower levels are further evidence that Warsaw Treaty Governments have adopted many elements of the Western conceptual approach to reductions. However, once again, the Warsaw Treaty Organisation's statement of July 1988 suggests no specific new level for the first stage.

It does not identify "the individual types of conventional arms" in which imbalances and asymmetries should be eliminated. It is vague as regards details of the phase-two reductions of 25 per cent which it suggests, and it gives no details with regard to the proposed third stage and what it means in urging that remaining force of both alliances "should acquire a strictly defensive nature".

For their part, the NATO countries have not recovered from surprise over the rather sudden shift of course of the Soviet Union in it foreign relations and arms control policy which began four years ago and which has included the positive developments described above. All NATO States have welcomed these changes, but all share the uncertainty, rooted in the actual situation, as to whether the changes will be enduring and whether the USSR may revert to negative policies of a: earlier period. These worries have deeply divided Western opinion One influential group, composed mainly of conservative political leaders, officials and defence experts, fears that the post-war Western system which provided the framework for the emergence of the Wester: European States to unparalleled political stability and economic success may crumble and leave Western Europe open to future intimidation from a powerful Soviet neighbour. More specifically, these leaders fear a rapid, uncontrolled arms control process which could sharply reduce or eliminate the American military presence in Europe, and undermine or even eliminate American, French and British nuclear forces in Europe—before there can be any assurance that the new patterns of Soviet co-operation are enduring. At the other end of the opinion spectrum public opinion in Western Europe is more impressed than many West ern officials with the positive possibilities of further build-down of the East-West military confrontation. But, the December 1988 communique of the NATO Ministerial Council, which sets forth NATO's approach to the CFE talks at a level of generality similar to that of the Warsaw Treaty document of July 1988, is clearly a product of the worries am apprehensions just described.

NATO is proposing a reduction of the main battle tanks, artillery and armoured troop carriers of both alliances, which amounts to a cut of about 5 per cent in NATO's current holding of these armaments, with Warsaw Treaty forces coming down to new NATO levels in these armaments. NATO does not now propose to reduce aircraft or surface-to surface missiles, whose reduction has been proposed by the Warsaw Treaty.

As regards tanks, NATO is proposing reduction to a level of about 20,000 for each alliance. The outcome of this is hard to deduce from the ministerial communique: owing to opposition from some member States to proposals which would make explicit overall parity between the two alliances, NATO is instead proposing that the present combined total of tanks held by both alliances, estimated at about 80,000, be reduced to 40,000. Of this new total, no single country, for example

the USSR, would be permitted to have more than 30 per cent or 12,000 (from a total of Soviet tanks which NATO estimated at about 37,000 prior to unilateral Soviet reductions). However, NATO will propose parity between the members of the two alliances in tanks and the other two armaments deployed in each of two sub-regions into which the region from the Atlantic to the Urals would be divided. In addition, NATO will ask for parity in respect of the armaments to be reduced held by forces stationed on the territory of other States. Of the Warsaw Treaty countries, only the USSR has such forces. The last provision would require the levels of tanks, artillery and armoured troop carriers in active-duty forces deployed by the USSR in Czechoslovakia, the German Democratic Republic, Hungary and Poland, to be equal to the collective levels of the same armaments held in NATO by the United States, the United Kingdom, Belgium and the Netherlands, deployed mainly in the Federal Republic of Germany.

The NATO communique is a cautious document; it seems to reflect an underlying assumption that the West must reckon with a continuing East-West military confrontation in Europe, perhaps under conditions somewhat more favourable for NATO through Warsaw Treaty reductions to an equal level slightly below NATO's present one. NATO's decision to limit its own reductions of tanks, artillery and armoured personnel carriers to about 5 per cent of its present holdings is based on the force-to-space ratio and the related NATO concern that further reductions of active-duty divisions along the line of confrontation on the border of the Federal Republic of Germany with the German Democratic Republic and Czechoslovakia—now considered to be at the minimum needed to cover this line of confrontation, a line of about 800 kilometres—would make its "forward defence strategy" no longer feasible. The effect of this guideline is apparently to set a floor to NATO reductions, no matter how many forces the Warsaw Treaty is prepared to reduce. Thus, NATO appears to be locked by its own strategy, or at least by its current interpretation of that strategy, into continuing the military confrontation in Europe at a high level.

Even if it proves negotiable, NATO's approach would not decisively reduce the possibility of conflict between the alliances. Conditions of equality in the three specified armaments between still very large forces on both sides would not of themselves prevent the Warsaw Treaty from initiating an attack. And with NATO now equal to the Warsaw Treaty in the three armaments—tanks, artillery and armoured troop carriers—which NATO has defined as creating "invasion capability",

NATO would for the first time have the capability to attack Warsaw Treaty forces. Warsaw Treaty commanders would become as nervous as NATO commanders now are about small shifts in force activities of the opposing alliance. This same criticism also applies to the first stage of the Warsaw Treaty proposal, but that proposal contains additional suggestions for reducing the possibility of surprise attack-the establishment of zones of reduced armaments and agreed restrictions on force activities in this zone—which the NATO approach lacks. Some versions of this proposal by the Warsaw Treaty may be useful if they take into account the shallowness of the NATO area and the greater depth of the Warsaw Treaty area. But, a more general point should be made: reductions to parity are highly desirable for military, political and economic reasons. However, to make a real contribution to increased stability, they must be accompanied by explicit proposals for early warning" and for agreed restrictions on troop deployments and activities.

Although NATO's communique of December 1988 speaks of further reductions, its 5 per cent rule and the absence of provision for manpower reductions appear to indicate that implementation of the NATO reduction approach would do little or nothing to reduce the huge costs of the NATO-Warsaw Treaty confrontation, now running at about $300 billion annually for NATO and well over $200 billion for the Warsaw Treaty countries, over half the world's annual expenditures for armed forces. In its present form then, NATO's approach fails to meet the real test of the possibility of making deep cuts and of a real abatement of the East-West confrontation in Europe which present circumstances call for. The political causes of the cold war military confrontation in Europe have ebbed away, including early fears on the part of the NATO countries of a combined operation between the Red Army and then strong West European communist parties to seize Western Europe and the fears of the Warsaw Treaty countries of an irredentist West Germany backed by American arms. True, there are justified uncertainties as to how long this welcome development will last and as to its long-term development, but possibilities do exist for making deep cuts in the military confrontation in Europe in ways which would at each step create greater security for both sides than the present confrontation and they should be energetically exploited.

The NATO approach was formulated prior to the Soviet announcement of unilateral reductions and did not take it into account. None the less, revision of the NATO approach prior to the beginning of the CFE talks is unlikely. The divergences between the positions of

the two alliances in the selection of armaments to be reduced and in the scope of reductions may in part be narrowed if, at the outset of the CFE talks, or in response to NATO's opening proposal, the Warsaw Treaty Organisation makes a specific proposal which goes beyond NATO's terms: perhaps a proposal for a package reduction of tanks, artillery, armoured troop carriers, armed helicopters, attack aircraft and surface-to-surface missiles, and of active-duty ground and air force manpower to equal levels at 10, 15 or 25 per cent below the level of the alliance weaker in these armaments. Whether or not such a development occurs, NATO should respond to the signal of the unilateral reduction announcement by revising its current approach in the direction of a more far-reaching reduction of its own forces to an equal plateau of reduced risks and costs for both alliances.

The prospects that CDE-2 will result in an extension and improvement of requirements for pre-notification of military activities in the field, observation of these activities and on-site inspection are considerable. Though it will not realistically be possible or even desirable to eliminate the present exception in the Stockholm Document which permits alert exercises of any size, the number, frequency and duration of alerts should be cut back, and coverage of air activities extended if an effective and equitable means of doing so can be devised. Agreement should be reached on further restrictions on force deployments and activities. Now, there is only one such constraint, the prohibition of military activities involving more than 75,000 men unless notified two years in advance.

It is already clear that the central focus in these CDE-2 negotiations, and one which may block an early outcome, will be on efforts by the Warsaw Treaty Organisation to introduce confidence-building measures, including pre-notification, covering naval exercises and NATO's continuing resistance to any coverage of naval activities in East-West agreements. Protection of the sea reinforcement route to Europe by NATO navies will be essential as long as any sizeable East-West military confrontation in Europe continues. At the same time, with further negotiated reductions in United States and Soviet nuclear forces in prospect and negotiations on reduction of conventional land-based forces starting in a new expanded format, some coverage of naval forces in negotiated arms control is logically inescapable. Whether naval confidence-building measures are the right point of entry to this complex problem is, however, an open question.

The problems and divergences in the approaches of the two alliances to the new CFE reduction talks described here may mean slow progress in their first few years. For the longer term, despite uncertainties about the durability of the current Soviet reform programme, it is likely that the economic pressures which are fuelling it will continue indefinitely and, with them, parallel pressures in Western countries. Consequently, the long-term prospects for continued build-down of the military confrontation in Europe by a mix of unilateral and negotiated actions appear good.

CONVENTIONAL STABILITY

The prevention of war is, now as ever, the supreme objective of the security policy pursued by the Federal Republic of Germany. The Federal Government, together with its allies, is working towards achieving, step by step, a just and lasting peaceful order in Europe. With that goal in view, negotiations and agreements on arms control form a necessary and integral part of our security policy, which is designed to guarantee stability and security at lower levels of forces.

1988 was a year of significant progress for Europe in the field of arms control and disarmament. The ratification and implementation of the INF Treaty as well as the observation and inspection procedures in accordance with the Document of the Stockholm Conference were an indication of the growing will in West and East to achieve a fair reconciliation of interests and reduce further the sources of conflict.

The safeguarding of peace in Europe through the elimination of destabilising imbalances has always been a prime objective of our policy. The development of a lasting peaceful order presupposes the creation of a situation in which neither side possesses the capability for launching surprise attack and for initiating large-scale offensive action.

The simultaneous opening of negotiations on the reduction of conventional armed forces throughout Europe and on further confidence- and security-building measures marks the beginning of a new phase in our efforts towards greater security in Europe. The tracks have been laid for meeting our long-standing demand: the core problem of European security, the destabilising imbalance in conventional forces, can at last be tackled. The aim now is to eliminate asymmetries and establish conventional stability. In view of the present superiority of the Warsaw Pact countries in the conventional sphere, this can be achieved only through asymmetrical reductions.

These difficult negotiations will require, on the part of everyone involved, the utmost creativity and a readiness for innovative thinking as well as the greatest possible sense of proportion and perseverance. However, the prospects of attaining substantive results are good. There are important reasons for this assessment:

First, it is no longer possible to claim absolute security for one country alone. Today security can be achieved for everybody only if the interests of all concerned are taken into account. The logic of co-operative security is irrefutable. Anyone who, none the less, tries to obtain absolute security through the unilateral accumulation of military might must pay a high economic and social price at home, while sowing distrust abroad.

Secondly, the nations of Europe reject war as a political device. The thinking public is rightly examining the military capabilities of countries in order to see whether they are intended for defence and for effectively preventing war. Even in countries where, in the past, spending on arms was a taboo, critical questions are now being asked as to whether expenditures on armaments and security do not actually exceed the amount needed for defence purposes.

Thirdly, the success of the Stockholm Conference and the conclusion of the INF Treaty eliminating all United States and Soviet intermediate-range and shorter-range nuclear missiles mark a historic turning-point. They prove that military confrontation can indeed be eliminated through substantive agreements. For the first time, it has proved possible not only to inventory weapons, but also to decide in favour of scrapping them. This new momentum in the field of arms control can and must be maintained at the Vienna negotiations that are beginning.

Fourthly, in the mandate for the negotiations, the East has accepted a number of important demands: In particular, it acknowledges that a secure and stable balance of conventional forces does not exist in Europe at present, but has to be attained through negotiation.

The opening of the negotiations on conventional forces in Europe is more than merely a phase of arms-control diplomacy. The nations of Europe and North America are pinning high expectations on these new negotiations. They hope that they will give fresh impetus to the quest for stable security and lasting peace in Europe. The negotiations afford an opportunity to apply new approaches to arms control. The aim cannot be simply to set off tanks against tanks, or divisions against divisions. Instead, the aim must be to bring about a situation in which

military power can no longer be misused for aggression, for threatening or intimidating one's neighbours.

The mandate agreed on two months ago by the 23 members of the two opposing alliances lays a sound foundation for the new negotiations. The work done during the mandate talks was worth while: It has helped to bring the two sides closer together in their thinking and to clarify important basic issues. Three understandings contained in the mandate are particularly significant:

(a) The objective of the negotiations is to establish a secure and stable balance of conventional armed forces at lower levels and, as a matter of priority, to eliminate the capability for launching surprise attack and for initiating large-scale offensive action;

(b) The negotiations are to cover the conventional forces of the 23 participants in Europe from the Atlantic to the Urals;

(c) The exchange of detailed information and mandatory on-site inspections have been accepted as necessary instruments of a reliable verification regime.

The objective now must be to fill in the framework provided by the mandate. Together with our allies, we have proposed an initial, substantive step towards the establishment of conventional stability. Achievement of this step would be a quantum leap forward on the path to a secure and stable Europe. Our proposal is based on the conviction that stability cannot be achieved at a stroke: it must come step by step. The situation as it stands is too complicated, too unbalanced, for us to be able to address all the factors of instability at one time. Anyone who attempts to solve everything at the same time runs the risk of solving nothing at all.

We, therefore, propose a selective approach, concentrating in the first step on weapon systems that pose the greatest threat to stability in Europe. We want to eliminate the most dangerous elements that make it possible for forces to seize foreign territory. We are convinced that these are major weapons of ground forces, in respect of which the largest disparities exist, as has meanwhile been acknowledged by the East, and which, because of their combined mobility and firepower, are suitable for launching surprise attacks and initiating large-scale offensives: main battle tanks, artillery and armoured troop carriers.

As a first step, we want to achieve a radical reduction of the major equipment holdings of land forces in Europe and set a limit for them

at a level significantly below that of the weaker side. For the total holding of all participating countries we suggest an overall limit of 40,000 main battle tanks, 33,000 artillery pieces and 56,000 armoured troop carriers. The principle that has to be applied is: whoever possesses more must scrap more. The East, too, has acknowledged this principle.

In addition, we need rules for guaranteeing a stable balance in Europe. We propose:

(a) Limiting the strength of armed forces which countries of the same alliance station outside their territory;

(b) Preventing the concentration of all available forces through sub-limits within the overall European region from the Atlantic to the Urals;

(c) Limiting the arsenal of an individual country so as to guarantee that no nation in Europe can dominate others by force of arms; and

(d) Limiting the proportion of weapons in active units, thus restricting the capability for launching an attack with only brief preparation.

Stability is more than parity. For this reason, our proposal includes a package of measures in addition to equal ceilings for decisive heavy weapons. Through their interaction, the measures will unfold their full stability-promoting potential.

Every year information on weapon holdings, disaggregated down to battalion level, and on the associated military personnel is to be exchanged in order to control structures as well. Changes in unit structures will be allowable only after notification. Stabilising measures which effectively buttress the agreed reductions and limitations will, in addition, hamper the preparation of offensive actions.

We do not regard the proposal that we are submitting together with our allies as a self-contained programme. Rather, we view it as a first major step in a phased negotiating process. After eliminating the most threatening disparities in the major equipment of land forces, we want to attain stability through further steps:

(a) We want, subsequently, to reduce and limit further categories of conventional armaments and equipment;

(b) We envisage further reductions of the limits attained;

(c) In addition, we seek the restructuring of armed forces with a view to curbing further their offensive capabilities and enhancing their defensive capabilities.

The yardstick of all steps in the inevitably arduous and protracted negotiating process will always be our basic understanding of the role of armed forces: they should, exclusively, serve the purpose of self-defence and the prevention of war, and not the purpose of aggression or military or political intimidation.

The negotiations on confidence- and security-building measures in Europe which are being conducted by the 35 countries participating in the CSCE process afford a special opportunity for developing co-operative security structures. The aim is to eliminate the lack of transparency, increase predictability in the military sphere, promote military contacts and, in this way, build greater confidence. Concrete measures are to be taken to reduce misperceptions of military capabilities and activities and the danger of misunderstandings and thus improve the capacity for avoiding and controlling crises. This undertaking was launched by the Helsinki Final Act and continued by the Stockholm Conference.

The Stockholm Document has already proved its practical worth. The participating countries' knowledge of one another's military activities is constantly being widened through notifications, observation and inspections. Contact between officers and soldiers of the participating countries are also helping gradually to dispel distrust.

Military confidence-building requires concrete measures. Anyone who lays open his own capabilities and activities makes it easier for the other side to assess the situation more realistically. Concrete military confidence-building can thus decrease confrontational and aggressive attitudes and tangibly increase security.

For this reason, the Foreign Ministers of the Atlantic Alliance stated at their meeting in December 1988 that the negotiations on confidence-building constitute an essential complement to the negotiations on conventional stability. The goals of the two sets of negotiations are complementary. The transition from confrontation to co-operative security structures presupposes better mutual knowledge and greater predictability. Predictability creates confidence; confidence in turn promotes disarmament. We must set this chain reaction in motion and keep it moving.

A great deal still has to be done to make military activities everywhere predictable. This task requires that outmoded habits of military secrecy be abandoned. Foreign Minister Shevardnadze's remark about the damage which the Soviet Union inflicted on itself in the past through a lack of transparency in military matters is an encouraging sign of new prospects in military confidence-building.

The proposals which we have elaborated together with our allies are intended to expand and improve the regime of measures contained in the Stockholm Document. We shall suggest new, effective measures for the disclosure of military arsenals. In addition, we want to step up communication between the participants and deepen the dialogue between them on military issues.

Of our proposals, the one concerning an open and detailed exchange of information on the strength, deployment and equipment of the armed forces of all participating countries is particularly important. For the first time, an exchange of information concerning the introduction of new weapon systems will make transparency about the procurement of weapons and equipment a routine matter for all participants. A system of random checks is to be used to examine this information.

The military dialogue is to be promoted by, among other things, an exchange of views among the 35 participating countries on their military strategies and doctrines. In this context, the military intentions and capabilities of the participating countries are to be discussed, as are also the fears that others may have about those intentions and capabilities. The exchange of views should cover the strength, structure, deployment, equipment, training and operational principles of the existing armed forces. This approach could lead to the development of a broad-based security dialogue on stability criteria, which might also benefit the negotiations on conventional stability.

The two sets of negotiations in Vienna afford all participants the chance to opt for a new, co-operative method of negotiating. A comparison of the public statements made by representatives from East and West on the subject-matter of the forthcoming negotiations shows that the starting positions of the two sides are no longer diametrically opposed. The ideas of both sides have moved towards each other to a considerable extent.

Although some elements of the East's negotiating approach appear scarcely promising to us, such as the very complicated matter of including aircraft, which are by their very nature highly mobile, in regional arms

control agreements or the repeatedly detectable tendency of indirectly incorporating naval forces in the negotiations, contrary to the agreed mandate, the degree of conceptional agreement is now perhaps greater than ever before in the history of East-West arms control negotiations:

(a) Both sides are seeking a phased approach;

(b) Both sides are convinced of the need for asymmetrical disarmament steps;

(c) Both sides have a similar interest in verification;

(d) Both sides are evidently determined to avoid a dispute over data;

(e) Both sides have expressed the desire to achieve early results.

These negotiations do not just concern figures, weapons or military options. They also concern a new stage along the road towards a peaceful order in Europe. The architecture of Europe's peaceful order must be shaped not by military threats, but by co-operation. This new order must not be characterised by separation, but by open doors; not by suppression, but by the free movement of people, ideas and goods; not by arbitrary rule, but by the rule of law and respect for human rights. The right of countries to equal security must be reflected in the military arsenals and their structures. No country must be allowed to dominate others by military means. Armed forces must serve defensive purposes only.

ANNEXURE

Steps towards the establishment of conventional stability

I. Limits Proposed by NATO

1. Overall Limit for Forces in Europe

	Europe	*Per alliance*
Main battle tanks	40,000	20,000
Artillery pieces	33,000	16,500
Armoured troop carriers	56,000	28,000

2. Limit for the Total Holding of Each Country

Not more than 30 % of the overall limit for *both* alliances.

	Per country
Main battle tanks	12,000
Artillery pieces	10,000
Armoured troop carriers	16,800

3. Limit for Forces Stationed Abroad in Active Units

	Per alliance
Main battle tanks	3,200
Artillery pieces 1,700	
Armoured troop carriers	6,000

This limit applies to all forces stationed outside a country's own territory but within Europe.

4. Sub-limits

In the areas indicated below, each group of countries belonging to the same alliance must not exceed the following levels:

(1) In the area consisting of Belgium, Denmark, France, the Federal Republic of Germany, Greece, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey, the United Kingdom, Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Romania and the territory of the Soviet Union west of the Urals comprising the Baltic, Byelorussian, Carpathian, Moscow, Volga, Urals, Leningrad, Odessa, Kiev, Trans-Caucasus, North Caucasus military districts:

Main battle tanks	20,000
Artillery pieces	16,500
Armoured troop carriers	28,000
	(of which no more than 12,000 AIFVs)

(2) In the area consisting of Belgium, Denmark, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands, Portugal, Spain, the United Kingdom, Czechoslovakia, the German Democratic Republic, Hungary, Poland and the territory of the Soviet Union west of the Urals comprising the Baltic, Byelorussian, Carpathian, Moscow, Volga, Urals military districts

In active units:

Main battle tanks	11,300
Artillery pieces	9,000
Armoured troop carriers	20,000

(3) In the area consisting of Belgium, Denmark, France, the Federal Republic of Germany, Italy, Luxembourg, the Netherlands, the United Kingdom, Czechoslovakia, the German Democratic

Republic, Hungary, Poland and the territory of the Soviet Union comprising the Baltic Byelorussian, Carpathian military districts In active units:

Main battle tanks	10,300
Artillery pieces	7,600
Armoured troop carriers	18,000

(4) In the area consisting of Belgium, the Federal Republic of Germany, Luxembourg, the Netherlands, Czechoslovakia, the German Democratic Republic and Poland

In active units:

Main battle tanks	8,000
Artillery pieces	4,500
Armoured troop carriers	11,000

5. Personnel will be indirectly covered by a detailed information exchange. Any change in the structure of units or any increase in personnel strength will be allowable only after notification.

6. Stabilising measures are proposed to buttress and safeguard the effects of the limits to be agreed. These could include measures of transparency, notification and constraint applied to the deployment, movement and levels of readiness of conventional armed forces.

An effective and reliable monitoring and verification system, including on-site inspections, will have to be agreed on in accordance with the negotiated results.

II. CSBMs

In addition to the proposals for the CFE negotiations, the West proposes at the parallel CSBM negotiations:

An annual exchange of information on:

The structures, strength and equipment of armed forces;
The planned introduction of weapon systems; and
The call-up of reservists.

This information is to be examined through random checks.

The improvement of communication and understanding among the participating countries by:

The equal treatment of media representatives from CSCE countries at manoeuvres;

The improvement of working opportunities for military attaches;

The development of means for transmitting information in connection with CSBMs; and

A seminar on security concepts and military doctrines.

The substantive improvement of the provisions of the Stockholm Document in the light of experience gained with their implementation, especially as regards observation and inspections.

REDUCTION OF CONVENTIONAL ARMED FORCES AND ARMAMENTS IN EUROPE

Favourable trends can be observed of late in the military situation in Europe: the elaboration of the mandate for the negotiations on conventional armed forces in Europe (CFE) to be conducted between the States members of the Warsaw Treaty and NATO has been completed successfully and, almost simultaneously, the Warsaw Treaty member States have announced unilateral reductions in their armed forces as a first step towards the elimination of asymmetries and the defensive restructuring of armed forces in Europe.

These developments have resulted in a political and military environment which creates more favourable conditions than ever before for an early successful outcome of the Vienna talks on conventional armed forces in Europe.

We in Hungary have a vested interest in the success of disarmament talks. Our interest follows from our geopolitical situation since Hungary is vulnerable to any war in Europe. An armed conflict on this continent, even if considered limited in respect of the Super-Powers, would most certainly threaten the existence of the Hungarian nation.

Our interest is reinforced by our present political and economic needs: the solution of our economic problems and the quest for a new model of socialism that would ensure the long-term development of the country under the conditions of a socialist market economy and political pluralism call for a peaceful environment and close co-operation with all countries of Europe and make it imperative for us to reduce the burden of military spending. An end must be put to a situation that has, for centuries, been accepted as a European fact of life, a situation based on military confrontation and a balance of fear. We desire lasting security based on political and economic co-operation, openness on the part of States and nations, general and reciprocal respect for human rights, and the removal of the material basis for a

military threat. It is time to stop thinking of the world as being made up only of friends and enemies, and to take concrete and significant steps towards easing the political, economic and psychological burdens imposed by the arms race on our peoples and countries.

The current set of international conditions offers favourable opportunities to move in this direction. However, seizing the opportunities calls for substantive and joint efforts. On both sides there are forces which, for different reasons, are not interested in a radical change in the prevailing situation since they have serious political, economic and existential interests in maintaining large armies and continuing the arms race.

Joint efforts will neverthelesss make it possible to achieve a breakthrough, which may lead, not only to dismantling armed forces and armaments, but also to disarming militant ideologies directed towards confrontation and reconciling the advocates of those ideologies.

The negotiations on conventional armed forces may be the most complex of disarmament talks in view of the unprecedented quantities of weapons, troops and military equipment involved, all with characteristics that differ widely from country to country and different patterns of deployment. These complicated sets of problems can be addressed with any hope of success only if we display sufficient flexibility and pursue clear objectives in this joint effort. We are aware that the problems cannot be solved all at one stroke, but we are equally aware that approaches that fail to take account of broader interrelationships are bound to fail sooner or later. It is necessary to find a formula that is practicable yet directed towards the ultimate goal of helping advance the process of disarmament step by step.

In our view, the ultimate goal is to organize, in all countries of Europe, armies that are intended exclusively to guarantee the security of the individual countries, armies that are suitable only for the reliable defence of sovereignty and territorial integrity. This means that they must be incapable of attack, whether strategic or operational, against the territory of another country.

Achieving forces that are structurally incapable of offensive action is a highly complex task. Building such armed forces is not a question of quantity alone; it has qualitative aspects as well. Security and stability should be maintained by means of measures other than a further arms buildup, even if the only goal is to strengthen defence. By its very nature, additional armament is dangerous because strengthening defence

in that way objectively increases the armed forces of any given State and creates more favourable conditions for their use, a fact which is in turn at variance with the ultimate goal of achieving incapacity for offensive action. Moreover, such an arms buildup would impose almost unbearable and senseless burdens on the peoples of Europe, burdens which I am sure they would refuse to accept.

The steps conducive to ensuring that forces are structurally incapable of offence may be summed up as follows:

1. *Lowering the level of armed forces and restructuring their armaments.* The current level, deployment and structure of armed forces in Europe is clearly attack-oriented on both sides, despite essential differences in quantity and structure between the armed forces of the two systems of military alliance. The Warsaw Treaty countries, proceeding basically from their experience and possibilities, found it practicable to undertake a large-scale quantitative development of their armed forces, concentrating on forces capable of occupying enemy territory. By contrast, relying on their technological superiority, NATO countries sought to deploy forces in such a way as to make the most effective use of such superiority and to make them more capable of destroying enemy forces and hinterland targets. These differences, however, cannot conceal the fact that the forces of both systems of alliance are capable of offensive military operations. Beyond a certain limit, significant quantitative cuts in armed forces will necessarily diminish and then eliminate their offensive capability. This is true particularly of reductions in forces destined for attack, such as armoured troops and air strike forces. These forces must be reduced but in itself this is not sufficient to ensure structural incapability for offensive action.

2. *Restructuring armed forces.* Reductions in armed forces should be coupled with changes in the organisational pattern of armed forces. At present, the systems of military alliance have a great number of military structures (for example, tank divisions and airborne assault units) clearly destined for offensive operations. It may be stated in general that independent higher units of great firepower and mobility are suited to attack; their massive presence and the efforts preparatory to their establishment are at variance with the requirements of defence.

3. *Operational principles.* The military doctrines of the two sides have long been the subject of unofficial discussions. It appears to me that the debate is due partly to a misunderstanding. Many of our Western partners think that by proposing an exchange of views on military doctrines the Warsaw Treaty member States want to discuss questions of military propaganda. That is not so. In our view, such discussion is intended to provide an insight into the intentions of all countries and to clarify their concepts with regard to the use of armed forces in case of a military conflict. Therefore, we attach no less importance to discussing the principles that govern the use of armed forces, particularly since, in our view, they form part, or constitute the military-technical aspect, of military doctrines. I hold that the centuries-old principle of "attack is the best defence" should be rejected! Any army preparing, even if for defence purposes, to carry out offensive operations is an objective source of threat and has a destabilising effect. Preference must therefore be given, even in the principles governing the use of armed forces and in the corresponding training and military manoeuvres, to such operational and tactical methods as are required for defence. Attack can be accepted only as a tactical category, as an element subordinate to defence. It is therefore necessary to eliminate from the concepts concerning the use of armed forces such clearly offensive ones as FOFA (follow on forces attack) and the use of operational manoeuvre groups.

4. *Dislocation.* I believe that the possibility of surprise attack is all the greater and the presence of an army is felt to be all the more threatening the closer the armed forces of a country are stationed to the potential enemy. Achieving offensive incapability presupposes essential reductions in the concentration, or density, of forces stationed along the borders. This does not mean that armed forces should necessarily be withdrawn farther away from the borders, since building a reliable line of defence makes no sense except along borders. What should be withdrawn are only the remaining forces capable of launching an attack. It is an accepted fact, however, that lines of defence should be built along borders. This, too, adds to the importance of deploying along such lines forces that are capable of defence only.

5. *Openness.* We reserve an important role for military openness in ensuring that forces are incapable of offensive action. The

feeling of being threatened is, I believe, closely related to the fact that military life and activity are still largely a secret. An army whose life is well known to its own people and to the potential adversary and which does not wish to "surprise" the enemy with its secrets is much less capable of launching a surprise attack than are the present-day armies surrounded in secrecy.

We consider that structural offensive incapability can be achieved if made an integral part of the whole process of disarmament in Europe. However, we attach great importance to unilateral steps in this context as well. The significance of such steps lies not only in that they strengthen confidence, but in that they enable us to move towards the final goal, even though we are guided only by our own ideas, whereas negotiations encourage the participants in the negotiations to seek some balance. Moreover, unilateral steps may facilitate the negotiations themselves. As elimination of asymmetries is one of the main goals of negotiations, the measures taken in that direction obviously serve to make agreement simpler to achieve, allowing the party originally having an advantage not to feel compelled to accept reductions that are too disproportionate at the conference table.

We feel that agreement would be greatly facilitated if all participants had reliable data on the actual armed forces of the negotiating partners. Therefore, we would find it practicable for the negotiating parties to elaborate, at the very first stage of negotiations, mutually acceptable criteria for an exchange of detailed and substantive data and, on that basis, to exchange data on their armed forces as soon as possible. The reliability of the data submitted should be guaranteed by appropriate verification prior to the reaching of agreement.

The preparation and realisation of the exchange of data as well as verification do not necessarily impede the elaboration of substantive measures. Quite the contrary, we would deem it necessary to work in parallel on the elaboration of measures or of the first agreement and on the exchange of data. It would also become easier to implement the agreement reached on the basis of the data exchanged and verified, while the exchange of data and their verification would in themselves be significant steps towards achievement of the transparency of the military situation in Europe and the strengthening of confidence.

As regards the future military situation in Europe and, in particular, the achievement of structural offensive incapability, tactical nuclear

weapons must not be ignored even though they are not on the agenda of the negotiations on conventional armed forces in Europe. There should be greater awareness of the need to return to the problem of tactical nuclear weapons at a specific time in the not too distant future when the process of eliminating the existing asymmetries in conventional forces would make it both possible and necessary to do so. It is important that talks likely to result in abandoning the time-worn concept of nuclear deterrence, at least in Europe, should cover tactical nuclear weapons as well in the not too distant future.

In view of the complex nature of conventional disarmament, I am convinced that it is necessary for this process to embrace the European armies as a whole, including ground and air forces as well as their armament and equipment. The ultimate goal should be to establish parity, with both sides having a much lower level of armaments than the side that now has the lower level in every significant service and armament. This would also mean large reductions in military capabilities that threaten the other side and other countries.

It appears to me that it is impossible at the first stage of the talks to adopt an approach that seeks to focus exclusively on armoured and artillery forces while putting off negotiations on air forces to the distant future, if the needed stability is to be achieved. The principles of modern warfare make it indispensable to reduce strike capabilities, particularly in terms of deep strike, and it would be impossible to reduce them to any significant degree if air forces were left intact.

An approach that seeks to measure military capabilities and parity exclusively by quantitative parameters is, in my view, equally contradictory and of doubtful value in achieving stability. If at the talks we endeavour to reach the ultimate goal that both systems of alliance should have equal numbers of armoured vehicles, artillery pieces, combat aircraft, and so on, it is not certain that we would, in the longer run, do a service to the cause of stability, security and peace, since any comparison in terms of numbers alone is very likely to give false results in view of the great and growing significance of qualitative parameters.

A new approach is needed in this respect as well. Attempts to take qualitative elements into account in determining the balance of forces have been made before. In saying that in Europe there is more or less military parity between the Warsaw Treaty and NATO member States we are not claiming that both sides have the same forces. By military

parity in this concrete case we mean that neither side is strong enough to impose its will on the other by the use, direct or indirect, of its military forces.

This kind of comparison cannot, of course, be used at military and disarmament talks. Nevertheless, it is necessary to abandon an approach that is merely quantitative in order to find a means that can be used at disarmament talks for measuring military strength. Our efforts may lead to very questionable results if we do not compare and take into account the qualitative parameters. We should seek to establish a stable parity that would reliably guarantee, at less cost and at less risk, the security of all countries in Europe.

Qualitative factors should be taken into account for the added reason that the armed forces in the countries of the two systems of alliance have, owing to historical developments, evolved different structures. Therefore, an approach that is merely quantitative is objectively favourable to those who have developed their armed forces at a higher level of technology, inasmuch as it places greater reliance on quality than on quantity. It would, therefore, be advisable for the disarmament talks to work out appropriate methods for taking opposing military potentials realistically into account, in parallel with efforts at the exchange of quantitative data, the verification of data and the elaboration of the first agreed measures. This would also provide a basis for determining the levels of defensive sufficiency to which armed forces could be reduced as a result of the negotiating process.

During the talks we should also consider the fact that there are asymmetries between the two systems of alliance that are objective and cannot be eliminated merely by talks. For example, the Soviet Union, as the strongest military power of the Warsaw Treaty, is a European State and the United States, as its NATO counterpart, is situated outside Europe. For one thing, given the shorter land routes of supply, it might be easier for the Warsaw Treaty countries to turn the new situation to their own favour after implementation of the future measures than it would be for NATO, which would have to use longer air and naval routes of supply. Allowance for this asymmetry could be made at the talks by appropriate measures, such as storage of part of the heavy armaments to be reduced. However, there is another side to asymmetry, one detrimental to the Warsaw Treaty countries, namely, the fact that the territory of the leading great power of NATO and its home-based armed forces remains entirely outside the scope of the future measures, while these same measures will apply to the

most developed parts of Soviet territory. I should like to emphasise that we do not see anything wrong with this in itself, except that care should be taken to ensure that factual geographical conditions would not bring any country or group of countries into a position of disadvantage.

In the European territory of the Soviet Union, there are armed forces which, though forming part of the forces to be covered by the talks and measures under the mandate of the 23, are clearly destined to balance such NATO and American forces as are outside the scope of talks and future measures. This is best illustrated by the Soviet home air defence (PVO), a part of which is undoubtedly destined to repel strikes by land-based NATO forces covered by the mandate, but a large part of which is intended for defence against American strategic air force, sea-launched cruise missiles, and naval air force. It is no less important for the talks to take this characteristic into account than for them to consider the aforementioned implication of the geographical asymmetry.

All in all, we expect to face difficult and complicated negotiations, but we are confident, and shall do all we can to ensure, that the negotiations will in the near future set in motion the process of reducing military confrontation in Europe, will reverse the arms race, which has hitherto appeared to be irreversible, and will lead to early, concrete results in reducing conventional armed forces in Europe and establishing their level and structure in accordance with the requirements of defence.

CONVENTIONAL DISARMAMENT IN EUROPE

The meeting of foreign ministers of the States participating in the CSCE process that took place in Vienna from 6 to 8 March 1989 marked the beginning of negotiations on conventional armed forces in Europe and negotiations on further measures for strengthening confidence and security in Europe. On 9 March, the participants in the negotiations began their substantive work, the goal of which is to solve the problems connected with the reduction of the threat of war, the achievement of real disarmament in Europe, and the strengthening of peace and stability in the relations between States.

Thus, the machinery of the Helsinki process has begun to operate. That machinery, which has no precedent in negotiating practice, consists of a unique structure of linked and mutually complementary negotiations on military questions on an all-European scale. It provides for the conduct of two negotiations, the first, within the framework of the 35

members of the CSCE, dealing with the further development of confidence-building measures (on the basis of the results of the Stockholm Conference, which were characterised by Mikhail S. Gorbachev as "the first sprouts on European soil of the new thinking in international politics"), and the second, among the 23 member countries of the CSCE belonging to NATO or the Warsaw Treaty Organisation, on conventional armed forces in Europe.

The mandate agreed on in Vienna, after years of effort, for the negotiations of the Group of 23 in itself represents an important step towards the creation of an integral system of negotiations on European disarmament which would include nuclear and chemical as well as conventional arms. The path to the mandate was long and difficult. The decisive impulse that lifted the whole problem of conventional arms in Europe away from dead centre was the 1986 Budapest Appeal of Warsaw Treaty States and the programme for the reduction of armed forces and conventional armaments in Europe embodied in it. At the same time a certain re-evaluation of earlier views on the whole complex of questions relating to conventional armaments in Europe was taking place in the West, and this cleared the way for a more realistic approach to the problem.

It was against this new political backdrop that, on 17 February 1987, in the French embassy in Vienna, the first meeting took place of the 23 States members of the Warsaw Treaty Organisation and NATO which were also participants in the all-European process embodied in the Conference on Security and Co-operation in Europe. This meeting marked the beginning of consultations on the preparation of a mandate for negotiations on conventional armed forces in Europe. The practical result of these consultations, which stretched out over almost two years and sometimes reached the point of deadlock, was the adoption of a mandate establishing the framework for negotiations within the Group of 23. That framework clearly defined the parameters for negotiations which were unprecedented in their scale and scope. The goal of the negotiations was the establishment of stability and security in Europe at lower levels of armed forces and conventional weapons through the elimination of existing asymmetries and the potential for surprise attack or the launching of large-scale aggressive actions.

The subject of the negotiations is the armed forces and conventional weapons of the participating States, including dual-purpose weapons. This means that the negotiations will cover all types and categories of ordinary weapons without exception, and regardless of whether they

require complementation, such as attack aircraft, artillery and tactical missile installations.

The negotiations will for the first time cover a broad geographical area—all of Europe from the Atlantic to the Urals, including a large part of the territory of Turkey and the Soviet Caucasus, all the European island territories of the participating States and even such outlying islands as the Azores, the Canaries and the Faroes, Madeira, Franz Josef Land, Novaya Zemlya, Spitzbergen and the Bear Islands. This in itself shows clearly the scope, unprecedented in negotiating practice, of the reductions of armed forces and weapons envisaged.

The mandate provides for strict and effective control of the agreements to be reached, including mandatory on-site inspection. There is even a provision for the exchange of detailed information on the troops and weapons covered by the negotiations, with the possibility of verification of the information exchanged.

Upon the adoption of the mandate, the States members of the Warsaw Treaty Organisation stated that during the negotiating process it would be necessary to weigh all the factors affecting the basic elements of European security and to take into account all the components of conventional armaments and forces without exception. Reductions should be carried out on a reciprocal basis and lead to reductions in the military expenditures of the participating States.

With the adoption of the mandate, new conditions have been created for evaluating the question of the reduction of conventional arms. It seems possible to look at the problem of security with regard to conventional armaments from several new angles. Indeed, the very progress made with regard to armaments makes new approaches necessary. Now that negotiations on the reduction of armed forces and armaments in Europe are beginning, we are thinking above all of how the armed forces of NATO and the Warsaw Treaty can be restructured so as to exclude offensive operations on their part or their use for surprise attack while at the same time strengthening their capacity for defensive operations. That is why we propose that the whole process of reduction of forces and armaments in Europe should be carried out in a way that will ensure that from the very beginning attention is directed not only to eliminating imbalances and asymmetries but to reducing the offensive capabilities of the two blocs.

It is important that this process not stop at the end of the first stage, when, after doing away with imbalances and asymmetries,

someone might decide that stability had been guaranteed. In fact, things are not so simple. As long as the possibility of technical and scientific progress in the field of armaments has not been eliminated, the first stage of this process, the mere reduction of offensive arms systems, may not result in a sufficiently stable situation. This is all the more true in view of the fact that in the capitals of the NATO countries, as well as at its headquarters, calls are being made (and specific programmes put forward) for the modernisation of conventional forces, which would in our opinion represent a serious threat to stability in Europe. Therefore, what is needed is a continuous process of talks and practical measures for the reduction of conventional forces and armaments. This process should last until the lowest levels of armament are reached and strictly held to and verified.

This process, naturally, is not a matter of a few months. But, it can be hoped that, having been begun this year, it may be possible, within the next one or two years, to complete its first phase—initial reductions, the liquidation of imbalances and asymmetries, and perhaps the creation of a nuclear free corridor in Central Europe as well as of zones of reduced military threat. This would mean the realisation of the ideas embodied in our proposals and in the proposals made by other States members of the Warsaw Treaty, such as the Jaruzelski plan, the Jakesh plan, and the initiatives put forward by the German Democratic Republic, Czechoslovakia and the West German Social Democrats.

At the negotiations in the Group of 23 now beginning in Vienna, the task will not be an easy one. It will demand great patience and moderation, balanced and responsible approaches. In many respects the task of the negotiators will be to create new models for the strengthening of security on the basis of a turn from the principle of military superiority to that of reasonable defensive sufficiency.

The Soviet Union and its Warsaw Treaty allies have demonstrated, in the new military doctrine they adopted in May 1987, their resolve to take such a turn. This doctrine is directed in essence towards a universal human objective, and has a dual content: the prevention of war and the defence of socialism. The doctrine of the Warsaw Treaty Organisation consists of three structurally interrelated aspects. The first aims at maintaining a military equilibrium between the sides at the lowest possible level. The second stresses the desirability of the reduction of military potentials to the levels of defensive sufficiency. And the third establishes the unacceptability of the use of force for the resolution of any international disputes. In full agreement with these postulates,

which will determine the military practice of the Warsaw Treaty Organisation and each of its members, the USSR and its allies have decided to implement unilateral reductions of their armed forces.

The scale of the reductions in Soviet armed forces is very significant. Their numbers will be brought down by about the size of the *Bundeswehr:* i.e. by 500,000 men, 10,000 tanks, 8,500 artillery pieces and 800 combat aircraft. Our military budget will decrease by 14.2 per cent, and expenditures on arms and military technologies will drop by 19.5 per cent, i.e. by about one-fifth.

In the course of two years the whole structure of our armed forces will be shifted towards a more defensive orientation. In agreement with our allies, the German Democratic Republic, Czechoslovakia and Hungary, six tank divisions will be withdrawn and dismantled before 1991. Moreover, some of our assault units with their arms and combat systems and other units which are currently with the Soviet groups of armies stationed in these countries will also be affected by these changes.

Over all, the Soviet troops stationed in these countries will be reduced by more than 50,000 men. The number of tanks there will also be significantly decreased, by 5,300 units. The Soviet divisions remaining on the territories of our allies will be restructured as well. For example, in the motorised divisions of the Soviet group of armies in the German Democratic Republic, and the central group deployed in Czechoslovakia, the number of tanks will be reduced by 40 per cent, whereas in the tank units it will be reduced by more than 20 per cent. Their anti-tank, anti-aircraft and engineering capabilities will be enhanced. Such a restructuring is meant to give our divisions a positively defensive structure.

More than 56,000 men, 1,900 tanks, 130 combat aircraft, and a significant amount of other military systems will be withdrawn from our allies' forces as a result of the decisions taken by the Governments of Bulgaria, Hungary, the German Democratic Republic, Poland and Czechoslovakia. The military budgets of the allied countries will be reduced by an average of 13.6 per cent. Over all, the Soviet armed forces in Europe and the armies of the other Warsaw Treaty countries will be reduced by 296,300 men, almost 12,000 tanks, 930 combat aircraft and a very significant number of other arms.

An extremely important step in the preparation of propitious conditions for the negotiations of the Group of 23 has been the publication by the Warsaw Treaty countries of data on their military potentials in

relation to the North Atlantic Treaty Organisation in Europe and in adjoining areas. They give a general picture of the existing forces. Furthermore, this count includes all the components which in real life are tightly linked, closely and continuously interact with each other, and complement and reinforce each other.

However, the publication of these data is not meant for the talks; they were not compiled to inflate those forces which will become the object of negotiations. Nevertheless, they include all the elements that are essential in order to establish the overall correlation of forces. These data could be used in connection with issues directly related to the negotiations.

It is the belief of the Soviet Union that the West now wishes as a matter of priority to reach agreement on the matter of conventional forces. This desire is regarded as a touchstone of the readiness of Governments to change the levels, structures and deployment of their forces in the direction of non-aggressive defence, and in a wider context to establish East-West relations on a new foundation.

Our position is known. It is the gradual reduction of armed forces in Europe to levels sufficient exclusively for defence. NATO recently came out with a proposal for stability at lower levels of armament.

Can we build bridges between these approaches? It would seem so. Notwithstanding serious differences, the positions of the two sides definitely converge. Both NATO and the WTO call for the elimination of asymmetries and imbalances by way of arms and force reductions, primarily of those which provide a capability for surprise attack or for large-scale offensive operations.

In and of itself, this is already not a bad achievement for the beginning of the Vienna talks. None the less, we are concerned that influential circles, especially in NATO's leadership, are inclined to adopt wait-and-see tactics in order to test the limits of the Soviet Union's readiness to make concessions. Supporters of this policy stand for making harsh proposals at the Group of 23 negotiations which would require the Soviet Union to unilaterally reduce its forces. Clearly, this can only slow down the negotiation of an agreement on a reduction of conventional forces.

We think that there now exist favourable conditions for achieving such an agreement. To that end, time must not be wasted in general discussions which, as experience has shown, lead to a hardening of positions, but instead work should immediately begin on the first set

of understandings, and the Vienna negotiations should be viewed as a continuing process.

In fact, both sides give high priority to the reduction of those forces that have the capability for surprise attack and the conduct of large-scale offensive operations. Clearly, in dealing with those forces attention must be directed first of all to the liquidation of imbalances and the reduction of the forces.

If such a path were taken and the most dangerous of offensive weapons were singled out (for example, attack aircraft, combat helicopters, tanks, artillery, armoured personnel carriers, river-crossing equipment etc.) and if ceilings were set for them at much lower levels than the current ones in NATO or the WTO, an agreement could be reached in the very near future.

Taking into account the complexity and the contradictions inherent in the problem, and the great breadth of the areas covered by the talks, it would appear more appropriate to break down geographically the entire area stretching from the Atlantic to the Urals into several concentric zones. The first phase of the lowering of military confrontation in these zones would be measured in terms of volume, depth and form.

The main difficulty expected at the negotiations from the very beginning is the numerical discussion which led earlier to the failure of the Vienna talks on disarmament in Central Europe. Naturally, it is impossible to avoid such discussion altogether. The question is how its dangerous effects on the talks can be minimised. The possibility of a parallel discussion of the necessary baseline data, and of the ways to attain the intermediate and final objectives of the talks could be examined.

It is clear that the establishment of a detailed register of military forces would be an extremely complicated issue for the talks. This could lead to interminable disagreements, especially if the goal of verifying all declared levels of forces is established. Thus, an alternative could be examined which would avoid discussion of the baseline data and concentrate instead on the final arms ceilings to be established. Verification would then apply to maintaining those ceilings, i.e., to the forces remaining after the reductions. Control would be introduced gradually, as the force reductions are carried out. And, when the agreed-upon lower ceilings are reached, the remaining forces would be subjected to full verification.

This approach would probably make it possible to avoid quantitative discussions. At the same time, the exchange of data could take place in

the context of the negotiations of the Group of 35 on confidence-building measures, if the countries involved agree on the exchange of information relative to the numbers, structure and deployment of their armed forces.

Another variation could consist of selective on-site inspections to verify these data. In any event, we must keep in mind that the objective of the negotiations is not to ascertain data but to determine the final levels of the forces, which should be brought down to the lowest viable levels.

The important thing now is to take the first step. The Soviet side will actively endeavour to open the way to the realisation of the three-phase plan proposed by Mikhail S. Gorbachev for reducing arms and troops in Europe, which will of course in the future be extended, made more specific, and translated into language compatible with negotiating norms.

From the very beginning it is important to agree also on the principles of disarmament. Our unilateral steps, presented by Mr. Gorbachev at the United Natons on 7 December 1988, already involve the principle of future reductions. They include: the correction of asymmetries and the elimination of imbalances, the reduction first of all of the most destabilising forces, the withdrawal of troops from the areas of direct contact between NATO and the WTO, the dismantling of the units recalled, and the restructuring of the divisions stationed in Central Europe with a view to giving them exclusively defensive functions.

In this connection, the great importance of the dialectical interaction between unilateral and multilateral steps should not be forgotten. As was shown by the reaction to Mr. Gorbachev's address at the United Nations, important unilateral steps may have a huge positive impact on the negotiations. Similarly, unilateral steps, especially in those spheres where asymmetry in offensive forces prevails, can stimulate the entire negotiating process and make possible even more far-reaching multilateral agreements. At the same time, however, it must be clearly recognised that there is an objective limit beyond which any unilateral disarmament action must assume a multilateral character.

Clearly, the role of naval forces will grow as a result of the elimination of imbalances and asymmetries between the land and air forces of the two sides. These forces are a destabilising factor in the global system of European security. Clearly as well, in the new Europe which will emerge from the disarmament process, the postponement of the questions of control and reduction of naval armaments will become more and

more difficult. Sooner or later, it will be necessary to make political decisions, taking into account the interests of all sides.

An important aspect of conventional force reductions is the interrelation of this process with the elaboration and introduction of new confidence-building and security measures in the military area. Progress in the domain of confidence-and security-building measures will ease the process of armed forces and conventional weapons reductions in Europe. It will also promote the solution of other disarmament issues, which in turn will create favourable conditions for future confidence-building. The agreements to be reached in the negotiations of the Group of 23 and of the Group of 35 should be in harmony with each other. They should complement and reinforce each other. Confidence- and security-building as well as disarmament negotiations in Europe must advance the preparation and adoption of measures which would encompass all the elements of the armed forces (land forces, naval and air forces) of the CSCE member States with a view to lowering the risk of an armed conflict in Europe, lowering and eliminating the possibility of a surprise attack, enhancing common security, subordinating military activities to defensive purposes, increasing openness and predictability, and contributing to the creation of practical disarmament measures.

The Soviet Union has been ready from the very beginning of the negotiations on conventional weapons and force reductions to discuss the immediate reduction of tactical nuclear weapons. It is clear that the decision to give both military alliances exclusively defensive profiles is impossible to implement if weapons with such huge destructive potentials continue to exist.

On the other hand, taking into account the close operational, technical and organisational links between conventional forces and weapons and tactical nuclear systems, it appears that large reductions of "general-purpose forces" objectively create the conditions needed for the reduction of these nuclear weapons. This interrelationship was also expressed in the unilateral steps announced by Mr. Gorbachev at the United Nations: the Soviet Union will withdraw from Central Europe large units with all their armaments, including their tactical nuclear weapon systems. This clearly constitutes an important unilateral measure of nuclear disarmament.

It is evident that the steps we have taken are creating new and favourable conditions in Europe for the beginning of a dialogue about

tactical nuclear weapons, including short-range nuclear missiles. In the context of the concessions made by the Soviet Union, the West should re-evaluate its approach to this problem. It is clear that important reductions in armed forces and conventional weapons, and especially of their most destabilising elements, significantly reduce the mutual threat of a surprise attack and of the conduct of offensive operations with conventional means. In essence, they eliminate any grounds for keeping tactical nuclear weapons in the military arsenals of NATO or the WTO.

Conventional armed forces negotiations cannot be expected to be simple, not only because of the extreme complexity of the problems to be faced, but also because the participants will be far more than two, three or ten States, all with their own perceptions of their national security needs, and of the desired reductions in conventional armed forces.

If all States are determined to succeed, they must above all try to overcome the stereotypes of "strength", the temptation to "outsit" the other side in the negotiations for the sake of mythical negotiating advantages. A psychological reassessment is not an easy process to undertake, given the general acceptance of the existence of a military threat from the other side. The invocation of threats has been used in politics, including military politics, both in the West and in the East, and seems to be stronger than reinforced concrete. Unless the "enemy image" is eliminated, the Vienna negotiations will be doomed in advance to end in deadlock, and its participants resigned to passivity or a simple refusal to engage in dialogue.

We believe that public assurances of peaceful intentions and of the defensive character of military doctrines are unconvincing. They must be reinforced with specific, tangible actions by States in the realm of their military policies—i.e., the build-up of armed forces and weapons, their structure and deployment and their operational planning—as well as a readiness to lower the level of military confrontation by means of disarmament negotiations. In this connection, it is particularly important that the military policies of States should correspond—not in words but in deeds—with the declared defensive aims of their military doctrines.

In fact, the armed forces of States should be restructured so that neither the qualitative nor the quantitative characteristics of their defence forces or their military policy as a whole create a desire on the other

side to increase its military power, or give it the impression of a growing security threat.

The Soviet Union, and other members of the Warsaw Treaty, have already begun the rebuilding of their armed forces on the principle of reasonable defensive sufficiency. Thus, it can already be said that the theoretical defensive military doctrine of the Warsaw Treaty countries has been translated into military practice. The adoption by the Soviet Union of unilateral force and conventional armaments reductions has become possible as a result of a radical improvement in the international climate during the past two or three years. It is also the result of the introduction into the foreign policies of both the West and the East of new political thinking. The decision to do so is based primarily on the understanding that the current high level of military confrontation in Europe, which dates back to the post-war years, does not fit the present nature of East-West relations.

That is to say that we have already begun to reassess previous perceptions of the military threat posed by the West, and that we are building our policy, including our military policy, on these premises. It is important that a similar path be taken in the West as regards the Soviet Union and the socialist countries. Only this will allow us to eliminate mutual distrust and to reach decisive breakthroughs at the Vienna negotiations in the very near future.

The success of these talks depends also upon whether the participants will be able to overcome routine, whether they will be able to bring to the discussions creative approaches. Fresh outlooks, new proposals and decisions are needed. The Soviet Union and the other members of the Warsaw Treaty Organisation are ready to examine any proposals and measures directed towards the enhancement of stability on the continent at lower levels of military confrontations, on a basis of equality, and non-infringement of the security of any of the parties involved and with a guarantee of effective verification of the agreements reached.

CONVENTIONAL DISARMAMENT AND EUROPE

The announcement of unilateral reductions in conventional forces by several Warsaw Pact countries, the review of disarmament priorities by the new United States Administration, the revival of the transatlantic debate on "sharing the burden" and the question whether decisions to modernise nuclear weapons should be taken at this juncture—these developments constitute the context in which the new negotiations on

conventional disarmament in Europe began. This renders them even more significant.

Governments in the East and the West characterise those negotiations as one of the tests of a transition to a new era: an era in which a relaxation of military postures could result in more fluid political, economic and cultural relations in Europe. Seen in this light, the recent inconclusive end of the talks on mutual and balanced force reductions (MBFR) after 15 years of negotiations should symbolise the passing to a radically new approach.

Nevertheless, the goals and ulterior motives of the negotiating parties are not necessarily the same: the stakes at future negotiations have become high enough so that a political approach becomes as important as a purely military one.

In the Strategic Arms Reduction Talks (START), the goals of the partners are roughly identical. Both consider it possible to reduce their overstocked arsenals by eliminating those elements which contribute least to strategic stability. They set out from positions that are not very far apart: there is global nuclear parity. They should end in positions that are quite similar: the goal in both cases is to retain a range of survivable second-strike capabilities while persuading the partner/adversary to renounce those systems which can be perceived as creating the temptation of a pre-emptive first strike.

In the future negotiations on conventional forces, things will be much less clear-cut. First, there are many more partners—23 at this point, at least for disarmament negotiations on conventional armed forces in Europe (CFE), and 35 for confidence- and security-building measures (CSBMs). Secondly, some are convinced that there is a basic imbalance favouring their Warsaw Treaty partners, while the others talk about compensating asymmetries which result roughly in an overall balance. While the Western countries are prepared to demonstrate how serious they are about disarmament, by making cuts in their own forces, they expect most of the reductions to be made by their Warsaw Treaty partners in tanks, artillery and armoured personnel carriers. They consider it essential to reduce the surplus in that hardware in order to eliminate the risk of surprise attack or of a large-scale operation, since it could now be used by the Warsaw Treaty countries for those purposes.

Their negotiating partners, on the other hand, conceding that there are asymmetries to their advantage in at least some of these areas, have been trying to broaden the scope of the talks. They intend to

include other subjects despite the fact that some were expressly barred under the terms of reference agreed upon in Vienna: qualitative factors, naval weapons and nuclear weapons. They have also been performing acrobatics in classifying concepts. For example, they would like to split up air strength into defensive and offensive categories, which are not relevant to the nature and versatility of modern aircraft. In so doing they try to demonstrate, by juggling figures to their advantage, that there are balances here and imbalances there. Whenever an imbalance in favour of the East is created by adding several categories, they attempt to cover it up in an even more general computation. When the inclusion of a given category in the overall count yields the same result, however, they resort to subtler and unconvincing distinctions. This accounts for the different approaches noted recently when the basic data were published by the Western countries in November and the Warsaw Treaty countries in January. While it is generally encouraging, this mutual effort at transparency reveals substantial conceptual differences. Over and above differences in assessing the starting positions, the reasons for entering into negotiations are also very different.

The reason most common to the various negotiating States is undoubtedly related to economic and/or demographic concerns: they have induced several countries, in both East and West, to seek reductions in their conventional forces. It has often been said that the only area where disarmament could really lead to savings was in conventional forces. Today we know the difficult budgetary choices faced by such diverse countries as the United States, the Federal Republic of Germany, the Soviet Union and France. Furthermore, everyone is aware of the demographic pressures on the *Bundeswehr* and the Red Army. Lastly, there is no doubt that the internal economic restructuring under way in the Soviet Union would have everything to gain from the reallocation to the civilian sector not only of funds being used to maintain armies, but also of skilled technical personnel.

These reasons, however, might not be the most decisive. Claiming to gain a diplomatic advantage from constraints known by the other side to be largely inescapable is frequently an illusion and tantamount to negotiating from a position of weakness. Such reductions are normally better made unilaterally, as the Soviet authorities have just demonstrated.

Consequently, other concerns, of a political nature, probably assumed priority in enabling the various negotiating States to agree on the need

for the forthcoming negotiations. That is where the ulterior motives are often in conflict.

There is no doubt, for example, that the primary concern of the United States in entering into negotiations was to dispel the impression created among the Europeans by a certain way of portraying the Strategic Defense Initiative (SDI), or by the possibility entertained at Reykjavik of renouncing all nuclear ballistic missiles. This impression was that the United States could withdraw a large part of its nuclear protection from Europe, abandoning it to its conventional imbalances. Since there was a conventional problem, Washington had to show that it was aware of it and wanted to settle it. However, once this problem is solved, United States disengagement might become even more justifiable. Hence the hesitation regarding the real motives of the United States: Are conventional negotiations being used to deflect Congress from the temptation of unilateral disengagement as the MBFR negotiations were used at the time of the Mansfield amendment? Or is it rather a question of getting the Europeans used to the idea of disengagement?

Whatever the case may be, conventional negotiations probably appealed to the United States for another reason: they provided an argument for delaying the opening of negotiations on short-range nuclear missiles in Europe.

During the pause for review of the START negotiations, there is undoubtedly a further concern, namely, to keep public opinion and the allies convinced that the United States does everything to favour the dynamics of disarmament. A syndrome has been observed for the past several years: when strategic negotiations are stalled, there is a temptation to train the spotlight on European negotiations.

That assessment, right or wrong, of United States intentions, which should normally generate a preference for slow-paced negotiations, inevitably produced the opposite reaction in other parties. Some were hoping that a speedy opening of and rapid progress in conventional negotiations might help break the deadlock on negotiations on short-range nuclear missiles, or even that they might provide an argument for postponing the modernisation of such missiles on the grounds that conventional negotiations will, it is hoped, make it unnecessary by eliminating what some believe to be the *raison d 'etre* of short-range nuclear weapons on European soil.

This brings us to the danger of oversimplifying the relationship between conventional and nuclear forces in Europe. By trying to justify

the presence of nuclear weapons in Europe solely on the basis of persisting conventional imbalances, one would build up frustration and create a time bomb: frustration on the part of those cheated of the negotiations on short-range nuclear missiles they are hoping for, the excuse being that the conventional imbalance must be reduced first; the time bomb—denuclearisation once the parties declare themselves satisfied with the outcome of the conventional negotiations.

In actual fact, as the Heads of State and Government of the Atlantic Alliance stated last March, the relationship between nuclear and conventional forces is complex. As things stand, deterrence requires a minimum number of nuclear weapons regardless of the respective size of conventional arsenals. A perfect balance between those arsenals would not rule out the possibility that someone, at some time, might be tempted by a military adventure. Furthermore, "extended" deterrence, a phrase describing the relationship between the 15 members of the integrated military structure of the Atlantic Alliance, probably requires the presence on European soil of nuclear capabilities designed to demonstrate the danger of escalation which an aggressor would risk. The presence of this nuclear ground echelon in Europe provides the military protector with a certain number of options, while at the same time it convinces those being protected that he cannot remain indifferent to their fate.

Conventional negotiations will interfere with this complex interplay of factors. Many analysts feel that therein lies the main reason for Moscow's interest in the forthcoming negotiations. They consider that the aspect of Soviet policy that has changed least since Mr. Gorbachev came to power is the Soviet attitude towards Europe. The prospect of the integrated common market in 1993 has, in their view, even strengthened some constant foreign policy objectives of Soviet diplomacy: the attempt to sever the linkage between the Europeans and the United States—to be achieved by American nuclear disengagement from Europe—and the effort to dissuade the European Economic Community (EEC), in the interest of the "common house", from forging an identity, *inter alia,* through the Western European Union (WEU) in the field of security, which would make them less vulnerable to the intentions of their larger continental partner.

This line of reasoning, if correct, suggests that Moscow's chief concern in the conventional talks will be to make sure that their pace will be settled after the achievement of Soviet ambitions in the nuclear field: that is, the abandonment by the members of the Atlantic Alliance's

integrated military structure of their nuclear modernisation plans, and the opening of talks on short-range nuclear missiles. Through a third "zero option" these talks would bring about an almost total denuclearisation of Europe, Britain and France excepted. Pointers in this direction can be found in recent Soviet appeals (such as the appeal by Mr. Eduard Shevardnadze at the closing ceremony of the Vienna CSCE meeting) for a Western response in the nuclear category to the recent unilateral steps announced by the USSR in the conventional field.

Admittedly, the other Eastern European countries do not necessarily have the same priorities as Moscow. Some of them simply have a national interest in seeing the Soviet military presence on their soil reduced.

In that, they share one of the chief concerns of a country like France. The desire by the French to rectify the current conventional imbalance, voiced as early as 1978 in their proposal for the Conference on Disarmament in Europe, has always been much more a reflection of their views on desirable political evolution in Europe than of any military uneasiness against which, they believe, they are protected by their overall deterrent posture. Conventional disarmament, in the eyes of Paris, means first and foremost the removal of one of the obstacles which still prevent the war legacy of a divided Europe from being superseded. And it is the Helsinki Final Act that has opened the way for such a development.

If those are the ulterior motives of the various partners in the negotiations, the question is merely whether it will be possible, in the talks, to find an approach that satisfies everybody.

This is certainly not impossible. Moscow's nuclear concerns may just as well prompt the Soviets to look for speedy results—collateral intended to persuade the most hesitant Westerners not to go along with nuclear modernisation—as to set up potential obstacles. If they opt for progress, there is no reason why an understanding cannot be reached.

In any event, however, the stakes are far higher than progress in conventional disarmament in Europe. The new talks bear indirectly on such basic factors as the American involvement in Europe, transatlantic relations, what part nuclear forces play in the Western security posture, the future of Eastern Europe, the overcoming of divisions between blocs, and the like.

It is certainly too early to predict whether awareness of what is at stake will encourage the negotiators to seek agreement or exacerbate differences.

In the eyes of a Westerner, a number of encouraging signs have been appearing in statements by the Eastern participants: the idea that those with the most must cut the most; the acknowledgement by the Warsaw Pact countries of their superiority in almost all the areas which the West regards as most significant; the acceptance of the principle of on-site inspections; the much-vaunted concern to avoid getting bogged down in MBFR-type squabbles over data; the stated desire for transparency; Moscow's taking up of Western themes such as "reasonable sufficiency" and "defensive posture"; and, finally, a degree of willingness to admit that the announced unilateral cuts, although worth taking seriously—subject to some further clarification—are not by themselves sufficient either to establish a balance or to rule out the possibility that the Warsaw Pact could launch a large-scale military operation.

Other, rather less encouraging, factors are understandable if not entirely forgivable: some discrepancies in the published data arise from differences in methods of counting; certain contradictions in official statements on what constitutes reasonable sufficiency are indicative of the problems some people have in adapting to the "new thinking". Time, and talks, will presumably put those matters right.

What is more disturbing, however, is that now that unilateral cuts have been announced, there might be a temptation to allow the talks to bog down at the start. There would be no lack of opportunity for anyone wishing to adopt such a worst-case policy: a protracted quarrel in the CFE talks about data, how to define asymmetries—the role of aircraft, missiles, anti-tank weapons etc.—or how to allow for qualitative distinctions; or in the talks on CSBMs, insistence on including naval or air activities unrelated to land-based operations and, hence, impossible to ascribe with certainty to Europe.

Such squabbles could be accompanied by presumably time-saving proposals, which in fact do not serve the objectives of the talks: for example, the creation of special-status zones, free of particular kinds of weapons, in the heart of Europe. Opportunities for forward-basing of defence capabilities by the West would be seriously affected while the danger of surprise attack or large-scale operations would not be reduced at all. What good would it do to make steep cuts in forward-based forces if rapid reinforcement capability, whether immediately or

deep behind the lines, was left untouched? Far from encouraging progress towards abolishing political divisions in Europe, moreover, such proposals, by requiring both blocs to guarantee protection for these reduced-security zones, would simply perpetuate existing divisions and prevent movement towards greater political fluidity.

That, of course, is not to say that special stabilisation measures in the "contact" zones, designed, for example, to give more rapid warning in the event of aggression, cannot be devised. But, these would not be the demilitarised "corridors" that the Eastern bloc countries are talking about. To avoid the obstacles that the above approaches would produce, negotiators need to keep two points in mind: the need to stick to agreed objectives; and the need to turn the combined effect of the two sets of talks to advantage.

Concentrating on the objectives agreed on in the two sets of terms of reference means, for the 23, working to prevent surprise attacks and large-scale operations, and for the 35, promoting transparency and confidence.

Preventing surprise attacks and large-scale operations in Europe means making it impossible for an aggressor to seize and occupy territory without his preparations being noticed sufficiently far ahead of time. Numbers are of course important here, and parity in the main categories of weapons is doubtless preferable to imbalance. But, numbers are not everything: parity alone has not over the course of history always deterred aggression. The time it takes to build up strength, the operational level from which one begins, and constraints of force location and availability are of major importance.

Western partners will put forward proposals covering all these points: seeking changes in the total size, concentration on the ground and national origin of forces simultaneously. They will call for them to apply initially to *material* specifically designed for seizing and occupying territory, i.e. tanks, artillery, armoured personnel carriers.

The question of aircraft will naturally come up. It would of course be absurd to claim that they do not play a major role in modern combat. On the other hand, lacking tanks, artillery and armoured transport, a power armed only with aircraft could not pursue aggressive objectives with any hope of lasting results. Add to that the near impossibility of attributing air strength, which is eminently mobile and multipurpose by nature, to a particular theatre, and consider the huge problems of verification associated with any withdrawal or cut-back in air strength.

Putting off any counting of aircraft to a later phase looks entirely reasonable.

As far as confidence-building measures are concerned, the problem will be to agree on an approach which emphasises the need to go beyond what was agreed in Stockholm even though, until the CFE talks result in reductions and greater stability, it will not be possible to progress as 35 nations to limitations proper on, for example, the frequency or scale of manoeuvres and exercises. Pending greater stability in conventional arrangements as a result of the CFE talks, flexibility must remain the rule on force training. At this intermediate stage, however, a great deal of progress could be made under the heading of confidence- and security-building measures in areas which have not yet been much explored, e.g. transparency, not only in military activities—already developed at Stockholm—but in how forces are structured in peacetime.

Some encouraging signs suggest that Eastern countries would now be ready to agree to what they turned down in Stockholm: mutual reporting on units, their composition and position, combined perhaps with machinery for random checks. Similarly, thought could be given to the development of "warning signals" whereby, any time an apparent departure was observed from the normal peacetime military behaviour of a State party (as statistically determined over a number of years from notifications), its partners could call for an explanation. Finally, the talks on CSBMs could provide the occasion for an extensive exchange of views on military doctrine, which might for example emphasise the exchange of training manuals, and offer an opportunity, in combination with the CFE talks, to evaluate the change-over to exclusively defensive postures and philosophies.

These examples give an idea of how the combined effect of the two sets of talks could be turned to advantage. For example, the best means of avoiding a squabble over data among the 23 is to promote transparency on arsenals within the 35. Conversely, if some constraining measures are not acceptable at this stage as confidence-building measures, they might be accepted as stabilising measures in association with the cuts to be agreed among the 23.

The combined effect, moreover, is not merely of practical interest: it reflects a political point of view which, at the insistence of France, among others, was what led to the two sets of talks being conducted within the CSCE framework. The intention was twofold: on the one hand, to emphasise that progress towards greater military stability

cannot be considered in isolation from other developments, political, economic or cultural, which are all needed if a new, safer and less divided Europe is to emerge; and also to indicate the importance of the role of the neutral and non-aligned countries in the creation of more stable conventional military structures in Europe.

For now, certainly, the CFE talks are of concern only to the 23 countries in the two alliances, which are regarded as having special responsibility for the way security is currently organised in Europe. In any event, the neutral and non-aligned countries were not eager to begin cutting their own forces immediately. The fact remains that the talks are not a face-to-face encounter between the two alliances, but between 23 independent, sovereign States. Furthermore, expansion of the CFE talks to 35 countries is by no means impossible. If the decision were to be taken at a future CSCE meeting, for example in Helsinki in 1992, the second phase of CDE, no longer devoted just to confidence-building measures but to disarmament proper, as foreseen in the mandate adopted in Madrid in 1983, would take over from the 23-country CFE negotiations. This should be considered a reason to avoid any formula in the CFE talks whose effect might be to make the pre-eminence of the two blocs immutable: the very fact that the 23-country talks are taking place within the CSCE framework, while their current format is merely something of an interim arrangement, cannot but affect the kind of proposals adopted there.

Any proposals that clearly put the relaxation of military postures within a broader political context will be going in the right direction. Hence the special attraction of proposals which, going beyond mere symmetry in the military structures of the two camps, will affect either the individual posture of each State for example, a ban on exceeding a certain percentage of the combined arsenals of all the others in each weapons category for the sake of "reasonable sufficiency" or on military relations between pairs of States (for example, a requirement that each State will not station forces in a partner country that exceed a certain percentage of that country's national forces, in repudiation of political intimidation).

It has been said that at stake in the new talks was the establishment of the kind of military relations in Europe which would deprive the alliances of their *raison d'etre.* This is undoubtedly an exaggeration. Conventional stability alone will not justify talk of a "comprehensive European security system" capable of supplanting what exists today.

But, a great hope rides on the talks on conventional forces, namely, that they may allow new room for manoeuvre, additional "play", in European relations, and thus facilitate the emergence of a new Europe with less need to worry about the compatibility of efforts made by 35 countries (CSCE), 12 countries (EEC), or 9 countries (WEU) at a time. The less burdensome the military constraints are, the smoother will be the transition between successive levels of the new European identity.

PROSPECTS FOR CONVENTIONAL ARMS REDUCTION AND CONFIDENCE- AND SECURITY-BUILDING MEASURES IN EUROPE

Since the entry into force of the INF Treaty, the prevailing understanding in Europe seems to be that conventional arms are next on the arms control agenda for the continent. Europeans are more concerned about limiting conventional arms than they are about achieving the controversial "triple zero" by reducing tactical nuclear arms. For budgetary reasons conventional arms reduction is favoured by the general public both in the East and in the West. The CSCE process must also continue inasmuch as the participating States have reaffirmed their determination to continue building confidence, to lessen military confrontation and to achieve progress in disarmament.

Two negotiating processes have now been established by the Vienna CSCE Follow-up Meeting. Negotiations on conventional armed forces in Europe have received a new mandate. Those on confidence-and security-building measures (CSBMs) will take place in accordance with the mandate drawn up for the Stockholm Conference at the Madrid CSCE Follow-up Meeting in 1983. As each has its own mandate, it seems appropriate to discuss the prospects for arms limitation and confidence- and security-building measures by examining some of the issues likely to be raised in each of the two forums.

Conventional Arms Reduction

Negotiations on the reduction of conventional armed forces will take place in a forum consisting of the 23 States members of NATO and the Warsaw Treaty. In the course of the Vienna Meeting the neutral and non-aligned States were dissatisfied with this arrangement because it excludes a third of the CSCE States and places them in a position of inequality. The neutral and non-aligned States have, however, contributed to a constructive outcome by securing an information link between the two forums.

Assessing the prospects for the negotiations at this early stage is, of course, a futile task. The negotiations will be long and arduous and it would be premature to predict the outcome, which in any case lies years ahead. At the moment it may suffice merely to chart out the goals of the participants and to assess the prospects for limitation of their conventional arms.

The Western View

During the Vienna meeting NATO was instrumental in formulating the objectives of the negotiations on the reduction of conventional armed forces in Europe (CFE) in a way that closely corresponded to its aims as defined in March 1988:

- The establishment of a secure and stable balance of conventional forces at lower levels;
- The elimination of disparities prejudicial to stability and security; and
- As a matter of high priority, the elimination of the capability for launching a surprise attack and for initiating large-scale offensive action.

As the last-mentioned capability has been deemed to be the one that causes the greatest concern, NATO's aim is "to establish a situation in Europe in which force postures as well as numbers and deployments of weapons systems no longer make surprise attack and large-scale offensive action a feasible option."

Several criteria for pursuing this aim have been defined. These include the need to enhance stability throughout Europe from the Atlantic to the Urals, taking into account the concentrations of Warsaw Treaty forces and the particular problems affecting the Central, Southern and Northern regions; focusing on the key weapons systems in seeking to eliminate the capability to conduct large-scale offensive action; and taking account of the weight of forward-deployed conventional forces as well as force generation and reinforcement capabilities. As the goal of NATO is to redress the conventional imbalance, this outcome will, in the Western view, require very asymmetrical reductions by the East, and will entail the elimination from Europe of "tens of thousands of Warsaw Treaty weapons relevant to surprise attack."

As a concurrent element in its efforts to enhance stability and security, NATO will propose measures to promote greater openness with regard to military activities throughout Europe and to support a rigorous,

effective and reliable monitoring and verification regime. This regime should include the exchange of detailed data about the forces and their deployment and the right to conduct sufficient on-site inspections to provide confidence that agreed provisions are being complied with.

It is believed that NATO will lay down certain pre-conditions for the negotiations, pre-conditions which arise from its strategic principles. Consequently, NATO will probably maintain its strategy of flexible response, including the option of first-use of nuclear weapons. Another important issue is the modernisation of tactical nuclear weapons, a right on which NATO will insist in principle.

The Eastern View

Considerable flexibility and a willingness to meet Western demands have recently characterised Soviet and Warsaw Pact views with regard to conventional arms limitation. The change of attitudes has been quick and dramatic: from inflexibility in negotiations on mutual and balanced force reductions throughout the 1970s and the early 1980s as regards admission of the military imbalances, to a willingness to make asymmetrical reductions, and finally to the announcement by President Gorbachev of the intention of the Soviet Union unilaterally to reduce Soviet forces by half a million, which was followed by similar statements by other Warsaw Treaty members.

The Warsaw Treaty States had made several arms reduction proposals on conventional forces before the Gorbachev announcement. In June 1986 they had called for a substantial reduction of all components of the land forces and tactical strike-aircraft of the European States, as well as corresponding forces and weapons systems of the United States and Canada deployed in Europe. The reduction would comprise over half a million persons on each side. As a result, land forces and tactical strike-aircraft of both alliances in Europe would be reduced early in the 1990s by approximately 25 per cent.

In May 1987 the Political Consultative Committee of the Warsaw Treaty States discussed ways of implementing the programme submitted in 1986. The Warsaw Treaty States recognised the imbalance of the forces of the two sides in Europe and declared their readiness to remove any disparity by bringing about a reduction on the side of the one which had an advantage. In the view of the Warsaw Treaty countries the reductions must ensure, at each stage, a balance at the lowest possible levels.

In 1988 the Soviet view on conventional arms control in Europe was formulated into a three-stage proposal. During the first stage the two sides could officially exchange data on the numerical strength of the armed forces and armaments of each of the alliances and of each country individually. As the talks began, the data could be checked by on-site inspections. During a second stage, each side could reduce its troops by approximately 500,000. During a third stage, further reductions could be made which would leave both sides with such numbers of armed forces and weapons as would be sufficient for defence but not sufficient for offensive purposes.

The current Soviet view on conventional arms control in Europe recognises the existence of certain imbalances in favour of the Soviet Union. Accordingly, the Soviet Union is willing to accept asymmetrical reductions. It has, however, some concerns of its own. While recognising an edge of 20,000 tanks, it maintains that NATO has an advantage of 1,400 in tactical aircraft and 50 per cent more combat helicopters than the Warsaw Treaty countries. In the Soviet view, the question of eliminating the imbalances in tactical strike aircraft and combat helicopters should also be raised. Future negotiations will make sense only if they cover "mutual and simultaneous reductions and the elimination of imbalances and asymmetries".

Prospects

While there is agreement as regards the objectives of the negotiations, there is likely to be disagreement as regards specific ways of achieving the goals. The parties agree in principle on the desirability of ensuring conventional stability at a lower level of forces, armaments and equipment than exists today. At the same time, they are prepared to do away with the disparities in existing force structures. Eliminating surprise-attack capabilities and the ability to initiate large-scale offensive action is a further objective generally accepted by the parties to the negotiations.

In spite of the fact that the goals are shared, their realisation is hampered by potential disagreements, which indicates that the negotiations will in all probability be protracted. How, it may be asked, are the parties to apply reductions, limitations, redeployment provisions, equal ceilings and related measures in a militarily significant way that will ensure a balanced outcome of the stated objectives? Limiting conventional arms is also connected to other political and military problems that are outside the mandate but that have to be taken into account in one way or another.

Confidence- and Security-building Measures

In the forum of the 35 countries participating in the CSCE, the neutral and non-aligned countries will be present in addition to members of the two military alliances. In Stockholm the neutral and non-aligned States already had interests emerging from their own needs, not merely the aspiration to act as the makers of compromises between the West and the East. As the CSBMs increasingly affect their security and military interests, the independent stand of the neutral and non-aligned States is likely to continue.

The positions of the three groups have become familiar to all in the course of the negotiations, and in the future their views may merge more and more. Therefore an examination based on actors would hardly provide a natural starting-point. Instead, by focusing on the substance we might divide the CSBM issue into two main problems: openness and constraints.

Openness

Openness, transparency and the exchange of information have been essential elements of Western policy on CSBMs ever since the preparatory phase of the CSCE leading to the Helsinki Final Act of 1975. In the negotiations of the 1970s the Soviet Union and other socialist States still refused to apply openness to the extent deemed necessary by the West. A substantial change took place, however, in the attitudes of Eastern Europe towards openness during the Vienna Follow-up Meeting, not only as regards security issues but also as regards other issues, particularly human rights.

It must nevertheless be assumed that the concept of openness will be promoted primarily by the Western participants. Indicating that a lot of unfinished business with regard to CSCMs remained after the Stockholm Document, United States Secretary of State George Shultz stated:

> "The concept of openness—central to any efforts to reduce the risks of surprise attack—has yet to be fully put into practice."

The Western interest in openness is also expressed by the NATO document of November 1988 comparing conventional forces in Europe:

> "At the talks on CSBMs, improved openness about military forces and their activities will be a fundamental objective. The Allies will therefore present, as we did at the Stockholm Conference, a proposal that participating States should provide each year, on the basis of an agreed

formula, information about the composition, organisation and deployment of their armed forces in Europe. We hope that on this occasion our proposal will evoke a more positive response."

The attitude of the Warsaw Treaty States towards the exchange of information has so far been rather reserved. Their recent proposals are, however, rapidly approaching the views of NATO. In the declaration on confidence- and security-building measures issued by the foreign ministers of the Warsaw Treaty States following their meeting at Budapest in October 1988, one set of CSBMs specifically called for various measures for increasing openness and predictability, verification, control and the exchange of information. The measures would include a regular exchange of information on the armed forces and their activity, and the structure and make-up of the military budgets. It is also suggested, among other things, that special rapid communication be established between the countries involved and that inspection conditions for observers be improved.

Some provisions of the Stockholm Document also contain a promising potential for further development. This is the case, first of all, with the right to conduct inspections on the territory of another participant in specified areas. From the experience gained in inspections already conducted it may be concluded that this form of inspection is a significant contribution to confidence-building. There are still, however, some deficiencies in the system. One example relates to the provision that no participating State shall be obliged to accept on its territory more than three inspections per calendar year: How will it be possible to avoid saturating the annual quota with inspections by alliances' members so as to enable a neutral or non-aligned country to conduct an inspection in a situation where its security concerns seem to require one?

Inspections have been directed mainly to pre-notified manoeuvres and, hence, to peacetime military routines. Inspections by request may also prove appropriate for monitoring military preparations at a time of increasing international tension but there is further need for refining the techniques. In exploring new forms of inspection, procedures should be developed that address the needs for crisis management as well.

Since the entry into force of the extensive provisions of the Stockholm Document in 1987, prior notifications and observations of military activities have increased markedly from the level resulting from the provisions of the Helsinki Final Act of 1975. Organising observation activities in a way that fulfils all the requirements of the Stockholm

Document is already a demanding task. On the other hand, attending manoeuvres as observers has become a matter of routine, which is, however, repeated conscientiously. It would obviously be useful to acquire more experience before increasing the frequency of observer activities.

Qualitative improvements in the notifications and observation activities are quite possible and would be welcomed by participants that have found inadequacies in the existing practices. These measures may include more detailed information concerning the notifiable exercises, improvements in the working conditions of the observers and the use of modern technology in observation. The information provided to observers in the course of the manoeuvre is still diversified, owing to a certain flexibility in the Stockholm Document. The minimum level of information to be provided should be specified in order to set some kind of standard.

Constraints

The Stockholm Document carries some constraining elements but its provisions may still be characterised as "first-generation" confidence-building measures, emphasising confidence-building by means of increased information and "transparency" of military activities. Constraints, on the other hand, can be seen as an expansion of existing measures and as representative of "second generation" CSBMs. While leaving the overall military potentials intact, the objective of such constraints ought to be to make sure that existing potentials cannot be used for aggressive purposes. Such mutual constraints could, for example, take the form of the limitation of military activities, including measures of verification.

Constraining provisions in the context of CSBMs were initially conceived at Stockholm and may, consequently, be considered as a legitimate subject of negotiation. The forum of 35 will certainly witness further proposals on constraining CSBMs. In the statement of October 1988 by the Warsaw Treaty States a proposal is in fact made for "restrictive" measures, applicable to the objectives and numbers of military exercises, as well as to the number of alert exercises and the troops taking part in major military manoeuvres.

Restricting the size of major military manoeuvres has been part of the proposals by Warsaw Treaty countries since the Belgrade follow-up conference and is aimed at scaling down NATO's larger exercises. NATO has rejected these proposals for the very same reason. But, the

rejection has not been total even in the West. In the joint recommendation of the Social Democratic Party and the Socialist Unity Party to the Governments of the Federal Republic of Germany and the German Democratic Republic it is proposed, among other things, that manoeuvres exceeding 40,000 troops would no longer be carried out. That restriction would also cover series of manoeuvres and alarm exercises.

Restricting military activities from zones agreed upon between the two military alliances in Central Europe has been proposed as a further confidence-building measure. In some cases, these proposals have addressed the most threatening forms of conventional arms such as the main battle tanks; in most instances, however, the idea of a nuclear free corridor is being advanced. Nuclear free zones, according to generally agreed criteria, belong to the sphere of disarmament rather than confidence-building measures. The demarcation line, however, is fluctuating as the confidence-building proposals of the Soviet Defence Minister Dmitri T. Yazov demonstrates:

- Diminishing troop and weapons concentrations in the border area between the two alliances;

- Withdrawal of the most dangerous weapons from that zone; and

- Creation of a nuclear weapon free corridor between the two alliances.

Constraining measures are likely to receive a fresh stimulus if tangible arms reduction is achieved at the CFE negotiations. In conclusion, constraints remain an interesting option for shaping future CSBMs.

Prospects

What are the prospects for confidence- and security-building measures at the outset of the negotiations? The following list is offered on the basis of today's situation only, since the forthcoming months will certainly show where progress is possible and where it is less likely.

- Exchange of military information concerning numbers, organisation, deployment etc. of armed forces offers substantial potential, especially as willingness for an exchange of information is increasing.

- The times of prior notification of military activities, building on the provisions of the Stockholm Document, may be increased, particularly on alert exercises where there are none; the information content of the notification may be increased; new types of exercises may be included.

- Observation of military activities has already reached a level at which few requests are made to increase the number of observable activities. Improvements in working conditions and in the quality of information would still be welcomed by observers.

- Inspections on request can offer useful military information and are an interesting dimension worth developing.

- Constraining measures on military activities of land forces are conceivable in the long term. These have to be co-ordinated with measures negotiated at talks on conventional armed forces.

- Independent naval activities are excluded from the present negotiating mandate. At the same time, there is increasing interest in naval CSBMs.

Linkages and Conclusions

Both negotiations on conventional armed forces and negotiations on CSBMs are taking place within the CSCE framework and an adequate exchange of information between the two forums is assured. An institutional link has thus been established but clearly there is a need for a substantive link as well.

The talks on CSBMs, building on the Stockholm Document, may get off to a quicker start than the new negotiations of "the 23", the members of NATO and the Warsaw Treaty. Should the negotiations on CSBMs result in increased confidence they certainly could create momentum for talks on the reduction of conventional armed forces. On the other hand, progress in the forum of 23 is not excluded as an effort to achieve initial results. Barring progress in one forum certainly increases the pressure to achieve results in the other. This may be the case particularly if the CFE negotiations should fall short of achievement of their objectives.

Progress in the forthcoming negotiations is dependent not only on mutual interdependence but also on a host of other factors as well. These include:

- Other disarmament processes, including the implementation of the INF Treaty and experience gained from its verification;

- The development of military doctrines from declaratory defensiveness towards genuine defensive structures which enhance the credibility of the doctrines;

- The role of nuclear weapons in strategy, their diminishing military usefulness, on the one hand, and the need to modernise the remaining weapons, on the other;

- Super-Power relations, political and economic developments in Europe, implementation of the Concluding Document of the Vienna Follow-up Meeting in fields such as human rights, which tend to link arms reduction to wider issues, which in their turn have an influence on arms control forums.

Disarmament is generally regarded as a step-by-step process. Accordingly, the reduction of conventional forces in Europe and negotiations on CSBMs would serve to strengthen stability and security in Europe, which would then lead to a reduction of international tension and would contribute to disarmament between the Super-Powers and to disarmament in other parts of the world as well. This hypothesis still remains to be confirmed. Now, if ever, there is a chance to test it.

REDUCTION OF CONVENTIONAL ARMED FORCES IN EUROPE: PROBLEMS AND PROSPECTS

Two events that took place early in 1989 have significantly changed the prospects for the reduction of conventional armed forces in Europe. First, on 15 January, the 35 States participating in the Third Follow-Up Meeting of the Conference on Security and Co-operation in Europe (CSCE) in Vienna adopted the Concluding Document of the Meeting. In addition to recording major achievements in the areas of economic co-operation and humanitarian affairs, the Document includes the mandates for two arms control negotiating forums for Europe. The broader forum, including all 35 of the participating States of the CSCE, will continue the Conference on Confidence- and Security-building Measures and Disarmament in Europe (CDE), which had been given its mandate in the Concluding Document of the Madrid Meeting in 1983 and which took place in Stockholm from 1984 until 1986. In Vienna, the CSCE States decided that "negotiations on confidence- and security-building measures will take place in order to build upon and expand the results already achieved at the Stockholm Conference with the aim

of elaborating and adopting a new set of mutually complementary confidence- and security-building measures designed to reduce the risk of military confrontation in Europe. These negotiations will take place in accordance with the Madrid Mandate".

The other forum, consisting in effect of the 23 member States of the Eastern and the Western alliances will conduct negotiations on conventional armed forces in Europe. Its mandate, as set forth in an annex to the Concluding Document of the Vienna Meeting, sees as the objective of the negotations: "...to strengthen stability and security in Europe through the establishment of a stable and secure balance of conventional armed forces, which include conventional armaments and equipment, at lower levels; the elimination of disparities prejudicial to stability and security, and the elimination, as a matter of priority, of the capability for launching surprise attack and for initiating large-scale offensive action.... These objectives shall be achieved by the application of militarily significant measures such as reductions, limitations, redeployment provisions, equal ceilings, and related measures, among others".

The second event is no less significant. On 2 February, the Vienna Talks on the Mutual Reduction of Forces and Armaments and Associated Measures in Central Europe (MURFAAMCE)—also known as mutual and balanced force reductions (MBFR)—ended after 16 years of negotiation, without tangible results. From a pessimistic point of view, the fate of the MURFAAMCE negotiations may serve as a constant reminder that negotiating on the reduction of conventional forces and armaments in Europe is not, in itself, bound to end in success. From an optimistic point of view, one might consider that the future negotiations based on the mandate of the Vienna Meeting would replace the futile MURFAAMCE negotiations by a more promising forum. To be realistic, one would have to take into account, on the one hand, the problems inherent in both the Vienna Talks on MURFAAMCE and the future negotiations and conventional armed forces in Europe, and on the other hand, the changed conditions under which they will take place.

Historical Background: The CSCE Process and MURFAAMCE

Ideas for the reduction of conventional forces in Europe and for a larger framework for European security share a long history with plans for nuclear disarmament. The first proposals for a conference on European security date back as far as 1954, when the Soviet Union

proposed a conference on collective security in Europe. The idea of a system of collective security was then included in several other Soviet proposals until 1955.

In January 1956 the States parties to the Warsaw Treaty proposed an agreement limiting the level of stationed foreign forces, creating a special zone of limited forces and envisaging a non-aggression pact for the European States. Later proposals shifted towards the idea of a nuclear weapon free zone for central Europe, including the two German States, Poland and Czechoslovakia. Initiated primarily by the then Foreign Minister of Poland, Adam Rapacki, between 1957 and 1964, the so-called "Rapacki plan" and its later versions have since 1966 been taken up by the Soviet Union. On the Western side, the Federal Republic of Germany proposed agreements with the Eastern States on the renunciation of force and the exchange of observers for military manoeuvres in 1966. After that, the "Harmel report" submitted to the NATO Council in December 1967 set forth explicit proposals for negotiations on disarmament and arms control, including mutually balanced force reductions for Europe. The same idea was later reinforced by the "Reykjavik signal" during the NATO meeting in July 1968.

Thus, by the end of the 1960s, a pattern of proposals had emerged: on the one hand, the Eastern alliance emphasised limits on, or elimination of, nuclear weapons and a (political) conference on European security; the Western side, on the other hand, emphasised an agreement on the reduction of conventional forces. As the West was at that time seen to be superior in nuclear weapons and the East superior in conventional forces, both sets of proposals in effect meant attempts by each of the alliances to redress the military balance in its own favour.

In the following years, the proposals became more concrete. After the "Budapest appeal" of the Warsaw Treaty States in March 1969 and Finland's offer to host a European security conference in October of the same year, the Western side responded positively to the idea of a conference on European security, provided that the conference would also include the "human dimension" of greater freedom for human beings, ideas and information. It further proposed to link one conference project to the other. This received a positive response from the East in Leonid Brezhnev's "Tbilissi signal" of May 1971. On the occasion of the signing of the SALT-I Treaty in 1972 the Eastern and the Western Powers agreed to accept each other's conference projects. This led to the CSCE, which began on 22 November 1972, in Helsinki, and the MURFAAMCE talks, which began on 31 January 1973, in Vienna.

Questions of military security and arms reduction played only a limited role in the CSCE at that time as the military dimension of European security appeared to have been transferred to the MURFAAMCE negotiations in Vienna. Some States, including Austria, argued in favour of including the issue of force reductions in the agenda of the CSCE, but the military dimension of the CSCE was drastically reduced to negotiation on confidence-building measures (CBMs), providing mutual information and communication, which at that time were considered to be too "soft" and to be marginal matters in comparison to measures of arms reduction or disarmament, or other "associated measures" to be negotiated in the MURFAAMCE framework. However, the MURFAAMCE negotiations soon became deadlocked, first in the problems of the area concerned and of the States that should participate, and then in the "data problem": whereas establishing the strength of Western forces in the area concerned posed no major problems, East and West could not agree on the real strength of the Eastern forces. Proposals by one side for linear reductions and proposals by the other side for trading nuclear weapons for conventional forces were mutually dismissed. The worsening climate between East and West further complicated the situation, leading finally to a temporary suspension of the talks after the negotiations on intermediate-range nuclear forces had broken off late in 1983.

At that time, the military dimension of the CSCE process gained momentum. In contrast to the MURFAAMCE talks, the CSCE had come to a successful conclusion in 1975 with the signing of the Final Act. The military dimension also encompassed the CBMs negotiated at the CSCE, which were subsequently implemented. Whereas no agreement had been reached on force reductions, the CBMs were actually effective in the military relations among East, West and the neutral and non-aligned States. Overall experience with the CBMs proved positive, despite the necessity for further improvement. Then, the second CSCE Follow-up Meeting in Madrid gave the mandate for the Conference on Confidence- and Security-building Measures (CSBMs) and the Conference on Disarmament in Europe (CDE). In its first phase it was not only to expand the scope of the CBMs already enshrined in the Final Act but also to pave the way for disarmament measures to be adopted in its second phase. The first phase of the Conference, which opened in Stockholm on 17 January 1984, took place at a time when the arms control talks in all other forums, including the MURFAAMCE negotiations, had virtually ceased. It was only after the East-West climate had again improved, by the mid-1980s, that the Stockholm Conference

was able to come to a successful conclusion, with the adoption of major CSBMs in 1986.

By that time, however, it had gained more relevance than the stalled MURFAAMCE talks. Some of the problems that had plagued the MURFAAMCE talks had been solved within the CDE framework, for example the issue of on-site verification. Then, the CSBMs provided by the Stockholm Concluding Document in some respects resembled the "associated measures" envisaged by the MURFAAMCE framework and had thus overtaken the negotiating process there. The fact that the Third CSCE Follow-Up Meeting in Vienna decided to give the mandate for the continuation of the CDE and for separate negotiations on conventional armed forces thus corresponds not only to the common roots of the CSCE and the MURFAAMCE talks in the mutual proposals of the late 1960s and early 1970s but also to the development of the CSCE since then. Although there is no formal linkage to the MURFAAMCE talks, the new negotiations are technically bound to replace them and will bring the issue of arms and force reductions into the CSCE framework, where some States, including Austria, would have liked to see them from the very beginning.

There are, however, several elements that will distinguish the new forum from the former MURFAAMCE talks. First, its scope is widened. Whereas MURFAAMCE was restricted to "Central Europe", composed of the Benelux countries, the two German States, Czechoslovakia and Poland, the future negotiations will pertain to the territory of the participants in Europe from the Atlantic to the Urals. Then, the MURFAAMCE rules discriminated between "full members" and "members with a special status" in the negotiations, whereas the 23 participants in the future negotiations will participate without any differentiation in status. Most important, however, are significant changes in the approaches towards the issues of military stability in Europe which have become evident in both the Stockholm agreement and the INF Treaty.

Impact of the INF Treaty

Nuclear issues have always accompanied the attempts towards arms control and arms reductions in Europe. First, it was the Eastern side that proposed a nuclear weapon free zone for Europe. In the MURFAAMCE talks, the Western side offered in 1975 to withdraw not only conventional United States forces but also some 1,000 nuclear warheads and some of the delivery systems, including 36 Pershing

missiles, in exchange for the withdrawal of a Soviet tank army from the area.

From 1977 on, nuclear weapons in Europe became a specific issue. First, American plans to introduce neutron warheads for tactical weapons in Europe caused opposition on the Eastern side as well as in segments of the European public. When the Soviet Union introduced a new missile, the SS-20, into its armed forces the West reacted, in 1979, by linking a demand for eliminating this weapon from the Soviet arsenals with plans for introducing land-based cruise missiles and Pershing II missiles in Europe (the "dual-track decision") by the end of 1983. Negotiations between the United States and the USSR were initiated in 1981 but were discontinued when the United States deployed its missiles late in 1983, inasmuch as no agreement had been achieved by then. This caused a freeze also in all other arms control negotiation forums except the CDE, and led to the lowest point in the already deteriorated East-West relations. In 1985, however, there was a significant improvement in the overall climate. This development was evidently caused also by more flexible leadership on the Eastern side. Arms control negotiations were resumed, and not only was the Stockholm Conference brought to a successful conclusion in 1986, but the INF talks also ended on 8 December 1987 with the adoption of an agreement on the complete elimination of all land-based nuclear missiles (both ballistic and cruise) with a range between 500 and 5,500 kilometres.

The IMF Treaty has had a multiple impact on the negotiations on conventional armed forces. On the one hand, it has made the issue of conventional arms control even more imperative. Although Europe has not been denuclearised by the agreement, the role of nuclear weapons has decreased and the role of conventional forces increased in relative terms. Imbalances on the conventional level have become more accentuated. Thus, the INF Treaty has brought increased attention to the negotiations on conventional armed forces in Europe, and failure in those negotiations would not only be seen as a major set-back from a political perspective but would also, from a military perspective, leave an unbalanced conventional situation more vulnerable because of reduced coverage by nuclear weapons, at least in the Western view. On the other hand, the agreement, by the very fact of its having been reached, could have a positive influence on arms control efforts on other levels of the military balance in Europe. It has demonstrated that problems of military security in Europe are not beyond solution. In addition, it contains elements some of which have been accepted for

the first time in an arms-control agreement, for example a detailed exchange of information and the idea of asymmetric reductions, and it contains a verification regime which has gone far beyond what had been even optimistic expectations only a few years ago. It has thus set important precedents for arms control, which may also contribute in a positive way to addressing the issue of conventional forces in Europe. Finally, it has been both the expression of, and a further factor in, improved East-West relations, which are essential for a successful arms-control dialogue.

The significance of the INF regime becomes even more evident when contrasted with long-held positions in the MURFAAMCE talks. First, the MURFAAMCE negotiations had been stalled for most of the time because of the "data problem". In the INF Treaty, however, both sides agreed to a detailed exchange of information. Absolute symmetry had been paramount in the MURFAAMCE talks. Whereas the West had called for a reduction in Eastern superiority towards a symmetric balance, the East had called for a "grown balance", which excluded any asymmetric approach. In the INF Treaty, however, the Soviet Union agreed to the elimination of a higher number of missiles than did the United States. Whereas differing views on verification may also have played a problematic role in the MURFAAMCE talks, both sides were able, in the INF Treaty, to agree upon a viable verification regime.

The Eastern and the Western Positions

Both East and West will enter the negotiations with positions that have grown over the years. In part, they have remained constant; in part, they have undergone certain changes.

The Western Position

The Western position is based upon the perception of a considerable imbalance in conventional forces in favour of the East. This was one of the reasons for the first deployment of nuclear weapons in Europe by the West in the early 1950s. It was also the rationale for insisting on negotiations on force reductions in the late 1960s and early 1970s as an answer to the Eastern conference proposals, which then led to the MURFAAMCE negotiations. Recent NATO publications, for example the study "Conventional Forces in Europe: The Facts", of 25 November 1988, show significant superiority on the Eastern side with regard to the numbers of manpower, armaments and equipment, such as main battle tanks, armoured infantry fighting vehicles, other armoured

vehicles, armoured vehicle launched bridges, artillery, air defence systems, combat aircraft, and helicopters.

Whereas the Western side accepts the argument that overall numbers comparing the two alliances are less trouble some, it points to the fact that militarily strong yet geographically distant alliance members—for example Turkey or Spain—cannot do much to alleviate imbalances in Central Europe. Here, in the "NATO guidelines area", which is equal to the former MURFAAMCE area, including Belgium, the Netherlands, Luxembourg, the two German States, Poland and Czechoslovakia, NATO sees an even greater imbalance of forces in favour of the East, which in its view would make possible the successful launching of an attack against the West, since in modern warfare there is a heavy premium on the forces available for the first phases of a battle. In the Western view, other factors play a major role also, for example the Eastern organisation, doctrine and strategy. Military forces of the Warsaw Treaty States have been designed, organised and trained for a strategy emphasising mobility, surprise and offensive actions as well as a rapid shift of the focus of operations. Superiority in numbers would thus allow an attacker sufficient flexibility to mass forces at selected points for decisive breakthrough operations.

Accordingly, the Western side has offered several proposals for negotiations on the conventional situation in Europe, the latest in a statement by the North Atlantic Council Meeting on 9 December 1988. According to this statement, instability derives from weapons systems that are capable of mounting large-scale offensive operations and of seizing and holding territory, for example main battle-tanks, armoured troop-carriers, and artillery. Therefore, the alliance proposes:

- An overall limit on the total holdings of armaments, cutting tanks to close to a half, which would mean an overall limit of 40,000 tanks;

- A limit of 30 per cent for any country of the total holdings in Europe of the 23 participants in each category, which would mean that any one country would be entitled, in the case of tanks, to no more than 12,000 tanks;

- Limits on the stationing of forces on the territory of other countries;

- Sublimits for certain areas of Europe since the proposals will apply to the whole of Europe.

In addition, the proposal includes stabilising measures of transparency, notification and constraint applied to the development, movement and readiness of conventional armed forces as well as a demand for a rigorous and reliable regime for monitoring and verification, including the periodic exchange of data and the right to conduct on-site inspections.

The Eastern Position

The Eastern side has for a long time shown less concern about the conventional situation in Europe but has been strongly involved in nuclear issues. However, as the debate emerged about a gradual replacement of nuclear components in the Western strategy by long-range conventional systems—for example in the follow-on-forces-attack (FOFA) concept—in the air-land-battle doctrine, or in the "Rogers plan" for an extended battlefield beyond the immediate combat zone—conventional issues became a topic of concern in the East also. Whereas the West stressed the issue of land forces, especially of tank forces, the East stressed the importance of the air component but also the naval component. For a long time, however, the overall Eastern perception was that in Europe there was a "grown equilibrium" of military forces, especially on the conventional level, which made it more important to address nuclear issues first.

This position has changed significantly with the new leadership under Mikhail S. Gorbachev since 1985. In June 1986, the Warsaw Treaty Organisation offered in the Budapest Appeal a programme for the reduction of conventional forces in Europe. In a first stage, the forces on both sides should be reduced by 100,000 to 150,000 troops. Quotas for the individual countries should be the object of negotiations. This first stage would involve all components of the ground forces and offensive tactical air forces. In a second stage, considerable reductions of conventional forces could be carried out, lowering the strength of both sides by about 500,000 troops. In May 1987, Poland proposed a plan for limiting armaments and building confidence in Central Europe (the "Jaruzelski plan"), which to a certain extent continues the line taken in earlier Polish proposals (the "Rapacki plan", in its several versions). It provides for the reduction and/or elimination of nuclear weapons; the removal and/or reduction of agreed conventional weapons, especially those required for offensive operations and surprise attacks, for example air forces, tanks, attack helicopters, long-range artillery, including missiles artillery; common measures to achieve the evolution of the military doctrines towards a strictly defensive character, based

upon the principle of "sufficiency" required for effective defence; corresponding confidence-building measures, and mechanisms for verification. In addition, the Jaruzelski plan accepts in principle the fact of historically grown disproportions and asymmetries in certain types of weapons and forces and agrees to the elimination of disproportions by asymmetric reductions of the superior side.

The principle of "reasonable sufficiency" as included in the Jaruzelski plan was first introduced into the Eastern vocabulary by Mikhail S. Gorbachev during his visit to France in 1985. It has since then become one of the more important guidelines in Eastern proposals. On 29 May 1987 the Warsaw Treaty Organisation issued a statement in Berlin on the military doctrine of the States members of the Warsaw Treaty Organisation, emphasising the strictly defensive character of the doctrine. In a similar way, the meeting of the Foreign Ministers of the Warsaw Treaty States in Sofia in March 1988 and the meeting of the Political Consulting Committee of the Warsaw Treaty States in Warsaw on 15 and 16 July 1988 stressed the principle of "reasonable sufficiency". The statement further proposes, as an objective for the future, negotiations with a view to achieving approximately similar or balanced collective ceilings on both sides lower than the existing force levels; elimination, by both sides, of existing disproportions and asymmetries by withdrawing and subsequently disbanding the forces and by destroying superfluous armaments. A first phase should thus achieve parity; in a second phase forces and armaments would be drastically reduced by approximately 500,000 troops and their armaments; in a third phase both sides would transform their forces towards a strictly defensive character by further reductions. The statement also calls for measures to prevent surprise attacks, mainly by establishing a corridor of reduced levels of forces and armaments along the contact area of the alliances which would allow defensive but no offensive operations, and for measures of information and verification.

Finally, in his statement before the United Nations General Assembly on 7 December 1988, Mikhail S. Gorbachev offered unilateral cuts in the Soviet armed forces, including a reduction by 500,000 troops within two years; the withdrawal and disbanding of six Soviet tank divisions and other forces from the German Democratic Republic, Czechoslovakia and Hungary, thereby reducing the Soviet forces stationed there by 50,000 troops and 5,000 tanks; and cuts in troops and armaments in the European part of the Soviet Union. Altogether, the reductions should amount to 10,000 tanks and 8,500 artillery systems.

In sum, the positions have to a considerable degree come closer together. Whereas until recently even the question of asymmetries has been a bone of contention between East and West, now at least the fact that there are asymmetries which have to be addressed in future negotiations appears less of an insurmountable obstacle.

Problems and Prospects

There remain, nevertheless, thorny issues to be considered in the negotiations. One is the problem of force-to-force ratios. Although both sides have accepted that disproportions exist and that they should be eliminated by asymmetric reductions, they have yet to reach consensus on how far asymmetries could go. Although both sides have accepted that "balance" does not necessarily mean total parity, the question is still open what remaining imbalances would be acceptable. The closer the numbers of quantifiable weapons systems come, the more relevant will be other elements of the military forces, as for example their structure, their capabilities in logistics and their supply lines, but also their capabilities in the area of C^3I (command, control, communication, intelligence). These elements include purely technical capabilities, as for example ammunition supply, reloading capabilities of multiple rocket-launchers, or superiority in tank construction or communications equipment, as well as the human factor, for example the duration, intensity and quality of the training of troops. Thus, numerical parity would not necessarily imply military stability as long as it left aside those non-quantifiable factors that might lead to lengthy negotiations.

Another factor is the force/time/space ration, which could have been almost entirely neglected in nuclear arms control but is especially relevant with regard to conventional forces. To maintain military stability, a certain "density" of forces is required for a given space. Otherwise, even an overall parity could not prevent the concentration of forces at a given point and the achievement of a decisive breakthrough. This may be the case even with inferiority in overall forces, as the German campaign against France in the Second World War and similar examples in the Middle East have demonstrated. Some calculations indicate that for stability in Central Europe, the levels on both sides could not go much below the present force level maintained by the Western side. This does not imply, however, maintaining standing forces of the same level but may also be achieved by mobilizable militia forces, similar to the military structures followed by some of the European neutrals. As mobilisation of these forces would take time, measures would in turn be required to reduce the

capabilities for quick concentration of the remaining standing forces and for their launching of surprise attacks, and measures to impede offensive operations, in other words real "security-building measures" of military significance.

Yet, the problems that lie ahead must not discourage attempts to negotiate conventional arms reductions. First of all, the signing of the Stockholm Document and the INF Treaty has shown that it is possible to negotiate and to reach a consensus between East and West on military issues. Secondlly, there is a growing tendency to respect the other side's security and defence requirements and to use arms control proposals and agreements, not primarily as an instrument for gaining better positions—be it militarily or in respect of public opinion—against the adversary, but as an instrument for a shared objective of stability. The Stockholm Document and the INF Treaty have set important precedents by introducing principles and instruments which until recently could not have been envisaged for East-West arms control agreements, and have thus paved the way for an agreement in the field of conventional armed forces also.

There is yet another lesson to be learned from this experience. Arms reductions do not come by themselves, nor could they be negotiated in a political or military vacuum. In this view, the MURFAAMCE negotiations were an attempt at a short-cut, which was however taken too early to permit achievement of the desired results. Without ignoring the value of the years of negotiation leading to increased mutual understanding of the other side's perceptions and apprehensions, these negotiations have shaped, first of all, the basis on which to build meaningful negotiations. In addition, it may have required the positive experience with less stringent instruments of arms control, as for example the confidence-building measures of the Final Act of Helsinki, or the confidence- and security-building measures of the Stockholm Document, to narrow the gap in the perceptions of the military situation on both sides and to get accustomed to a functioning arms control regime. On the basis of this experience, it may be wise to take the mandate for the negotiations on conventional armed forces in its full range, addressing the issue of military stability between East and West in Europe by a broad array of measures. Only in this context, can the objective of force reductions be pursued in a way conducive to military stability in Europe.

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THE SUBSTANCE AND MAIN FEATURES OF DEFENSIVE SECURITY CONCEPTS AND POLICIES

The maintenance of armed forces in the modern world is legitimised by the right of individual and collective self-defence. Governments raise armies, build weapon systems and use armed forces all in the name of defence. Yet, while two adversarial States are likely to justify their own military preparations in defensive terms, they will probably view each other's preparations as conveying aggressive or offensive intentions. How, in these circumstances, can one determine which military postures and activities are more defensive and which are more offensive in nature?

In the past, there have been various attempts to answer this question by searching for clear and unambiguous criteria that would distinguish offensive from defensive military strategies and forces. Underlying these attempts has been the assumption that there is a close connection between defence as an objective and defence as a military operation.

The first major effort to establish clear criteria distinguishing offensive from defensive capabilities was undertaken during the World Disarmament Conference held at Geneva under the auspices of the League of Nations from 1932 to 1934. The goal of this Conference was in particular to effect qualitative disarmament, which the General Commission of the Conference defined as "the selection of certain classes or descriptions of weapons the possession or use of which should be absolutely prohibited to all States or internationalised by means of a general convention". The objective of qualitative disarmament, so defined, was

> "that the range of land, sea and air armaments should be examined by
> the competent special Commissions with a view to selecting those weapons

whose character is the most specifically offensive or those most efficacious against national defense or most threatening to civilians"

The reasons for the failure of three special Commissions of the Conference to agree to common definitions of what constituted "offensive weapons were varied. One such reason was the inherent difficulty of defining weapons and weapons systems without considering the context in which they would be used.

Since the early 1980s, peace researchers in Western Europe have formulated specific models designed to eliminate the "offensive" nature of military force postures throughout Europe by emphasising "defensive" over "offensive" capabilities. The terminology and underlying assumptions that emerged from these efforts were taken up by the Soviet Union. Starting in 1986, Soviet officials from former President Mikhail Gorbachev on down declared their intention to change Soviet military doctrine in the direction of "defensive defence", including a force posture based on the notion of "reasonable sufficiency" for defence.

Combined with the improvement in East-West relations discussed in chapter II above, these developments further promoted the idea that international security at the bilateral, regional and global levels could be strengthened by a greater emphasis on the defensive orientation of military force postures of all States. The present chapter reviews major ideas that have emerged since the early 1980s in support of this proposition.

Soviet military doctrine had both a political and a military-technical aspect. The "former referred to the general security objectives of the State. These had always been phrased in purely defensive terms. However, it was not until the enunciation of a new doctrine 'in the mid- to late 1980s, that the military-technical aspects of Soviet military thinking emphasised that these defensive objectives could best be accomplished through a defensive strategy based on the concept of "reasonable sufficiency". Thus, the draft military doctrine of the soviet Union issued in late 1990 stated that sufficiency in the sphere of conventional forces consisted of a "minimum quantity ... necessary for ensuring reliable defense, but insufficient for conducting large-scale offensive

The emphasis on maintaining the minimum quantity "necessary for ensuring a reliable defense" underscored that the level of forces prescribed by the concept of "reasonable sufficiency" was to be related to the level of forces possessed by the potential adversary. Thus, the

members of the Warsaw Treaty Organisation stated in 1987, "the state of military-strategic parity ... remains a decisive factor for preventing war." At the same time, the concept of "reasonable sufficiency" also underscored the necessity of ensuring that a military equilibrium be achieved at progressively lower levels of forces.

With the creation of the Commonwealth of Independent States (CIS) on the territory of the former USSR, six of its members—Armenia, Kazakhstan, Kyrgyzstan, Russia. Tajikistan and Uzbekistan—concluded a Treaty on collective security at the meeting of the CIS in Tashkent in May 1992. They proclaimed that their military doctrine would have a defensive orientation. Russia, which has the most powerful military potential in this group of States, declared that it would base its national military doctrine on the principle of defensive sufficiency, which the May 1992 draft of the Military Doctrine of Russia defines as:

> "a posture of armed forces of a State (a coalition of States) that is capable of preventing and containing aggression by a potential enemy, but does not enable the launching of large-scale offensive operations without additional deployments of troops (forces) and other measures to reinforce its combat potential."

"Non-offensive defence" refers to a type of military force posture that emphasises defensive capabilities and eschews offensive or provocative capabilities. Definitions of the concept vary, but all contain common elements. Three particularly cogent definitions, proposed respectively by Dutch, Norwegian and German proponents of "non-offensive defence", are:

> "A military posture in which the strategic and operational concept, the deployment, organisation, armaments, communications and command, logistics and training of the armed forces are such that they are in their totality unambiguously capable of an adequate conventional defence, but as unambiguously incapable of a bordercrossing attack, be it an invasion or a destructive strike at the opponent's

> "A structure which poses no threat to the opponent on his own territory, which is immune to destruction by pre-emptive attack, which has a reasonable chance of successfully denying the opponent hostile access to the defended nation, and which would produce minimal damage to the defending society in the process of repelling an invasion."

> "The build-up, training, logistics and doctrine of the armed forces are such that they are seen in their totality to be unsuitable for offence, but unambiguously sufficient for a credible conventional defence."

From these statements, it is clear that proponents of the concepts of "non-offensive defence" stress the importance of structuring a State's armed forces in a manner that unambiguously conveys their defensive orientation. This should be reflected both in the doctrine or strategic concept that guides military operations at the strategic level and in how armed forces are deployed, trained, equipped, supported and commanded. Above all, the proponents maintain that the strategic concept guiding military operations and the armed forces, while providing for an effective defence, should emphasise a State's inability to pose a threat to the territory of another State.

The elaborate models for a "non-offensive defence" that emerged in Europe, though they differ in specifics, are all based on a central belief of their proponents, namely that military postures constructed upon the assumption that "attack is the best form of defence" are inherently destabilising, since the type of forces heeded to implement these offensive strategies are the same as those required for outright acts of aggression. The fact that a State's armed forces emphasise offensive capabilities does not necessarily reflect the harbouring of hostile intentions towards neighbouring countries; however, the potential threat posed by the capability to launch a large-scale attack or invasion generates fears and suspicions that are likely to lead to an unchecked arms race. If intentions are also misread, then war by miscalculation could ensue, thus undermining the possibility of political management of international crises.

The principle of "non-offensive defence" is intended to obviate this dilemma. By deliberately reducing the "threat element" in defence policies to a minimum, a "non-offensive defence" posture seeks to reconcile the goal of maintaining an adequate and reliable defence with the goal of building confidence and relaxing political tension.

Discussions and model-building exercises related to concepts of "non-offensive defence" have mainly been devoted to problems in the East-West context. Not surprisingly, corresponding proposals were put forward primarily in countries where military force concentrations and the risk of nuclear escalation were most evident However, they were not in a position to create realistic alternatives to the formally adopted postures and did not provide comprehensive practical solutions. Nevertheless, advocates of "non-offensive defence" concepts in Germany—and later in Denmark, Poland, the Netherlands and the United Kingdom of Great Britain and Northern Ireland—have certainly

helped to promote the core idea of "defensive sufficiency" and "reasonable sufficiency" in the Soviet Union and elsewhere.

While the various models of "non-offensive defence" differ in their specifics, their proponents share three basic assumptions:

(a) Heavy armoured forces, particularly if deployed in forward locations, are inherently offensive and provocative because they combine a high degree of mobility, firepower and protection;

(b) The vulnerability of crucial military assets invites pre-emption by the opponent;

(c) Military capabilities that threaten the territorial integrity of the opponent, are provocative.

Specific models advanced to overcome these potentially provocative elements in military force structures can be grouped into four categories, each representing a different defensive concept: area defence; wide-area covering defence; fire-barrier defence; and integrated and interactive forward defence. Brief examples of these models are provided below:

(a) *Area defence:* The principal objective of an area defence is to deny the aggressor the possibility of winning decisive battles through a strategy of attrition. The model entails the deployment of so-called "techno-commandos" composed of small and mobile armed units that would be stationed throughout the defended area, save for highly populated areas where the struggle would be carried on through non-violent means. Each unit would be responsible for defending an area of approximately 10 to 15 square kilometres. The units would be equipped with advanced-technology mines, anti-tank guided weapons and rockets designed to attack large armoured concentrations massing along the front for a breakthrough offensive. The units would be backed up by an artillery network capable of concentrated fire against advancing armoured forces which, in turn, would be backed up by traditional armoured units designed to cope with a potential breakthrough by the aggressor.

(b) *Wide-area covering defence:* This model divides defending forces into two groups—the "shield" and the "sword". The "shield" forces, which would be deployed in border areas of some 75 kilometres in depth, would consist of light infantry brigades and regiments. Their task would be to wear down an attacking force and, by using the characteristics of terrain to the defence's

advantage, channel the advancing forces towards concentrated fire positions provided by the "sword." The "sword" forces, which would be deployed in the rear, would consist of traditional armoured brigades capable of concentrating fire against the aggressor's advancing tank forces.

(c) *Fire-barrier defence:* The fire-barrier model envisions a layered defence. The first layer would consist of a fire wall—a small zone along the border (of some five kilometres in depth) that, upon penetration, would be saturated with remotely controlled mines, missiles and rockets. Immediately behind the fire wall, small units of light infantry forces armed with precision-guided munitions would seek to counter any breakthrough attempts by the aggressor. These would be backed up by fewer but more heavily armoured units capable of meeting forces that had broken through the first two defensive layers. Finally, territorial defence units would operate in the rear to provide for a militia-type defence capability.

(d) *Interactive and integrated forward defence:* This model is also known as the "Spider-in-the-Web" because of the way in which the defender uses its capabilities to try to exhaust and confine the "insect", or attacker. The "web" consists of several small units, each responsible for defending a designated area and armed with mines, bazookas and short-range indirect fire weapons. These web units would have four tasks: to delay and wear down the aggressor; to provide communication links and information to the "spider" units; to give physical and electronic cover to spider units; and to support spider units logistically. A smaller number of spider units, consisting of mobile forces designed to move around the "web", would fall into three categories: shock troops for tactical counter-attack; infantry mounted on light armoured vehicles; and anti-tank cavalry. Their tasks would be: to delay, channel and destroy attacking forces in cooperation with the web units; to perform blocking actions; to conduct counter-strikes against invading forces that have penetrated the defence; and to aid the web units as needed. This model therefore allows for some counter-attack capability, which is constrained, however, by the fact that the "spiders" cannot leave the "web" or defended area.

Although the proposals and models for a "non-offensive defence" originated in Europe, a number of arms limitation and disarmament

agreements and intergovernmental declarations have been in force, which, by calling for the elimination of some or all types of weapons of mass destruction in a region or area, may be considered as supporting the idea of "non-offensive defence". Notable examples of these treaties and declarations include: the Antarctic Treaty (1959); the Tread on Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and Other Celestial Bodies (1967); the Treaty for the prohibition of Nuclear Weapons in Latin America with Additional Protocols I and II (1967); the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof (1971); the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (1972); the South Pacific Nuclear Free Zone Treaty (1985); the Agreement between Argentina and Brazil for the Exclusively Peaceful Use of Nuclear Energy (1991); the Mendoza Accord on the Complete Prohibition of Chemical and Biological Weapons (1991); the Declaration on the Denuclearisation of Africa (1964); the declaration of a zone of peace, and cooperation of the South Atlantic (1986); and the Cartagena Declaration on the Renunciation of Weapons of Mass Destruction (1991).

In addition, ideas and proposals for arrangements that aim at reducing weapons of mass destruction have been put forward in various regions that when realised could further the creation of conditions towards the implementation of defensive security concepts. Notable examples of such proposals include: the proposal of Iran and Egypt of 1974 to establish in the Middle East a nuclear weapon free zone; the proposal by Indonesia of 1983 to establish a nuclear weapon free zone in Southeast Asia to enhance the declaration of ASEAN in 1971 declaring the region a zone of peace, freedom and neutrality; the action plan for ushering in a nuclear weapon free and non-violent world order proposed by India in 1988 to establish in stages a world free of weapons of mass destruction, reduce conventional forces to minimum defensive levels and create a comprehensive global security system; the proposal by Egypt of 1990 to establish in the Middle East a zone free of all weapons of mass destruction; the proposal by Pakistan of 1991 to convene a meeting between India, Pakistan, China, the United States and the former Soviet Union to discuss the issue of nuclear proliferation in South Asia with the aim of arriving at an agreement establishing a nuclear weapon free zone in the region; the draft Treaty on Central American Security of 1991 by Honduras, which calls for a commitment

by all States in the region to refrain from acquiring, maintaining or permitting the stationing in their territories of all weapons of mass destruction.

"Defensive Security"

"Defensive security", as defined in paragraph 12 above, goes beyond the more limited notions, like "non-offensive defence" and "reasonable sufficiency", described in the previous pages. It encompasses both political and military elements aimed at ensuring that all States conduct their policies in conformity with the Charter of the United Nations and adopt a military posture and a level of forces that, while ensuring an effective defence, pose no threat to other States. It must be stressed however, that the modalities of defensive security policies will, in practice, depend on the security situation prevailing in each particular region and the perceptions of the States concerned in this regard.

1. Aims of "Defensive Security"

The aim of "defensive security" is to achieve a condition of peace and security in the world in accordance with the purposes and principles of the Charter of the United Nations.

The concept of "defensive security" is based on the recognition that its achievement depends upon creating the political and military conditions necessary for eliminating threats to international peace and security through a transformation in the relations between States so that each State can feel secure from external military threats.

The concept of "defensive security" is related to the notion of common security, which implies that States recognise that their security is indivisible, i.e., that the security of every State within a given group or region is inseparably linked to that of others. These principles of common security are based on the Charter of the United Nations:

(a) All States have a legitimate right to security;

(b) Military force is not a legitimate instrument for resolving disputes between States;

(c) Restraint is (necessary in expressions of national policy.

The notion of common security also implies the two following conclusions:

(a) The pursuit of military superiority, as a factor of the arms race, is not a guarantee of security, and is obviously incompatible with the notion of common security;

(b) Reductions of armaments have to be pursued in the context of common security, which would ensure the necessary conditions for trust and stability.

To this end, it is necessary to promote awareness of the indivisibility of security of States through a concerted dialogue, the adoption of confidence-building measures, the gradual initiation of changes in military force postures and the reduction in the level of armaments.

It is important to stress that the achievement of "defensive security" requires in each case a specific attitude. The guiding principle is that a State achieves security by defending its own interests in a manner that does not reduce the security of others. To this end, practical political and military' steps, which, once implemented, will reflect a commitment to the concept of "defensive security" have to be taken.

The principal objective of these political and military steps is to convey a commitment to the indivisibility of security by reassuring others of one's own peaceful intentions. The means furthering this objective are a respect for international law and a commitment to openness in political and military affairs. These considerations aim at reassuring other States that, in maintaining the ability to safeguard one's own security, one is at the same time committed to their security.

2. Political Considerations

The most important political condition for "defensive security" is a commitment to adhere to the provisions enshrined in the Charter of the United Nations and to act in accordance with international law. By definition, States that violate international law do not uphold the principles of "defensive security". To be credible, therefore, their declarations of intent regarding the lawful "external behaviour of States must be followed by practical political and military steps to signal their intention to live by the principles of international law and uphold the Charter of the United Nations.

A major impediment to implementing "defensive security" is the existence of real or perceived conflicts of interest among States. A key political prerequisite therefore is to effect an improvement in the political relations among States and to seek a reduction in tensions, upholding international law and eliminating aggression.

The peaceful settlement of disputes would contribute to improving relations between adversaries. This requires an essentially political process. The settling of differences can be accomplished through a

commitment to conflict resolution processes in accordance with international law. In keeping with its efforts to settle disputes in the world, the United Nations could play a useful role in this process.

An open political system, such as democracy, would better facilitate efforts to reduce mistrust than a closed political system. Although it does not constitute a guarantee for the absence of aggressive intentions, an open political system promotes open debate to challenge such intentions should they be promulgated as official policy. Sudden and unexpected shifts in policy will prove more difficult to implement. Furthermore, an open political system based on democratic principles provides an effective counter to the tendency of Governments to cloak their actions in secrecy. Since secrecy leads others to suspect motives and intentions, a political system that discourages secrecy in policy formation provides a basis for easing suspicions and fears.

It is also important that legitimate political authorities design and control defence policy. Military organisations require a certain degree of confidentiality and secrecy. However, in order to promote legitimate control, information regarding military matters must flow and be available to legitimate political authorities. Political control implies that the identification of threats and national interests, the development of strategic concepts, and decisions on weapons procurement should be the primary responsibility of a country's legitimate political authorities. The task of the military is to advise legitimate political authorities in these matters and to implement the latter's decisions in a way that is consistent with their instructions.

Political control also implies the promotion of civilian expertise in military affairs, both at the administrative and governmental levels and within the Civilian society at large. This is particularly relevant in countries undergoing a transition from military rule to democracy. An open debate on defence and security issues involving experts from political parties and the civil society tends to give additional reassurance that Governments will not opt to pursue aggressive policies.

It should be stressed that openness is a relative concept. Its implementation, particularly in military affairs, requires a degree of reciprocity. In addition, the security situations facing States may also affect the degree to which States feel able to open up. In situations of acute conflict, even open political systems will tend to limit the degree of information that is freely available; closed societies will face few incentives to open up.

Democracy as such may not always be a guarantee that a State will not pursue offensive policies, and it certainly is no guarantee that other States might not perceive its policies as threatening or provocative. The mere enunciation of non-aggressive or peaceful intentions is no guarantee for security and stability, even if these intentions can be more easily gauged in an open society. While intentions may change in short order, military capabilities cannot. Hence, to be truly credible, reassuring and stabilising,, political pronouncements of defensive intentions should find their material expression in the manner in which armed forces are composed, trained, equipped, organised and deployed.

3. Military Considerations

Military considerations involve two factors: the strategic concept that prescribes the mission of armed forces and the force posture that provides the material capabilities for implementing the conceptual elements. In order to enhance the prospects for "defensive security" both the strategic concept and the force posture should emphasise "defensive" over "offensive" capabilities. Their validity depends upon reciprocity in their implementation, either bilaterally or multilaterally.

The military considerations described below apply in particular to bilateral situations in which States confront each other in an adversarial setting. Moreover, in the absence of political differences. States may not necessarily feel the need to adopt the force posture descriptions detailed here, since the fear of attack is absent. Additional factors, such as the inclusion of allies in the situation, and the specific problem posed by the role of some weapons systems, including weapons of mass destruction, are discussed in chapter. IV.

(a) Strategic Concepts

Carl von Clausewitz described defence in the following terms:

"What is the concept of defence? The parrying of a blow. What is its characteristic feature? Awaiting the blow. It is this feature that turns any war into a defensive one; it is the only test by which defence can be distinguished from attack in war."

Central to this description are the notions of space and time. Space refers to the area for defensive operations; time to the initiation of military action or reaction. Combined, the two elements define essential features of a defensive strategic concept.

A defensive strategic concept is one that is informed by the objective of protecting and preserving a particular space from attack. This space

usually consists of a State's national territory or the territory of an ally. The objective of a defensive strategic concept in this regard is the protection of national or allied territory and the restoration of the *status quo ante* if its integrity should have been violated. It follows that the possession of a capability to seize and hold foreign territory is inconsistent with a condition of "defensive security".

The second critical element of a defensive strategic concept concerns time. A strategic concept that, besides continued efforts towards a peaceful settlement of conflict, concedes to others the initiative to resort to weapons, can be deemed defensive. Notions such as pre-emptive or preventive attack, would be incompatible with a defensive strategic concept. An emphasis on pre-emption would naturally be perceived as offensive by the other side, leading it to fear an attack and perhaps launch one before the other does. A defensive strategic concept therefore means that a State cannot initiate combat operations unless its vital interests are violated. Any response, however, must be proportionate to the attack.

To be effective and credible in the eyes of a potential adversary, a defensive strategic concept must be reflected in the forces at one's disposal to support the objectives informing the strategic concept. As the earlier example regarding pre-emption demonstrates, mere statements that the objective is to defend one's territory and that one "intends to await an attack" are not credible if the forces deployed possess the capability for large-scale attack or aggressive action. Hence, a defensive strategic concept is most reassuring in its effect if it is reflected in the posture of the armed forces supporting it.

(b) Force Postures

A strategic concept, properly understood, prescribes how armed forces as a whole should be organised, deployed, equipped and used. Its defensive orientation should therefore be reflected in the force posture as a whole and not necessarily in the individual capabilities and tactical considerations that make up the totality of strategic operations. The reason for this is clear once one considers the nature of military operations. At the operational and tactical levels of command i.e., those at the Corps and Division level and below, considerations of offence and defence are but two sides of the same coin. As chapter IV will discuss in more detail, there are a number of reasons for this, of which two stand out. First, an effective defence requires offensive operations, if only to secure the return of territory that was lost as a

result of the initial attack. Second, it is practically impossible to distinguish defensive from, offensive intent if one examines particular weapon systems or individual military formations. Any weapon system can be used for both offensive and defensive purposes; any military formation, however equipped, is in principle capable of conducting offensive operations.

The difficulties in distinguishing between an offensive and a defensive orientation of ground forces is compounded in the case of naval forces because of the fundamental distinction that exists between war on land and war at sea. Whereas military actions on land tend to concentrate on the actual acquisition and occupation of territory or their denial, operations at sea are geared to securing unhampered access to and passage through international waters. In general, the oceans are used as means of communication—to conduct trade and commerce, to transport troops, supplies and equipment to zones of conflict and for other peaceful and non-peaceful purposes. With very few exceptions, the means for securing unhampered access to and passage through the sea can be used for both offensive and defensive purposes, i.e., either to deny access to others or to secure access for oneself. Because the notion of defensiveness generally refers to preserving territorial sovereignty, the notion is inherently difficult to apply to naval forces. Although still not easy in the case of ground forces, the defensive force posture considerations described below mainly refer to these forces.

The orientation of a ground force posture should be assessed by examining the force posture as a whole. This means that one's attention should be directed primarily at the strategic level of command. There are at least four elements that provide some indication of the orientation of a given force posture. These are: the distribution within the entire force posture between those military capabilities that are necessary for invasion and large-scale offensive action and those that are not; the pattern of deployment of forces within the defended territory and the mobility of these forces; the state of readiness of military equipment and personnel; and the logistics and command and control capability necessary to sustain military operations. To promote "defensive security" it is necessary to reduce or minimise the offensive characteristics in each of these elements of a military force posture.

The defensive orientation of a force posture will be strengthened if the invasion capability is reduced. Central to this capability is the ability to generate sufficient thrust to enable the conduct of large-scale

offensive operations. Strategic thrust is created by a combination of a high rate of mobility, firepower, technologically advanced weapons and the ability to sustain attack operations over large distances. Battle tanks, armoured combat vehicles, large caliber artillery systems, combat aircraft and attack helicopters are prime examples of forces capable of generating strategic thrust.

For example, a reduction in these weapon systems forms the core of the Treaty on Conventional Armed Forces in Europe (CFE). The goal of these reductions was to limit the relative capability of a group of States to generate the strategic thrust required to conduct large-scale offensive operations. However, unlike the concepts put forward by proponents of "non-offensive defence", the goal was not to eliminate these capabilities. It was clearly understood by the parties to the Treaty that offensive capabilities at the operational level remained necessary to meet defensive objectives, including to enable the recapture of lost territory and the rapid countering of attempts of a breakthrough.

Rather than seeking the complete elimination of those systems necessary for generating strategic thrust, force postures should convey an appropriate balance between military operations at lower levels of forces and armaments, as well as between offensive and defensive capabilities. Some capability for offensive operations at the tactical and operational level will remain necessary for an effective defence. But, such a capability should be balanced with an increasing emphasis on those weapon systems (like anti-tank munitions, air defences and mines) that are necessary to counter offensive operations. It is the distribution between these capabilities that indicates the defensive or offensive orientation of a given force posture, not the absolute level of either. At the same time, as the CFE Treaty underscored, it is also necessary to ensure a reasonable balance of capabilities necessary for generating strategic thrust between two States or alliances.

A second issue relates to how forces are deployed. In order to launch an offensive, it is generally necessary to concentrate those ground forces that possess a high degree of mobility and firepower along the critical axes of attack. Along with other features supporting an attack, such a capability can provide an indication of an offensive orientation. In order to convey a defensive orientation, forces deployed along the borders should be relatively stationary and inactive, with more mobile reinforcements placed in the rear. The relatively reduced mobility of forces deployed along the borders would act to reassure neighbours of a defensive orientation. Similarly, leaving the more mobile forces in

the rear provides a potential adversary with warning in case these are moved towards the front before the onset of hostilities. At the same time, the reinforcements provide the necessary capability to counter any breakthrough attempts that cannot be met by the initial defending forces. Another indication of an offensive orientation can in many cases be derived from a high degree of readiness in active and reserve forces. If the forces at or near the border are deployed in a high state of readiness, capable of rapidly conducting military operations not commensurate with the risk posed, then this could be one indication of an offensive orientation. If, in addition, reserves can be mobilised with deliberate speed so that the wartime strength of a State's armed forces can be quickly expanded, then this could provide a second indication. If, finally, there are active attempts to hide mobilisation efforts from view, then there could be a high degree of likelihood that a premium is being placed on surprise, which is generally regarded as an indispensable element of offensive operations. However, speedy mobilisation of reserves and surprise are equally features of a successful defence so that clear indications of a more offensive or defensive orientation may only be taken from a combination of different factors.

In general, the combination of a low state of readiness in the active forces (e.g., by relying only on-partial manning of active units), a high degree of dependence on the mobilisation of reserves (which are generally less well trained), and a commitment to openness and transparency of military preparations, including in particular of force movements and mobilisation, can provide relatively clear indications of a defensive orientation, of a State's force posture.

A final element that is crucial to identifying the orientation of a given force posture is the degree of logistical support that is available for sustained military operations. Of course, both the offence and the defence require logistical support to sustain operations until their respective objectives have been achieved. Therefore the size of the stockpile of military necessities—like ammunition, fuel and medical support—is not at issue. What distinguishes an offensive from a defensive orientation is the possession of a logistical organisation that can sustain military operations at a distance from one's own territory for a substantial period of time. If there are large fuel and ammunition stocks stored well forward and a large capability for transporting them, then an offensive intention could be assumed. Conversely, a defensive orientation would be conveyed by a more stationary and withdrawn stockpiling of material support.

The recommendations on the level of training of forces, the use of reserves and logistical support in defensive force postures could obviously not be applied as such in the case of States whose forces are solely composed of professional soldiers and, by definition, are maintained at a high state of readiness, or in the case of forces readily available for emergency missions (including collective security operations and operations to assist allies).

These force posture issues must also be reflected in the technological improvements, research and development practices and procurement efforts of a State. As far as new technologies are concerned, these should be directed at enhancing the defensive nature of the force posture, bearing in mind the difficulty of differentiating between them. Research, development, procurement and the transfer of additional weapon systems should be transparent to the extent possible and focus on bolstering defensive rather than offensive capabilities.

In sum, a military force posture could, in general, contribute to the aims of "defensive security" if: it is well balanced as to the capabilities necessary to seize and hold territory and those to defend against an attempt by others to do so; forward-stationed forces are lightly armed and less mobile while heavy armoured and mobile forces are deployed in the strategic rear without being vulnerable to pre-emption; active units are only partially manned and dependent upon the mobilisation of reserves to be combat ready; military operations and the movement of forces are readily observable by others; and the logistical support of combat operations can be concentrated within the defended territory.

Confidence in the defensive orientation of armed forces designed in this manner will increase if the mission assigned to them and their actual involvement in conflicts" over time clearly reflects this. Even if structured along defensive lines, military forces that are repeatedly assigned offensive missions will not be viewed as defensive. Hence, the mission assigned to forces and their practice over time should reflect the defensive orientation of strategic concepts and force postures.

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PARIS SUMMIT: A DISARMAMENT AND SECURITY ASSESSMENT

The summit meeting of Heads of State or Government of the States participating in the Conference on Security and Co-operation in Europe (CSCE), held in Paris from 14 to 21 November 1990, resulted in the conclusion of a series of disarmament and security agreements which have no precedent in European history.

The agreements comprise:

- The Treaty on Conventional Armed Forces in Europe (CFE Treaty), signed at the Elysee Palace, on 19 November 1990, by 22 States, supplemented by a Joint Declaration of the same 22 States;

- The document on a new set of confidence- and security-building measures, approved in Vienna, at the negotiator level, on the eve of the summit by the 34 States participating in CSCE; and

- The final document of the Paris summit, signed on 21 November 1990, which takes note of the above-mentioned agreements and complements them by establishing security-building institutions, the main one being the Conflict Prevention Centre of CSCE, and by setting guidelines for the 34 CSCE States to follow in continuing the process of disarmament and confidence-building in Europe.

Taken together these various elements constitute the foundation of a new balance of security in Europe: much remains to be done to build a stable and lasting peaceful order on our continent.

The results of the Paris summit, which symbolise the end of the cold war, stand in counterpoint to the past and establish the conditions necessary for further progress in security-building and disarmament in Europe.

Results of the Paris Summit: Disarmament, Confidence-Building and Dialogue

Disarmament: the Treaty on Conventional Armed Forces in Europe

It is no exaggeration to say that the CFE Treaty is the most ambitious disarmament agreement concluded to date. Negotiated in less than two years, it establishes, for 22 countries, strict and verifiable limits on levels within the major categories of conventional equipment throughout most of the European continent. As a result, more than 100,000 tanks, armoured combat vehicles, artillery pieces, aircraft and helicopters will have been either destroyed or permanently withdrawn from Europe.

Objectives

Under the mandate of the CFE negotiations three objectives were assigned to the sessions which began in March 1989 at Vienna:

- The establishment of a stable and secure balance of conventional armed forces at lower levels;
- The elimination, as a matter of priority, of the capability to launch a surprise attack;
- The elimination, as a matter of priority, of the capability to launch large-scale offensive operations.

The Treaty signed on 19 November 1990 at Paris meets these three objectives.

The first objective is attained through *parity*, which the Treaty establishes between the forces of the Atlantic Alliance and those of the Warsaw Pact in the five equipment categories already cited (tanks, armoured combat vehicles, artillery, combat aircraft and attack helicopters). In several of these five categories parity is only nominal, since in practice various imbalances will remain: the countries of the Atlantic Alliance have, in effect, been obliged to accept, at the request of the Soviet Union, higher ceilings than their current equipment levels, in the case, for example, of artillery and aircraft. But, these minor disparities will, in any event, be much less serious than the general imbalance in every category which existed previously in favour of the Warsaw Pact.

The second objective, the concern to eliminate surprise attack capabilities, has led to a series of measures designed to complement parity by genuine conventional *stability* in Europe. Two provisions of the Treaty serve that purpose:

- *Regional differentiation*, which establishes weapons ceilings for the four concentric regions into which the negotiators have divided the European continent. This is designed to reduce the possibility of concentrating forces in the "contact" zones (Central Europe and the "flanks") and to compel participating countries to reduce their "forward" forces and deploy them in the rear of their territory.

- The obligation to place *in permanent storage sites* a proportion of the land-based weapons authorised in the zone. This also serves the objective of preventing surprise attacks, since the removal of such weapons from their storage sites becomes an unavoidable (and immediately detectable) precondition for any offensive military operation.

The third objective, that of preventing large-scale offensive operations, is served, in the Paris Treaty, by a *sufficiency rule*, which limits the military equipment which any party may station in the area of application. It thus establishes the principle that no party may possess more than one third of the total level of armaments authorised for the 22 participants. The political message of this rule is without doubt the most significant element of the CFE Treaty: no one must be able to dominate Europe by force of arms, or to use military supremacy for the purpose of political influence.

Thus, translated into specific provisions, the objectives of the mandate would remain unattained if the Treaty did not contain clauses providing for transparency and verification. This mechanism, established in some haste at the end of the negotiations, and accordingly somewhat complex, is based on two elements:

- The obligation, incumbent upon each party, to provide the other parties with detailed periodic information on its armed forces, and, in particular, the major categories of equipment which are subject to the Treaty limitations;

- The right of the parties to carry out on-site inspections, at locations which may or may not have been disclosed by the other parties, to verify the accuracy of the information provided.

Limitations of the Treaty

The CFE Treaty certainly does not provide a solution to all the problems of European security, for two main reasons. First, its scope is strictly confined to Europe. As a result, the obligation to destroy

equipment in excess of the agreed ceilings—stipulated in the Treaty— loses much of its significance. The Soviet Union has been able to withdraw east of the Urals more than half the equipment which was emplaced in Europe at the start of the negotiations in order to shield it from the CFE Treaty restrictions without being in formal violation of the Treaty. This equipment represents a potential circumvention of the Treaty limitations.

The second limitation of the Treaty is that it reflects the old European order rather than providing for the future security of our continent: it is essentially a transitional agreement. The initial Western plan, put forward in March 1989, was based on such premises as the existence of two coherent military alliances in Europe, the division of Germany, and the presence of Soviet forces in Central and Eastern Europe, premises which were totally invalidated over the 12 months separating the fall of the Berlin Wall and the Paris summit. The negotiators were forced to adapt their initial ideas constantly to the new European realities. The adaptation was largely successful—the CFE negotiations even contributed to a final settlement of the German question by providing an appropriate framework for the unilateral commitment to limit the manpower level of the German army. However, the structure of the Treaty quite clearly still reflects a bipolar conception of European security, inherited from the cold war, which does not in itself correspond adequately to the less acute but more complex and diversified security problems now facing the European countries.

One final uncertainty hangs over the CFE Treaty, namely the very future of the Soviet Union: the negotiations, from the mandate stage, were characterised by a significant change in Soviet security policy, to wit, acknowledgement of the Soviet Union's conventional superiority, and agreement, *grosso modo,* to relinquish it in Europe. It is possible that the change was precipitated by events in Central and Eastern Europe which the Soviets were unable to control. That will be for historians to decide. The fact remains that the CFE Treaty forms part of a broader Soviet policy, with theoretical underpinnings provided by the concepts of "defensive orientation" and "sufficiency". This policy is today the subject of debate in the Soviet Union and may not, unfortunately, remain in effect. As soon as the agreement was signed, implementation difficulties appeared on the Soviet side which could affect ratification of the Treaty. There is inevitably a great difference, for European security, between a CFE Treaty applied in good faith by all, including in spirit (that being essential in terms of non-

circumvention), and one applied reluctantly, indeed compromised in its implementation by a restrictive interpretation. However, fidelity to the spirit of openness and confidence-building embodied in the Paris Treaty should, let us hope, lead to satisfactory implementation of the Treaty.

Confidence and Dialogue

The document on a new set of confidence- and security-building measures (CSBMs) approved in Vienna by the 34 States participating in CSCE strengthens the framework of the Conference on Security and Co-operation in Europe.

Negotiated and concluded within the CSCE framework, the 22-State CFE Treaty cannot be separated from the 34-State CSCE agreement endorsed in Paris on a new set of confidence- and security-building measures. This agreement may have paled because of its proximity to the CFE Treaty on which public attention has tended to focus. The fact remains that, in relation to the Stockholm Document of 1986, the document which emerged from the negotiations carried on in Vienna since March 1989 represents an extremely significant step forward in four respects.

1. A main series of measures dealing with the *exchange of information* on armed forces. There are two aspects: the commitment of participants to furnish a series of detailed data each year on their armed land-based and air forces in Europe; and the possibility of verifying the accuracy of these data by means of a random assessment procedure (visits, on short notice, to another party's units).

2. A second series of measures involving adjustments of and improvements on the Stockholm regime: they relate to the annual schedule of military activities, possibilities of observation and inspection modalities.

3. Then comes a series of measures which proceed from an approach to security issues which is based on dialogue and co-operation. They are a follow-up to the seminar on military doctrine which the chief military officials of the 34 participating countries attended in January 1990 in the context of the CSBM negotiations. They relate to:

   • Organisation of regular meetings to assess and improve the implementation of the Stockholm document;

- Exchange of information concerning the military budgets of the 34 participants;

- Agreement on the date of a second seminar on military doctrine.

4. Lastly, there is one measure, the one relating to unusual military activities, which must be mentioned separately. This is a *sui generis* provision concerning crisis management in Europe and it will be implemented by the Conflict Prevention Centre. It allows any State which has concerns regarding any kind of military activity carried out by another participant to obtain a prompt explanation from that State, either bilaterally or within the CSCE framework.

A New Framework for European Security

These confidence-building measures cannot be dissociated from the strengthening and institutionalisation of CSCE which was decided on at the Paris summit; they lay the foundation for, and outline the first tasks of, the Conflict Prevention Centre which is soon to be set up in Vienna. They testify to a flexible, open and authentically multilateral approach to European security issues; such an approach should, in the long run, prove more suited to the real nature of security problems in Europe than the bipolar CFE framework, particularly if the waning of East-West confrontation proves to be lasting.

The success of the CSBM negotiations and the outcome of the Paris summit have confirmed the central role played by CSCE in the process of disarmament and confidence-building in Europe. This was understood by the Heads of State or Government when they decided that the process should continue in a single forum open to all 34 participants. Once the complementary phase of CFE negotiations (called "CFEIA") is over, whereby the limits agreed to in the Treaty of 19 November 1990 will be complemented by limits on manpower levels, a single CSCE process will take over from the two temporarily separate negotiations among the 22 States and among the 34 States.

France's Objectives: to Foster the CSCE Framework and Methods While Taking into Account the New Requirements of European Security

Ever since 1978, when it launched the idea of a conference on disarmament in Europe involving the 35 participants in the CSCE process, France has worked unremittingly to ensure that disarmament in Europe used the CSCE framework and methods: from the Madrid mandate in

1983 until the Paris summit at which French ideas finally prevailed, going through the decision to place the CFE negotiations within the CSCE framework, that has been one of the most remarkable constants of France's disarmament policy. It satisfies basic concerns: to ensure that each State embarks on the road to disarmament in its own name rather than via the collective disciplines of the blocs; to prevent the multiple and complex data relating to European security from being placed in the same category as the numerical balance between alliances; and the conviction, above all, that a fundamental improvement in relations between States cannot be separated from progress in disarmament and that the technical process of arms control must continually be related to the major political events of the moment.

This is what France has endeavoured to do throughout the Vienna negotiations, which culminated in the agreements reached in Paris last November. It has done so right from the stage when Western proposals were being formulated, by proposing to its partners a rule of national sufficiency, independent of the numerical balance between alliances.

It has done so throughout the negotiations, by ensuring that the CFE Treaty remains consistent with European political developments. For example, France has sought to ensure that the collective obligations of the Treaty would be translated, upon signature, into a series of national ceilings that would be binding on each State party. It has advocated the establishment of a system of verification based upon bilateral reciprocity of each party's rights and obligations in respect of inspection. Finally, it has sought to promote joint approaches with the countries of Central and Eastern Europe, even going so far as to present joint proposals.

In addition, France has ensured that other aspects of disarmament are taken into account. For example, the 34 participants undertake, in the final document of the summit, to become party to the agreement on chemical disarmament currently under discussion in Geneva as soon as the negotiations are completed. The declaration of the 22 signatories to the CFE Treaty recalls the importance of concluding an Open Skies agreement relating to the opening of airspace, which in our view should give a new dimension to the unflagging efforts to increase transparency and confidence.

After the Paris summit, France remains determined to pursue this approach to issues of security and disarmament in Europe, bearing in mind the new facts of European security. There are three such facts:

- In Europe itself and between Europeans, security issues increasingly warrant a diversified, multilateral and voluntary approach to disarmament. Dialogue, dispute settlement procedures, transparency and better understanding of the doctrine and intentions of the other parties may well prove to be more important in the future than mere reductions in forces.

- Experience with the implementation of the CFE agreement has shown us that European security cannot be considered only within the strict geographical confines of our continent. We must find a way to look beyond and to deal more rigorously with the possibilities of circumvention of agreements existing beyond the area bounded by the Atlantic and the Urals.

- Finally, the CSCE experience can help to advance dialogue and security in areas of tension or conflict: that is in the interest of the Europeans, particularly in the Mediterranean and in the Middle East, where they are directly involved. The idea is not simply to transpose the CSCE concept, which remains essentially a European concept, to that region but to try to find what particular tailor-made synergism of political dialogue and advances in confidence and in disarmament can be worked out in that region. That should be a priority of European political security following the Gulf conflict.

TREATY ON CONVENTIONAL ARMED FORCES IN EUROPE

On 19 November 1990, the 22 nations of the North Atlantic Treaty Organisation (NATO) and the Warsaw Treaty Organisation (the Warsaw Pact) signed the Treaty on Conventional Armed Forces in Europe (CFE) in Paris. Successful implementation of the CFE Treaty, which limits five major types of conventional weapons deployed in the region from the Atlantic Ocean to the Ural Mountains, will virtually eliminate any European nation's capability for surprise attack or for large-scale offensive action. When it enters into force as an internationally binding and verifiable agreement establishing limits on future military power in Europe and providing for the destruction of excess weaponry, the CFE Treaty will represent a solid foundation for expanded political, social and economic co-operation among all European States. It will provide an underlying element of certainty and confidence in an era of rapid change. Implementation of the CFE Treaty will thus reduce the likelihood of war in Europe and help to build a regime of security and stability which European States have not known for generations.

At the time of writing, however, questions have arisen regarding future implementation of the CFE Treaty. Those questions have been generated by the actions of the Soviet Union when Treaty-relevant data were exchanged at the time the Treaty was signed. Moscow must satisfy the concerns expressed by all the other Treaty signatories over its action if the full benefits of the CFE Treaty are to be realised.

Why a CFE Treaty?

Since the end of the Second World War, the massive numerical superiority of the conventional forces of the Warsaw Pact, in particular the Soviet Union's heavy armoured divisions, deployed forward in Eastern Europe, represented the greatest threat to the security of Western Europe. The conventional forces in the area from the Atlantic Ocean to the Ural Mountains was the largest military concentration ever known in peacetime. In the assessment of NATO, the Warsaw Pact's enormous holdings of equipment most suited for offensive action (primarily tanks, armoured combat vehicles, and artillery) were far in excess of what the Soviet Union and its allies required for defence. The speed, fire-power and mobility of the Warsaw Pact forces constituted a major threat, particularly in the case of a surprise attack, that would confront NATO allies with the choice of accepting defeat or resorting to the use of nuclear weapons. Acknowledgement by the Warsaw Pact States that these disparities existed and their declared willingness to reduce them provided the basis for successful CFE negotiations.

The CFE Negotiation Begins

The CFE negotiation began on 9 March 1989 in Vienna. Under the terms of the mandate, negotiating parties were divided into two groups—the 16 members of the Nato Alliance and the 7 members of the Warsaw Pact.

The objectives of the negotiation, mutually agreed by all NATO and Warsaw Pact members, were the establishment of a secure and stable balance of conventional forces at lower levels; the elimination of disparities prejudicial to stability and security, and the elimination, as a matter of priority, of the capability for launching surprise attack and for initiating large-scale offensive action. As the negotiation progressed, NATO positions were guided by the belief that no one country should be allowed to dominate Europe by force of arms and that there should be a limit on the amount of equipment that could be stationed outside national territory. In addition, the Alliance promoted

measures that would prevent the redeployment of forces withdrawn from one part of the region from the Atlantic to the Urals to another.

President Bush's Initiative

In the opening phase of the negotiations, although all participants agreed on the general thrust of the talks, the specific scope was the subject of intense debate. On 29 May 1989, at a NATO summit meeting, United States President Bush secured agreement from the Allies on an initiative for expanding the scope of the talks and accelerating the timetable for implementing a CFE agreement. The President's creative proposals brought new momentum to the negotiations and advanced NATO interests while addressing Eastern concerns. Included in the package were such important elements as locking in Eastern acceptance of the proposed Western limits on tanks, armoured combat vehicles, and artillery pieces (pending resolution of the definition of each category of equipment), a requirement that reduced equipment be destroyed, inclusion of limits on all land-based combat aircraft and helicopters in the region from the Atlantic to the Urals at a level 15 per cent below the existing NATO level, and a proposed manpower ceiling of 275,000 each on United States and Soviet ground and air forces stationed outside their respective national territories and in the region from the Atlantic to the Urals. In addition, President Bush advocated an accelerated timetable for reaching and implementing a CFE agreement, urging completion of the talks within a year. Subsequently, on 13 July 1989, two months ahead of its own schedule, NATO proposed to the Warsaw Pact a revised CFE package which incorporated the essential elements of the President's initiative, and which, to all intents and purposes, established the framework for the remainder of the talks.

Political Revolution in Eastern Europe

In the autumn of 1989, one East European Communist Government after another collapsed, making possible the unification of Germany and changing the military and political context of the CFE negotiation. Indeed, when the Soviet Union announced its intention to withdraw forces from Eastern Europe and when the newly elected Governments there disclosed their own plans to reduce the size of their military forces, some questioned whether a CFE Treaty was still necessary. The negotiating parties, however, did not agree. A treaty remained the best insurance that the Soviet Union's unilateral actions could not be reversed legally at a later date, since it would contain important provisions not found in bilateral and unilateral arrangements for troop

and armament reductions. Among these provisions were the requirements that the military equipment reduced to treaty limits would be destroyed so that it could not be reintroduced into the Atlantic-to-the-Urals region; a verification regime would be implemented to include detailed data exchanges and on-site inspection, which would not only enable NATO to monitor treaty provisions and deter violations, but would also have a significant confidence-building effect. Finally, only a CFE Treaty would constrain both the size and the disposition of Soviet forces inside the western Soviet Union.

A CFE Treaty in Sight

At a NATO summit in London in July 1990, Allied leaders called CFE NATO's "highest arms-control priority" and they proposed that once a CFE treaty was signed, follow-on talks should begin which would build on the concluded agreement, but with additional measures, including limitations on manpower in Europe. With this goal in mind, they agreed that Germany would make a commitment at the time of the signing of the CFE Treaty concerning the manpower levels of a unified Germany, consistent with the agreement reached between Chancellor Helmut Kohl and Soviet President Mikhail Gorbachev as part of the "2 + 4" process leading to German unification. In a speech on 30 August 1990 to the CFE plenary session, the Foreign Minister of the Federal Republic of Germany and the Prime Minister of the German Democratic Republic jointly stated that, at the time of the signature of a CFE Treaty, they would undertake that the future armed forces of a unified Germany would not exceed 370,000. Within this overall number, no more than 345,000 would belong to the ground and air forces covered by the CFE mandate.

In concert with the German manpower commitment, NATO formally proposed that the CFE Treaty contain a commitment to CFE follow-on talks with the same participants and mandate. NATO also proposed that all CFE participants agree to a political commitment not to increase manpower while follow-on negotiations were under way. The Warsaw Pact States subsequently accepted these proposals, eliminating manpower levels as an issue for resolution in the original CFE negotiation.

The CSCE Ministerial Meeting

On the margins of the CSCE Ministerial Meeting in New York in October 1990, United States Secretary of State James A. Baker III and then Soviet Foreign Minister Eduard A. Shevardnadze, in consultation with foreign ministers from all participating States, agreed in principle

on all outstanding major issues in CFE. Although some tough negotiating would occur in the subsequent six weeks, this intensive meeting was critical in making possible the signing of the CFE Treaty in Paris on 19 November 1990.

At the conclusion of the New York meetings, Secretary Baker highlighted four major achievements of the prospective Treaty.

First, CFE participants could now match the autumn 1989 political revolutions in Central and Eastern Europe with a military revolution. Implementation of the CFE Treaty would accelerate the construction of a new European order which would be more stable and legitimate politically and militarily.

Secondly, the CFE Treaty would be the first post-war conventional arms control treaty signed by both the United States and the Soviet Union. The previous effort aimed at stabilising the European military balance, negotiations on the mutual and balanced force reductions (MBFR), had languished for over fifteen years.

Thirdly, the Treaty would require the Soviet Union to destroy thousands of pieces of military equipment, ensuring a more secure and stable European military balance.

Fourthly, even if times should become less certain in the future, the provisions contained in the Treaty for intrusive monitoring and inspection would make Europe safer.

The last obstacles to a CFE treaty disappeared early in November 1990, when, after consultations with Allies, Secretary Baker met with then Foreign Minister Shevardnadze in Moscow and resolved a number of outstanding issues, including the limits and the disposition of equipment in various parts of the region from the Atlantic to the Urals and technical verification questions.

The CFE Treaty: What is in it?

The CFE Treaty applies to 22 nations and tens of thousands of armaments spread over an area of more than 1.5 million square miles. It is probably the most ambitious arms control agreement ever concluded.

Equipment

The CFE Treaty limits tanks, the chief instruments of an offensive attack, to 20,000 for each group of States. Since the Warsaw Pact nations hold over half the tanks in Europe, this limit will require the reduction of thousands of Eastern tanks, primarily through destruction, significantly enhancing the stability of the region from the Atlantic to the Urals.

Linked to the need to reduce tanks is the need to reduce armoured combat vehicles. These vehicles, which include armoured personnel carriers (APCs), the more capable armoured infantry fighting vehicles (AIFVs), and heavy armament combat vehicles (HACVs), provide infantry mobility and support during combat and can be a crucial factor in an offensive campaign. The CFE Treaty sets limits of 30,000 armament combat vehicles for each group of States and a subceiling of 18,000 for each group of States for AIFVs and HACVs, of which no more than 1,500 for each group of States can be HACVs.

Under the CFE Treaty, each group of States is also allowed 20,000 pieces of artillery—guns, howitzers, mortars and multiple rocket launchers of 100 mm calibre and above. Artillery is important because it provides essential fire-power for conducting combat operations.

Given the versatility, lethality and mobility of aircraft, the West agreed with an initial Soviet demand that the CFE negotiation should include combat aircraft. Therefore, all land-based combat-capable aircraft in the region, regardless of current role, mission or assignment, were considered. Accordingly, the CFE Treaty limits combat aircraft to 6,800 for each side, excluding primary trainers. In addition, the 22 signatories made a political commitment outside the Treaty to limit land-based naval aircraft to 430 for each group of States, with no more than 400 for any one country.

Finally, the CFE Treaty limits attack helicopters to 2,000 for each group of States. These aircraft offer fire-support, flexibility and rapid mobility, which gives them an important role in military operations.

In connection with the CFE Treaty, the six members of the Warsaw Pact signed a treaty at Budapest on 3 November 1990 which allocates the holdings of the Warsaw Pact group of countries by country. Similarly, the members of NATO have consulted through NATO mechanisms and have agreed to national entitlements, referred to in the Treaty as maximum levels of holdings. These national entitlements may be adjusted, however, through agreement with other members in the same group of countries.

Sufficiency

One of the most important elements of the Treaty is the "sufficiency" rule. This limits the proportion of arms held within the region from the Atlantic to the Urals by any one country to about one third of the total for all participating countries. This provision constrains the size

of the Soviet Union's forces more than any other in the Treaty. The sufficiency limits for any one country are: 13,300 tanks; 13,700 artillery pieces, 20,000 armoured combat vehicles; 5,150 combat aircraft; and 1,500 attack helicopters.

Verification

A central feature of the CFE Treaty is the ability to verify effectively the reduction of armaments and the maintenance of ceilings at lower levels. The inspection regime will complement national technical means of monitoring compliance with Treaty provisions and will generate increased confidence by requiring access to all declared sites and reduction facilities.

The Treaty includes provisions for detailed information exchanges, to validate holdings declared at signature, on-site inspection (both mandatory and "challenge" inspections, the latter of which can be refused), and on-site monitoring of destruction. Parties have an unlimited right to monitor the process of reduction. At the initiative of the United States, NATO nations have established a coordinating mechanism to co-operate among themselves in conducting on-site inspections. The Treaty also establishes a Joint Consultative Group, which will consider measures to enhance implementation of the Treaty and address questions relating to compliance with the Treaty.

For the first four months after the Treaty enters into force there will be an intense period of "baseline" inspections to validate the data. After this, there will be a three-year period in which reduction of Treaty-limited equipment (TLE) will take place. During this period, the parties will have the right to monitor the destruction process and to conduct mandatory on-site and challenge inspections. At the conclusion of the reduction period, there will be another four-month period of intense inspections—a second "baseline" period. Thereafter, mandatory and "challenge" on-site inspections will be used to monitor continuing compliance with the Treaty. Throughout the life of the Treaty there will be regular, detailed information exchanges. The Treaty also calls for an aerial inspection regime, the details of which are to be negotiated during follow-on talks in Vienna.

Reduction

The CFE Treaty requires that the equipment reduced to meet the ceilings be destroyed or, in a limited number of cases, rendered unusable for military purposes, while converting it for non-military purposes.

After the four-month "baseline" period, there is a further 12-month period in which 25 per cent of the reduction must be completed, 60 per cent by the end of two years, and all reduction required by the Treaty must be completed by the end of three years. The Treaty parties have five years to convert limited amounts of equipment to non-military uses.

Other Treaty Elements

The Treaty contains other provisions that will contribute to confidence and stability in Europe. The most important of these is the storage provision, which limits the readiness of both groups of armed forces by imposing equal ceilings on equipment that may be in active units. Other ground equipment must be in designated permanent storage sites. The limits for equipment each group of parties may have in active units are: 16,500 tanks; 17,000 artillery pieces; and 27,300 armoured combat vehicles.

In addition to these limits on the number of armaments in each category which each side may maintain in active units in the region from the Atlantic to the Urals, the Treaty also includes regional numerical sublimits. Sublimits on holdings of ground-force equipment in active units constrains further the potential for a surprise attack. These sublimits will also help prevent destabilising force concentrations of ground equipment, particularly on the flanks.

The Importance of the CFE Treaty

The CFE Treaty represents an essential building block for a new European security architecture based on co-operation rather than confrontation. The agreement ensures that this new security architecture rests on a stable military basis.

The reduction of equipment in the region from the Atlantic to the Urals to a level of equality between West and East will decrease the threat to all negotiating parties. Although the Soviet Union will continue to have the largest army in Europe, it will not be able to mass overwhelming forces against NATO's central front on short notice.

In addition, successful completion of the CFE Treaty represents a milestone in the history of arms control. Previous conventional force negotiations in Europe (the MBFR talks), which involved only 12 NATO members and all Warsaw Pact nations, were confined to a smaller geographical area (Central Europe), dealt only with manpower, and did not lead to an agreement. In contrast, the CFE negotiation involved

all 22 members of NATO and the Warsaw Pact, applies to all of Europe, from the Atlantic Ocean to the Ural Mountains, deals with five major categories of conventional armaments, and has resulted in a Treaty signed by all the participants. In the CFE negotiation, NATO seized the opportunity to remove the military threat the West has faced since the beginning of the cold war: the huge conventional military imbalance led by heavily armoured Soviet forces, which had cast a shadow over Europe for almost 45 years.

Conclusion

Clearly it is in everyone's interest that the Treaty be ratified and implemented. In testimony before the United States House Foreign Affairs Committee, however, Secretary of State Baker stated that he would not recommend that the President send the Treaty to the Senate for advice and consent to ratification unless concerns generated by Soviet actions since the time of Treaty signature were satisfied. Secretary Baker's concerns, and those of the other 20 Treaty signatories, relate to Soviet action in regard to three matters.

First, there was some concern that Moscow did not report all of its holdings in the area from the Atlantic to the Urals at the time of signature. While the extent of the problem was not clear, there were indications that Moscow had not indicated in the data exchanged at the time the Treaty was signed all the Treaty-limited equipment in the zone or all the places at which the equipment was located.

Secondly, prior to the signature of the Treaty, Moscow moved thousands of pieces of Treaty-limited equipment east of the Ural Mountains and out of the region. With no treaty signed or in force this was obviously not a legal violation of any agreement. However, the argument has been made that through such equipment transfers the USSR has sought to avoid the obligation to destroy large amounts of equipment that would, had it stayed in the zone, have put the Soviet Union far in excess of its allowed levels. At the very least, it diminishes confidence in Soviet good faith. The United States continues to seek from the Soviet leadership assurances on the future disposition of this equipment east of the Urals, with the expectation that it will not be exploited to alter the strategic balance in Europe or in Asia in the future.

Thirdly, and most seriously, the Soviet Union has refused to accept clear-cut Treaty obligations by re-subordinating former army divisions holding Treaty-limited equipment to the Navy and by arguing that

such forces as well as others assigned to such units as strategic rocket and other forces are not covered by the scope of the CFE Treaty. In this regard, the Treaty—and the negotiating record—are unambiguous. Article III of the Treaty says "all" equipment of the relevant types "within the area of application shall be subject to numerical limitations", with seven specific exemptions. None of those exemptions relates to equipment assigned to such units as naval infantry, coastal defence forces, or strategic rocket forces, as Soviet officials have contended. Moreover, the mandate is legally superseded by the provisions of the signed CFE Treaty. There is simply nothing—anywhere—that supports the Soviet argument. This issue is not a matter of treaty interpretation in which two reasonable views might be reconciled. It is not a question of ambiguous treaty language. It is a matter of compliance with a clearly stated treaty obligation.

The United States remains hopeful that these issues will be quickly resolved and that the CFE Treaty—which remains a historic accomplishment—can be quickly ratified and implemented. The Treaty represents an important contribution to an emerging environment in Europe of great benefit to all States. It is unfortunate that the process of implementation has been slowed by self-serving actions that starkly contrast with the spirit of co-operation with which the agreement was negotiated. It is time to return to that spirit of co-operation and allow the CFE Treaty to become the important achievement it is intended to be.

THE TREATY ON CONVENTIONAL FORCES IN EUROPE— A POLISH VIEW

The Treaty on Conventional Armed Forces in Europe (CFE), signed in Paris on 19 November 1990 by the Heads of States or Government of 22 States, has been widely acclaimed as a major—indeed unprecedented—disarmament move, of far-reaching military and political effect. It certainly is, to borrow a metaphor from a British weekly, "the biggest scrap-metal deal in history", providing as it does for the reduction in Europe, from the Atlantic to the Urals, of some 20,000 tanks, over 8,000 artillery pieces, over 17,000 armoured combat vehicles and over 1,500 combat aircraft. That reduction amounts, on an average, to some 45 per cent for the Warsaw Treaty States and to about 10 per cent for those of the North Atlantic Treaty Organisation (NATO). These figures, both absolute and relative, are highly impressive, particularly when considered against the background of past efforts.

After the first negotiations between the NATO and Warsaw Pact States began in the autumn of 1973 on the mutual reduction of forces and armaments in Central Europe, the Western demand for the withdrawal from that area of 1,700 Soviet tanks was considered excessive by the Soviet Union and in a later phase of those negotiations, which came to an end early in 1989, the two sides failed to agree even on the withdrawal from Central Europe of some 20,000 Soviet and American troops.

The CFE Treaty also sets limits on all the above-mentioned categories of conventional weapons to be reduced, as well as on attack helicopters. These limits will be in the form of equal collective ceilings in these weapons categories for the two groups of States: 20,000 tanks and pieces of artillery, 30,000 combat armoured vehicles, 6,800 combat aircraft and 2,000 attack helicopters. The ceilings will no doubt serve to stabilise the military situation in Europe at much lower levels of armaments. Some might say these levels will still not be very low. That is of course true, for the reduced figures do represent formidable military capability. However, the reductions to be undertaken and the post-reduction limits established (as well as the regional or zonal sublimits aimed at preventing the two sides from concentrating their weapons too close to one another), together with a developed system of detailed information exchange and intrusive verification, for which the CFE Treaty provides, ensure a degree of transparency that will practically eliminate the possibility of launching a major surprise military action in Europe, thus assuring the predictability and stability of the military situation. This will certainly be the military result of implementation of the Treaty, and will have the greatest importance for the increased security of its signatories, including, in particular, Poland.

Of great importance for Poland's security, too, is the specification in the Treaty, next to collective weapons ceilings, of the so-called sufficiency limit on the five weapons categories of the individual States. Such a limit prohibits any country from holding more than a specific proportion (about one third) of the permitted particular weapons quotas in the area to which the Treaty applies, which may, otherwise, be freely shared, respectively, by States within each of the two groups. In practice, the sufficiency clause concerns the States with the highest military potentials in the area covered by the Treaty.

In this connection, another important element not in the Treaty itself but in a note accompanying its signature—is the declaration of the Government of Germany limiting the strength of that country's forces to 370,000 men.

No less significant are the political results of the CFE Treaty. Next to the transformations in the countries of Central and Eastern Europe and the unification of Germany, its conclusion is a clear manifestation of a changed political situation in Europe. Above all, the Treaty denotes—in the military field—an end to the era of confrontation in Europe, a fact which helps to clear the way towards political integration of the continent.

While the commitments undertaken by the States parties are basically of a collective, or bloc, nature, the Treaty nevertheless results, in objective terms, in a weakening of the role of military alliances. As far as the future of the Warsaw Treaty is concerned, it certainly serves to facilitate the proposed actions aimed at phasing out the intra-Alliance military co-operation and the liquidation of the military structure of the Warsaw Pact.

There is, in my view, one preponderant consideration with regard to the CFE Treaty that should be noted and that is going to determine the course of its implementation—once the Treaty enters into force following its ratification—as well as the success of CFE-II negotiations and the future of the disarmament process in Europe in general. It is the close connection between European disarmament negotiations and the dynamics of the political relationship between the participating States as well as of internal developments in those States.

I alluded earlier to the Vienna negotiations by NATO and Warsaw Treaty States on reductions of armed forces and armaments in Central Europe, popularly referred to as MBFR (mutual balanced force reduction) talks. Those negotiations lasted 16 years and, despite great efforts and much good will, failed to produced agreement even on reductions which by today's standards seem meagre indeed. The odds were against it, the feeling of the negotiators most of the time having been one of the lack of the necessary high-level political will for agreement on the part of all those concerned. Unlike the case of MBFR, by contrast, there was an of high-level political will—and pressure—for agreement during the CFE negotiations, which made it possible to produce an immensely complicated Treaty with its eight detailed protocols in only 20 months. Here, too, one might say that the negotiators worked against some odds, but of a completely different kind. They were prompted, challenged and forced by the rate of tempestuous developments in Europe, especially in its central and eastern part, which almost from one day to the next were opening new vistas and creating completely new conditions for the progress of disarmament, indeed sometimes

running ahead not only of the negotiators' position papers but even of their imagination.

The result to date, as I have tried to prove above, is a formidable one. The CFE Treaty now awaits ratification by all signatories before it enters fully into force. Following a further reduction period of 40 months it should result in a considerably disarmed, more secure and more stable Europe. But, several of the vital provisions of the Treaty and sections of some protocols have already been put into effect on a provisional basis. They concern the exchange of information by States regarding their conventional armaments, the declaration of intended respective post-reduction limits on their armaments, establishment of a joint consultative group to promote the objectives and the implementation of the Treaty, inspections and immediate continuation of the negotiations on conventional armed forces (that is, CFE-II), with the goal of building on the CFE-I Treaty. The immediate provisional application of a part of the Treaty certainly underlines the seriousness of the intent of the 22 signatory States. So too does their declaration not to increase the authorised peacetime personnel strength of their conventional forces in the area of application of the Treaty.

One is thus certainly entitled to say that the European disarmament and security process is now firmly on its way. This, however, should not make anyone oblivious of or complacent about the enormous and very difficult tasks that are facing it in both the near and the more distant future. First and foremost, there is a need for speedy ratification of the CFE Treaty and for its full and timely implementation. Indeed, it is the manner of implementation of the Treaty by all its signatories—from the beginning to the end—that will be decisive for maintaining good faith and confidence upon which the whole process is based. In this connection one cannot fail to note the misgivings arising around the exchange of data on the present holdings of conventional armaments in the Treaty application area which was effected on the eve of the Treaty's signature, as well as with regard to the declared number of the so-called objects of verification. These misgivings concern in particular the data presented by the Soviet Union, their clarification, correction and completion now appearing critical for the Treaty ratification and its further implementation.

As a participant of the MBFR negotiations to which I have referred above I would point out here that those negotiations had been thwarted largely by persistent, un-resolved disputes on data. Such a dispute was wisely avoided in the negotiations on the CFE Treaty, and one

would wish and hope that no such dispute now paralyze the Treaty's implementation. It is important to bear in mind that implementation of the Treaty will coincide with the planned massive withdrawal of Soviet troops from the territories of four countries in Central Europe—Germany, Czechoslovakia, Hungary and Poland—a process that must be duly taken into account in shaping and filling the limits on troops and armaments for that crucial zone.

Then there is the question of the speedy negotiation and conclusion of a new agreement—CFE-II. The CFE-I Treaty sets the CSCE follow-up Helsinki meeting in 1992 as a target date for terminating negotiations towards this end. The objective of the CFE-II agreement is generally described as comprising additional measures aimed at further strengthening security and stability in Europe. Among such measures identified in the CFE Treaty are limits on the personnel strength of the participants' conventional armed forces within the area of application of that Treaty. Next to this measure, several others should conceivably be tackled under an expanded substantive scope of a CFE-II agreement. One idea that conies to mind is the need to enlarge the limits already adopted so as to cover new categories of armaments (for example, tactical missile launchers, transport helicopters and aircraft) or to introduce a set of stabilising measures (for example, widening the scope of information on existing and planned new weapons systems, covering the storage regime, the structure of troops and their combat readiness).

An important task, closely connected to strengthening of security, is certainly a further lowering of the limits on conventional armaments already established.

The objective of increased stability seems to prompt paying more attention to regulations aimed at enhancing it at the regional level, for example through ceilings on the number of weapons (and troops) in each of the four zones (not only, as now, the central and flank zone). The same purpose would certainly be served by introducing regional "sufficiency rules"—limits not to be exceeded by any country in the region. Such an arrangement would also come closer to the solution of a very pressing issue, that of basing the structure of limitations on national commitments. A way will have to be found to move to such commitments from the present collective or bloc ones. This is a requirement, not of a technical but of a highly political, security nature, for adjustment to the changing realities of Europe, its central and eastern part in particular.

In conclusion, I should like to emphasise the following points regarding the process of conventional disarmament in Europe:

- A lot has already been achieved in this process, both in material terms (largely through withdrawals and reductions by States of Eastern and Central Europe) and in the agreed Treaty arrangements (reductions, limitations, information, verification), therefore the process is firmly on its way;

- These results are largely due to radical political changes in the countries of Central and Eastern Europe and the ensuing transformation of East-West relations;

- Despite all these highly positive developments, further progress of the disarmament process in Europe should not be taken for granted: it requires determined and speedy action on the part of all 22 signatories of the CFE Treaty to implement it, and parallel, equally speedy and effective CFE-II negotiations to consolidate and expand the scope of disarmament and security arrangements and, above all, bring them into accord with the new political developments in Europe, notably the democratisation processes in its central and eastern part. Needless to say, the durability of these latter processes will largely determine the dynamics of disarmament and progress towards enhanced security and stability in Europe. Any drawbacks in democratisation must therefore be seen with concern in this context also;

- The economic factor weighs heavily on political, systemic changes in Central and Eastern Europe. The rate and, indeed, the fate of these changes is conditioned by imaginative and timely economic co-operation and assistance on the part of the Western CSCE partners.

Poland's national interest determines its strong and unequivocal support for the firm implementation of the CFE Treaty and for the success of CFE-II negotiations along the lines specified above. The Polish people see in the meaningful European disarmament process a way that will help them become part of an integrated Europe—a priority goal of Polish foreign policy.

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THE MOSCOW SUMMIT

Introduction

The United States and the Soviet Union made modest progress towards a new strategic arms agreement (START) at the Moscow summit meeting. They failed, however, to overcome the main barriers to an agreement: the scope of permitted testing of anti-missile systems and the question of what limits should be put on sea-launched cruise missiles.

With an eye to world opinion, both sides stressed how much they wanted to complete a treaty this year. But, the negotiating conduct at the summit meeting suggested that the Super-Powers were content to defer the resolution of some key issues until the next American Administration. In so doing, both sides appeared to be betting that the transition to the next American Administration would not substantially delay the negotiations or adversely affect the prospects for eventual ratification of the agreement.

Other arms control agreements concluded at the summit on the notification of missile test launches and on experiments to verify limits on the size of underground nuclear tests were useful steps. But, they were too minor to warrant signing by President Ronald Reagan and General Secretary Mikhail S. Gorbachev.

The Moscow summit has led to an improved diplomatic climate, which may create the possibilities for new understandings and reduce the risks of miscalculation. But, the summit meeting will not be remembered as an important chapter in the history of the emerging strategic arms agreement. The two sides took few risks, suffered no important set-backs and registered incremental gains.

INF and START

The signing of the INF Treaty on intermediate-range nuclear forces (INF) in December 1987 fuelled expectations among observers at the

Washington summit meeting that the accord might be followed by a strategic arms agreement in 1988. The heady atmosphere of the Washington summit, however, soon gave way to a more sober-minded assessment. A series of ministerial meetings in Moscow and Washington failed to evince new signs of flexibility on key issues. As the Moscow summit meeting approached, expectations were modest.

In retrospect, this should not have been surprising.

A careful examination of the INF agreement suggests that there are important differences between that accord and the emerging treaty on strategic arms.

INF is in many ways a special case in which political considerations played an unusually important role, as Washington and Moscow competed for the hearts and minds of Western Europe. The INF negotiations dealt with only a fraction of each side's nuclear arsenal, and concessions were offered with the knowledge that an INF treaty would not significantly alter the overall military balance between the Super-Powers. But, in the case of the strategic arms talks, the heart of each side's nuclear arsenal is the subject of negotiation and the military stakes are far higher.

Beyond that, the INF Treaty poses less of a verification challenge than a strategic arms accord. The INF Treaty covers only two classes of weapons: medium-range and shorter-range missiles based on land. Moreover, the INF Treaty calls for eliminating these weapons, which greatly simplifies verification. The detection of a single banned INF item would indicate a violation.

Additionally, the INF Treaty bans conventionally armed cruise missiles as well as nuclear-armed versions of the weapon. This dispenses with the need for distinguishing between the two types of weapons. Further, the risk that each side might attempt to maintain a covert missile force is mitigated by the Treaty's ban on missile flight tests, a prohibition that over time would diminish the reliability of any possible covert force.

Even so, INF negotiators worked around the clock to complete the agreement in time for the Washington summit meeting. And five months after the Treaty was signed, Secretary of State George P. Shultz and Foreign Minister Eduard A. Shevardnadze would fly to Geneva to iron out remaining verification details so that the agreement could win approval by the United States Senate.

But, in the case of a strategic arms treaty, the task of negotiating effective verification measures is much more difficult. A new strategic arms treaty will set limits on an array of bomber weapons, land-based missiles and sea-based weapons. It is harder to keep an accurate count of thousands of weapons than it is to monitor a total ban.

Complicating the task, the United States has insisted that no limits be set by the strategic arms treaty on conventionally armed cruise missiles launched by aircraft or from vessels at sea. This reflects an interest in protecting potentially promising non-nuclear technologies, but it also establishes the need to devise procedures for telling the two types of weapons apart.

Another complication is that missile flight tests are to be allowed under a strategic arms pact. This makes it all the more important to negotiate an array of verification measures that will prevent each side from maintaining a force of illegal weapons. And there are still other technical problems which are unique to the strategic arms talks. The two sides, for example, will have to develop procedures for verifying the number of warheads on missiles, and they will also have to agree on how to measure throw-weight.

A further critical difference between the INF Treaty and the strategic arms talks is that the latter negotiations have become linked to a resolution of the sharp debate over strategic defences.

START Issues

As the Moscow summit meeting approached, the two sides reached agreement on the general framework of a possible treaty. But, there were still important differences over matters of principle and technical detail.

The general framework of a strategic arms treaty would call for a limit of 1,600 on strategic delivery vehicles. A ceiling of 6,000 would be established on warheads and air-launched cruise missiles, though the two sides had important differences over how to count air-launched cruise missiles.

A sub-ceiling of 4,900 would be set on warheads on land- and sea-based missiles. The Soviet force of SS-18 missiles would be cut in half, to 154 missiles carrying 1540 warheads. The throw-weight of Soviet missiles would also be cut in half, though just how throw-weight should be defined was in dispute.

In a significant move to facilitate verification, the two sides also agreed that there could be no encryption (encoding) of electronic missile signals during tests, and they expressed a willingness, in principle, to craft extensive on-site verification measures, though there was no agreement on exactly how this was to be done.

But, there were still other important differences, which reflected asymmetries in the force structures of the two sides.

Washington has sought to set limits on land-based missiles, the Soviet Union's strong strategic suit, while advocating looser constraints on bomber weapons and sea-launched cruise missiles, two areas of American advantage. Moscow has responded to this approach by proposing tight limits on bomber weapons, sea-launched cruise missiles and submarine-launched ballistic missiles—all areas of American strength."

This clash of strategic interests has taken a number of forms. The United States, for example, has held to a proposal that the number of warheads on land-based missiles be limited to 3,300. This proposal is based on the American argument that fast-flying land-based ballistic missiles are the most threatening strategic systems.

Soviet Marshal Sergei F. Akhromeyev, the chief of the Soviet military, is reported to have informed the United States that the Soviet Union has no plans to deploy more than 3,300 warheads on its land-based missile arsenal if a strategic arms agreement is concluded. But, Soviet officials have espoused the principle that if the United States insists on a 3,300 limit on land-based missile warheads, the Soviet side will demand reciprocity in the form of a 3,300 limit on submarine-based ballistic missile warheads and a limit of 1,100 on air-launched cruise missiles. This is not acceptable to the United States.

A related dispute concerns the American proposal to ban flight tests of the Soviet SS-18 missile. Such a ban would prevent the Soviet Union from developing new versions of the weapon and would eventually undermine the reliability of existing SS-18 missiles. Administration hard-liners argue that such a ban is justified because the United States has no corresponding heavy missile. But, the SS-18 is the most accurate Soviet strategic missile and Moscow is already engaged in a programme to modernise the system.

The Soviet Union has responded to the American offer by proposing to permit modernisation of existing heavy missiles while banning new

types. This would allow Soviet retention of a force of its heavy SS-18, without giving the United States a corresponding right. The United States, however, has no current plans to field such a missile.

The two sides also remain very much at odds over sea-launched cruise missiles that are armed with nuclear weapons.

Soviet officials have said that verifiable limits should be set on these weapons. As agreed at the 1986 Reykjavik summit meeting, the limit would be outside the 6,000 ceiling on ballistic missile warheads and air-launched cruise missiles. If the two sides cannot find a way to differentiate between sea-launched cruise missiles that are armed with nuclear warheads and conventionally armed versions, the Soviet Union says, a limit of 1,000 should be set on all sea-launched cruise missiles. That is about one quarter the number that the United States plans to deploy.

The United States says that it cannot devise a verifiable scheme for monitoring limits on these weapons and that the two sides should simply exchange plans on how many they intend to build. A major concern for the United States is that verifiable limits on sea-launched cruise missiles could run counter to the American policy of neither confirming nor denying the presence of nuclear weapons on United States naval vessels.

The two sides remain far apart on this question, with no prospect of an immediate compromise in sight.

Difficult as these issues are, they are overshadowed by the profound differences between the two sides over the scope of permissible activity under the 1972 anti-ballistic missile (ABM) Treaty.

The Soviet Union has insisted upon mutual acceptance of a traditional, strict reading of the ABM Treaty, which would sharply limit the testing of anti-missile systems in space. The Soviet Union has insisted that a strategic arms treaty give it the right to call off reductions and build up its arsenal if the United States violates this interpretation of the ABM Treaty in its effort to develop a space-based defence.

The Soviet opposition to "Star Wars" reflects Moscow's recognition that this is an area of technological advantage for the United States and implies a recognition that limits on anti-missile testing must be established to avoid excessive military spending. But, the American side has insisted that Moscow accept a broad interpretation of the ABM Treaty, which would allow an expanded pattern of "Star Wars"

tests. At the Washington summit, the two sides succeeded only in side-stepping their differences by agreeing to vague language that they would work out an agreement "that would commit the sides to observe the ABM Treaty as signed in 1972, while conducting their research, development, and testing as required, which are permitted by the ABM Treaty, and not to withdraw from the ABM Treaty, for a specified period of time".

Moscow Summit

Before the summit meeting, the United States identified two areas where realistic expectations of progress could be made: mobile missiles and air-launched cruise missiles.

Despite some important differences, the category of mobile missiles has been an area of gradual convergence. Earlier, the United States had formally proposed a ban on these weapons, but it has long indicated that it is prepared to remove the prohibition once verification issues are worked out. This position is an implicit acknowledgement that the Soviet Union will not accept the proposed ban, since it has already deployed two mobile missiles: a truck-borne SS-25 missile, which carries a single warhead, and a rail-borne SS-24 missile, which carries 10 warheads. In addition, current Pentagon plans assume that the proposed ban will never be agreed to. Defense Secretary Frank C. Carlucci has proposed putting the entire MX missile force on rail cars, and, at the behest of Congress, the Pentagon budgeted funds for possible development of a new single-warhead missile dubbed the "Midgetman".

One important remaining issue is what limit should be set on the weapons, once the United States abandons its proposed ban. The Soviet Union has proposed a limit of 1,600 warheads deployed on 800 launchers. The United States says that this is too high.

The second main issue is completing the verification arrangements. At the first negotiating session in Moscow, a team of American negotiators, headed by Paul H. Nitze, Special Advisor to the President and Secretary of State on Arms Control Matters, provided its Soviet counterparts with a paper that outlined a series of verification measures. The Soviet team was headed by Marshal Sergei F. Akhromeyev, the head of the Soviet military. The next day the Soviet negotiators indicated that they had accepted the vast majority of these arrangements.

The basic elements of the agreed plan are as follows:

Mobile missiles that are carried on trucks would be confined to small, restricted areas. Within those areas, there would not be any

more structures than there were missiles on launchers. This would preclude each side from hiding prohibited missiles there.

Each side would be able to move the missiles outside these areas for training and maintenance, providing that it gave advance warning. Only a given portion of the missiles could be moved, but this percentage was not established at the summit.

Each side could also disperse its mobile missile force as part of an exercise or as part of a general alert without prior notice. Notice would be given after the fact. There would be provision to enhance satellite observation as well as on-site inspection to make sure that the dispersed force was returned to the restricted area.

Non-deployed mobile missiles would be limited in number and would be kept at an agreed distance from a deployment area. This would prevent each side from using these missiles as operational spares to augment its force.

A roughly similar scheme would be worked out for rail-mobile missiles.

Despite this progress, a number of important unresolved issues remain. One concerns the size of the deployment areas. The United States proposed a 25 square-kilometre area for road-mobile missiles. This was consistent with Air Force plans to base Midgetman missiles at Minuteman sites (which are small), but might not allow the United States to take full advantage of suggestions that the missiles be placed at large military facilities in the south-west United States. Some advocates of the Midgetman, such as Brent Scowcroft, the former National Security Adviser, say that the Midgetman missiles should be deployed at the south-west bases to render them less vulnerable to possible attack. The Soviet Union, for its part, proposed a 100-square-kilometre area for truck-borne missiles. There is also no agreement on the size of garrison areas for rail-borne missiles.

Another critical question is whether the missiles should be marked with a unique identifying tag, as the United States has proposed. Such a tag might take the form of a special epoxy paint that contains metallic glitter. Like a fingerprint, each pattern would be unique. By discerning the pattern with special devices, inspectors would determine whether the missile was allowed under the treaty. But, the Soviet side has resisted this plan.

There are also differences over the United States demand that certain rocket motor production facilities for mobile missiles should be subject

to continuous monitoring. In addition, the two sides have to work out a regime for "suspect-site inspections", that is, spot checks to ensure that each is complying with the terms of the treaty.

Developing procedures for the conduct of such inspections has been a daunting task for the United States arms control specialists. American experts, for example, want to craft measures that will allow spot checks of the Soviet facilities to ensure compliance, but at the same time, they want to protect American intelligence centres and other sensitive sites from Soviet inspection.

The United States never found a way during the INF negotiations to strike an appropriate balance between these two concerns. It finally abandoned the idea of wide-ranging suspect-site inspections that would include undeclared facilities not specified in a memorandum of understanding to the treaty. This was done after Moscow agreed to a ban on medium-range and shorter-range missiles. The Soviet side has consistently resisted the idea of such wide-ranging inspections. But, despite these difficulties, the United States has said that some sort of suspectsite inspection of facilities should be provided for in a new strategic arms treaty.

ALCMs

At the summit meeting the two sides also made headway on how to count nuclear-tipped air-launched cruise missiles (ALCMs), but this is an area in which they still have fundamental disagreements.

The Soviet Union is behind the United States in the area of cruise missile technology and has less ambitious plans to deploy such weapons. Consequently, it has proposed tight limits on the weapons. According to Soviet proposals, each bomber would be counted as having as many of the cruise missiles as it was capable of carrying. The Soviet side has said that a B-52 can carry 28 cruise missiles and that a B-1B bomber can carry 22. In addition, the Soviet side has said that there should be an overall ceiling of 1,100 on the number of air-launched cruise missiles, but Soviet negotiators have indicated a willingness to drop the 1,100 ceiling if other demands pertaining to air-launched cruise missiles are met.

The United States takes a different view towards these weapons. American officials say that there should be loose constraints on air-launched cruise missiles because they are relatively slow flying weapons and thus, they argue, less threatening than fast flying ballistic missiles. Hence, the United States has proposed that each bomber that carries

cruise missiles be counted as carrying only 10 air-launched cruise missiles, even though it might carry more. American officials suggested before the summit that one compromise approach might be to count American bombers as carrying 10 cruise missiles, but to count Soviet bombers as carrying somewhat fewer, say 6 or 8. But, this compromise was not put forth at the summit meeting.

The two sides also differ over how far a cruise missile should be able to fly before it is counted. Drawing on the definition in the unratified SALT-II Treaty, the Soviet Union has proposed that cruise missiles with a range of more than 600 kilometres be limited. The Americans have said that only nuclear-armed cruise missiles with a range of more than 1,500 kilometres should be limited, but that they are prepared to be somewhat flexible on the issue of range if other questions on air-launched cruise missiles can be resolved.

There was no convergence on any of these disputes at the Moscow summit meeting. But, based in part on discussions during Secretary of State George P. Shultz's visit to Moscow in May, the two sides codified several areas of agreement pertaining to verification.

The areas of agreement are as follows:

All current long-range air-launched cruise missiles will be considered to be nuclear-armed. This will dispense with the problem of distinguishing between conventionally armed and nuclear-armed versions of existing cruise missiles.

Future types of nuclear-armed cruise missiles will be distinguishable from the conventionally armed version. How exactly this is to be done, however, was in dispute at the summit. The Soviet side argued that it should be done through the use of functionally related observable differences. That is to say, a conventionally armed cruise missile would be designed in such a way that it would not be capable of carrying a nuclear warhead. The United States was sceptical about this approach.

Heavy bombers that are equipped to carry nuclear air-launched cruise missiles will be distinguishable from other heavy bombers. Each side will have the right to convert heavy bombers that carry nuclear air-launched cruise missiles and nuclear bombs to bombers that are equipped for conventional missions.

The two sides, however, also left the meeting with important differences about on-site verification of bombers. The United States suggested an approach that was designed to keep Soviet inspectors

away from bombers equipped with nuclear-armed cruise missiles and the new B-2 Stealth bomber. It proposed a formula stipulating that inspections would be carried out at bases for bombers that were of a type that had been tested with nuclear air-launched cruise missiles, but that were not actually deployed with such weapons. Thus, the Soviet team would not be able to inspect the Stealth B-2 bomber under this plan, since the bomber had not test-fired air-launched cruise missiles.

The Soviet side, however, has at times advocated a more far-reaching plan that will allow on-site inspection of a wide range of bomber and bomber facilities.

The Soviet proposal for sweeping verification arrangements for bombers and cruise missiles, which was expressed in part by the time of the summit meeting and which has been amplified since, appears to be primarily tactical. Moscow has resisted some American proposals for extensive on-site verification arrangements for land-based missiles. It has, for instance, resisted the American plan for tagging mobile missiles. In demanding tough verification measures for bombers and cruise missiles, Moscow's hope is almost certainly not to establish a highly intrusive verification regime, in which far-reaching Soviet monitoring schemes are added to those of the United States. Rather, Moscow's aim is probably to make tough verification demands in the hope that these can be traded away in return for a lessening of American demands for inspection of Soviet ballistic missile facilities.

Outlook

For all of the problems, the outlook for an eventual strategic arms treaty is generally good.

Congressional opposition to the Reagan Administration's broad ABM interpretation and funding limitations have substantially slowed the pace of the Strategic Defense Initiative. That programme is now being restructured in a fashion that defers some space-based programmes that would eventually run afoul of a traditional interpretation of the Treaty. This development, plus the forthcoming change in the American Administration, is likely to create a basis for possible compromise over the key issue of "Star Wars" testing, as long as Moscow accepts the view that some space testing is allowed by the traditional interpretation of the ABM Treaty.

At the same time, compromises over other difficult issues are conceivable. There is no special urgency to complete a treaty at this

time. Both sides have survivable deterrent forces and the strategic balance is stable. What is needed is a measure of continuity, time and a requisite amount of political will.

The Moscow summit meeting, held from 29 May to 2 June 1988, was an important event in Soviet-American relations and in international politics. It represented a new stage in the political dialogue between the leaders of the USSR and the United States, strengthened the continuity factor in international politics and constituted another logical step in the series of four meetings between Mikhail Gorbachev and Ronald Reagan, at each of which they intensified efforts to find solutions to major problems of universal importance.

Persistent and well-directed efforts made it possible to achieve at Moscow further progress in arms limitation and reduction. The exchange of the instruments of ratification for the Treaty between the USSR and the United States on the Elimination of Their Intermediate-Range and Shorter-Range Missiles, signed in December of last year, brought the Treaty into effect. It is the first international agreement in history providing for the elimination of two types of Soviet and American nuclear weapons, and marks a practical start in building a world without nuclear weapons.

The main result of the meeting was the continuation and development of a dialogue that now covers all the main problems of policy and bilateral relations between the USSR and the United States. The Moscow talks helped this dialogue develop into a realistic, long-term policy. This was reflected in the joint statement, which the leaders of both countries value as a major conceptual and practical agreement.

Still, one must not underestimate the seriousness and importance of the differences remaining between the USSR and the United States on a number of important problems. A general understanding was reached, however, that these differences are not an insurmountable obstacle to the stabilisation and adjustment of Soviet-American relations and that present and future problems must be solved exclusively by peaceful, political means.

Security and Disarmament Problems

Of central importance at the Moscow talks was the problem of a drastic reduction of the strategic offensive arms of the USSR and the United States.

At the very outset of the talks, the Soviet side favoured reaching a final and mutually acceptable solution then and there, without shelving

the matter, for at least two or three of the five major issues connected with the problems that have, until recently, been the object of disagreement between the sides. Specifically, we proposed that we should at the very least agree upon and record in joint documents mutually acceptable solutions on mobile ICBMs and the rules for counting air-launched cruise missiles on heavy bombers. The Soviet delegation also proved ready to seek solutions on other aspects of strategic offensive arms, namely, sea-launched cruise missiles and verification.

The USSR was prepared to continue working for achievement of an agreement on strategic offensive arms after the Moscow meeting. If both sides are really prepared to seek solutions to the remaining problems with the same determination they showed in recent months in working on the Treaty on intermediate-range and shorter-range missiles, then a treaty on strategic offensive arms with all accompanying instruments might be ready even under the present United States Administration. In that event the General Secretary would be prepared to have another meeting with the President of the United States this year to sign the new agreements.

The Moscow talks further strengthened the foundations established in the Soviet-American statement of 10 December 1987, on the basis of which work on a treaty on 50 per cent reductions of strategic offensive arms and on related documents is being conducted. New impetus was given to the search for mutually acceptable solutions to remaining key problems, thereby making it possible to reduce the number of major unresolved issues relating to this treaty.

Two documents were prepared stating the areas of agreement on the issues of mobile ICBMs and long-range air-launched cruise missiles. It was agreed that the provisions of the documents would be included in the joint draft treaty on strategic offensive arms.

The sides stipulated in particular that restricted areas of agreed size would be established for mobile ICBMs. A limited number of missiles and launchers would be permitted in each of them, with a corresponding limited number of installations intended exclusively for mobile ICBM launchers.

Agreements were reached on the implementation of verification measures to facilitate observation by national technical means, on the submission of information concerning the movement of missiles and launchers from restricted areas and on their dispersal, and on the

limitation, both quantitatively and in terms of possible deployment sites, of undeployed ICBMs.

The area of agreement on long-range air-launched cruise missiles was expanded. A mutual understanding was reached that all existing missiles of that type would be considered as being nuclear-armed. Future long-range air-launched cruise missiles with conventional warheads would be distinguished from such missiles with nuclear warheads.

Heavy bombers capable of carrying nuclear-armed long-range air-launched cruise missiles must also be distinguished from other heavy bombers. The parties confirmed the counting rule already agreed upon at Reykjavik for heavy bomber armaments. In this connection, the Soviet side is still firmly convinced that the division of air-launched cruise missiles into long-range and shorter-range missiles must be at the 600-kilometre range, and mat rejection of that notion would mean violation of the Reykjavik counting rule for heavy bomber armaments.

The agreements reached in Moscow concerning air-launched cruise missiles do not, however, fully settle the matter. There remains the unagreed rule for counting the number of long-distance air-launched cruise missiles for each heavy bomber of a specific type. The Soviet side wants that number to be determined in accordance with the maximum number of such missiles for which a heavy bomber of a given type is equipped. The American side insists on agreement on an arbitrary number, one clearly understated in terms of American heavy bombers, of 10 units.

The sides agreed that the following minimum verification measures would be provided for in the future treaty: an exchange of declarations and information, periodically updated, on the number and location of the strategic offensive arms of the parties even before the signing of the treaty; inspections to verify such initial data; on-site observation of the destruction of strategic offensive arms; continuous on-site monitoring of the perimeter and portals of production facilities in order to confirm the output of weapons to be limited; and short-notice inspections of the locations of strategic offensive arms, including locations where either side considers that covert deployment, production, storage or repair of strategic offensive arms might be occurring. The use of concealment, which impedes verification by national technical means, is prohibited, and there are plans for the outdoor display of systems limited by the treaty at missile bases, bomber bases and submarine ports at times chosen by the inspecting party.

An important practical step, part of the verification system under the future treaty, is the exchange—already initiated between the two parties—of data on their existing strategic offensive arms.

We proposed that an explicit understanding be reached with respect to implementing the decision agreed upon in Washington on 10 December 1987 on limitation of the deployment of sea-launched cruise missiles and on strict and effective verification, on a mutually acceptable basis, of such limitation. The Soviet side again pointed to the unacceptability of a selective approach to problems of verification, i.e., comprehensive and stricter verification for Soviet strategic weapons and lenient verification for American weapons. Only a verification system that is equal for both sides is acceptable..

Without agreement on limitations for sea-launched cruise missiles and on strict and effective verification, the drafting of the treaty on 50 per cent reductions of strategic offensive arms is inconceivable. This problem will be the subject of further discussion in the talks between the Soviet and American delegations in Geneva.

It was therefore not possible to untie all the knots impeding progress on an agreement.

The future treaty on strategic offensive arms affects the most crucial aspects of Soviet and American security and must, therefore, be worked through most carefully in order to balance the interests of the sides and must be adjusted in the minutest details. Unless the sides find mutually acceptable solutions to each problem individually, they will not be able to reach an early agreement on such sensitive issues.

At the same time, the positive impetus lent to the Geneva talks by the Moscow discussions and by the common understandings reached at those discussions by the two leaders, primarily on mobile ICBMs and air-launched cruise missiles, gives reason to think that there is still a chance that in the foreseeable future the treaty on strategic offensive arms may be prepared and signed. Our position on this was clearly stated by Mikhail Gorbachev at a press conference on 1 June of this year.

The Soviet side again placed the problem of preserving the ABM Treaty in the forefront.

At the Washington meeting in December 1987, as we all know, the formula for a future treaty was agreed upon. We are convinced that we had every opportunity to make it a legally binding document, but

unfortunately that was not done. As a result, work on this important part of the complex of issues relating to strategic offensive arms and ABM systems was not completed.

An important result of the discussion in Moscow of issues relating to ABM systems was the clear affirmation of the position that the joint draft text of a separate agreement concerning the ABM Treaty and adherence to it during the established time period must be based on the formulas in the Soviet-American statement of 10 December 1987. It was noted that at the Geneva talks some progress had been made in the preparation of such a text, which in its complete version will reflect the Washington formula in the required legal form. Now the problem is to complete this work in the shortest time.

A joint draft text of the protocol to the agreement which is to contain provisions on verification measures and predictability, designed to create confidence that the obligations undertaken will be honoured has been prepared. Now efforts must concentrate on deciding upon the specific wording of a draft agreement.

The Soviet side placed special emphasis on the organic interdependence of the implementation of 50 per cent reductions in strategic offensive arms and compliance with the ABM Treaty in the form in which it was signed in 1972. This Treaty, which prohibits the development, testing and deployment of space-based and certain other types of ABM systems and components, was and remains one of the most prominent factors in ensuring stable development of the strategic situation, which is required for important reductions of strategic offensive arms.

A serious step in the field of confidence-building measures between the two countries was the signing of the Agreement between the USSR and the United States on Notifications of Launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles, which is designed to reduce and ultimately eliminate the danger of the outbreak of a nuclear war, particularly as a result of misinterpretation, miscalculation or accident.

The problem of nuclear tests was thoroughly discussed at the Moscow talks. Agreement to start full-scale Soviet-American negotiations on the limitation and ultimately the complete cessation of nuclear tests was achieved at a meeting between the Soviet Minister for Foreign Affairs, Eduard Shevardnadze, and the United States Secretary of State, George Shultz, in September 1987.

These negotiations started in November 1987. The sides must first agree on effective verification measures that will make it possible to ratify the 1974 Soviet-American Treaty on the Limitation of Underground Nuclear Weapon Tests and the 1976 Treaty on Underground Nuclear Explosions for Peaceful Purposes. They must then reach an agreement on further interim limitations on nuclear tests before achieving the ultimate goal of the complete cessation of nuclear tests, as part of an effective disarmament process. A priority goal within this process would be to reduce nuclear weapons and ultimately eliminate them.

In order to work out improved verification measures for the Soviet-American Treaties of 1974 and 1976, the sides decided to develop and carry out a joint verification experiment at each other's test sites. These verification measures will be used, where applicable, in agreements on the further limitation of nuclear tests that may be devised in the future.

In order to prepare and conduct a joint verification experiment, in January of this year the sides visited each other's test sites—the Soviet test site in Semipalatinsk and the United States test site in Nevada. Following that, the participants in the negotiations focused their attention on elaborating an agreement on the conditions for conducting the joint experiment. The delegations also undertook an exchange of views on the content of the documents which should supplement the 1974 and 1976 Treaties.

The elaboration of the joint verification experiment Agreement was completed in the course of a meeting at the highest level in Moscow. This document (approximately 200 pages) was signed on 31 May 1988 by the Soviet Minister for Foreign Affairs and the United States Secretary of State. In order to measure yield, the Agreement provides for the carrying out of a 100-150 kiloton nuclear explosion at the Nevada test site on 17 August 1988 and the Semipalatinsk test site on 14 September 1988.

The Agreement establishes in detail the procedure for preparing and conducting the joint experiment, using the methods proposed by the sides for verifying measurement of the yield of the explosions. In this regard, the Soviet side has attached particular importance to seismic verification methods, and the United States side to hydrodynamic verification, in particular, the CORRTEX (Continuous Reflectometry for Radius versus Time Experiments) method. The results of the experiment are then to be considered by both sides in order to find a

mutually acceptable combination of these methods for verifying compliance with the provisions of the Treaty on the Limitation of Underground Nuclear Weapon Tests.

The existing Protocol to the 1974 Treaty sets out the methods for monitoring compliance with the Treaty's obligations. In the light of the joint experiment, an additional protocol to the 1974 Treaty is to be drawn up, which will pave the way for the Treaty's ratification. At the negotiations the sides have already exchanged texts of corresponding draft protocols, which at this stage contain a number of significantly divergent views owing to differences in the sides' positions. An understanding has been reached that the work on an additional protocol will be completed after the joint verification experiment has been carried out and its results specifically taken into account.

With regard to the 1976 Treaty on Underground Nuclear Explosions for Peaceful Purposes, the Soviet side proposed amending the existing Protocol to the Treaty rather than drawing up an additional document. Agreement on such an amended protocol is not linked to the results of the joint verification experiment and it can be completed before the experiment is conducted.

The objective of these new protocols to the 1974 and 1976 Treaties will be, as can be seen from the joint statement of 18 September 1987 by the USSR Minister for Foreign Affairs and the United States Secretary of State, to achieve agreements on further limitations on the number and yield of nuclear tests, leading to the ultimate goal of the complete halting of nuclear tests.

In discussing the problem of prohibiting chemical weapons, our side particularly stressed the need for and the possibility of speedily completing the negotiations on the convention on the destruction of all chemical weapons. We drew attention to the fact that under current conditions the deadlock in negotiations is tantamount, in essence, to movement backward. If the opportunity is lost, then several years from now the convention may become an unattainable goal.

An important result of the meeting was not only the confirmation by the United States of the goal of the comprehensive and general prohibition of chemical weapons, but also recognition at the highest level of the "continuing urgency" of concluding a convention, as stated in the corresponding section of the joint statement by Mr. Gorbachev and Mr. Reagan. These results open up possibilities for intensifying joint or parallel Soviet-United States efforts at the negotiations on the

convention and create a sound basis for work on the questions relating to the prohibition of chemical weapons. The fact that both leaders condemned the proliferation and use of chemical weapons in violation of the 1925 Geneva Protocol is also important.

The results of the Moscow meeting will make it possible to speed up the negotiations on prohibiting chemical weapons and improve the atmosphere at them. At the same time, the efforts of the Soviet Union and the United States alone are insufficient to achieve ultimate success. All States must make their contribution to the speediest possible conclusion of the convention.

The new Soviet proposals on reducing armed forces and conventional weapons in Europe were a subject for serious discussion with the United States side. The crux of these proposals is as follows.

In the first stage, after an exchange of initial data concerning the numerical strength of armed forces and numbers of weapons, imbalances and asymmetries will be exposed and eliminated. To achieve this, immediately after the start of negotiations the initial data will be verified through on-site inspection and differences in assessments will be resolved.

In the second stage, the sides will each reduce their armed forces by approximately 500,000 men.

In the third stage, the armed forces of both sides will become purely defensive in nature, unable to mount offensive operations.

In all these stages of negotiations we are prepared to accept a mutual reduction of offensive weapons—tactical nuclear weapons, strike aircraft and tanks. Of course, all reductions must be carried out under strict international control, including on-site inspection. Such measures as the establishment of corridors in which there would be no nuclear weapons and which would separate our armies from one another could also be discussed. An exchange of views, which has now become customary, was also carried out with regard to naval questions.

At the Moscow summit meeting, there was also an exchange of notes relating to an extension of the bilateral Agreement on Peaceful Uses of Atomic Energy and to new projects to be carried out under the Agreement concerning Co-operation in the Exploration and Use of Outer Space for Peaceful Purposes.

In general, an intensive work programme was laid down for cooperation between the Soviet Union and the United States in various

fields, as the corresponding sections of the joint statement issued at the Moscow summit clearly demonstrate. The transition from confrontation to the search for areas of co-operation in relations between the USSR and the United States serves the interests of not only the peoples of the Soviet Union and the United States, but also the entire world community. This represents a general triumph of reason and realism. It is a result largely of the global recognition of the fact that the world has come to a point where it must stop and proceed in another direction—towards a nuclear free and non-violent future and improved international relations.

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PROBLEMS IN THE IMPLEMENTATION OF DEFENSIVE SECURITY CONCEPTS AND POLICIES

The implementation of "defensive security" faces a number of practical problems. These include the inherent difficulty of distinguishing between "defensive" and "offensive" weapons and weapon systems; the requirement of any State to retain the ability to conduct counter-offensives at the tactical and operational level if it wishes to maintain the integrity of its territory; and the fact that the right to collective self-defence whether enshrined in formal alliance commitments or not implies the need for military capabilities that can be extended beyond the territory of particular States.

Over and above these practical problems, the progressive implementation of "defensive security" is made more difficult by a state of international relations in which tensions and conflicts persist. Although emphasising the defensive orientation of military capabilities can have beneficial effects on the nature of conflict situations by generating some confidence, the full implementation of the concept of "defensive security" ultimately depends on States feeling secure. An improvement in political relations and the creation of a sense of mutual trust among States is, therefore, a pre-condition for the successful implementation of "defensive security". Before analysing practical measures for promoting such an improvement in relations, however, it is necessary to detail the practical problems confronting the implementation of defensive security concepts and policies.

Weapon Systems

The characteristics of weapons and weapon systems pose two problems for the effective implementation of defensive security concepts

and policies. First, it is difficult, if not impossible, to make a distinction between "offensive" and "defensive" weapons and weapon systems. Second, weapons of mass destruction pose a particular problem for the implementation of "defensive security". In the first case, and even to some extent in the second, it is only the context in which a weapon is used that will determine its defensive role. Yet, this context is by definition particular to specific circumstances, and the formulation of universally applicable guidelines is, therefore, impossible.

Much of the literature on "non-offensive defence" assumes that it is possible to make a clear distinction between "offensive" and "defensive" weapons. Practical experience shows, however, that this assumption is misplaced, or at least requires qualification. Thus, anti-tank weapons can be used both to delay and destroy an advancing armoured attack or to dislodge a dug-in defence. Even the archetypical "offensive" and "defensive" weapons—the sword and shield—are ambiguous in their effect. Swords may be used to ward off offensive thrusts. Conversely, the effective use of a shield can disarm an opponent of his sword and can subsequently be employed to crush an opponent. It follows that the "offensive or defensive character of a weapon depends as much on the full context in which it is used as on its intrinsic properties. Even in chess, defensive or offensive games can be fought with the same sets of pieces".

Although conventional weapons generally defy categorisation in the absence of the context in which they might be used, this is different in the case of weapons of mass destruction. Despite a general failure during the Geneva World Disarmament Conference in the 1930s to identify dearly which weapons were offensive, there was agreement on which weapons should be considered as weapons of mass destruction. The United Nations Commission for Conventional Armaments adopted a resolution on 12 August 1948 by consensus, which declared "that weapons of mass destruction should be defined to include atomic explosives, radioactive material weapons, lethal chemical and biological weapons, and any weapons developed in the future which have characteristics comparable in destructive effect to those of the atomic bomb or other weapons mentioned

Although these weapons were not characterised as "offensive", weapons of mass destruction pose a severe challenge to a defensive orientation. There is widespread agreement within the world community oh this point. The use in war of chemical and biological weapons is banned by the 1925 Geneva Protocol. In 1972, the biological and toxin

weapons Convention banned the development, production and stockpiling of bacteriological (biological) and toxin weapons. In January 1989, 149 countries, meeting in Paris during the Conference of States Party to the 1925 Geneva Protocol and other Interested States, called for the early conclusion of a convention on the complete and effective prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction under negotiation in Geneva. Hence, the international community is in agreement on the urgency of eliminating chemical and biological weapons. As such, their possession and use is inconsistent with the concept of "defensive security".

Nuclear weapons pose a somewhat different problem. The Treaty on the Non-Proliferation of Nuclear Weapons of 1968 recognises that some States possess nuclear weapons and undertake to pursue "negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control" (A/RES/2373 (XXII), annex, Art. VI).

This goal was reiterated in the Final Document of the Tenth Special Session of the General Assembly (the first such session completely devoted to disarmament), which was adopted by consensus on 30 June 1978:

> "It is essential to halt and reverse the nuclear arms race in all its aspects in order to avert the danger of war involving nuclear weapons. The ultimate goal in this context is the complete elimination of nuclear weapons" (see resolution S-10/2, para. 47).

It also contained the following statement:

> "The process of nuclear disarmament should be carried out in such a way, and requires measures to ensure, that the security of all States is guaranteed at progressively lower levels of nuclear armaments, taking into account the relative, qualitative and quantitative importance of the existing arsenals of the nuclear weapon States and other States concerned" (ibid., para. 49).

These, as well as other statements, recognise that in the framework of efforts to achieve general and complete disarmament, which is a gradual process, further nuclear disarmament measures should be Undertaken. In the East-West context, the arms race has already ended and has been reversed. In this regard, the Treaty on the Reduction and Limitation of Strategic Offensive Arms signed by the Soviet Union and the United States in July 1991, as well as the new Bush-Yeltsin agreement

on strategic nuclear warheads of 17 June 1992 represent important steps. These and further reductions in other sectors of nuclear arsenals that have been announced must be implemented.

Offensive *versus* Counter-offensive Capabilities

A second problem in implementing a defensive orientation in military policy is that an effective defence may require the ability to conduct offensive operations. At the tactical and operational level of war, this ability is therefore necessary for an effective defence. The most obvious reason for this is the defender's need to regain territory lost to the aggressor in the initial attack. But, there are other imaginable situations in which offensive operations are critical to fulfilling defensive objectives. The Persian Gulf war provides one such example. In order to liberate Kuwait, coalition forces had to launch an offensive operation to dislodge occupying Iraqi forces. While the military operation was clearly offensive, its purpose—the restoration of Kuwaiti sovereignty—was precisely the kind of defensive objective deemed legitimate by the concept of "defensive security".

A force posture that would deprive the defence of the ability to conduct offensive operations at the tactical and operational level might therefore prove ineffective, thereby defeating the credibility of such a posture. The very mobility so often disdained as offensive by advocates of "non-offensive defence" is central to this ability. In certain situations, moreover, mobility might favour the defender over the attacker. For example, in the initial breakthrough battle the aggressor need not be highly mobile to effect surprise as long as movements can be concealed from the defender. On the other hand, the defender, caught by surprise, requires mobility to move forces rapidly to meet the attacker at the breakthrough point in order to secure objectives.

If the force posture characteristics necessary for an effective counter-offensive capability are similar to those required for an offence, then it will be difficult to distinguish a defensive from an offensive orientation. This challenge to the implementation of "defensive security" can be mitigated by the adoption on a reciprocal basis of the force posture characteristics discussed in chapter III above. Thus, the distribution of mobile and stationary capabilities within the force posture could be such as to reduce the ability for large-scale offensive action; mobile forces that are in principle capable of offensive operations could be stationed well to the rear; the readiness of mobile units during peacetime could be held below wartime strength; and logistical support capabilities could be deployed away from the borders.

Collective Defence and Joint Commitments by States

The concept of defensive military force postures that inheres in such notions as "non-offensive defence", generally assumes that the primary interest of all States is confined to the defence of national territory. In a general sense, this is of course true; under the Charter of the United Nations, the legitimate use of force is indeed confined to self-defence. In addition, Article 51 of the Charter also makes clear that States have the inherent right of collective self-defence, which in many cases may be the only effective way in which the territorial integrity of States can be secured against the threat of, or actual, aggression.

The right of collective self-defence means that States must have the ability to come to the aid of victims of aggression. This may, in some cases, imply that at least some States, either individually or collectively, must possess the military means to project military power beyond their respective national borders. Such a capability by definition provides those States with a potential for an offensive action. In those cases the precept that States should possess only those armed forces that are sufficient for defending their own territory could pose a problem. In those situations, the possession and eventual use of such capabilities should be for the sole purpose of implementing collective self-defence in accordance with the relevant provisions of the Charter of the United Nations and consequently should not be perceived as posing a threat to neighbouring States.

Such situations can be found in formal alliance commitments between two or more States whether from the same region or not. In this respect, States have in the past sought, and are likely to continue to seek in the future, to protect their security by entering into formal military alliances for the purpose of collective defence. These alliances generally reflect— often with a sense of common values—a common threat perception to the interests of the members seeking security in the protection provided by a system of mutual assistance. The credibility of such protection depends, however, on the States being able to defend the interests of their allies. If the allies perceive this capability as a credible protection of their interests, then they may well themselves be prepared to adopt or maintain a purely defensive posture.

The security alliance between Japan and the United States offers an example of this situation. For historical as well as constitutional reasons, Japan has developed a military doctrine and force posture that is intended to be unambiguously defensive in nature. This

"exclusively defense-oriented" policy is reflected in Japan's military forces: Japan does not possess long-range missiles, strategic bombers and aircraft carriers necessary for massive destruction of an adversary's territory; it will not possess, produce, or permit the introduction of nuclear weapons on its territory; it will not engage its forces in combat operations outside its territory; and it will limit military operations to the immediate territory, sea and airspace of Japan. These precepts underscore that a defensive orientation can be expressed according to different criteria, which derive from specific circumstances.

However, Japan recognises that its military capability might be insufficient in case of an attack on its territory and therefore relies on the United States to protect it from nuclear attack and to conduct any offensive operations necessary for the defence of its territory. The ability of Japan to adopt a defensive posture is therefore vitally dependent on the commitment by the United States to its defence should Japanese forces prove unable to defend Japanese interests.

Another example can be found in the mutual defence agreements between France and its allies in Africa. These agreements contain important provisions for mutual military assistance that are reinforced through bilateral and collective agreements. By virtue of France's protective military cover, some West African countries have been able to adopt defensive military postures and spend less on defence generally. As these examples demonstrate, the effectiveness of a truly defensive military force posture for some countries will depend on the offensive military capabilities of an ally. These agreements, however, have given rise to a moderate arms race within the regions concerned, especially by neighbours not party to the agreements.

An idea that has been proposed to address these difficulties is that of role specialisation. Under this idea, which was not further, explored by the Group of Experts and which might pose serious practical problems for its implementation, States in a given group would individually specialise in different force projection roles—for example, sea-lift, logistical support, armoured warfare, deep strike capabilities, etc. Although no one State within such a group would possess an independent total force projection capability, the assembled forces of the group of States would be sufficient for collective operations beyond the borders of the States concerned. In this manner, role specialisation may wherever feasible provide sufficient military capabilities for collective action without at the same time posing an actual or perceived threat to the security of other States.

Applicability at the Bilateral, Regional and Global Levels

Quite apart from these inherent difficulties of implementing a defensive orientation in military force postures, there are a number of practical obstacles to the implementation of the concept of "defensive security". One of these, is that tensions or conflict between States or within a region might be so intense as to preclude adoption of defensive security policies by the States involved. Perceptions of insecurity that lead to the adoption of potentially offensive military postures are often the result of real differences of interest concerning territory, ideological predisposition or historical experiences, or differences in power. Given such perceptions, States are unlikely to embark on a course that reduces their military potential so long as there is no guarantee that their potential adversaries will follow suit.

Hence, in regions where conflict is rife, a political process designed to reduce differences of interest and degrees of mistrust is probably necessary to effect the necessary military changes. As discussed further in chapter V, this process could include confidence-building and transparency measures adopted on a reciprocal basis. The entire process of, implementing defensive security policies in such regions may start either with the political or with the military elements or in concert. What is important is a commitment by all States in the region to begin the process and be aware that the political and military elements must be pursued in tandem.

Disparities in power and size could also present a problem for the implementation of defensive security policies. Even if reduced and defensive in nature, the military force posture of a powerful country could pose a potential threat to a weaker neighbouring country. In these circumstances, the development and preservation of good political relations is the best guarantee for security.

Each of these challenges to the applicability of defensive security concepts and policies in specific bilateral and regional settings underscores the importance of political factors to the successful implementation of defensive security concepts. In the absence of a basic degree of mutual trust, mere changes in the disposition and capability of military forces will prove insufficient to effect the desired change. Of course, reducing the offensive or provocative character of military forces can be an important element in a strategy designed to improve political relations. However, in the absence of an active diplomatic involvement designed to solve real differences or alter misperceptions regarding external intentions, mere changes in military structures will prove insufficient.

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CAN NON-OFFENSIVE DEFENCE IMPROVE ARMS REDUCTIONS?

The aim of this study is to analyse how arms reductions and the notion of sufficient defence might interact with each other. I will first spell out a couple of the points of departure for the argument, after which I will discuss the desirability and feasibility of arms reductions, identifying some main obstacles. Following that, I will discuss some different interpretations of "sufficient defence", the research approaches that they entail, and the conceptual elements that become central to the argument. Finally, I will try to link the ideas of arms reductions and sufficient defence through the crucial notion of non-offensive defence.

Points of Departure

This article will take as its point of departure an examination of the doctrines of States and alliances. There is considerable debate as to whether doctrines are best understood as instruments of what they purport to be—guidelines for policies of national security—or whether they are better understood as by-products—legitimising lines of action that have quite different causes. As will be seen from the reservations made below, the fact that I take doctrines as a point of departure does not imply any stand in this debate. The purpose of the present article is to look at the problems of arms reductions and sufficient defence through the lens of doctrine, leaving open the question of what they would look like, if viewed through other lenses.

According to the doctrines of most States, the State has, or strives to have, a level of military preparedness aimed at two things: (a) the ability to defend itself against reasonably conceivable attacks and (b) the ability to deter or dissuade other States from attacking it. A number

of other official motives can also be found, such as control of "internal enemies", but they are not essential to the argument in this article.

The doctrines vary considerably in the manner in which they link these two stated objectives. In some, for example, those of a number of non-aligned countries, the capability of dissuasion is assumed to rest entirely on defence capability; there is no element of even a hypothetical threat of retaliation. In more ambitious versions, for example, Yugoslavia's, the defence capability aimed at must be sufficient to repel any reasonably conceivable attack, or at least to throw the invader out eventually. In other States, such as Austria, Finland, Sweden and Switzerland, the doctrine is built upon an assumed cost/benefit rationality on the part of a potential aggressor. It is assumed that an invasion would benefit him only if he gained control of secondary strategic assets. For this reason dissuasion only requires making it credible that an invasion will be so uncertain, costly and time-consuming that it will not be worthwhile.

In other doctrines, defence alone is not assumed to be sufficient to dissuade potential aggressors. They also build on a stronger kind of deterrence: on the ability to launch painful or even devastating offensive attacks, conventional and/or nuclear, against aggressors. Involved in this may be various combinations of reasoning concerning strategic geography (for example, pre-war Germany and modern Israel), timing of mobilisation (the 1914 squeeze in Europe), political/(quasi) psychological evaluations ("It is the only language they understand"), a perceived lack in one's own attainable defence resources (a traditional element in the doctrine of the North Atlantic Treaty Organisation (NATO)), or the belief that deterrence by punishment is seen as cheaper than deterrence by denial only (a belief found in the doctrines of both major blocs).

The main line of my argument will not deal with whether the doctrinal reasons are the "real" ones or not. The doctrines themselves are social facts, whatever their possible underlying motives, and so is the military apparatus that is justified by the doctrines; by virtue of that, the doctrines must be assumed to have real consequences. This, of course, is not to say that there are not other factors behind these consequences. Still less is it to say that the actual consequences are those intended according to the doctrines, or that they are even compatible with them. Several cases of arms races and escalating crises illustrate that the net result of two doctrines and, especially, of the interaction they engender may quite well be precisely what both were designed to avoid.

Arms Reductions

There are several arguments—although none is uncontroversial—for worrying about high levels of armament and wanting to reduce them:

(a) They are a waste of resources—labour, capital, products, trained scientists and technologists—that could be much more fruitfully used for national and international development;

(b) They lead to the militarisation of societies—socially, economically, culturally, etc.

(c) They increase the danger of war.

The third argument is the crucial one in the present context. It is obviously a highly controversial one. The opposite position is that it is precisely balances of power, however conceived, that serve to avert wars by deterrence.

Much can be said—and has been said—about this issue, which is obviously very susceptible to ideological interpretations. To the extent that systematic statistical studies concerning military expenditures and wars can be of any guidance, they can be summed up in the following points:

(a) There seems to be a weak association between high military expenditures of individual States and their participation in wars. There is no firm support for a causal interpretation of this but, by the same token, there is even less support for the notion that high levels of armament tend to contribute to averting war.

(b) There is a stronger association between quick rises in the levels of armament of individual nations and their participation in wars. Here too, caution is necessary, since different causal interpretations are possible: that the rise contributed to causing the war, that the anticipated war contributed to the rise, or that both the rise and the war were the products of some other underlying factors of competition or conflict. Again, it is true that if there is no firm support for the argument that a rise in the level of armaments tends to cause wars, there is even less support for the argument that it tends to avert wars.

(c) If a pair of States have a confrontation, the risk that the confrontation will escalate into a war is higher, the higher the military preparedness of either State. It is highest when both have high levels, and lowest when both have low levels,

(d) If both States have higher-than-normal rises in arms expenditures for at least a few years, the risk of war between them is particularly high.

(e) There is no support for the notion that approximate equality of military capability tends to preserve peace between two States. On the contrary, the risk of war is higher when there is parity than when there is a marked discrepancy between them. It is particularly high if one passes the other—which, of course, can only happen if they are very close to each other.

Several reservations should be made here. First, statistical analysis can tell you only about general tendencies, and even among the cases where these general tendencies can be interpreted causally, there may, in specific instances, be other and stronger causal factors that work in the opposite direction. Secondly, these propositions are only about the relationship between armaments and wars, and therefore cover only limited aspects of national security. Thirdly, most of the analyses cover long time periods. We have much less systematic evidence regarding the shorter time period in which two or more international actors have had deliverable nuclear weapons.

Still, to the extent that we can draw any firm conclusions at all from the body of existing studies, there is an indication that high levels of armaments and, in particular, simultaneous high rises in the levels of two opposing States are—at the very least—clear warning signals.

The question may now be formulated whether the relationships that seem to exist between armament levels and wars also work in the opposite direction: whether arms reductions can be expected to reduce the risks of war. This question is more difficult to answer. First, we find many fewer cases of rapid disarmament than of rapid rearmament, so the empirical basis for analysis is slimmer. Secondly, we have a major (from the analytical point of view) disturbing factor. Periods of major disarmament are almost exclusively found immediately after major wars, so we do not know for sure whether the lower risks of war that appear to be associated with them are due to effects of disarmament, or whether both the disarmament and the lower incidence of war are due to the general war-weariness that tends to follow a major war. Even so, if any overall conclusion is justifiable, it should primarily be to the effect that disarmament tends to reduce the risk of war, everything else being equal.

Everything else, however, is usually not equal, so we cannot draw a firm conclusion to the effect that any disarmament is always favourable to peace. The general reservation that may be made can be formulated as follows. Even if it is true that there is no risk of war if both parties are completely disarmed, it does not follow that any move from the present towards that point will reduce risks. It may well be that the road from a zone of danger to a zone of less danger passes through zones of even higher danger. The word "may" is stressed here, since this argument, presented in different versions by some authors, is a purely theoretical one, with no empirical research to back it up.

Even so, it deserves to be taken seriously. Since in some cases we cannot possibly get sufficient empirical data from which to draw any firm conclusion, we have to make do with theoretical arguments and counter-arguments.

That leads us to ask whether we can identify any ideal or optimal roads to arms reductions. If so, we have to look at more specific aspects of defence organisations than the measure of total military expenditures, which is what is usually used in statistical analyses.

One point of departure might be the traditional formula that disarmament needs to be mutual, balanced and verifiable. However, since this formula was established a generation ago, in the McCloy-Zorin agreement, global armaments have approximately doubled. This trend has even been much worse in some regions and in some types of weapons, for example, nuclear ones, and the (quantitatively) minor results in disarmament have been minor precisely because of this comparison. That seems to indicate that if this formula is to lead anywhere, a fresh look has to be taken at it.

One problem with it has been the term "mutual", which has often been interpreted as "exclusively mutual", that is, excluding unilateral steps because they tend to be seen in terms of loss of "bargaining chips". This problem has to be dealt with.

Another problem lies in the word ' 'balanced", which has very often been interpreted in purely quantitive terms. Thus, negotiations have tended to get stuck in "bean-counting", with the late mutual and balanced force reduction negotiations in Vienna as the worst example, or to stumble on with seemingly insoluble issues of "rates of exchange" between nuclear missiles, tanks, troops, etc. This is another problem that has to be dealt with.

The term' 'verifiable" has also led to problems, a basic one being that it can mean so many things—you can give different answers to the question, How much is enough? The extreme interpretation will be in absolute terms: a procedure of verification is considered sufficient only if it can provide absolute certainty that the measure agreed upon is in fact carried out. More sophisticated interpretations will consider a procedure sufficient if it entails a risk of disclosing cheating that is so high that cheating is not worthwhile. Some negotiations have got stuck in exaggerated, absolutist interpretations of verification, the worst example probably being those on a comprehensive test-ban treaty, which have gone on intermittently since 1963.

Before we continue our discussion of what kinds of arms reductions might be both desirable and feasible, we have to look at some of the factors and processes that determine levels of armament.

Notions of Sufficient Defence

The classical question concerning defence is: How much is enough? The question may be interpreted as a purely political one, a question that can be answered only by political means, by the decision-making procedures concerning national security that are employed in a particular country. The most succinct answer to the question, understood in this way, may have been given a few decades ago by Ernst Wigforss, the Swedish Minister of Finance, who said: "One should give the military as much as is politically suitable, and then leave them to make the best of that."

Looking at the question in this way also determines in what ways scientific research can be applied to it. In essence, research will have to consist of trying to find the factors that seem to influence the levels of military expenditures that States decide to impose upon themselves. In such studies, the decision-making machinery is sometimes treated as a "black box" between the observable characteristics of States on the one hand (GNP, GNP/capita, population, area, number of boundaries and boundary disputes, recent experiences of wars, alignment or not, type of socio-economic system, and so forth) and absolute or relative military expenditures (or more sophisticated measures of military preparedness) on the other hand. Other studies deal more specifically with the decision-making machinery and what happens in it, looking at political processes, interest groups, types of argumentation and underlying tacit rules as to what constitutes valid argumentation, etc. In the case of the first type, there are a number of international studies;

in the case of the second type, there are mainly case studies of a single country, and they are only rarely comparable.

If research is to provide any guidelines for change, however, it has to have wider ambitions than just describing what States are doing. It has to point to alternatives that would—in some sense—be more rational than the present policies, and has to demonstrate this, or at least make it credible.

The crucial term here is "rational", since it is a very ambiguous one. We will focus on one specific interpretation of it: a means-ends relationship, where the means under consideration are all aspects of the military forces (man-power, equipment, training, deployment, tactics, strategy and doctrine) and the ends under consideration are those officially stated (the ability to avert a war by making any aggression appear ill-advised, and the ability to defend oneself against reasonably conceivable cases of aggression, should they nevertheless occur). These tend to be the obvious functions of armed forces proclaimed in national or alliance doctrines. There can also be various latent functions, such as employment, survival in domestic politics, the symbolism of international status, capability for aggressive intervention, intra-alliance bargaining chips, and so on. The fact that these have not been considered here should not be seen as naivety, but as an effort to focus on precisely the officially intended means-ends relationship in order to see what improvements might be possible there.

At the highest level of abstraction—and in the terms in which it tends to present itself—defence planning includes the following operations:

(a) Producing a very wide array of scenarios of conceivable acts of aggression;

(b) Discarding those scenarios that are not only unlikely, but that are so unlikely that there is no reason to plan for them;

(c) Discarding those scenarios that one already has sufficient resources to cope with;

(d) Discarding those scenarios that one cannot possibly obtain sufficient resources to cope with;

(e) Calculating what resources one needs in order to cope with the remaining scenarios and planning how to get those resources.

When we move to lower levels of abstraction, new problems become visible. One set can be summarised in the question, What is meant by

"reasonably conceivable"?— which points to the division of competence between experts and politicians and to the risks that this division will become obfuscated. We can illustrate this with a caricature: The experts produce the scenarios. They then take it for granted that the "weeding out" process among them will be the responsibility of the politicians. The politicians, however, when receiving the scenarios, take it for granted that the experts have already done the weeding out—and hence the decision as to what scenarios to base defence planning on makes itself, without anybody having made it.

In more precise terms, the production of scenarios is obviously a task for military or civilian experts on national security, as is the assessment of their likelihood. On the other hand, it is equally obvious that the decision as to what level of incredibility disqualifies a scenario is a matter for political decision. Deciding what scenarios one already has resources to cope with may be a matter for experts, but deciding what one cannot possibly get resources for must include a political decision about priorities.

When we analyse the actual processes of defence planning from a social science perspective (rather than just accepting their internal logic), it seems obvious that there are built-in forces of expansion, since it is much more common for States to increase than to decrease their military expenditures in real terms. Much research has been done on trying to determine to what extent these forces are predominantly domestic (interest groups, domestic politics, etc.) or predominantly interactive, that is, action/reaction processes between States. The best answer appears to be that this varies from State to State and from period to period: there is no generally valid answer.

Whether the interactive forces are predominant or not, it is safe to assume that they are always there, and often important. In the abstract terms outlined above, the essential mechanism is then that the result of the planning process in one State—increased military resources— affects the selection or description of scenarios in the other State, which leads to increased military resources there, and so on.

Judging from the typical results, this is at least the normal outcome of the interaction. Still, we should not believe this to be some kind of immutable law, but rather look for the "unless...." clauses that may describe possibilities for breaking these spirals.

One such clause is: "unless the politicians intervene by weeding more thoroughly than before in the scenarios", that is, by deciding to

no longer count another State as a potential aggressor, to no longer consider the possibility that an alliance will be formed between two main competitors, to no longer assume that a given potential aggressor is willing to take extremely great risks, etc. This can happen, and has happened, and depends—among other things—on what we vaguely call "international climate".

Another possible clause is: "unless the increased military resources on the other side do not mean that it gets an increased capability for aggression". This requires that one go beyond the crude quantitative measures of military expenditures or of specific categories of weapons to see what the changes mean in terms of options.

The "options approach" was introduced in the debate on confidence-building measures by Christoph Bertram more than a decade ago, but has equal, and even higher, validity when it comes to discussing sufficient defence. The basic logic is that either side will have an interest in being able to rule out, in its security planning, certain options that the other side may have. If, for example, the feared option is a major surprise attack from the other side, there are several possibilities. The increased transparency and predictability contained in confidence-building measures may play a part. Where this is not sufficient, changes in deployments on the other side is another alternative, for example, "thinned-out zones" for tanks, units, etc. Still another possibility is the reduction or elimination of elements that would be indispensable in a surprise operation, for example, bridge-building equipment in some cases or naval infantry in others.

Non-Offensive Defence

One important part of the discussion on sufficient defence must be the notion of non-offensive defence. This debate originated in the Federal Republic of Germany in the late 1970s, and has been more wide-ranging there than elsewhere. It has become a major source of ideas for debates in other Western countries. It has also influenced thinking in the USSR and the Warsaw Treaty Organisation, where such notions have been incorporated into the national and alliance doctrines of security since 1986/1987.

Simply speaking, the central idea in this debate is that *transarmament* into more defensive structures, that is, into military structures with the same or increased defensive capability but reduced offensive capability, would be able to solve or ameliorate problems concerning

arms races, crisis stability, etc. The other ideas are not of immediate relevance here. First, it is argued that it would alleviate or eliminate the security dilemma, in which one side, seeing increased military resources on the other side as a potential threat, increases its own resources—which leads to the perception of increased threat on the part of the other side, and so forth. As long as the resources are dual capable (possible to use for offence as well as for defence), the dilemma is there, but if the total offensive capability of the other side decreases, it may be resolved. Secondly, it is argued that transition to structures with less offensive capability will increase crisis stability, because the possible premium on striking first in a tense situation will be reduced or eliminated. On the one hand, there is less to risk by waiting, and on the other hand, there are less profitable targets to attack.

Attractive as this notion may appear in a theoretical discussion, a number of important questions have been raised about it: Is it militarily feasible? If so, would it avoid side-effects that would be worse than what it is trying to cure? Is it affordable? Can non-offensive defence be carried out unilaterally, or do such moves necessarily presuppose negotiations and treaties?

It is still too early to give definitive replies to any of these questions, but the best tentative answers seem to be the following ones:

(a) Yes, while the early models of non-offensive defence can be very easily criticised, there are now more sophisticated and pragmatic models that appear militarily feasible;

(b) Yes, there are some models that seem to have few noxious side-effects. The most important risks consist in engendering a new race in military technology (which might also engender new offensive options) and in piling more defensive resources on top of existing offensive ones rather than in gradually substituting the former for the latter;

(c) Yes, there are models that have been cost-assessed and found to be equal to or—in the long run—cheaper than the present defence structures;

(d) The advantage of non-offensive defence is that it permits at least some unilateral steps to be taken without loss of military security. At the same time, more encompassing changes are probably best undertaken when accompanied by consultations and negotiations between the blocs.

Conclusion

Even in a cautious assessment, there are some signs of a possible breakthrough in ongoing efforts, especially in the Vienna negotiations on conventional forces in Europe (CFE), and of this being in part a result of increasing acceptance on both sides of the ideas behind non-offensive defence. The unilateral reductions announced by the Soviet Union seem to indicate that the negative side-effects of "mutual" are not of an "ironclad" character. The acceptance of the principle of asymmetric reductions do the same thing for the "balanced" clause, and indicate that the parties are now prepared to interpret the term in a more sophisticated and pragmatic manner. The acceptance of much more extensive verification measures than before indicates that this issue area may constitute less of a stumbling-block than before.

It remains to be seen what mix of agreed and unilateral arms reductions and transarmament comes out of the ongoing negotiations. There seems to be agreement to start with arms reductions and leave transarmament into non-offensive defence structures until the later phases. This, in itself, is interestingly at odds with some of the theorising on non-offensive defence, where one major point is that transarmament first would make reductions more feasible later. There is one major argument why it is important that such agreements on transarmament take, place as quickly as possible. The present breakthrough in negotiations is obviously greatly helped by the improvement in the "international climate". History seems to show, however, that "climatic waves" are shorter than waves in military technology and planning and that the arms control results obtained in earlier positive phases have been quickly eaten up or made irrelevant when the climate has worsened again. One main reason for this has been that, with the return to a worse climate,' 'worst-case logic" has become more forceful again and its premises have been only marginally affected by the previous results in negotiation. If the arms reductions presently being negotiated are quickly followed by agreements to transarm in the direction of non-offensive defence while the climate for negotiations is still good, then the result will be more robust. Even if the climate changes again and "worst-case logic" becomes more forceful, the premises for it will have been ameliorated by the structural changes and that logic will therefore have less harmful effects than it would otherwise have. At the same time, such structural changes would also make changes in climate less likely and milder, precisely because they would reduce the element of threat perceptions that is one important determinant behind such changes.

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MUTUAL INABILITY TO LAUNCH ATTACKS, AND ARMS REDUCTIONS IN EUROPE

It is a generally known fact that the European situation, today, is characterised by a particularly high level of military confrontation. Facing each other in the region between the Atlantic and the Urals are the armed forces of the North Atlantic Treaty Organisation (NATO) and the Warsaw Treaty Organisation (WTO), two groupings of 3.5 million men on either side and their arsenals that include thousands of short-range nuclear warheads and carrier systems, chemical means of mass destruction, and enormous numbers of large systems of conventional weapons, among them 15,000 combat aircraft and 90,000 tanks.

It is a cause for great concern that each side has available to it extremely strong offensive forces and weapons which, in case of conflict, can be used for deep strikes into enemy territory. This applies primarily to their tanks and aircraft, but is equally true for the full range of modern means of warfare. History has frequently shown that even between such massive military forces of potential adversaries, there can be some sort of equilibrium. Nevertheless, the danger of war cannot be warded off. The following point was correctly made, in this context, by Horst Afheldt, a well-known defence expert of the Federal Republic of Germany. In his book *Atomkrieg,* he points out that although one might think that military parity and war are mutually exclusive, history proves that military parity is closely associated with the longest and severest wars, and he cites the First World War as a case in point. He asks if a better type of military parity than that demonstrated for years in trench warfare is conceivable, and concludes that it is not.

However, one very important point has not been explicitly mentioned by Afheldt. So far in history, all cases have involved military

constellations in which conventional potentials *with offensive capabilities* have faced each other, and this fact alone has made war a possible option for political and military leaders. The goal of a co-operative, complex, step-by-step disarmament process between NATO and the WTO, therefore, should be stability on the basis of *mutual inability to launch attacks,* on the basis of armed forces which, by size, composition, weapons, deployment, and training, have no option of launching a deep offensive strike. This is what we mean by "sufficient defence".

It would, at the same time, be the most effective way to prevent the nuclear disarmament process initiated by the Soviet-United States Treaty on the elimination of intermediate- and shorter-range nuclear missiles (INF) from giving rise in some way to anxieties or illusions to the effect that the dismantling of nuclear weapons in Europe might possibly mean a retreat to the past, to the era in which conventional wars—with which the European continent had been so terribly afflicted, especially in the course of this century—could be fought and won.

Mutual Inability to Launch Attacks—Definition

For a definition of the term "mutual inability to launch attacks", the assumption can be made that in military theory there are three different levels with regard to the expansion and evaluation of offensive and counter-offensive actions: *strategic, operational,* and *tactical. A strategic* attack or counter-attack can determine the outcome of the war. It is aimed at the destruction of the adversary's important war potential and complete conquest of his territory. An attack or counter-attack of *operational* magnitude, however, covers merely a somewhat extended part of the war front. A *tactical* military operation, finally, is undertaken for locally delimited objectives. It is the two upper levels that are relevant to the mutual inability of NATO and the WTO to launch attacks, for the following reasons:

(a) The capability of one military coalition to launch strategic attacks or counter-attacks would threaten the entire substance of the other coalition, which—by all accounts of military history— would have to expect its own defeat and destruction if war broke out.

(b) While the capability to launch operational attacks or counter-attacks would not endanger the other alliance in its totality, it would expose the adversary's "front-line States" to severe danger and, under present-day conditions, jeopardize their very existence.

The significance of the second point may be easily seen if one looks at the situation of the two German States. The German Democratic Republic, the author's country, would, on account of its geostrategic position in Central Europe, located precisely on the NATO-WTO dividing line, be among the first and most severely struck countries in the event of military conflict between the two blocs. Even operational activities by NATO air and land forces would be a strategic threat to it, since its territory is roughly 108,000 square kilometres and its average geographic depth about 250 kilometres. The operational warfare range today is between 300 and 350 kilometres for the air force or between 80 and 100 kilometres for land forces. The Government of the Federal Republic of Germany has correctly drawn attention to its country's high vulnerability in case of war, since 30 per cent of its population and 25 per cent of its industrial potential are located within a 100-kilometre strip along the border with the German Democratic Republic and Czechoslovakia. The German Democratic Republic would be even more vulnerable: its territory is smaller by two thirds, and the proportion of its population and industrial potential that would be affected would thus be much higher.

Consequently, consideration of and proposals and measures for the mutual inability of NATO and the WTO to launch attacks should be aimed at the inability of the *entire* military potentials of either side in Europe, and particular emphasis should be laid on the strategic and operational inability of those forces that directly face each other. Such offensive incapability would be achieved if the forces and military hardware left after drastic bilateral reduction and restructuring could be used for neither surprise attacks nor other massive frontier-crossing operations. Only then would neither side be militarily capable of substantially endangering the very existence of its adversary on the latter's own territory.

Mutual Inability to Launch Attacks—Major Practical Aspects

The following three points are of decisive relevance to achieving such a desirable condition for the NATO-WTO relationship in Europe:

(a) The military doctrines of both sides must be based on strictly defensive concepts primarily aimed at war prevention or—should a military conflict erupt—at the earliest possible political settlement and, in terms of military strategy, at stopping the enemy's advance and avoiding premeditated warfare escalation in order to provide leeway for political termination of the conflict.

In terms of military strategy, this would require each side to renounce frontier-crossing counter-offensives of land forces and to abandon deep air force strikes.

(b) Regarding military deployment, inability to launch a surprise attack should be reflected in the widest possible absence of highly offensive formations and structures, and of weapons that would be required for frontier-crossing strategic or operational attacks and counter-attacks. It should also be demonstrated by the way armed forces are deployed and by their peacetime activities. To all intents and purposes, this would boil down to military potentials suitable for merely close-to-frontier defence, without any physical means for offensive operations above the tactical level.

The complete elimination of short-range nuclear systems and chemical weapons from Europe would be eventually necessary in order to achieve the above purpose, that is, removal of those systems which, on account of their very nature, can be used for operational and strategic strikes as long as they are present on European soil.

As to conventional forces, structures, and heavy-duty weapons, the achievement of mutual inability to launch attacks would not entirely depend on the complete elimination of the most dangerous offensive components, although their removal would most certainly help to solve the problem. Since these components, for example, tanks and artillery, can at the same time play a major role in defence, it would be conceivable to reduce them bilaterally to levels below the "critical mass" necessary for strategic and operational attacks and counter-attacks. Precise limits could best be worked out jointly, by military experts of both alliances. One approach might be to reduce the most dangerous offensive conventional systems (together with all their pertinent units and structures) to levels at which "WTO defensive capabilities are widely superior to NATO offensive capabilities" and, equally, "NATO defensive capabilities are widely superior to WTO offensive capabilities". The definition of the most dangerous offensive conventional units, structures, and weapons should not be made by one side. It should rather be made jointly by Warsaw Treaty and NATO countries and with due consideration of the other side's particular anxieties. To outline a general framework, this should include components

which, on account of their range and/or mobility, could exert weaponry effects on the opponent's territory or region or with which, given sufficient concentration, thrusts of operational or even strategic magnitude might be attempted, in conjunction with engineering, logistic, and communication or related facilities that might be used to back up such operations.

(c) The structural inability to launch attacks should, after all, be verifiable for the opponent at any time and should be accepted as being verifiable. It should be highly transparent and accessible to verification measures, even at very short notice in dubious cases, and, as repeatedly proposed by Warsaw Treaty States, open to "unrefusable on-site inspections Mutual transparency should be greatly extended to include many other areas related to military potentials, such as development and procurement programmes, defence budgets and mobilisation plans, as well as to training schemes for officers and lower ranks.

The mutual inability of NATO and the WTO to launch attacks in Europe will require the dismantling of asymmetries in military sub-areas that have come into being in the course of history, but have long been sources of suspicion and exaggerated threat perceptions. To that end, the methodology of INF might "be employed ... in an analogous way", a proposition originally made by the former Italian Foreign Minister Giulio Andreotti. This might be quite practicable and effective, since several important methodological approaches were efficiently combined in INF:

- Removal of any given asymmetry by the side controlling more systems of a category of weapons by dismantling more of them;

- Deep parallel cuts in the weapons categories concerned on either side (equal upper limits-at lower levels—down to zero in the ideal case)

- Synchronised start of arms reductions on both sides;

- Scrapping of all large weapons systems removed from active service.

Such an approach would be helpful in concluding agreements by which security would be improved for all parties involved and by which the reduction of asymmetries would not grow into unacceptable unilateral disarmament. The decision regarding the total volume of desirable reductions, that is, regarding ceilings for armed forces

remaining in existence on either side for purposes of sufficient defence, should be taken in accordance with the principle of mutual inability to launch attacks, implying the total removal of strategic and operational offensive options from both sides.

Moreover, mutual inability to launch attacks should be accomplished in a way such that the arms race is decelerated and eventually stopped, with present arsenals being successively reduced. It should thus be primarily accomplished via non-modernisation and the limitation and drastic reduction of armed forces and hardware rather than via the so-called defensive restructuring of armament, which certain Western experts have suggested. In addition, due consideration should be given to the fact that disarmament has become a categorical imperative for economic reasons also.

Approach and Initiatives of the WTO

The Warsaw Treaty parties are prepared to embark jointly with NATO on the road to such fundamental changes, and they have already created some conditions conducive to that purpose, both political and strategic, as well as initiatives in terms of military doctrine. A first substantial step in that direction was undertaken by drafting and publishing in 1987 a policy document under the heading "On the military doctrine of the States parties to the Warsaw Treaty", in which an offer was submitted to NATO for the "reduction of the armed forces and conventional armaments in Europe to a level where neither side, maintaining its defence capacity, would have the means to stage a surprise attack against the other side or offensive operations in general". Hence, the objective of establishing for the military alliances in Europe the mutual inability to launch attacks has been announced as a collective commitment of the WTO.

Ever since, the WTO has been engaged in a continuous and extremely intensive process to translate these changes into political and military practice, a process which has already yielded several important domestic and international results.

For example, the WTO has proposed to NATO that the two sides jointly continue the process of nuclear disarmament in Europe by opening negotiations on the dismantling of short-range nuclear weapons on each side (and until such an agreement can be signed, by mutually renouncing modernisation in that field). The USSR, in order to fuel that development, has decided to withdraw unilaterally from the territories of its socialist allies 500 nuclear warheads for short-range

operations beginning already in 1989, and has declared its willingness to withdraw all categories of nuclear warheads from the territory of its allies by 1991, provided the United States takes a similar step in response.

The approach of the WTO to mutual inability to launch attacks has also taken shape in a document outlining its conceptual framework for the talks with NATO on conventional armed forces in Europe, which opened in Vienna in March 1989. The socialist States' proposals made in that context have been placed on the record. They have suggested that in the first phase of disarmament emphasis should be laid by all parties on the bilateral elimination of existing asymmetries in armed forces and in the most destabilising components of armament (offensive aircraft, combat helicopters, tanks, multiple rocket launchers, mortars, artillery pieces, and armoured-personnel carriers). These components should be reduced to equal, lower ceilings throughout the whole region from the Atlantic to the Urals. The following limits have been proposed by the WTO for each side:

Military personnel (men)	1,350,000
Tactical aviation combat aircraft	1.500
Combat helicopters	1.700
Tanks	20,000
Multiple rocket launchers, artillery pieces and mortars	24,000
Armoured personnel carriers and infantry fighting vehicles	28,000

Implementation of these proposals would bring about drastic cuts on either side. To achieve these limits—just to mention a few main figures—the WTO would have to discard 40,000 tanks, 42,000 armoured personnel carriers and 46,000 guns and mortars, whereas NATO would have to remove, for example, 2,500 combat aircraft.

The ceilings proposed by the WTO in Vienna should be reached via a step-by-step approach by 1996/97 and should be subject to stringent reciprocal verification. This would be helpful in creating conditions of complete parity with regard to the most offensive components. From such conditions of parity it would be possible to proceed to more substantial reductions, which would eventually also include weapons categories not yet covered by current agreements and give "the armed forces of the two alliances a strictly defensive character".

The socialist States' resolve to do their utmost to usher in, jointly with NATO, the process of conventional disarmament and to put into

practice the idea of mutual inability to launch attacks has been strongly underlined by far-reaching unilateral initiatives by the USSR, the German Democratic Republic, Czechoslovakia, and other Warsaw Treaty parties (see table on p. 80). Such initiatives were announced in December 1988 and are to be implemented by 1990, though some major steps have already been taken. The initiatives provide for the substantial dismantling of offensive forces, particularly in Central Europe and in areas opposite NATO positions. The USSR, for example, is withdrawing four tank divisions from the German Democratic Republic as well as one tank division each from Czechoslovakia and Hungary. These divisions will be demobilised. Also being withdrawn are airborne troops and engineer units for river-crossing operations. All in all, 50,000 men and 5,000 tanks will be withdrawn. The Soviet forces remaining in these countries will be reorganised into unambiguously defensive structures by, for example, clearly reducing the number of combat vehicles in the tank and motorised infantry divisions. The armed forces of the German Democratic Republic will be reduced by 10,000 men. Six tank regiments and one squadron of combat aircraft will be dissolved, in this context, with 600 tanks and 50 fighter aircraft being demobilised. This will impart an even more strictly defensive profile to the National People's Army of the German Democratic Republic. Czechoslovakia will demobilize 12,000 soldiers now in combat units and will put out of service 850 tanks and 51 combat aircraft. Other substantial disarmament steps are being taken unilaterally by the USSR, Hungary, Bulgaria and Poland.

These measures represent the transition from an offensive to a defensive defence strategy for the WTO, and they clearly signal that transition to NATO. The assumption of the past was that an aggressor must be destroyed on his own territory and, consequently, victory was seen as the objective of a war of defence, should such a war ever be forced upon the WTO. Such a war aim required an offensive defence strategy. However, under present conditions, victory can no longer be considered a realistic purpose of war between NATO and the WTO. Any kind of escalating war in Europe, nuclear or conventional, would inevitably lead to the destruction of highly industrialised societies in the East and West, all of which have come to be extremely vulnerable to military violence. Hence, the policy of reasonable sufficiency of defence capabilities, premised on the inability of the armed forces to launch attacks and aiming at political settlement in case of a military clash, has become the only sensible option for any realistic military strategy. The Warsaw Treaty countries are now going to carry out a

complete about-turn—to the extent to which such a reversal can be made by one side—in order to move in that direction. In a joint statement at their Bucharest summit in July 1989, they reaffirmed their determination to maintain "a military balance at the lowest possible level, one sufficient for defence but ruling out a surprise attack or large-scale offensive action".

However, one point must be made crystal clear: the danger of war and destruction still hovering over Europe cannot be definitely averted unless adequate, far-reaching changes are introduced by NATO as well. This can and should be done within the scope of the Vienna negotiations on conventional forces and arms. The scope necessary for that purpose has been clearly set out by the mandate given to the negotiators, the gist of the matter being "the elimination ... of the capability for launching surprise attack and for initiating large-scale offensive action", in plain language, the achievement of mutual inability to launch attack in the context of sufficient defence. The decision was formulated as follows: "Each and every participant undertakes to contribute to the attainment of these objectives."

TABLE 1

Unilateral Reductions of Armed Forces and Defence Budgets, as Announced by Warsaw Treaty Parties *Position on 1 March 1989*

Country	Troops	Tanks	Armoured personnel	Reductions Artillery/ mortars	Combat aircraft	Defence budgets as percentage
Bulgaria	10,000	200	—	200	20	12
Czechoslovakia	12,000	850	165	—	51	15
GDR	10,000	600	—	—	50	10
Hungary	9,300	251	30	430	9	17
Poland	15,000	—	—	—	—	from 7.7 to 5.5[a]
Romania	—	—	—	—	—	—
USSR in Europe	240,000	10,000	—	8,500	800	14.2
WTO in Europe	296,300	11,901	195	9,130		
USSR in Asia	200,000	—	—	—	—	
USSR in south	60,000	—	—	—	—	
WTO total	556,300	11,901	195	9,130	930	

[a] Relative to national budget.

The position of the WTO on reductions in the six major categories listed above was hardly congruent with the NATO line in the first round of the Vienna talks, since NATO was prepared to talk about

only three: tanks, armoured personnel carriers and artillery. However, remarkable *rapprochement* was evident from the second round. After NATO had announced at its summit in May that it was prepared to talk about aircraft, helicopters and personnel, this change was translated into negotiable proposals in Vienna in July. This is a promising development which, in spite of remaining differences, is likely to support hopes for success in the spirit of the mandate at future rounds of the talks.

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UNITED NATION ROLE IN DISARMAMENT

The founding of the United Nations at San Francisco, during the final months of the Second World War, in the summer of 1945, symbolised the beginning of a new era in international relations. The Charter of the United Nations embodied principles and provided a forum to discourage war as an instrument of policy between nations. The first of those principles was the commitment to "save succeeding generations from the scourge of war". Moreover, within the framework of the Charter, the world Organisation offered opportunities for member states to develop new forums, methods and international machinery of cooperation for international peace and security. To help achieve that goal, the Charter entrusted the General Assembly and the Security Council with the responsibility for dealing with questions of arms limitation and disarmament.

Only days after the signing of the Charter, the world entered into a dramatic new era—the nuclear age—which, as it turned out, gave a completely new dimension to all human endeavours. The newly formed United Nations was thus confronted with unprecedented military and political problems. The Charter had envisaged arms limitation and disarmament as elements in the progressive establishment of an international security system However, the revolutionary changes brought about by the discovery of nuclear energy gave significant additional emphasis to disarmament in international politics and security.

A few months after the first atomic bombs were dropped on Hiroshima and Nagasaki, the United Nations General Assembly adopted its first resolution: it was on disarmament, and specifically on the establishment of a commission—the Atomic Energy Commission—whose terms of reference were designed to ensure the elimination of atomic and all other weapons of mass destruction and the use of atomic energy

only for peaceful purposes. The General Assembly also underlined, later that year in resolution 41 (I), the connection between the questions of disarmament and of peace and security.

Since that time, the United Nations has, over the years, dealt with disarmament questions using a variety of bodies, methods, techniques and approaches. The problems involved are complex and are often seen to affect the vital security interests of States. The political compromises necessary to solve them have therefore often been difficult to reach, and the results achieved have often been characterised as modest.

In recent years the General Assembly, its First Committee and the Disarmament Commission have been the main United Nations deliberative bodies in the field of disarmament. The General Assembly sometimes also establishes *ad hoc* committees to deal with specific disarmament matters. In addition, since 1962 a multilateral disarmament negotiating forum with a limited membership—now known as the Conference on Disarmament—has been in place in Geneva. It has a unique relationship with the United Nations: while it defines its own rules of procedure and develops its own agenda, it takes into account the recommendations made by the General Assembly and reports to the Assembly annually or, as appropriate, more frequently.

CHANGING APPROACHES TO DISARMAMENT

The needs and the basic objectives of disarmament have remained constant through the years, but the approach to the subject and the scope of negotiations have changed, as a reflection of varying political realities and international conditions. The technical problems related to disarmament have also changed along with the rapid technological and scientific advances that have been made.

At the outset, the scope of negotiation; was very broad. The Atomic Energy Commission and another body—the Commission for Conventional Armaments (established in 1947)—envisaged immediate plans to ensure that atomic energy would be used only for peaceful purposes and that all armaments and armed forces would be regulated and reduced under an international system of control and inspection. In fact, up until the early 1950s the objective was the regulation, limitation and balanced reduction by stages of all armed forces and armaments in a coordinated, comprehensive programme.

With little progress towards agreement on a coordinated, comprehensive programme, more impetus was given in the late 1950s

to a "partial approach". It was hoped that the achievement of some first, though limited, steps would increase confidence and create a more favourable atmosphere for comprehensive agreements.

Although in 1959 the General Assembly stressed general and complete disarmament under effective international control as a goal to be actively sought, partial disarmament measures continued to be pursued as well. It was felt that devoting parallel and, at times, even primary attention to "collateral" measures—designed to reduce tension and build confidence—would facilitate the complex task of achieving general and complete disarmament. The immediate hopes and expectations of the great majority of nations centred on two such measures—the discontinuance of nuclear weapon tests and the prevention of the spread of nuclear weapons. By the mid-1960s it became widely accepted, however, that general and complete disarmament was not an attainable goal in any short or specific period. For the next fifteen years, the tendency was, therefore, to regard general disarmament as the ultimate goal and to concentrate increasingly on partial objectives.

In terms of concrete multilateral achievements, the period of 1963 to 1978 was productive. Nevertheless, the measures achieved, although significant, were not adequate to curb the arms race or to alleviate the nuclear threat. They proscribed certain particularly undesirable developments, but did not in most cases result in substantial reductions of any of the major weapons systems. For a brief description of the process involved in concluding a treaty and a list of agreements reached.

In reaction to what they called inadequate progress on those central issues, non-aligned States took an initiative that led to the convening of the first special session of the General Assembly devoted to disarmament, in 1978. That session adopted a Final Document setting out agreed goals, principles and priorities in arms limitation and disarmament. It stressed that the United Nations has a central role and primary responsibility in the field and specified measures intended to strengthen the international and multilateral machinery that deals with disarmament issues within the United Nations system. Subsequently, the Assembly convened two more special sessions, in 1982 and 1988. At neither session was it possible to reach agreement on a final document although, in the case of the 1988 session, tensions between East and West had begun to diminish.

In the 1990s, with the dissolution of the Union of Soviet Socialist Republics (USSR) and profound political changes in Eastern Europe,

more than forty years of ideological and military competition between East and West came to an end. This has created unprecedented opportunities for progress in disarmament, as evidenced by reductions under way in the nuclear arsenals of the Russian Federation and the United States, by certain unilateral measures undertaken by other nuclear weapon States, and by conclusion of a ban on chemical weapons.

The end of the cold war has been marked, however, by potential regional arms races and the accumulation of ever more destructive weaponry by a growing number of countries. Regional instabilities, the emergence of ethnic and religious tensions and the continuing and heightened risk of proliferation of both weapons of mass destruction and conventional weapons have created serious challenges and rendered disarmament, now more than ever before, an urgent and necessary element of the system of international peace and security.

DISARMAMENT DURING THE 1990s

In his report entitled *New Dimensions of Arms Regulation and Disarmament in the Post-Cold War Era,* the Secretary-General set forth his vision of the new opportunities and challenges of the 1990s. He saw the following issues as being of primary importance.

Integration: disarmament in the new international environment. "There is ... a constructive parallel between conflict resolution and disarmament: the two go hand in hand."

Globalisation: enhancing the multilateral approach. "The goal is to extend disarmament efforts to include not only bilateral agreements but also multilateral arrangements in a world-wide process involving all States."

Revitalisation: building on past achievements. Four areas of endeavour stand out: weapons of mass destruction, proliferation control, arms transfers, and transparency in arms and other confidence-building measures.

Some of the main events in the field of arms limitation and disarmament that have occurred in the first half of the decade are noted below. In the case of treaties, a brief description is given in the annex.

Chronology 1990-1995

1990

20 August-14 September. The Fourth Review Conference of the Non-Proliferation Treaty ends without agreement on a final declaration.

17 November. A new set of confidence- and security-building measures is adopted in Vienna by the 34 States participating in the Conference on Security and Cooperation in Europe.

19 November. The Treaty on Conventional Armed Forces in Europe (CFE) is signed in Paris by 22 States.

1991

8-17 January. The Amendment Conference of the States parties to the Partial Test-Ban Treaty is convened in New York, upon the request of more than one third of the parties, in an effort to advance prospects for conclusion of a comprehensive nuclear-test-ban treaty.

3 April. The Security Council adopts resolution 687 (1991), under which a Special Commission is established to carry out on-site inspection of and the destruction or rendering harmless of Iraq's biological, chemical and missile capabilities, and the International Atomic Energy Agency (IAEA) is requested to carry out similar action with respect to Iraq's nuclear capabilities.

1 July. The members of the Warsaw Treaty agree to terminate the validity of the Treaty.

31 July The first Strategic Arms Reduction Treaty (START I) is signed in Moscow by the USSR and the United States.

9-27 September. The Third Review Conference of the parties to the Biological Weapons Convention, meeting in Geneva, expresses its determination to strengthen the Convention. It further develops a set of confidence-building measures and agrees to examine potential verification measures.

9 December. The General Assembly adopts resolution 46/36 L, "Transparency in armaments", by which it establishes the United Nations Register of Conventional Arms. Member states are called upon to provide relevant data and information on imports and exports of arms in seven categories of major conventional weapons systems and are invited to provide information on their national holdings, procurement through national production and relevant policies.

1992

31 January. The Security Council meets for the first time at the level of heads of State and Government. The President makes a statement on behalf of the members in which they reaffirm the crucial contribution which progress in the fields of disarmament, arms control and non-

proliferation can make to the maintenance of international peace and security and in which they declare that the proliferation of all weapons of mass destruction constitutes a threat to international peace and security.

23 May. The Lisbon Protocol to START I is signed in Lisbon by four successor States to the former USSR—Belarus, Kazakstan, the Russian Federation and Ukraine—and by the United States.

17 June. The Secretary-General issues his report "An Agenda for Peace", in which he addresses the role of the United Nations in the areas of preventive diplomacy, peacemaking and peace-keeping.

14-18 September. The Second Review Conference of the parties to the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD Convention) meets in Geneva and adopt by consensus a Final Declaration.

27 October. The Secretary-General issues his report "New Dimensions, of Arms Regulation and Disarmament in the Post-Cold War Era".

1993

3 January. The second Strategic Arms Reduction Treaty (START II) is signed in Moscow by the Russian Federation and the United States.

13-15 January. The Chemical Weapons Convention is signed in Paris by 130 States.

10 August. The Conference on Disarmament decides to undertake negotiations on a comprehensive nuclear-test-ban treaty, beginning in 1994.

16 December. The General Assembly adopts without a vote resolution 48/75 L, by which it recommends the negotiation in the most appropriate international forum of a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.

1994

25 *January.* The Conference on Disarmament begins negotiation of a universal and multilaterally and effectively verifiable comprehensive nuclear-test-ban treaty.

19-30 September. The Special Conference of the parties to the Biological Weapons Convention meeting in Geneva underlines the need for a gradual approach towards establishing a regime to enhance the

effectiveness of, and improve compliance with, the Convention and takes action to consider measures, including possible verification measures, to strengthen the Convention.

September. A Non-Aggression Pact between Central African States is initialled by a majority of those States in Yaounde, Cameroon.

1995

5-6 April. The five nuclear weapon States issue unilateral declarations in which they affirm that they will not use nuclear weapons against non-nuclear weapon States parties to the Non-Proliferation Treaty (in the case of France, the Russian Federation, the United Kingdom and the United States) and to parties to the Non-Proliferation Treaty or any comparable internationally binding commitment (in the case of China).

11 April. The Security Council adopts resolution 984 (1995) on security assurances to non-nuclear weapon States parties to the Non-Proliferation Treaty in which it recognises that the Council will act immediately in the event that such a State is the victim of an act or object of a threat of aggression involving nuclear weapons.

17 April-12 May. The 1995 Review and Extension Conference of the 178 parties to the Non-Proliferation Treaty meets in New York to review the operation of the Treaty and to decide whether the Treaty shall continue in force indefinitely or shall be extended for an additional fixed period or periods. The Conference does not agree on a final declaration with respect to the operation of the Treaty, but it adopts without a vote three documents: *(a)* "Strengthening the review process for the Treaty"; *(b)* "Principles and objectives for nuclear non-proliferation and disarmament" (the text of which is reproduced in annex II, page 27); and *(c)* a decision on extension, to the effect that the Treaty shall continue in force indefinitely. In addition, it adopts a resolution on the Middle East.

24-28 June. The heads of State and Government of the Organisation of African Unity adopt the text of the African Nuclear Weapon Free Zone Treaty (Pelindaba Treaty). Later, in December, the General Assembly of the United Nations welcomes the adoption of the Treaty.

23 September-13 October. The Review Conference of the parties to the Convention on Certain Conventional Weapons meets in Vienna to consider ways in which to strengthen the Convention. It adopts a new protocol (Protocol IV), regulating blinding laser weapons. It also considers how to strengthen the prohibition against land-mines (Protocol II).

15 *December.* The Southeast Asian Nuclear Weapon Free Zone Treaty is initialled in Bangkok, Thailand, at a summit meeting of the Association of Southeast Asian Nations.

Future Prospects

It is clear, at this mid-way point in the decade of the 1990s, that there is great potential in the field of arms limitation and disarmament At the same time, there can be no room for complacency. Ways must be found to consolidate progress and to sustain the momentum in a systematic way. At the same time, it is becoming increasingly evident that disarmament cannot be pursued in isolation from broader concerns of international security and that these broader concerns are themselves inextricably linked to economic and social issues.

The decisions taken at the 1995 Non-Proliferation Treaty Conference have laid the foundation for progress in nuclear non-proliferation and disarmament to be evaluated against a set of agreed principles and objectives. Among them are: universal adherence to the Treaty, early conclusion of a comprehensive test-ban treaty and a ban on the production of fissile material for nuclear weapons, and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons. It is hoped that the regional nuclear measures now covering a large part of the globe—Latin America and the Caribbean, the South Pacific, Africa and Southeast Asia—will be brought into effect where that is not yet the case and implemented as expeditiously as possible.

Two other achievements pertaining to weapons of mass destruction await further action by the international community before their benefits can be fully realised: conclusion of provisions to verify compliance with the Biological Weapons Convention and entry into force of the Chemical Weapons Convention.

As countries seek to develop, their need for access to high technology will become more and more acute. Strenuous efforts will have to be made to balance this need with the need to prevent the proliferation of sensitive technology for weapons purposes. In the coming years, will it be possible to reach a compromise, with regulatory measures negotiated and applied on a universal and non-discriminatory basis?

Although considerable progress has been made with respect to weapons of mass destruction and the steps forward have been outlined in general terms by the international community, much less has been accomplished in the conventional field. Nevertheless, recent events

have highlighted the urgency of addressing the problem of excessive accumulations of conventional arms and unrestrained and illegal arms transfers that have resulted in suffering and misery for hundreds of thousands of people, particularly in the developing world.

Openness and transparency in military matters have a great potential for contributing to confidence-building and security among States. Further development of the global Register of Conventional Arms and wider participation in it, as well as the establishment of regional and subregional complementary mechanisms, would exploit this potential.

A new trend is emerging: internal conflicts are becoming more frequent and inter-State conflicts are becoming comparatively rare. The ready availability of small weapons exacerbates situations of religious and ethnic tension, destabilising States and destroying the very fabric of their societies. It seems likely that, in the years ahead, "micro-disarmament" will grow in prominence, as States intensify their efforts to curb the illicit arms trade, to place more stringent restrictions on or ban altogether certain small arms such as land-mines, and the United Nations continues to assist Governments, at their request, in addressing problems of domestic security and social and economic development that underlie internal conflict.

The objectives of arms limitation and disarmament pursued at the United Nations cannot be achieved without the political will of member states and their determined collective effort. It is fundamental, therefore, that, in the search for meaningful measures of arms limitation and disarmament, the legitimate security interests of each State be fully respected. No State can hope to attain security for itself if it entails lowering or undermining the security—real or perceived—of other States; the goal is thus to enhance security through fewer arms.

The United Nations is an instrument that the international community voluntarily devised to deal with issues that affect humanity. The extent to which this tool is used to good effect lies with the member states. In the field of disarmament, the potential of this unique and universal organisation has yet to be fully realised.

ANNEX I

Agreements

Since the beginning of the United Nations, the combined efforts of Governments at global, regional and bilateral levels have led to a body of important agreements, treaties and conventions committing their

parties to various arms limitation and disarmament measures. The legal instruments concluded so far are listed below (dates indicate year of conclusion or of opening for signature).

The process of achieving a treaty usually goes through several phases. It often begins with a resolution of the General Assembly, sponsored by a number of member states, calling upon the Secretary-General to carry out an in-depth *study* of a particular subject. The Secretary-General thereupon appoints a small group of experts to clarify the issues involved, to identify problems and suggest alternative approaches. The process then moves to a wider, *deliberative* stage, clearing the way for a consensus among States that may lead to active *negotiations.* If successful, the negotiations culminate in the *conclusion* of an agreement.

After an agreement has been concluded, it is *signed* by States wishing to indicate their intention to adhere to it; subsequently, it is *ratified by* their respective legislatures and they become *parties. A* treaty *enters into force* after certain conditions set out in it—for example, ratification by a specific number of States—have been met. The agreement is then *implemented.* Here the initial institutional arrangements for such measures as reductions and data exchanges are carried out. This stage involves *monitoring* and the *verification of compliance.* Problems which arise may be dealt with through *consultation* among parties and, if violations have occurred, the Security Council may be called upon by the parties to undertake measures to *enforce compliance* and to prevent further breaches. Finally, an agreement may be modified, amended, or extended, based on the findings of *periodic reviews* of the operation and implementation of its provisions.

Global Multilateral Treaties

- The Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (Geneva Protocol) of 1925. *In force.*

- The Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water (Partial Test-Ban Treaty) of 1963 prohibits all nuclear explosions, military or peaceful, in the atmosphere, in outer space and under water. It is a partial measure in that it does not ban underground tests. The General Assembly has repeatedly urged conclusion of a comprehensive treaty banning all tests by all States, including those conducted underground. *In force.*

- The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty) of 1967 bans the placing of nuclear and other weapons of mass destruction in Earth orbit, or the stationing of such weapons in outer space or on celestial bodies. It also forbids the establishment of military bases, installations and fortifications, the testing of any type of weapon and the conduct of military manoeuvres on celestial bodies. *In force.*

- The Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty) of 1968 aims at the prevention of the spread of nuclear weapons to non-nuclear weapon countries, at promoting the process of nuclear disarmament and at facilitating access to nuclear technology for peaceful purposes for all parties to the Treaty. *In force.*

- The Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof (Sea-Bed Treaty) of 1971 bans the placement of nuclear and other weapons of mass destruction and facilities for such weapons on or under the sea-bed anywhere outside a 12-mile limit from the coastal line. *In force.*

- The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (Biological Weapons Convention) of 1972 bans and eliminates all forms of biological weapons. It is the first international agreement providing for a genuine measure of disarmament, in the sense that it not only prohibits the development, production, stockpiling and acquisition of biological (bacteriological) agents or toxins and of weapons and means of delivery for such agents for hostile purposes, but also mandates their destruction or conversion to peaceful purposes. *In force.*

- The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques of 1977 prohibits the use of techniques that would have widespread, long-lasting or severe effects through deliberate manipulation of natural, processes and cause such phenomena as earthquakes, tidal waves and changes in climate and in weather patterns. *In force.*

- The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Agreement on Celestial Bodies) of 1979 complements the Outer Space Treaty of 1967. It prohibits, *inter alia,* the use of the Moon and other celestial bodies for military purposes. *In force.*

- The Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (Convention on Certain Conventional Weapons) of 1981 restricts or prohibits the use of any weapon which injures by fragments non-detectable in the human body (Protocol I), mines and booby traps (Protocol II) and incendiary weapons (Protocol III). These rules range from a complete ban on the use of such weapons to restrictions on their use in conditions that would cause incidental loss of life or injury to civilians, or damage to civilian objects. *In force.*

- The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (Chemical Weapons Convention) of 1993. This agreement, which bans an entire category of weapons of mass destruction and provides for the destruction of existing stocks, incorporates a complex, intrusive verification system. *Not yet in force.*

- Additional Protocol to the Convention Certain Conventional Weapons (Protocol IV) of 1995 prohibits the employment of laser weapons specifically designed, as their sole combat function or one of their functions, to cause permanent blindness to the naked eye and the transfer of such weapons. *Not yet in force.*

Regional Multilateral Treaties

- The Antarctic Treaty of 1959 provides for demilitarisation of Antarctica and is the first treaty to into practice the concept of a nuclear weapon free zone. It prohibits in the Antarctic region any type of military activity, including the testing of any kind of weapon, a nuclear explosions and the disposal of radioact wastes. *In force.*

- The Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty Tlatelolco) of 1967 creates the first nuclear weapon free zone in a densely populated area. It commits parties the Treaty not to test, produce or acquire

nuclear weapons themselves or to permit any other power to so or to deploy such weapons in the zone. It was the first arms limitation agreement to provide for verification an international organisation. Two Protocols are integral parts of the Treaty. According to those Protocol respectively, States outside the region with international responsibility there would undertake to apply the Treaty's provisions to those territories and all nuclear weapon States would undertake not to use or threaten use nuclear weapons against parties to the Treaty. *Inforce for each Government individually.*

- The South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga) of 1985 forbids its parties to manufacture, acquire, possess or control any nuclear explosive device inside or outside the zone. It also prohibits its parties from carrying out nuclear testing and commits them to refrain from and prevent the dumping of nuclear materials at sea anywhere within the zone. Three Protocols are integral parts of the Treaty, by which, respectively, States that are internationally responsible for territories in the zone would undertake to apply provisions of the Treaty to those territories; all nuclear weapon States would commit themselves not to use or threaten to use nuclear explosive devices against any party to the Treaty; all nuclear weapon States would commit themselves to refrain from the testing of nuclear explosive devices anywhere within the zone. *In force,*

- The Treaty on Conventional Armed Forces in Europe of 1990, negotiated between member States of the North Atlantic Treaty Organisation (NATO) and the Warsaw Treaty Organisation (WTO), seeks to establish a stable and secure balance of conventional forces at lower levels, to eliminate disparities in forces and the capability to launch a surprise attack and large-scale offensive operations. The Treaty puts equal ceilings and sub-ceilings for the two sides on tanks, armoured combat vehicles, artillery, combat aircraft and attack helicopters. It also sets up an elaborate system of verification, including data exchange, on-site inspection, challenge inspection and on-site monitoring of the destruction of military equipment to be reduced. *In force.*

- The Treaty on Open Skies of 1992, negotiated between member States of NATO and the WTO, establishes a regime for the conduct of observation flights by States parties over the territories of other States parties. *Not yet in force.*

- The Non-Aggression Pact among States members of the Economic Community of Central African States of 1994 commits parties to refrain in their mutual relations from the threat or use of force or aggression or from encouraging or supporting acts of hostility or aggression. *Not yet in force.*

- The African Nuclear Weapon Free Zone Treaty (Pelindaba Treaty) of 1995 commits parties to renounce nuclear explosive devices and to declare, dismantle and destroy any that they possess, prohibits the stationing and testing of such devices, prohibits the dumping of radioactive waste and promotes the peaceful use of nuclear science and technology. Three Protocols are attached to the Treaty, by which, respectively, the nuclear weapon States would undertake not to use or threaten to use nuclear weapons against parties and not to test nuclear weapons within the zone, and States outside the zone with international responsibility for territories within it would undertake to apply the Treaty's provisions to those territories. *Not yet in force.*

- The Southeast Asian Nuclear Weapon Free Zone Treaty of 1995 commits its parties not to acquire, develop, test, use or allow the stationing of nuclear weapons within the zone and prohibits the dumping of radioactive waste. *Not yet in force.*

Bilateral Treaties

Negotiations between the two major nuclear powers, the former USSR/Russian Federation and the United States, have produced a number of bilateral agreements, including:

- The Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty) of 1972 restricts in general the development of sea-based, air-based, space-based or mobile land-based ABM systems and specifically limits deployment of ABM systems to two sites with no more than 100 launchers each. By a Protocol of 1974, the deployment of ABM systems is further limited to a single area, with no more than 100 launchers. *In force.*

- The Interim Agreement on Certain Measures with respect to the Limitation of Strategic Offensive Arms of 1972 (SALT I) established limitations for a five-year period, which could be extended, on the number of launchers of strategic weapons.

- The Agreement on the Prevention of Nuclear War of 1973, under which the two parties agree to make the removal of the

danger of nuclear war and of the use of nuclear weapons an objective of their policies and to make all efforts towards guaranteeing stability and peace. *In force.*

- The Treaty on the Limitation of Underground Nuclear Weapon Tests (Threshold Test-Ban Treaty) of 1974 establishes a nuclear "threshold" by prohibiting underground nuclear weapon tests having a yield exceeding 150 kilotons. *In force since 1990 following the conclusion of a protocol on verification.*

- The Treaty on Underground Nuclear Explosions for Peaceful Purposes (Peaceful Nuclear Explosions Treaty) of 1976 prohibits the carrying out of any individual nuclear explosion for peaceful purposes having a yield exceeding 150 kilotons, or any group explosion with an aggregate yield exceeding 1,50 kilo tons. *In force since 1990 following the conclusion of a protocol on verification.*

- The Treaty on the Limitation of Strategic Offensive Arms of 1979 (SALT II) established limits c the number and types of strategic nuclear delivery vehicles. *Never entered into force.*

- The Agreement on the Establishment of Nuclear Risk Reduction Centers of 1987 establishes centres in Washington and Moscow to be used for exchanging data and providing notifications as require under certain current agreements, including the INF Treaty (see entry below). *In force.*

- The Treaty on the Elimination of The INF Intermediate-Range and Shorter-Range Missiles (INF Treaty) of 1987 provides for the elimination of all Unite States and Soviet ground-launched intermediate-rang (1,000-5,500 km) and shorter-range (500-1,000 km) missiles, their launchers and all their support equipment. A notable aspect of the Treaty is found in its verification provisions, which include on-site inspection, inspection by challenge, and national technical means of verification (satellite observation). *In force.*

- The Agreement on Notifications of Launches of Intercontinental Ballistic Missiles and Submarine launched Ballistic Missiles of 1988 stipulates 24 hour advance notification of the date, launch area and area c impact of missile launches. *In force.*

- The Treaty on the Reduction and Limitation of Strategic Offensive Arms (Strategic Arms Reduction Treaty/START I) of 1991 stipulates that each side will be limited to a ceiling of 1,600 deployed strategic nuclear delivery vehicles—intercontinental

ballistic missiles and submarine-launched ballistic missiles and their launchers, and heavy bombers—and to 6,000 "accountable" warheads deployed on these systems. The Treaty, which is the first agreement to actually reduce strategic nuclear weapons, will do so by approximately 30 per cent over 7 years under very stringent verification. *In force.*

- The Lisbon Protocol of 1992, signed by the four successor States to the former USSR and by the United States, commits the four States to undertake to make such arrangements among themselves as necessary to implement START I, and Belarus, Kazakstan and Ukraine undertake to adhere to the Non-Proliferation Treaty as non-nuclear weapon States in the shortest possible time. *In force.*

- The Treaty on Further Reduction and Limitation of Strategic Offensive Arms (second Strategic Arms Reduction Treaty/START II) of 1993 provides for the elimination of the most destabilising strategic weapons—heavy intercontinental ballistic missiles (ICBMs) and all other multiple-warhead ICBMs and for the reduction of the total number of strategic nuclear weapons deployed by both sides by two thirds. Reductions are to be carried out in two phases. *Not yet in force.*

ANNEX II

Principles and Objectives for Nuclear Non-Proliferation and Disarmament

The Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,

Reaffirming the preamble and articles of the Treaty on the Non-Proliferation of Nuclear Weapons,

Welcoming the end of the cold war, the ensuing easing of international tension and the strengthening of trust between States,

Desiring a set of principles and objectives in accordance with which nuclear non-proliferation, nuclear disarmament and international cooperation in the peaceful uses of nuclear energy should be vigorously pursued and progress, achievements and shortcomings evaluated periodically within the review process provided for in article VIII, paragraph 3, of the Treaty, the enhancement and strengthening of which is welcomed,

Reiterating the ultimate goals of the complete elimination of nuclear weapons and a treaty on general and complete disarmament under strict and effective international control,

The Conference affirms the need to continue to move with determination towards the full realisation and effective implementation of the provisions of the Treaty, and accordingly adopts the following principles and objectives:

Universality

1. Universal adherence to the Treaty on the Non-Proliferation of Nuclear Weapons is an urgent priority. All States not yet party to the Treaty are called upon to accede to the Treaty at the earliest date, particularly those States that operate unsafeguarded nuclear facilities. Every effort should be made by all States parties to achieve this objective.

Non-proliferation

2. The proliferation of nuclear weapons would seriously increase the danger of nuclear war. The Treaty on the Non-Proliferation of Nuclear Weapons has a vital role to play in preventing the proliferation of nuclear weapons. Every effort should be made to implement the Treaty in all its aspects to prevent the proliferation of nuclear weapons and other nuclear explosive devices, without hampering the peaceful uses of nuclear energy by States parties to the Treaty.

Nuclear Disarmament

3. Nuclear disarmament is substantially facilitated by the easing of international tension and the strengthening of trust between States which have prevailed following the end of the cold war. The undertakings with regard to nuclear disarmament as set out in the Treaty on the Non-Proliferation of Nuclear Weapons should thus be fulfilled with determination. In this regard, the nuclear weapon States reaffirm their commitment, as stated in article VI, to pursue in good faith negotiations on effective measures relating to nuclear disarmament.

4. The achievement of the following measure important in the full realisation and effective imlementation of article VI, including the programme action as reflected below:

  (a) The completion by the Conference Disarmament of the negotiations on a universal and internationally and effectively verifiable Comprehensive Nuclear-Test-Ban Treaty no later than 1996. Pending the entry into force of a Comprehensive Test-

Ban Treaty, the nuclear weapon States should exercise utmost restraint;

(b) The immediate commencement and early conclusion of negotiations on a non-discriminatory and universally applicable convention banning the production of fissile material for nuclear weapons or other nuclear explosive devices, in accordance with the statement of the Special Coordinator of the Conference on Disarmament and the mandate contained therein;

(c) The determined pursuit by the nuclear weapon States of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons, and by all States of general and complete disarmament under strict and effective international control.

Nuclear Weapon Free Zones

5. The conviction that the establishment of internationally recognised nuclear weapon free zones, on the basis of arrangements freely arrived at among the States of the region concerned, enhances global and regional peace and security is reaffirmed.

6. The development of nuclear weapon free zones, especially in regions of tension, such as in the Middle East, as well as the establishment of zones free of all weapons of mass destruction, should be encouraged as a matter of priority, taking into account the specific characteristics of each region. The establishment of additional nuclear weapon free zones by the time of the Review Conference in the year 2000 would be welcome.

7. The cooperation of all the nuclear weapon States and their respect and support for the relevant protocols is necessary for the maximum effectiveness of such nuclear weapon free zones and the relevant protocols.

Security Assurances

8. Noting United Nations Security Council resolution 984 (1995), which was adopted unanimously on 11 April 1995, as well as the declarations of the nuclear weapon States concerning both negative and positive security assurances, further steps should be considered to assure non-nuclear weapon States party to the Treaty against the use or threat of use of nuclear weapons. These steps could take the form of an internationally legally binding instrument.

Safeguards

9. The International Atomic Energy Agency is the competent authority responsible to verify and assure, in accordance with the statute of the Agency and the Agency's safeguards system, compliance with its safeguards agreements with States parties undertaken in fulfilment of their obligations under article III, paragraph 1, of the Treaty, with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices. Nothing should be done to undermine the authority of the International Atomic Energy Agency in this regard. States parties that have concerns regarding non-compliance with the safeguards agreements of the Treaty by the States parties should direct such concerns, along with supporting evidence and information, to the Agency to consider, investigate, draw conclusions and decide on necessary actions in accordance with its mandate.

10. All States parties required by article III of the Treaty to sign and bring into force comprehensive safeguards agreements and which have not yet done so should do so without delay.

11. International Atomic Energy Agency safeguards should be regularly assessed and evaluated. Decisions adopted by its Board of Governors aimed at further strengthening the effectiveness of Agency safeguards should be supported and implemented and the Agency's capability to detect undeclared nuclear activities should be increased. Also, States not party to the Treaty on the Non-Proliferation of Nuclear Weapons should be urged to enter into comprehensive safeguards agreements with the Agency.

12. New supply arrangements for the transfer of source or special fissionable material or equipment or material especially designed or prepared for the processing, use or production of special fissionable material to non-nuclear weapon States should require, as a necessary precondition, acceptance of the Agency's full-scope safeguards and internationally legally binding commitments not to acquire nuclear weapons or other nuclear explosive devices.

13. Nuclear fissile material transferred from military use to peaceful nuclear activities should, as soon as practicable, be placed under Agency safeguards in the framework of the voluntary safeguards agreements in place with the nuclear weapon States. Safeguards should be universally applied once the complete elimination of nuclear weapons has been achieved.

Peaceful Uses of Nuclear Energy

14. Particular importance should be attached to ensuring the exercise of the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I, II as well as III of the Treaty.

15. Undertakings to facilitate participation in the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy should be fully implemented.

16. In all activities designed to promote the peaceful uses of nuclear energy, preferential treatment should be given to the non-nuclear weapon States party to the Treaty, taking the needs of developing countries particularly into account.

17. Transparency in nuclear-related export controls should be promoted within the framework of dialogue and cooperation among all interested States party to the Treaty.

18. All States should, through rigorous national measures and international cooperation, maintain the highest practicable levels of nuclear safety, including in waste management, and observe standards and guide-lines in nuclear materials accounting, physical protection and transport of nuclear materials.

19. Every effort should be made to ensure that the International Atomic Energy Agency has the financial and human resources necessary to meet effectively its responsibilities in the areas of technical cooperation, safeguards and nuclear safety. The Agency should also be encouraged to intensify its efforts aimed at finding ways and means for funding technical assistance through predictable and assured resources.

20. Attacks or threats of attack on nuclear facilities devoted to peaceful purposes jeopardize nuclear safety and raise serious concerns regarding the application of international law on the use of force in such cases, which could warrant appropriate action in accordance with the provisions of the Charter of the United Nations.

The Conference requests that the President of the Conference bring the present decision, the decision on strengthening the review process for the Treaty and the decision on the extension of the Treaty on the Non-Proliferation of Nuclear Weapons, to the attention of the heads of State or Government of all States and seek their fulll cooperation on these documents and in the furtherance of the goals of the Treaty.

DISARMAMENT EDUCATION IN AFRICA: THE IAUP/UN COMMISSION EXPERIENCE

The International Association of University Presidents, together with the United Nations Centre for Disarmament Affairs, established in 1991 the IAUP/UN Commission on Disarmament Education. It consists of 200 scholars, university presidents, government officials, military officers, diplomats, and representatives of other professions, organised by teams. The Commission's mandate is to expand the teaching of peace and disarmament, especially in developing countries. The ultimate aim is to build constituencies for arms limitation throughout the Third World, as a prelude to economic and environmental improvement.

During 1991-1992, the first year of its existence, the Commission invited some 30 scholars from 25 universities in ten countries to address the status of academic arms control world wide. From these presentations we concluded that the teaching of disarmament was limited largely to the West. Even in the West, however, the material taught was obsolete, because it was based on a superpower confrontation which no longer existed. The Commission therefore decided to develop new curricula based on the current realities of regional conflict, and to seek the adaption of such curricula among Third World institutions.

After two years of assigning scholar teams, developing new educational material, and disseminating that material world wide, the Commission began in spring 1994 to work with 14 pilot institutions which soon grew to 36 universities in 21 developing countries. These institutions are committed to adapting the Commission's material to their own regional, cultural, and curricular needs. This effort now involves 16 mentor/scholars working as partners with almost 50 host professors from Asia, Africa and Latin America. So far these partnerships have produced 42 new disarmament courses for 1300 students, with 60 courses involving 1800 students projected for fall 1996. These numbers are conservative, because some of the "courses" are multi-course degree programs, and some of the "institutions" are multi-member consortia.

The Commission's activities have been funded by a variety of sources, including the Samuel Freeman Trust, the W. Alton Jones Foundation, international donors, the United States Institute for Peace (USIP), and the United States Arms Control and Disarmament Agency (ACDA). A recent second grant from USIP has permitted expansion of the Commission's curricular efforts to the Middle East. For data on the Commission's worldwide activities, including the countries involved, see Annex I.

Zambia: the Public System and "Surrogate Replication"

The IAUP/UN Commission's role in Africa is expanding rapidly. One of the leaders is Joseph Kalunga, President of Evelyn Hone College in Lusaka, Zambia. He is also Chairman of Zambia's 16-member public college consortium. These institutions offer three-year diploma programmes in technical and vocational fields like business administration, engineering, nursing, and accounting, as well as more general programs in the social and natural sciences.

Dr. Kalunga was one of twelve "students" at the September 1994 IAUP/UN International Seminar on Arms Control and Disarmament at Juniata College. Like the other students, he heard a presentation on the Commission's curricular project, and received outlines and later the full curricula of the disarmament modules developed by the various Commission teams. He returned to Lusaka, digested these materials, transformed them to meet the needs and culture of his country, and then proposed that his government approve a common three-year programme in peace and disarmament for the entire 16-member public college system.

The Government not only approved, but joined Dr. Kalunga in planning a workshop for spring 1995, as a preparatory step toward introducing the program the subsequent fall. The workshop was sponsored by the Government's Department of Technical and Vocational Education, working jointly with the public system's lead college, Evelyn Hone. This event brought together an impressive array of political leaders, military officers, human rights advocates, and educators, all of whom contributed to the development of a three-year required curriculum for all public college students regardless of academic major. The three-year peace requirement will be in place throughout the 16-member public system by 1997.

A two-semester course entitled "Peace and Disarmament Studies", which comprises the first year of the sequence, has already been introduced. Its chief aim is to enable students to understand peace and security as a prerequisite for economic development. Among the topics included are: definition of peace and war; the relationship of peace to development; factors affecting regional peace, e.g., political climate, economy, international relations; Zambian and international politics, including international organisations and treaties; the nature of democracy, in theory and in Zambia; economic reform in Zambia and internationally; history of the cold war, including the arms race, nuclear proliferation, and arms transfers to the Third World; emergence of

arms control and its current status; and conflict resolution, including applications to non-military conflict caused by trade unions, the church, and other pressure groups.

This course and the material to be introduced later in the second and third years of the public college curriculum replaces a former Marxist-oriented requirement. Given the leadership of Dr. Kalunga, who recently moved to the Zambian Education Department, it should be possible eventually to move parts of this sequence into other east African universities, especially in Kenya and Tanzania, where the Commission already has a foothold in medical schools. Zambia thus illustrates the Commission's initial efforts to achieve "surrogate replication"—that is, to move the "action center" away from the Commission and toward strategically located institutions in specific regions.

Kenya: Medical Schools and the Modular Approach

By no means is Zambia the only African star in the Commission's firmament. Among the earliest institutions to get involved were Moi and Nairobi Universities in Kenya. In September 1995, Moi introduced disarmament material for its second and fourth year medical students. Each of the original classes had about 40 students, one of whom was assigned to attend the International Physicians for the Prevention of Nuclear War (IPPNW) conference in Manila on children and war. Beginning' in October 1995, Nairobi University integrated similar material into its teaching programme for behavioural sciences (first year) and psychology/psychiatry (third year). Each of the original classes averaged 100 students.

In making these advances in medical education, these two African universities drew from the Commission's "Medicine and Peace" curriculum, developed by a team headed by Dr. Victor Sidel of Albert Einstein College of Medicine at Yeshiva University. Dr. Sidel is also President of IPPNW. This curriculum, appropriate for all types of health science colleges, features 18 modules (2-5 week units) which can stand alone, be inserted in other courses, or be sequenced to form one or more new courses or even a new program.

Among these are modules on medical ethics and war, the role of health professionals in the prevention of war, and a sequence of four modules on nuclear weapons: nature and threat, short-term health effects, long term health problems of survivors, and environmental consequences. Other modules include health consequences of chemical,

biological, and conventional weapons; psychological consequences of the arms race; and underdevelopment (poverty and hunger) as both consequence and cause of the arms trade. Each module contains a detailed substantive outline accompanied by extensive readings and issues for student discussion. For a sample of the Dr. Sidel modules, see Annex II.

The modular approach recognises that in academia, and especially in medical and other professional schools, the introduction of any new material is difficult, and likely to be opposed by the individual professor, his department, and/or a university curricular committee. This approach provides a psychological and "political" solution to such opposition. To start with the introduction of one or two modules into an already existing course is not threatening to the individual professor, and does not require departmental or committee approval.

In fact, the typical Commission "partner institution" begins with one or more orientation workshops for faculty, then cautiously integrates a few Commission modules into already existing courses. Once students are receptive and faculty comfortable, the institution moves more boldly toward a full-fledged course, created by linking interrelated Commission modules. At first this course is made elective, then later required. Ultimately, the more venturesome universities take the leap to multi-course degree programs at the baccalaureate or master's level.

The merits of the modular concept are illustrated by Moi University in Kenya, where for some years a conventional medical course had been taught in "Injury and Trauma". After becoming a host professor for the Commission, Dr. Peter Nyarang'o, now Dean of the Medical School, continued to maintain the title and broad outline of this course. But, he changed the substance dramatically by introducing IAUP/UN modules on the health impact of nuclear, biological, and chemical weapons.

South Africa: Potchefstroom University and Course Evaluation

The Commission soon expects to utilise the modular approach to introduce disarmament material into one or more of the medical schools at Cape Town, Witswatersrand, and Natal Universities. As elsewhere, the aim will be to adapt Dr. Sidel's disarmament material to regional, cultural, and curricular needs.

However, the Commission's main effort in South Africa has been in partnership with the political science or history departments at Rhodes, Potchefstroom, and Bophuthatswana Universities. Among these three

institutions, during the period September 1994 through February 1996, five peace and disarmament courses have been developed and taught. The material for those courses has been drawn largely from a curriculum developed by a team headed by Professor Steven Spiegel of the University of California, Los Angeles (UCLA), a master teacher whose text, *World Politics in a New Era,* has been widely used both in the United States and abroad. In contrast to Dr. Sidel's assignment, Professor Spiegel's team developed new material linking peace studies with security studies, and intended for undergraduates in the social sciences.

The Spiegel curriculum, which is still evolving and in which UCLA graduate students played a significant role, contains 15 modules grouped around four themes: *causes and management of conflict* (peace studies and conflict resolution); *weapon systems* (nuclear arms, chemical/biological weapons control, conventional arms control); *regional activities* (Middle East, Latin America, south Asia, east Asia, Europe, and eventually Africa); and *arms limitation factors* (UN and other international institutions, domestic influences, impact of military on environment, economics of arms control, and arms transfers/trade). For a sample of the Spiegel modules, see Annex III. Given the space limitations in this journal, this sample includes only the first four pages of an eight-page module.

The experience at Potchefstroom University illustrates what can happen when the "chemistry" is right between the Commission-appointed mentor (in this case Dr. Spiegel himself) and the host professor abroad. Professor Johann Kirsten, a former South African commando officer in Angola, was one of twelve southern African scholars invited to the Commission's International Disarmament Seminar at Juniata College in Pennsylvania in September 1994. Inspired by that crash course in disarmament issues, he began planning a disarmament course upon return home. In May 1995, he was one of seven outstanding host professors invited to participate in a Commission Symposium on "Education for Global Security", in honour of the 50th anniversary of the United Nations. While in New York, he and Professor Spiegel held several one-on-one meetings, out of which came the "Kirsten Bibliography"—a list of the books most urgently needed to teach a quality disarmament course.

In August 1995, Professor Kirsten launched his twelve week undergraduate peace and disarmament course under the title "Conflict and Order in World Politics". He drew heavily from Dr. Spiegel's module "Arms Control and Nuclear Weapons", as well as modules on

other weapons of mass destruction, origins of war, conflict management, and the role of the United Nations in addressing conflict. The course featured two examinations and a required paper analysing one recent war such as Vietnam or Iran/Iraq, the changed environment for the United Nations, or the recent French nuclear tests.

Each pair of mentor/host professors is asked to follow a 12-step process entitled *Guidelines for Partner Institutions.* Step 10 is the teaching of the course, and Step 11 is evaluation. In December 1995, Professor Kirsten submitted his and his students' evaluation of the course. Among the student comments were the following: "The problem of nuclear weapons becomes very real in [our] study of international politics—perhaps too real!" "I believe conflict management is one of the most important activities in today's world." "The United Nations has, in the absence of a bipolar world, played an important stabilising role in international relations."

In providing an evaluation to the Commission, the host professor is asked to identify weaknesses in the initial course, how on that basis he intends to revise the material, and his plans for further teaching at his own or a neighbouring institution. In Kirsten's case, the revisions will include more emphasis on conventional, chemical and biological weapons; economic consequences of arms control; the non-nuclear use of missiles; and especially Spiegel's module on "Arms Proliferation, Transfer, and Trade". Professor Kirsten will repeat the course, revised, in August 1996, and is considering an eight-week graduate course using Dr. Spiegel's modules "Peace Studies" and "Conventional Arms Control". He also plans to exchange course material with other Commission partners in South Africa.

South Africa: Rhodes University and "Library Enhancement"

The situation at Rhodes University is different. Unlike Professor Kirsten, the converted commando, the political studies faculty at Rhodes is sophisticated and experienced in the field of security and related studies. In 1995 they ran a full semester course in peace and conflict for master's and honors students, and are planning to offer a similar course in 1996. Their syllabus was well received, but in their own words, "our library resources in this area remain underdeveloped, largely due to financial restraints under which we operate".

For Rhodes and similar institutions, the IAUP/UN Commission has embarked on an ambitious "library enhancement" program. It involves the xeroxing and mailing of articles by team leaders, the use

of "suitcase libraries" by mentors as they visit overseas campuses, and modest cash grants to host professors, who can then purchase books and journals in their own country, directly from western publishers, or request Commission team leaders to make the purchases for shipment to them. In this latter case, the grant is expended in the United States, less costs for postage, shipments, and Fedex.

Meanwhile, the United Nations Library and Publications Division, together with the United Nations Centre for Disarmament Affairs (UNCDA), has agreed to send relevant United Nations publications to our overseas scholars on a roughly quarterly basis. The first such shipment, on a pilot basis to twelve host professors, was made in early July 1995. It consisted of Secretary-General Boutros-Ghali's *Agenda for Peace;* three volumes on nuclear weapons, environment, and sustainable development; and two training manuals on peace-keeping and peacemaking.

The first UNCDA shipment, made in August 1995, included current and past copies of the Centre's *Newsletter*, the journal *Disarmament*, and a backlog of materials now filling CDA closets. Although such materials might be obsolete to a United Nations officer or western scholar, they are prised resources for most Third World professors. Moreover, such shipments open up a whole new audience of opinion-makers for the United Nations.

Similar arrangements have been made with the United Nations University in Tokyo, the Non-Governmental Organisation (NGO) Committee on Disarmament in New York, and ACDA in Washington. The latter is sending their quarterly *Readings,* four volumes on nuclear, biological, and chemical weapons, and their annual publication on the status of world armament. As of January 1996, all 50 host professors will begin receiving these materials.

In short, the Commission is moving vigourously to consolidate its gains by converting the current experimental disarmament courses to "permanent" offerings. To accomplish this conversion, we obviously seek to "strike a deal" with the various host professors and their department chairs or deans. In effect, we offer to make significant improvements in their library holdings in the disarmament field, if they in turn commit to formally evaluating the course or program, revising it as necessary, including it in their catalogues, and offering it, at least in alternate years, for the next six years.

Given the considerable weakness of Third World campus libraries, this offer is being enthusiastically received. The enthusiasm will increase

as we gradually turn toward technology, especially the Internet, to expedite these efforts and to deliver the materials in a more timely fashion.

Nigeria and Cameroon: Failure Vs. Success

Africa reflects most of the problems involved in any attempt to introduce western-initiated disarmament education into the curricula of Third World universities. Among those problems are: communication difficulties such as non-working or non-existent fax machines; cultural differences, especially in the concept of timeliness; leadership transition—typically the retirement or removal of a supportive rector; inadequate resources of either faculty or library; lack of material relevance (e.g., in east Africa, land mines cause more anxiety than nuclear threats); and political instability, which often takes the form of civil war or military dictatorship.

Where the instability is lessening, as in South Africa, it can actually be a positive force. In the post-apartheid era, South Africa universities are now anxious to rejoin the world family, and free at last to pursue peace education and research. Where the instability is increasing, however, or is at or near its peak, conditions arise which make it almost impossible for the Commission to work with a partner institution. When faculty are intimidated and even fear for their lives, the atmosphere is not conducive to teaching peace and disarmament.

A tragic example here is the University of Ibadan in Nigeria, which originally intended to establish an interdisciplinary disarmament team from sociology, medicine, and political science. However, as communication with Ibadan has become impossible, we have placed the institution on hold, and have diverted our efforts to the International Relations Institute in more stable Cameroon (IRIC). The mentor for this latter project is Ivor Richard Fung, currently the United Nations Department of Political Affairs' political adviser to the peace processes in Mali and the Niger. Under Dr. Fung's guidance, and with the assistance of the IAUP/UN Commission, the IRIC hopes to explore relations with the nearby University of Yaounde and one or two other institutions in Chad or Gabon; improve its library holdings in the disarmament field; and develop a graduate seminar in peace and disarmament for diplomats from Central Africa.

Given the various problems in intercultural adaptation of disarmament education, no one would have thought that so much progress could have occurred so fast. Why are an increasing number

of Third World faculty and students attracted to the Commission's material? There are many answers, but only a few are presented here. First, little could have been done without the financial help of foundations and agencies. The unprecedented grant of US$100,000 from the United States Arms Control and Disarmament Agency in 1994 vastly increased both the thrust and scope of the Commission's efforts. Second, curricula in developing universities are still in flux, providing considerable opportunity for academic innovation.

Also, unlike prior disarmament syllabi based on superpower confrontation, the IAUP/UN Commission material focuses on regional conflict, conventional arms, the arms trade, dangers of nuclear proliferation among small countries, emergence of biological and chemical weapons in the Third World, the health and environmental impact of such weapons, peace economics and defense conversion, relation of peace to economic and environmental improvement, civilian control of the military, peace-keeping techniques, preventive diplomacy, and confidence building.

These regional themes, taught to successive classes of students, can help build an academic, and then a political, military, and civilian constituency for arms limitations, which are the *sine qua non* for achieving social justice in developing countries. Small wonder then that Third World faculty and students regard the IAUP/UN curricula as an opportunity to positively influence the future course of their countries, and to improve the quality of life for their people.

Mozambique, Malawi, Zimbabwe: The IAUP/UN Seminar

Apart from the previously discussed modular approach, however, the chief factor in the Commission's curricular success to date has been the International Seminar on Arms Control and Disarmament (ISACD), conducted annually by Juniata College's Baker Institute for Peace and Conflict Studies at its Williamsburg, Pennsylvania retreat center.

In return for free tuition, room/board, and even selective travel aid, scholars invited to the seminar are expected to return home and replicate what they have learned. Follow-up mechanisms help to assure that such expectations are realised. To appreciate how the Seminar works, let us look at the September 1994 session for young scholars from southern Africa.

Twelve scholars from six countries were invited to this session. The institutions represented were Evelyn Hone College from Zambia;

the Institute of Graduate Studies from Mozambique; the University of Zimbabwe from that country; Chancellor College from Malawi; and Western Cape, Cape Town, Fort Hare, Bophuthatswana, Natal, and Potchefstroom Universities from South Africa. Also included as a regional "foil" was a scholar from the University of Annaba in Algeria, who later fled to Paris to escape terrorist danger in his own country.

These twelve academicians were almost evenly balanced between whites and blacks, with mixed pairs in each room. Among them were several former government officials and military officers, including a retired colonel who had commanded the Mozambique Air Force. Their academic fields ran the gambit from history to physics, and included mathematics, conflict resolution, peace economics, political science, war and strategic studies, international relations, law, commerce, military technology, and applied arts. One scholar, just returned from a sabbatical abroad at Cambridge University, was a research associate in economic planning for the African National Congress. He also represented the Military Research Group in Johannesburg, which was seeking to develop a structure and policies for the post-apartheid South African army.

The lectures and discussions conducted by a distinguished faculty included such general topics as the United Nations and other agency effectiveness in arms control, major power roles in global security, international regimes banning weapons of mass destruction, alternative security measures, non-violent action and democratic culture, and "agreement building"—i.e., negotiation, mediation, and conflict resolution. The programme also included topics especially relevant to Africa: the African nuclear weapon free zone; the disarming of private armies and criminal gangs; the role of Africa in the 1995 Review and Extension Conference of the Nuclear Non-Proliferation Treaty; the prospects for regional arms control in north Africa; the consequences of anti-personnel mines in Mozambique; the United Nations in southern Africa after the cold war; and political violence in South Africa.

All that took place in two weeks, plus simulation sessions, a presentation of the IAUP/UN curricular project, and a climactic panel discussion at the United Nations featuring the ISACD "graduates" discussing "Confidence-building measures in Africa"! Given this extreme mix of personalities, institutions, countries, and topics, one might assume that the September 1994 Juniata seminar was a tumultuous affair, involving much conflict, emotion, cultural cleavages, and heated disagreements. On the contrary, an admirable bond quickly evolved

between whites and blacks, with general agreement on most African problems and solutions.

The impact of this seminar was enormous. It inspired the participants to return home and disseminate what they had learned, quite apart from any requirement to do so. Thus, within a year, a Mozambique scholar had introduced an arms control module in his *"Introduction to nuclear physics"* course; a South African scholar had taught a new course on *"Disarmament and global arms contracts in the nuclear age";* and the participant from Zimbabwe had not only developed a new course in *"Military technology and arms control"*, but had changed the emphasis of a prior course from *" War Fighting"* to *"Peace and Conflict Management* The commendable results at Evelyn Hone College in Zambia and Potchefstroom University in South Africa have already been described. Out of seven non-medical Commission host professors in Africa, five are graduates of the September 1994 seminar.

As the UNESCO preamble urges, the IAUP/UN Commission on Disarmament Education seeks to educate for peace, so that today's students, in Africa and elsewhere, will not need to fight tomorrow's wars.

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AGREEMENTS FOR
WEAPONS DESTRUCTION

Generally, the multilateral arms control agreements negotiated prior to the late 1980s were designed to provide confidence that certain types of *activities* would not take place. Agreements such as the partial test-ban Treaty, the nuclear non-proliferation Treaty and the agreement of the Stockholm Conference on Confidence- and Security-building Measures and Disarmament in Europe (CDE) are good examples. These agreements, however, have not required the *destruction of existing weapons.* The biological weapons Convention is an exception.

More recently, however, reduction of existing levels of armaments has become a central feature of multilateral arms control efforts. Consequently, physical destruction of armaments has become an important issue in major multilateral negotiations. Two such negotiations provide good examples of the problems that arise when destruction is a central element of a treaty agreement: the ongoing chemical weapons negotiations in the Conference on Disarmament in Geneva, and the negotiation on conventional armed forces in Europe, which concluded in November 1990.

The purpose of this paper is to review the approach taken to destruction of weapons in these two major multilateral negotiations. Recent bilateral arms control agreements such as the United States-USSR Treaty on their intermediate-range nuclear forces, which entered into force in 1988, also call for the destruction of existing weapons, but, because of the focus of this Conference and the need to keep this analysis to manageable proportions, this paper focuses on multilateral negotiations. Particular attention will be given to the environmental aspects of weapons destruction.

Destruction of Chemical Weapons

Destruction of existing chemical weapons has long been agreed to be one of the key requirements of a global chemical weapons ban. Thus, the multilateral chemical weapons convention being sought in the Conference on Disarmament negotiations will require the destruction of all existing chemical weapons, whether they are part of a current military stockpile or are relics of past wars. Tens of thousands of tons of nerve gas, mustard gas and other chemical warfare agents must be destroyed, along with the munitions and other containers in which they are stored.

The draft convention under negotiation contains detailed provisions on destruction, including the schedule for destruction and arrangements for verification. It specifies that chemical weapons must be destroyed in an irreversible manner that is safe both for people and the environment. Individual States are allowed to determine which specific destruction method will be used, except that, for environmental reasons, it is prohibited to dump chemical weapons in any body of water, to bury them on land, or to burn them in open pits. Destruction shall take place only at specifically designated and appropriately designed and equipped facilities. Confidence that the weapons have been destroyed will be provided through continuous on-site presence of international inspectors during destruction operations.

It is foreseen that chemical weapons will be destroyed during the first 10 years of the convention, beginning one year after entry into force. The approach to destruction is designed to take into account the interest of parties in undiminished security during the destruction period, to enhance confidence-building in the early part of the destruction stage, to encourage gradual acquisition of experience in the course of destroying chemical weapons, and to be applicable irrespective of the actual composition of the stockpiles and the methods chosen for the destruction of the chemical weapons. Given the likely divergence in stockpile sizes, the schedule of destruction is based on the principle of levelling out. Generally speaking, each possessor must destroy one ninth of its stocks annually.

The United States and the Soviet Union have agreed, however, to destroy their stocks more rapidly than required under the draft multilateral convention. Under the bilateral Agreement signed in June 1990 by President Bush and President Gorbachev, the two sides will begin to destroy their stocks to the common level of 500 agent tons by

the eighth year of the multilateral convention, substantially lower than the level calculated under the general formula in the multilateral convention.

While the most extensive destruction requirements will fall on the United States and the Soviet Union, a number of other countries will be obligated to carry out destruction activities. Some of these countries possess chemical weapons stockpiles, although they have not yet acknowledged this officially. Others have quantities of chemical weapons on their territory that were abandoned by foreign forces during the World War II era.

The United States has had an active programme for destruction of chemical weapons for many years. The number one priority in this programme is safety and environmental protection.

The original guidelines for the United States programme date back to a study in 1969 by the National Academy of Sciences, which assumed that all chemical agents and munitions would eventually require disposal. The Academy called for a more environmentally sound method of disposal than ocean dumping, which was the primary method used in the 1960s. It recommended that techniques similar to those used by the United States Atomic Energy Commission for disposing of radioactive wastes be adopted to ensure maximum public safety and protection of the environment. The Academy endorsed the incineration method for mustard and chemical neutralisation for nerve agents, but recommended further study to determine optimal methods.

Over the last two decades the United States safely destroyed approximately 170,000 munitions and nearly 8,000 metric tons of chemical agent, principally by industrial-scale operations. The first operations on an industrial scale were conducted at Rocky Mountain Arsenal outside Denver, Colorado, during the period 1970 through 1976. Over 2,700 metric tons of mustard in ton containers were incinerated, and over 3,700 metric tons of nerve agent sarin in ton containers and various warheads were destroyed by chemical neutralisation.

Since 1979 the United States has been operating a test facility, the Chemical Agent Munitions Disposal System (CAMDS), at Tooele, Utah. The purpose of CAMDS is to evaluate the equipment, processes and procedures which are being considered for use at future disposal facilities to determine their safety and ability to meet environmental standards.

Based on our previous disposal experience and successful tests at CAMDS, in 1984 the United States formally adopted direct incineration

as the preferred destruction method for all of its chemical stocks. This determination was endorsed by the National Research Council, a body of the National Academy of Sciences. Destruction through direct incineration requires less time for completion, is non-reversible, and generates much less residue than chemical neutralisation.

The current United States Chemical Stockpile Disposal Program consists of two operating facilities—CAMDS and the Johnston Atoll Chemical Agent Disposal System (JACADS). The baseline technology developed in the pilot-scale facility at CAMDS is essentially the same process we have incorporated at JACADS in an integrated facility.

Johnston Atoll, which is the site of our first full-scale destruction facility, is located 717 nautical miles southwest of Honolulu, Hawaii. The purpose of JACADS is safely to destroy the lethal chemical weapons located on Johnston Island. Rocket destruction has been under way since July 1990. As of 1 April 1991, JACADS had destroyed over 7,500 sarin-filled M-55 rockets and incinerated over 35,000 kilograms of agent. Later, munitions containing the nerve agent VX or mustard will be destroyed.

Safety considerations have been paramount in the design, construction and operation of the JACADS facility. Already it has demonstrated the capability to meet very stringent criteria for protection of plant workers and the general population. The agent safety standards were established by the United States Surgeon General to provide maximum protection. In addition to these agent standards, there are general pollutant emission standards for all of the incinerators. The JACADS plant has demonstrated the capability to meet all of these environmental standards as well.

A second full-scale disposal facility is also under construction at Tooele, Utah, near the CAMDS test facility. It is scheduled to begin destruction operations in 1993. Eventually we plan to have a destruction facility at each of our nine stockpile sites.

To facilitate the implementation of the multilateral chemical weapons convention, the United States is prepared to share both its experience and its technology with others. We are already doing so bilaterally, with the Soviet Union.

There is ample evidence that the destruction of chemical weapons is technically demanding and politically sensitive. It is time consuming and expensive. In planning their destruction programmes, States will need to take these realities into account.

States that will be required to destroy stocks under the convention should already be laying the political and technical foundation for their destruction activities, even though actual destruction may not be required for several years. A State that waits until the convention is signed to begin planning its destruction programme will probably have considerable difficulty in meeting the obligation under the convention to begin destruction one year after entry into force. Even under very optimistic assumptions, the design, construction and testing of a chemical weapons destruction facility require at least five years before the facility is ready for full-scale operations.

At times, alternative approaches have been suggested as short cuts for beginning destruction. One often-repeated idea is that the United States destruction facility at Johnston Island could be used to destroy stocks from other countries. This is not a possibility. The United States has assured countries in the region that the Johnston Island facility will not be used for such purposes. Another idea has been that conversion of a chemical warfare agent to a less toxic chemical could be considered as destruction, or at least as the "beginning" of destruction. This is also not acceptable to us. Conversion of a chemical warfare agent to another chemical that can, without great difficulty, be used again for chemical weapon agent production does not eliminate the threat.

Still another idea, suggested as an interim measure to be applied if States have difficulties in beginning destruction, is to disable munitions pending their destruction. This idea also has serious flaws. It can too easily become a substitute for destruction. As a practical matter, disabling millions of munitions in a way that would not complicate eventual destruction operations would be technically complex, dangerous, and expensive. It would be much better to focus resources on getting actual destruction under way.

Experience in the United States and elsewhere has also demonstrated that political problems associated with destruction can be just as daunting as the technical problems. These problems, of course, reflect concerns about safety and protection of the environment. Implementation of the convention's provisions on destruction depends on successfully assuaging these concerns. While each country must deal with the concerns according to its own circumstances, our experience suggests that openness, extensive local involvement and making safety the highest priority are essential.

There seems to be increasing interest in the Conference on Disarmament in discussing how safety and protection of the environment

can be ensured during the implementation of the destruction provisions of the multilateral convention. The United States welcomes this development and is prepared to contribute actively to such discussions.

Unfortunately, only the United States and the Soviet Union have openly admitted their possession of chemical weapons. The lack of candour on the part of other States with chemical weapons is not only a concern in itself, but also a hindrance to serious multilateral discussion of safety and environmental protection.

In summary, the United States attaches the greatest importance to ensuring that destruction of chemical weapons is accomplished in a manner that is safe for people and for the environment. In implementing the provisions of the multilateral convention, this fundamental principle must be given the highest priority. International cooperation can play an important role towards that end.

Elimination of Conventional Armaments

Our second example of a treaty involving the destruction of armaments with safety and environmental implications is the recently completed Treaty on Conventional Armed Forces in Europe (CFE).

In the CFE negotiation, the West proposed, in May 1989, that all armaments in excess of any agreed levels be destroyed. During the ensuing negotiation, the goal that equipment must be destroyed to meet the agreed limits was maintained; however, a cursory examination of the CFE Treaty text reveals that several other methods of accounting for equipment reductions were included in the document. As in any negotiation, many specialised and specific issues were uncovered that did not fit with the overall theme of reduction by destruction. In the CFE negotiation, as in any arms control negotiation, the approach taken to equipment reduction had to be tailored during the negotiating process to adjust the specifics of the proposal to the circumstances that apply for each participant. Within a multilateral negotiation, the tailoring and adjusting process is extremely difficult to accomplish.

Equipment Reduction Consideration in CFE

The CFE negotiation faced some special circumstances that limited the options as to what could be considered as an acceptable outcome for the issue of equipment reduction. For the West, the primary factors of concern were:

1. Europe contained and still contains the highest concentration of armaments in the world. Without some means of limiting

arms transfers as a result of an arms reduction agreement, the armament floodgates of Europe could have opened, thus setting off a global arms race which could have destabilised regional balances of power in many areas;

2. It was understood that a successful CFE negotiation would likely undercut the public consensus for defence spending among the democratic countries in Europe. A CFE Treaty that allowed equipment to be moved out of Europe to the East, with the possibility of bringing it back into Europe at some later date, could create a potentially dangerous security situation;

3. The West did not want to fix the military balance in Europe at the expense of worsening the military balance in Asia through the movement of equipment out of the Atlantic-to-the-Urals area;

4. It was uncertain how long the window of opportunity would be open to negotiate and execute a conventional arms reduction agreement for Europe. Therefore, it was in the Western interest to be able to execute rapidly any arms reduction agreement before the military or the political situation changed.

For the West, these four factors created a set of implied limits on what type of agreement could be negotiated in the CFE forum. Any outcome to the negotiation had to limit the ability of the participants to sell or shift treaty-limited equipment out of the area, to ensure that the armament reductions occurred rapidly before Western countries had trimmed their defence spending a disproportionate amount, and to ensure that the agreed weapons systems limited by the treaty were, in fact, eliminated permanently.

For the East, a different set of factors were apparently at work—factors that often led to Eastern positions that fuelled Western concerns:

1. The East, with significantly higher equipment holdings in many categories, was looking at a massive work requirement to reduce its military equipment levels. This level of effort argued against trying to reduce armament levels too quickly;

2. The Soviet Union apparently had had some difficulty executing the unilateral force reductions that President Gorbachev announced at the United Nations in December 1988. This difficulty argued for a more lengthy draw-down period for CFE implementation;

3. The East had an equipment reduction process developed that it wanted to follow. While this process was slow, the East claimed that it represented an efficient means for gradually processing armaments into scrap metal for consumption by its steel industry. As a result, the East resisted proposals by the West to adopt destruction methods designed to eliminate the military capability of armaments rapidly, without necessarily contributing to the process of preparing that equipment for consumption as scrap metal by the steel industry;

4. The Soviet Union was apparently concerned about the political ramifications of simply destroying massive amounts of military equipment that its population had sacrificed so much for in terms of depressed living standards. It indicated a strong desire to convert some military equipment into items that could be used in the national economy.

The proposals made by both sides each supported their own objectives and naturally raised suspicions on each side that some ulterior motive might be behind the other's proposals. This conflict in objectives made the equipment reduction issue difficult to negotiate. The outcome of this can be seen in the CFE Treaty. In essence, the Western proposals for equipment destruction procedures dominate the destruction processes, while Eastern proposals provided much of the basis for the conversion procedures, use of equipment as targets, and accounting for losses by accident.

CFE Destruction Procedures

Within CFE, there are a number of different procedures that have been approved for use in destroying military equipment: severing, explosive demolition, deformation and smashing. Conversion is also authorised, but limited. Some equipment to be eliminated can be accounted for in limited amounts by disposition as targets used in training, as museum or static display pieces, or through destruction in accidents.

The CFE Treaty based its destruction requirements on the concept of requiring destruction of only those elements of the item that are critical for system operation and that are difficult to repair. The standard of measurement was to inflict sufficient damage so that it would be about as expensive and time-consuming to repair the item of equipment as it would be to build a new item. For the most part, each method of destruction or conversion was aimed at damaging the same parts to

prevent reconstruction of a system by mixing and matching parts from different equipment pieces.

For tanks, the key components judged to be important for destruction were the turret, the trunnion system (point where the main gun attaches to the turret), the breech system, the gun tube, and the hull. To destroy the hull, without taking the time to cut it into pieces completely, requires that the areas around the drive shaft opening (between the engine and the drive sprocket) be cut away. In addition, the turret aperture area and glacis plate (front armour) are also points where damage significantly degrades the military potential of the hull. In general, the hull should be attacked with the aim of weakening key stress areas or of warping the alignment of its track-system attachment points. All parts not specifically cited for destruction may be salvaged for reuse by the owning country.

Armoured combat vehicles (ACVs) are to be destroyed using the same general approach as that specified for tanks. The hull and turret/main gun (if so equipped) are the focal points for destruction.

Artillery, particularly self-propelled artillery, is also treated similarly to the tank-destruction specifications. For towed artillery, the upper carriage, particularly the trunnion mounts, are vulnerable areas that allow maximum damage to be inflicted with minimal effort.

For aircraft and helicopters, destruction of the main fuselage should be the primary objective of any destruction regime. For fixed-wing aircraft, the most vulnerable areas to focus the destruction effort upon are the area where the wing attaches to the fuselage and the area just in front of the cockpit. For helicopters, the primary stress of lifting the airframe is carried by the critical load path that ties the airframe to the main transmission, which is at the base of the rotor mast. The fuselage should be destroyed in such a way as to destroy and twist the critical lifting structural members in the fuselage. Again, components other than those specified for destruction are recoverable by the owning country.

The severing, or cutting, method of destruction is likely to be the most common method of destruction used to meet the CPE Treaty requirement. While this method is the most labour-intensive way of destroying equipment, it is based on widely available technology and usually contributes to the ultimate goal of reducing the item of equipment to pieces small enough to be melted at a steel mill (1 metre x 1 metre x 1.5 metres, or smaller).

For example, it usually requires 300 to 500 man-hours of labour to completely cut a tank into pieces that can be melted. Since steel is worth about $130 a ton (on the east coast of the United States), and a tank's metal content will weigh about 25 to 40 tons (model dependent), the metal-salvage value of a typical tank might average $4000. Whether a country has to pay any additional funds above the salvage value to have tanks eliminated depends on the labour costs in that country, any transportation fees, and the amount of materials used to prepare the metal for the mill. Labour costs are usually the biggest factor.

Explosive demolition is a fast and inexpensive method for eliminating armoured vehicles. For example, a tank can be destroyed with about two man-hours of labour and less than $100 worth of explosives. Unfortunately, this method does not help solve the problem of disposing of the residual metal; however, it does provide a method for ensuring that each State can meet its reduction time-schedule in the event that an unexpected problem, such as a work interruption, delays the destruction effort.

The deformation method is essentially a crushing operation; a hydraulic press is used, or an object may even be run over with a heavy tracked vehicle. The damage that must be done with this method is specified in terms of a percentage of deformation from the original shape of the item.

The smashing method is based on a system that was developed in Poland to break up heavy steel plates for scrap metal. Essentially, the procedure uses an eight-ton wrecking ball dropped repeatedly from a height of 22 metres onto an object that is placed on a special anvil. Using this method, it takes about 30 to 40 hits of the ball to break a tank into pieces small enough to be melted. In many ways, this option might prove to be the most efficient and environmentally sound method available for destroying tanks.

Conversion is an attempt to modify military equipment into equipment with a non-combat application. While there are applications where this method is warranted, such as using tanks as fire-fighting vehicles for use in nuclear disasters, the expense of operating converted military equipment, coupled with repair parts availability issues, seems to limit the feasibility of eliminating military equipment on a large scale by this method. In addition, there is always the suspicion, whether warranted or not, that the converted equipment provides a means of avoiding the intent of the arms control treaty.

In the CFE Treaty, for ground equipment, the turret and gun-system components on equipment to be converted must still be destroyed. In addition, the hull being converted must have key pieces of armament removed to decrease its utility as a combat vehicle. For helicopters and trainer aircraft, conversion involves the removal of all wiring and fire control components necessary for using the aircraft in advanced combat operations.

Environmental Considerations

The destruction of chemcial weapons involves serious environmental and safety concerns. The various destruction options for eliminating conventional armaments under the CPE pose some environmental problems, problems that are within more easily manageable limits. For all methods of destruction, the various fluids used in the equipment to be destroyed must be drained and should be kept segregated. With regard to a tank, for example, it would not be uncommon to have it arrive at a destruction site with 350 to 700 litres of fluids on board. If these fluids are mixed when drained, they have to be treated as toxic waste in many countries. In addition, if these fluids are not drained and the explosive demolition method of destruction is used, it is possible that the equipment will be set on fire and will produce large volumes of hazardous smoke.

The severing method of destruction is the one other area that produces some environmental hazards. Armoured equipment is usually composed of alloy metals which produce toxic fumes when vaporised. Large-scale cutting operations can produce significant amounts of air pollution. In many countries, there are requirements for hoods and air scrubbers to be used during high-volume cutting operations that use some type of torch to melt metal.

Factors for Other Regional Negotiations

While the CFE Treaty provides one example of how conventional armaments can be destroyed, it should not be viewed as the only acceptable way to approach the problem. As noted earlier, the CFE processes of destruction were developed on the basis of some special considerations that might not be issues in conventional arms negotiations in other areas of the world. In determining how armaments should be eliminated under future arms control agreements, the following considerations recommend themselves:

1. How fast must the armaments be reduced? As a practical matter, it is easier politically to develop a build-down reduction regime which allows the participating countries to shave a percentage

of their holdings each year or two. For example, if country X owns 1000 tanks, and agrees to cut 100 tanks over a six-year period, that country could eliminate 16 or 17 of its oldest tanks each year and reach the new limit without much of the political pain that reductions during a shorter time-span might impose. If this approach is not acceptable, then other more drastic measures must be applied.

2. Are the amounts of armaments involved so large that their sale would cause problems in regional or global armament balances? If the amount is minor and the sale would just constitute a part of the continuing cycle of arms redistribution that occurs annually, it might be easier to allow the weapons to be sold, with an eye towards having fewer to sell in the future as armament inventories shrink. This is especially true where the countries involved are having economic difficulties and arms destruction would cause major political problems. (The large inventory of armaments in Europe made this an unacceptable solution for CFE.)

3. Can the countries use the spare parts from the items being eliminated? If so, a destruction regime that allows extensive salvaging of parts might be more acceptable. Most parties would likely realise some economic benefit from repair-parts cost savings.

Conclusion

As arms control agreements increasingly call for physical destruction of armaments, questions such as the magnitude of the destruction task, the desired order and rate of destruction, the costs, and the impact on political, economic and environmental concerns come into interactive play. It would seem that the key to a successful armament reduction regime is taking the time to develop a detailed plan that makes as much political and economic sense as possible.

Experience to date with unilateral and internationally negotiated destruction of weapons suggests that proper destruction of chemical weapons is enormously costly, both absolutely and relative to the original cost of the weapons. Destruction of conventional weapons is much less costly and can conceivably finance itself through the value of the scrap and other salvage. The bulk of the difficulties and costs destruction of chemical weapons are caused by safety and environmental demands. Environmental questions are much more easily managed in destruction of conventional weapons. There is no relevant experience to date on destruction of nuclear weapons.

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STRATEGIES AND MEASURES TO PROMOTE "DEFENSIVE SECURITY"

The adoption of "defensive security" in international relations will be a gradual process. Its achievement requires a step-by-step approach that will differ from region to region, and from one bilateral or multilateral relation to another in its modalities and time-frame, although not necessarily in substance. In some regions, major progress has recently been achieved in transforming relations among States, and the possibility of achieving a system of cooperative security based on principles of "defensive security" is, therefore, clearly present. However, in many regions basic conflicts persist, although some rudimentary steps towards "defensive security" are being taken.

Because regional differences must be taken into account, there is not one, universally applicable strategy for promoting "defensive security" at the global level. At the same time, there are certain steps that are applicable in a more general sense, even though the specifics will differ from one region to the next. For example, the universality of the principles of collective security, as embodied in the Charier of the United Nations, provides one basic component of a strategy for promoting "defnsive security". Similarly, confidence- and security-building measures can reduce secrecy and suspicions and create the degree of mutual trust necessary to convince States to adopt more defensively oriented military postures. Constraints on military activities and limits on military equipment holdings also form indispensable components of a restructuring of a State's armed forces towards defensive postures. Finally, adequate and effective verification of obseivance of international obligations is necessary both to ensure compliance and to enhance mutual trust that States will continue to abide by these agreements.

Hence, a strategy for promoting "defensive security" will entail, in the first place, effective functioning of the collective security system embodied in the Charter of the United Nations. In addition, such a strategy would include regional cooperative arrangements to enhance confidence that peace will be promoted and that aggression will be countered; the adoption of political and military measures designed to increase confidence between States—whether in a bilateral, multilateral, regional or global setting; and, finally, the negotiation of arms limitations and disarmament agreements that include adequate and effective verification measures, in order to instil confidence in new security arrangements.

The pace at which this strategy can be implemented and the scale of implementation will necessarily differ by region and from one bilateral relation to another. Moreover, since there is no one model that, when followed, guarantees the development of "defensive security", specific measures will have to be tailored to particular situations. Rather than providing a model, it is more useful and adequate to provide a choice of options from which States might select those measures they deem to be most appropriate for their specific circumstances.

Collective Security, Regional and Other Cooperative Arrangements Consistent with the Charter of the United Nations

Collective security, regional and other cooperative arrangements provide a real basis upon which States can feel secure. If States could rely on global, regional, or other arrangements to safeguard their security and interests, then they could adopt the military postures and strategic concepts that are compatible with "defensive security". In this regard, the collective security system embodied in the Charter of the United Nations has a critical role to play. The effective implementation of its provisions would reassure States that if their security and interests were threatened the international community would stand ready to come to their aid. Other collective security arrangements—be these bilateral, regional, or otherwise—may have similarly beneficial effects in reassuring their members. Finally, regional cooperative arrangements, designed to enhance economic, political and other forms of cooperation, may contribute to a sense of security and confidence conducive to the adoption of defensive security policies on the part of their members.

The effective implementation of the Charter of the United Nations— including a firm commitment by States to abide by the principle of the settlement of disputes by peaceful means and the effective and consistent

enforcement of Security Council resolutions—is a central element in promoting "defensive security". The experience of the Persian Gulf in 1990-1991 has had an important effect in this regard. The imposition of sanctions, followed by an authorisation to use all necessary means to ensure Iraqi compliance with the Security Council resolutions that addressed the crisis, and the resultant use of force to restore Kuwaiti sovereignty, demonstrated that cooperation among the member states of the United Nations can provide the means necessary to restore international peace and security. The defeat of Iraq and the effective implementation 'of Security Council resolution 687 (1991) further demonstrate that, if the United Nations takes a principled stance, aggression does not pay. As a result, States that intend to violate international law now face the possibility that concerted action on the part of the United Nations might render any aggression not only unsuccessful but also extremely costly.

Although the crisis in the Persian Gulf has demonstrated that the use of force may be necessary to enforce international law, this experience reinforces the importance of finding ways to prevent the need to resort to the enforcement provisions of the Charter of the United Nations. A more constructive involvement of the United Nations in terms of preventive diplomacy, peace-keeping and peacemaking within the framework and provisions of the Charter is called for. As elaborated in chapter II of the present study, the United Nations has in recent years intensified efforts in these and other areas, and this bodes well for its constructive involvement in the future. In so doing, the United Nations can strengthen the principles of collective security in a manner that reassures all States that their security will be provided for. On that basis, States may achieve the degree of confidence necessary to begin adopting measures designed to effect a defensive orientation in their military capabilities.

The United Nations Security Council addressed these and other issues when it met at the level of Heads of State and Government on 31 January 1992. On that occasion, the Security Council invited the Secretary-General to prepare an "analysis and recommendations on ways of strengthening and making more efficient within the framework and provisions of the Charter the capacity of the United Nations for preventive diplomacy, for peacemaking and for peacekeeping" Secretary-General responded to this invitation in his report, entitled "An agenda for peace: preventive diplomacy, peacemaking and peace-keeping" (A/47/277-S/24111). The study suggests that the aim of the United Nations in this area must be:

(a) To identify at the earliest possible stage situations that could produce conflict, and to try through diplomacy to remove the sources of danger before violence results;

(b) Where conflict erupts, to engage in peacemaking aimed at resolving the issues that have led to conflict;

(c) Through peace-keeping, to work to reserve peace, however fragile, where fighting has been halted and to assist in implementing agreements achieved by the peacemakers;

(d) To stand ready to assist in peace-building in its differing contexts: rebuilding the institutions and infrastructures of nations torn by civil war and strife; and building bonds of peaceful mutual benefit among nations formerly at war;

(e) And in the largest sense, to address the deepest causes of conflict: economic despair, social injustice and political oppression.

The study makes specific suggestions on how the United Nations might achieve these aims, several of which the Group of Experts found particularly relevant to "defensive security", especially those relating to preventive diplomacy.

That the effective functioning of a collective security system can produce gratifying results, including a willingness on the part of States to adopt policies consistent with the concept of "defensive security", is demonstrated by the effectiveness of collective security, regional and other cooperative arrangements. For example, in the postwar period, the North Atlantic Treaty Organisation provided a collective security framework within which former enemies—including those who had fought a number of devastating wars—were reconciled to live together in peace.

The beneficial effects of regional efforts can also be seen in South-East Asia, Africa and Central America. Thus, the establishment of the Association of South-East Asian Nations (ASEAN) in 1967 created a regional cooperative arrangement that first muted and eventually eliminated conflicts among the members themselves. Although political cooperation among the ASEAN States has generally been confined to dealing with external challenges, the fact of cooperation has proven to be a crucial confidence builder. It has promoted the development of common views and positions and encouraged mutual consultations to achieve common objectives, both of which have further stimulated interest in solving differences and neutralising conflicts. As a result, there now exists a general expectation that disputes among the members

will be resolved by peaceful means. It is this expectation that may enable the ASEAN countries to adopt defensive security policies.

In Africa, Subregional groupings like the Economic Community of West African States (ECOWAS), the Southern African Development Coordination Conference (SADCC) and the Economic Community of Central African States (ECCAS) have over time built confidence among their member States. ECOWAS, created in 1976, provides a particularly pertinent example. In 1981, economic harmonisation and integration among the members was supplemented by a new defence protocol on mutual assistance. The protocol eschewed the use of military force in the resolution of disputes among the member States and pledged military assistance in case of need. Its usefulness was demonstrated in 1990, when monitoring troops from member countries were sent to Liberia to avert a total political collapse. The operation, better known as the ECOWAS Monitoring Group (ECOMOG), became an inspiring model to the OAU. SADCC has played a constructive role in the southern African subregion. Since its founding in 1979, it has sought to promote various cooperative arrangements among its members. With the prospect for genuine democracy in South Africa and its eventual admission to SADCC, this subregional cooperative grouping is likely to play an even greater confidence-building role and help to erase mutual suspicions between South Africa and its neighbours. In turn, ECCAS has made further progress in developing confidence-building measures, disarmament and development in the subregion through the creation of a Standing Advisory Committee on Security Questions in Central Africa, with the assistance of the United Nations.

Similarly, in Central America the involvement of the Contadora nations provided the necessary framework for moving relations among the five Central American States involved in that process onto the path of mutual security. The reassuring effect provided by the involvement of neighbouring countries that were recognised to be genuinely impartial regarding disputes between and within the Central American countries enabled these countries to settle their disputes peacefully. As a result, while the provisions affecting the level and conduct of Central American military forces contained in the Contadora Act on Peace and Cooperation in Central America of June 1986 could not be implemented before a general settlement had been reached, now that such a settlement is well on its way to being achieved, the Central American countries can give serious consideration to adopting these military measures. The result will be a greater emphasis on the defensive nature of each State's military capabilities.

These examples demonstrate that collective security, regional and other cooperative arrangements provide a framework for countries to adopt measures that could help to promote "defensive security". These arrangements foster a climate conducive to negotiations, mediation and other means for solving disputes peacefully, thus establishing the basis for an emerging expectation that conflicts among States will be resolved by means short of the use of force. Once States are so reassured they may prove willing and able to and to adopt more defensive military postures reduce the role of military force in their relations

The advantages of effective collective security and cooperative arrangements are generally well understood by States. Nevertheless, doubts about the ability of the United Nations, as well as of regional and other arrangements, to function effectively in all instances has led some States, particularly those in conflict-prone regions, to seek reassurance and protect their national security interests through a build-up in military forces. The continued acquisition of ever-increasing military forces may reduce the security of all States in the region by fostering suspicions and perceptions of aggressive intentions. The risks involved in such situations may be reduced through political efforts aiming at a reduction in tensions and threats in the region concerned, with a view to addressing the causes of conflicts.

Confidence- and Security-building Measures

Confidence- and security-building measures (CSBMs) seek to regulate military activities of States in order to prevent the use of armed force in international conflicts and to provide the basis for improving relations among States. CSBMs achieve this objective by erecting barriers to the use of force on the one hand and by enabling States to demonstrate their peaceful intentions on the other.

The importance of these measures was recognised by the United Nations Disarmament Commission when in 1988 it unanimously adopted "guidelines for appropriate types of confidence-building measures and for the implementation of such measures on a global or regional level". The same year, the General Assembly in its resolution 43/78 H endorsed the guidelines and recommended them "to all States for Implementation, fully taking into account the specific political, military and other conditions prevailing in a region, on the basis of initiatives and with the agreement of the States of the region concerned".

Confidence- and security-building measures designed to erect barriers to the use of armed force can be applied even in situations

where the real sources of conflict have not yet been removed. Their goal is simply to contribute to the prevention of a war that neither side wants. Moving along a spectrum from peace to war, CSBMs can be designed to help achieve the following goals: inhibit the use of force for political intimidation; facilitate crisis management; establish a buffer to the outbreak of armed conflict; reduce the risk of surprise attack; create conditions that will favour the defence; and facilitate the termination of armed conflict.

In addition to erecting barriers to the use of force, confidence- and security-building measures can also be designed to enable States to demonstrate their peaceful intentions. This second objective is achieved by reducing the degree of secrecy shrouding military activities. Secrecy contributes to uncertainty and rising tensions that may lead to war by miscalculation as a result of reciprocal fears of surprise attack or misjudging the intentions of adversarial States. In this regard, the goal of CSBMs is therefore to reduce secrecy regarding military activities. This can both reduce uncertainty and increase predictability and thereby reassure States that any military activity is routine and non-threatening in nature. The aim is to make military activity transparent in order to determine the "normal" peacetime uses of military forces. In this manner, any military activity will either be regarded as normal or, if it is not, provide an early indication that something is amiss.

Although there are numerous confidence- and security-building measures designed to achieve these objectives, each will fall into one of the following five categories: information measures, communication measures, access measures, notification measures and constraint measures. Not every measure will be applicable in all circumstances; different regional conditions will demand a diverse set of measures. Rather than specifying which measures might be most suitable in what context, a number of specific examples are provided below. Although the European experience provides the richest example of possible confidence- and security-building measures, there is also a substantial experience in other regional settings, including notably in the Middle East and also in Central America.

1. Information Measures

Information measures consist of the exchange of data on military forces and activities. Their main purpose is to increase transparency and thus reduce uncertainty regarding the military capabilities and dispositions of other States. There is of course the danger that the provision of incorrect information may feed a false sense of predictability.

In this regard, data exchanges can serve the aim of deception rather than transparency. The ability to check the data is therefore important, which is why information measures are usually accompanied by access measures. However, even in the absence of cooperative verification measures—such as the mutual right to observe and/or inspect—information can be checked by national means in the same way that military capabilities are assessed without the exchange of information.

In 1992, the United Nations Disarmament Commission recognised the importance of information measures when it adopted "guidelines and recommendations for objective information on military matters". The guidelines, which set out principles and objectives of information measures in military matters, provide, *inter alia*, that "all States have the responsibility to provide objective information on military matters and the right of access to such information".

The principle of information exchange is now well-developed in Europe. Even as part of the 1975 Helsinki Final Act, the thirty-five CSCE countries were required to give notification of military manoeuvres 21 days in advance, thus providing some degree of information regarding planned military activities. However, the provision of data regarding military capabilities is of more recent vintage. Not until the 1987 INF Treaty were the United States and the Soviet Union required to exchange data in regard to actual military capabilities. The earlier Strategic Arms Limitation Treaties had no provision for data exchanges and compliance was assessed only on the basis of data acquired by national technical means.

Provisions mandating the exchange of military information among the European States have expanded dramatically since the signing of INF Treaty. For example, every party to the 1992 Vienna Document on Confidence- and Security-Building Measures must exchange the following information annually:

(a) The command organisation of land and air forces (including air defence aviation and naval aviation permanently based on land) down to the brigade/regiment and wing/air regiment or equivalent level;

(b) For each formation or unit, the designated subordination, whether it is active or not, its normal peacetime location and the peacetime authorised personnel strength;

(c) The major organic weapon and equipment systems, specifying the numbers of each type, of: battle tanks, helicopters, armoured combat vehicles, anti-tank guided missile launchers mounted

on armoured vehicles, artillery pieces, mortars, multiple rocket launchers, armoured vehicle launched bridges, combat aircraft and comprehensive technical data on all major weapon and equipment systems;

(d) Plans for the deployment of major weapons and equipment systems and the military budget for the forthcoming fiscal year.

The information to be provided under the CFE Treaty regarding equipment is also extensive.

The importance of information measures has been underscored by the attention given to it in recent regional arms control proposals, For example, under the draft Treaty on Central American Security put forward by Honduras in July 1991, the five Central American countries would annually exchange data on the composition of their armed forces, including on their organisation, location, armaments, *material* and equipment (A/45/1038-S/22822). More generally, under its "Plan for Arms Control and Disarmament" announced on 3 June 1991, the Government of France stressed the importance of regional security initiatives focusing on confidence- and security-building measures. According to this plan, the "first requisite of confidence is information ... i.e., mutual information on the capabilities and condition of armed forces and troop movements"

Information measures have also been proposed in the area of international arms transfers. In July 1991, the five permanent Members of the Security Council, meeting in Paris, voiced their "support for continued work in the United Nations on an arms transfers register to be established under the aegis of the United Nations Secretary-General". A study by the Secretary-General of the United Nations on ways and means of promoting transparency' in international transfers of conventional arms, submitted to the General Assembly at its forty-sixth session (A/46/301), called for the establishment of a universal non-discriminatory arms transfer register under the auspices of the United Nations. According to the study, the register should be based on the following broad characteristics:

(a) The register should be so designed as to permit its prompt implementation;

(b) Participation in the register should be universal, including both arms suppliers and recipients;

(c) The parameters of the register should be such as to allow standardised and comparable input from all States;

(d) The register should be so designed and maintained as to provide meaningful information with regard to its purpose to build confidence, promote restraint in arms transfers on a unilateral, bilateral or multilateral basis to enhance security at lower levels of armaments, and allow timely identification of trends in arms transfers;

(e) The register set up should have a potential to expand to more comprehensive coverage, if required.

On the basis of the study, as well as various proposals advanced outside the United Nations, the General Assembly discussed the question of transparency in international transfers of conventional arms at its forty-sixth session, in 1991. After thorough discussions, the Assembly took that had emerged in the a decision which, in fact, represents a merger of different viewpoints course of these considerations. In essence, it approaches the whole issue in a much broader manner by addressing not only arms transfers but also production. Thus, the Assembly in its resolution 46/36 L requested the Secretary-General to prepare a report on the modalities for early-expansion of the scope of the Register by the addition of further categories of equipment and inclusion of data on military holdings and procurement through national production. Furthermore, the Secretary-General will prepare a report in 1994 on the continuing operation of the Register and its further development. In doing so, the Secretary-General will, *inter alia,* take into account the work of the Conference on Disarmament, which was requested in the same resolution to address "the question of the interrelated aspects of the excessive and destablising accumulation of arms, including military holdings and procurement through national production, and to elaborate universal and non-discriminatory practical means to increase openness and transparency in this field". In addition, the Conference on Disarmament was requested "to address the problems of, and the elaboration of practical means to increase openness and transparency related to the transfer of high technology with military applications and to weapons of mass destruction, in accordance with existing legal instruments". Accordingly, in May 1992 the Conference on Disarmament decided to inscribe a new item on transparency in armaments on its 1992 agenda.

Information measures can also involve data relating to weapons of mass destruction. For example, States Parties to the Biological Weapons Convention of 1972, have agreed to exchange, on a voluntary basis, information on biological activities, including on past research and

development programmes and on vaccine production facilities. As part of their agreement not to attack each other's nuclear facilities, India and Pakistan exchanged information on the location of these facilities on 1 January 1992. In addition, in his report on the establishment of a nuclear weapon free zone in the region of the Middle East, the Secretary-General proposed, *inter alia,* that States in the Middle East unilaterally declare their activities in the nuclear field that are not covered by the International Atomic Energy Agency safeguards. These could include uranium mining or processing, heavy water or tritium production or stockpiling, and any research facilities capable of handling even *de minimis* quantities of fissionable material that are exempted under standard safeguards agreements. In addition, a large number of States have announced their commitment to become original signatories to the chemical weapons convention once this has been completed. The September 1989 memorandum of understanding regarding chemical weapons signed by the United States and the Soviet Union is another significant information measure. It provides, *inter alia,* for an exchange of data on the location, composition and size of their respective chemical weapons stockpile.

2. Communication Measures

Communication measures are among the oldest forms of formal confidence- and security-building measures, dating back at least until the 1963 "Hot-Line" Agreement between the United States and the Soviet Union. Their purpose is to provide a forum to discuss differences and reach a greater understanding of mutual intentions. By engaging in dialogue, differences between States can be ironed out, misunderstandings avoided, and transparency enhanced. The actual process of negotiations between States—whether concerned with the resolution of conflicts or the formulation of arms control measures— is. therefore an important confidence builder. These processes consist of a dialogue between States, through which perceptions regarding respective intentions might be changed, interests redefined, and mutual concerns better understood. A willingness to engage in a negotiating process therefore represents a first useful step along the road to building mutual trust.

In addition to the process of negotiations, there are a number of more specific-examples of successful communication measures. These include: the provision for liaisons to be included in observations and inspections resulting from the Israeli-Egyptian agreements regarding the Sinai: the establishment by CSCE of the Conflict Prevention Centre;

and the Seminars on Military Doctrine held under the auspices of CSCE.

Perhaps, the most striking example of a successful communication measure (when combined with other measures) was the provision under the Israeli- Egyptian Separation of Forces Agreement of January 1974 that Israeli and Egyptian liaison officers would participate in the verification activities of the United Nations Emergency Force (UNEF), which was established to oversee the implementation of the agreement. This provision contributed to the development of confidence between the two States, who at the time were still in a formal state of war. Under the 1975 Interim Agreement, the degree of cooperation was extended through the creation, under the auspices of the United Nations, of a joint Israeli-Egyptian committee tasked with monitoring the implementation of the agreement, solving problems and misunderstandings on the spot and serving as a liaison for both countries to UNEF and the United States Sinai Support Mission.

This experience formed the basis of the even more extensive joint verification provisions of the 1979 Peace Agreement. Under this agreement, the liaison system established by the Interim Agreement was expanded to include not only monitoring of the agreement's execution in cooperation with the Multinational Force and Observers, but also direct responsibility for solving problems and preventing crisis situations that might emerge because of errors or misunderstandings. There are liaison offices in El-Arish and Beersheba, each headed by senior military officers. Difficulties that cannot be solved at this level are addressed by a joint committee, headed by generals, which meets biannually or at the request of one of the parties. The success of these efforts is demonstrated by the absence of major non-compliance controversies and a general agreement that each side is abiding by the terms of the agreement. The net result is a communication measure that has contributed to building confidence between two States that had fought four major wars within a quarter of a century.

Two communication, measures were also agreed upon during the Paris CSCE summit meeting in November 1990. One concerned the establishment of direct communication between the capitals of the participating States for the transmission of messages relating to agreed measures contained in the Vienna Document and also, as decided in June 1991, in case of emergency situations. Another consisted of the establishment of a Conflict Prevention Centre. One of the Centre's functions is to address "unusual and unscheduled military activities"

about which a participating State expresses its security concern. In case, such an activity occurs and if the State responsible for that activity fails to satisfy the concerns of another State, the latter can call a meeting of the Consultative Committee of the Centre to discuss the issue. The Conflict Prevention Centre therefore provides a forum for consultation and possible cooperation to resolve the issue in question in a mutually satisfactory way.

An important contemporary example of a communication measure is the Military Doctrine Seminar held under CSCE auspices. The first such seminar was held for three weeks in January 1990, with a second one held in October 1991. The format of both sessions consisted of an introductory explanation of each participant's military doctrine, as well as discussions on force posture, training and exercises and budgets. The latter three topics provided the participants the opportunity to demonstrate how their military doctrine was reflected in the structure and training of, and spending for, their military forces.

Held soon after the revolutionary events of 1989, the first Seminar on Military Doctrine was attended by European and North American participants represented at the highest level. The seminar provided not only a unique opportunity for participants to meet and have personal contacts, but also to inquire about the nature and extent of change in the military doctrines announced by the Eastern European countries. Similarly, the then-members of the Warsaw Treaty Organisation used the opportunity to question NATO countries regarding their doctrine of forward defence and their emphasis on the concept of follow-on forces attack (FOFA), which many regarded as being offensive in nature. The result was that many of the NATO countries gained a clearer picture of, and confidence in, the military changes that were then under way in Eastern Europe. Similarly, the NATO members gained a better understanding of why the FOFA concept could have represented a concern to Eastern Europe.

The second Military Doctrine Seminar, held in October 1991, followed the same pattern as the first one. Taking place just before the NATO Summit in Rome, and with the situation in the Soviet Union so much in flux, the seminar did not break new ground. However, the absence of controversy was considered a good sign, providing further evidence of a new cooperative spirit replacing the confrontational habits of the past. The seminar identified some issues which could be jointly explored further at shorter, though more frequent, seminar meetings. These included: the criteria for conventional stability; the characteristics of

defensive and offensive armed forces; the degree of operational flexibility and mobility of crisis response and counter-attack capabilities that one would concede to the other side without feeling threatened strategically; the necessary constraints for the sake of mutual confidence; exercise patterns; and transparency requirements, not least with regard to mobilisation. Such an approach would avoid the pitfall of discussions on the offensive or defensive nature of strategic concepts, since pledges of non-aggression or reasonable sufficiency offer no adequate assurances for security and stability. Thus, the assumption here is that the defensive character of a security concept and corresponding policies must be underlined by the defensive orientation of its military-strategic postures, affecting the operational, strategic and tactical levels of armed forces.

In short, discussions regarding strategic concepts among military officials in different countries can play a useful confidence-building role between States. A willingness to provide information, to engage in a far-reaching discussion of military matters and to explain military deployments, equipment levels and training capabilities is the most direct route to reducing secrecy, uncertainty and misperceptions. Of course, as the European experience shows, political relations must reach a certain stage to make a military dialogue fruitful. If suspicions and fears dominate the proceedings, then the dialogue might turn into an exercise of mutual propaganda or even of disinformation. However, once a certain degree of mutual trust has been established, a wide-ranging military dialogue can do more to enhance confidence than many other measures.

3. Access Measures

Access measures provide a means to check both the accuracy of data exchanged under various information measures and the validity of statements provided as part of communication measures. As noted above, deceptive information and statements can create a false sense of security; access provides a means to verify their accuracy. In addition, providing access enhances the goal of all confidence- and security-building measures to break down the barriers of secrecy surrounding military activity and to enhance the transparency of military operations and capabilities. Examples of access measures include observations of military exercises, on-site inspections of military activities and force limitations, and open skies regimes.

European confidence- and security-building measures included, observations as early as the Helsinki Final Act, under which parties,

then still on a purely voluntary basis, could invite others to observe notifiable military activities. The discretionary nature of this access measure, however, reduced its value as a means to create openness, although it did enable States to reassure their neighbours through the issuance of invitations. This provision was strengthened in the 1986 Stockholm Document negotiated as part of the CSCE process and further developed in the Vienna Document 1992. Under the latter's provisions, a mandatory invitation for observations by other participating countries must be issued for any exercise involving 13,000 or more troops (3,500 if the exercise involves an amphibious landing or a parachute assault by airborne forces). A similar requirement is contained in the Honduran draft Treaty on Central American Security, where invitations for observations must be issued for each notifiable military activity.

A more intrusive access measure involves on-site and aerial inspections. In Europe, it was not until the conclusion of the Stockholm Conference on Confidence- and Security-Building Measures and Disarmament in Europe that agreement on the right to inspect notifiable military activities on short notice was first achieved. Under the provisions of the Vienna Document 1992, each participating State must accept up to three inspections annually of a specified area in which a notifiable military activity is or is suspected of taking place. These inspections can be conducted on land or from the air. Far more intrusive forms of inspections are included in major arms limitation agreements like the INF, CFE and START Treaties.

The right to on-site inspections is not unique to European agreements. In the Middle East, inspection provisions are a crucial part of the various agreements between Israel on the one hand and Egypt and Syria on the other. Thus, under the Israeli-Syrian Separation of Forces Agreement of 1974, the United Nations Disengagement Observation Force (UNDOF) is responsible for routine and challenge on-site inspection, as well as for general monitoring of the agreement. Routine inspections are to take place no less than once every 15 days and involve the verification of limits on military forces, equipment and weapons systems within each side's restricted separation zone. Upon the request of either party, UNDOF can also carry out challenge inspections. In all cases, the findings must be reported to both sides. Although actual access is denied to the parties involved, the inspection role performed by United Nations forces helps to create confidence that both sides will abide by an agreement that has been in force for over 18 years. On the other hand, the absence of a liaison system and the requirement that the United Nations mandate

for supervising the agreement be renewed every six months provide a much weaker basis for confidence building than in the Israeli-Egyptian agreements.

As noted above, Israeli and Egyptian liaison officers participated in the inspection activities conducted by the United Nations Emergency Force (UNEF) under the Israeli-Egyptian Separation of Forces Agreement. This access was expanded under the Interim Agreement, with both sides allowed to conduct overflights up to the buffer zone. In addition, they could use reconnaissance aircraft up to the middle of the buffer zone, using two aircraft up to seven times per week flying at an altitude no lower than 4,750 metres. Finally, both sides operated an early-warning station on each side of the Giddi Pass, which were manned by up to 250 persons using visual and electronic surveillance systems. In accordance with the Agreement, the deployment of offensive weapons at the stations was banned. As noted, inspection provisions under the Peace Agreement were even more extensive.

A final example of an access measure was first proposed by United States President Dwight D. Eisenhower during the July 1958 Geneva Summit. This was the idea of a United States-Soviet "Open Skies" regime under which each side could conduct aerial photography missions throughout the territory, of the other. Revived by President George Bush in May 1989, an Open Skies Treaty was signed by 24 CSCE member States in March 1992. The Treaty will be open to signature to all other CSCE participating States. Hungary and Romania had earlier signed an agreement allowing reciprocal overflights of each other's territory.

Agreement to conduct aerial overflights of the territory of other States grants a large degree of access that can be used to confirm the absence of threatening military activities, compliance with agreed measures and force limitations, and a more general willingness to open up a society to outside inspection for the purpose of demonstrating peaceful intentions and good will. In extending the degree of transparency, open skies regimes provide an added measure of reassurance and predictability upon which to base an increase in confidence in the relations between States.

4. Notification Measures

Notification measures are designed to enhance predictability by requiring States to inform each other of an impending military activity. These measures therefore permit such activities to take place, but ensure that their conduct will take no one by surprise. Implicitly, moreover,

the requirement of advanced notification enjoins States not to undertake certain military activities that have not been notified. Examples of notification measures that are currently in effect include ballistic missile launches, the conduct of military exercises and the movement of forces and equipment. Each measure attempts to eliminate surprise in the conduct of specific military activities by notifying others that the activity will take place. As a result, predictability is enhanced.

Under the 1971 Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War between the Soviet Union and the United States, both countries were required to notify each other in advance of any planned missile launches if these would extend beyond national territory in the direction of the other country. Such notification therefore eliminated concern on the part of both countries that a ballistic missile launched in their direction was the start of an attack. The 1971 Agreement was extended in 1988, when the United States and the Soviet Union agreed to notify each other at least 24 hours in advance of the planned date, launch area and area of impact of any strategic ballistic missile launch, no matter what its direction or impact area. This agreement again helps to reassure both sides that a missile launch does not represent an impending attack.

In the area of conventional forces, advance notification of military activities has generally involved military manoeuvres and the movement of forces or equipment. Extensive provisions for advance notification were, for example, included in the Helsinki, Stockholm, and Vienna agreements. Under the Helsinki Final Acton Confidence-Building Measures, States were required to notify each other 21 days in advance of major military manoeuvres involving 25,000 or more troops and were encouraged to notify each other in the case of other manoeuvres and major military movements. Some of the ambiguity of the language and the discretionary nature of some of the measures in the Helsinki Final Act were eliminated in the Stockholm and Vienna documents. Under these agreements, the following military activities are subject to prior notification (with lead time required for each notification indicated in parentheses):

(a) Major military activities, "concentrations" or transfers of forces involving at least 9,000 troops or 250 tanks (42 days);

(b) Amphibious landings or parachute drops involving at least 3,000 troops (42 days);

(c) Large-scale activities involving more than 40,000 troops (2 years).

The draft Treaty on Central American Security (A/45/1038-S/22822, annex) put forward by Honduras also contains extensive provisions concerning notifiable military activity. Specifically, the draft treaty calls upon the parties to notify 30 days in advance military activities if: they take place within 30 kilometres of the border of another State party; foreign forces are involved; more than 1,000 personnel or 100 naval personnel participate; more than 300 paratroops are dropped; or if 20 or more airplane and/or helicopter sorties are involved.

5. *Constraint Measures*

The final set of confidence- and security-building measures, unlike the previous four, actually prohibits specific military activities. In being more intrusive and actually limiting operations, as opposed to merely subjecting them to prior notification or observation, constraint measures are inherently more difficult to negotiate than other measures. It is therefore not surprising that, with the exception of one specific type of constraint, few of these measures have thus far been negotiated. The exception concerns disengagement zones which have existed since the mid-1970s in the Middle East Other constraint measures limit the size, frequency and/or duration of military exercises.

As part of the framework for resolving the Arab-Israeli conflict, Security Council resolution 242 (1967) suggested the establishment of disengagement zones between Israel and its Arab neighbours. It took another war in 1973 to bring these proposals to fruition. As part of the Israeli-Syrian Separation of Forces Agreement, zones were established on both sides of the lines of separation on the Golan Heights in which Israeli and Syrian forces were limited to specific ceilings within two zones extending 20 kilometres east and west of the lines of separation. Although the details remain confidential, limits within these zones apply both to manpower and to certain types of weapons (including tanks, artillery and surface-to-air missiles) that can be used for offensive purposes.

More detailed information is available regarding the disengagement zones established in the Sinai agreements of 1974 and 1975. Under the Israeli- Egyptian Separation of Forces Agreement, each side was limited to 30 tanks and 7,000 troops within their respective areas of limited armaments and forces. Additionally, the following were prohibited: artillery with ranges in excess of 12 kilometres; weapons that could interfere with the other party's flights over its own forces; fixed installations for missile sites; surface-to-air missiles; and weapons that

could reach the other party's separation line. These limits were extended in the Interim Agreement where, within their limited-forces zones, both sides were permitted to deploy no more than 8,000 troops, 75 tanks and 72 artillery pieces with ranges not to exceed 12 kilometres.

The Arab-Israeli disengagement agreements represented the first time that the deployment of weapons considered to be offensive in nature were limited in specific zones. Combined with extensive verification measures under third- party auspices, the successful operation of these disengagement provisions has the effect of extending the warning time available to both sides in case of an impending attack. In addition, by creating a buffer between the two sides, the risk of miscalculation and accidental war is reduced. In this manner, predictability is enhanced, providing the basis for building confidence between adversarial States.

However, the practical military utility of disengagement zones should not be overstated. Given their limited nature, the reintroduction of offensive capabilities in case of a crisis can generally take place in a matter of hours. Proposals for establishing such disengagement zones in Europe put forward during the height of the cold war (for instance, the Gromyko, Rapacki and Kennan Plans) were, therefore, rejected. More recently, however, as political relations have improved, the idea of establishing disengagement zones has garnered increasing interest in Europe. The idea behind these proposals is less to separate warring parties (as was the case in the Middle East) than to reinforce and demonstrate peaceful intentions.

This confidence-building aspect of disengagement zones was the stated reason for Hungary's proposal in November 1989 to create a "zone of confidence" in the Alpe-Adriatic region, which would have banned offensive military forces within 50 kilometres of the common borders of Hungary, Austria, Italy and Yugoslavia. A similar reasoning accompanied the proposal put forward by Greece in July 1991 to limit weapons such as tanks, armoured vehicles, artillery, fighter planes and assault helicopters from the regions where the Greek, Turkish and Bulgarian borders meet. An agreement along these lines was signed by Bulgaria and Greece in December 1991.

A second constraint measure concerns limits on the size, frequency and/or duration of military activities, such as exercises and movement of forces. To date, the only existing such constraint in Europe affects the following types of military activities:

(a) No more than one military activity involving more than 40,000 troops or 900 tanks every two years;

(b) No more than six military activities involving more than 13,000 troops or 300 tanks every year;

(c) Of the latter, no more than three military activities involving more than 25,000 troops or 400 battle tanks every year.

6. Lessons from Recent Experiences

Although the nature of the confidence-building regimes that were constructed in Europe, the Middle East and elsewhere differed in their specifics, these experiences may provide useful lessons for other regions where efforts to build confidence have yet to begin. Rather than suggesting specific measures that States might wish to negotiate, these lessons provide useful guidelines for the development of a confidence-building regime in other parts of the world.

The first lesson is that while there are a host of conceivable confidence- and security-building measures, negotiating agreements on specific measures will take time. The elimination of conflict and the building of confidence (let alone security) between States is a gradual process that requires a just treatment of the case and time to achieve its intended effect. To overcome historical animosities, reduce conflicts of interest to a more manageable level, correct misperceptions clouding decision-making processes and diminish mistrust in relations between States all takes time. It took the 35 CSCE States 11 years to move from agreement on largely discretionary measures to a more robust confidence-building regime. It took another four years for the main antagonists to agree to actual force reductions. In the Middle East, Israel and Egypt proved able to build an extensive regime in five years, but Israel and Syria have yet to move beyond their initial efforts of 1974. In Central America, the basis of an ambitious plan like that contained in the 1986 Contadora Act or the more recent Honduran draft Treaty is only now being laid. In short, confidence cannot be built overnight; it is, of necessity, a gradual and painstaking process.

A second lesson of recent experiences is that the building of confidence between States can be further enhanced if secrecy surrounding military activities is reduced. An excess of secrecy contributes to mistrust, misperceptions and misunderstandings in the relations between States, all of which encourages them to plan on the basis of worst-case assumptions. Transparency is therefore the crucial basis for building

confidence The key to transparency is information exchange and the means to check its accuracy. Confidence building must therefore start with information and communication measures, accompanied by access measures.

Notification of planned military activities creates a degree of predictability in the peacetime operations of military forces. An intensive dialogue, first at the political and then at the military level, provides States with the opportunity to explain their intentions and forces them to justify their military activities in a reassuring manner. A far-reaching and thorough dialogue on military matters also compels States to put themselves in each other's place in order to see how their own actions might be perceived by others. As mutual understanding grows and defensive intentions become more clearly apparent, States can move on to negotiating measures that will actually constrain or prohibit certain military activities, in the belief that such activities are both unnecessary to meet legitimate defensive objectives and might be perceived as threatening to others.

A third lesson is specific to regions in which conflict is rife and tensions are high. In such regions, an effective confidence-building process may, in certain situations, benefit from third-party participation. The involvement of third parties that are regarded as impartial by all sides in the conflict is often necessary to get negotiations going. A third party may be a country, group of countries, a regional organisation, or the United Nations.

A final lesson that can be learned from recent experiences is that States must first gain confidence regarding the defensive orientation of military force postures before they are willing to engage in actual reductions of military capabilities that are part of these postures. Once the force postures have become transparent and States have been able to gain a sufficient degree of confidence that the forces as a whole are organised largely for defensive purposes, they may be willing to engage in a process leading to actual reductions in military equipment holdings. In many cases, agreement on force reductions cannot therefore precede the effective implementation of confidence- and security-building measures. Once secrecy has been reduced through greater transparency, predictability concerning the peacetime activity of military forces has been enhanced and a certain degree of mutual confidence between States has been built, States may be willing to engage in the difficult process of arms limitation and disarmament.

Arms Limitation and Disarmament

In contrast to confidence- and security-building measures, arms limitation and disarmament agreements are designed to affect the structure of opposing military forces through limitations and/or reductions in actual military capabilities. Once a sufficient degree of mutual trust has been established or a modicum of common interest has been identified, States may) decide that their security is best served by placing mutual restrictions on their forces. In this manner, the traditional goals of arms control—to reduce the probability of war, the extent of damage in case of war and the cost of maintaining military forces—can be achieved.

In addition, arms limitation and disarmament agreements can contribute directly to "defensive security". Depending on the details, the defensive orientation of military forces can be enhanced by agreements that limit, balance or reduce particular "offensive" aspects of their capabilities. As regards weapons of mass destruction, which should ultimately be eliminated, any agreed reduction in these weapons should in principle promote "defensive security". Conventional arms limitation and disarmament agreements can also promote "defensive security", provided that particular attention is paid both to the weapons and weapons systems affected by the agreement and the manner in which these are to be limited or reduced. Unlike the case of weapons of mass destruction, certain conventional force limitations or reductions may reduce rather than enhance the defensive orientation of the military forces concerned. Therefore, in order to promote "defensive security", specific elements of conventional arms limitation and disarmament agreements should be taken into account. For these reasons, moreover, agreements affecting weapons of mass destruction and conventional weapons must be clearly distinguished.

1. Weapons of Mass Destruction

In a world in which "defensive security" is fully achieved, weapons of mass destruction would have been eliminated. This, indeed, should remain the objective of all States. However, a transition from the present to such a world is likely to be a long process, during which time at least some States will continue to possess some weapons of mass destruction. Arms limitation and disarmament are part of a process by which all these weapons will be further reduced and finally eliminated. This may prove easier in some categories of weapons (e.g., biological weapons, which have been banned) than in others (e.g., nuclear weapons), as well as in some regions than in others.

Under the Biological Weapons Convention of 1972, the signatories agreed not to develop, produce, stockpile or acquire "microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protection or other peaceful purposes" and "weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict" (resolution 2826 (XXVI), annex, art. I). To date, 120 States are party to the Convention.

The Biological Weapons Convention is the first global disarmament agreement ever concluded and, as such, represented a highly significant step towards the abolition of all weapons of mass destruction. As a result of the revolution in biotechnology, compliance concerns on the part of some States parties, and the reported interest in biological weapons of some non-signatory States, efforts have been made in recent years to strengthen the Convention. For example, at the Second Review Conference of parties to the Convention, in 1986, it was agreed that consultative meetings to review compliance concerns should be promptly convened to consider problems, suggest ways to clarify ambiguities, or initiate procedures within the framework of the United Nations and in accordance with its Charter. Finally, in an effort to build confidence in the Convention, States parties participating in the Conference agreed to exchange information concerning biological activities directly related to the Convention.

Five years later, at the Third Review Conference, in September 1991, States parties agreed, *inter alia*, not only to strengthen the existing measures, but also to add three new confidence-building measures, most notably regarding the declaration of past activities in offensive and/or defensive biological research development programmes and of vaccine production facilities. The Conference also decided to establish an ad hoc group of governmental experts to identify and examine potential verification measures from a scientific and technical standpoint on the basis of a number of criteria agreed upon by States parties at the Review Conference.

Only one multilateral agreement currently governs chemical weapons. The 1925 Geneva Protocol bans the use in war of asphyxiating, poisonous or other gases as well as bacteriological methods of warfare. Since 1980, the Ad Hoc Committee on Chemical Weapons of the Conference on Disarmament in Geneva has been negotiating a convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction. At the Conference

of States Party to the 1925 Geneva Protocol and other interested states held in Paris in January 1989, 149 countries stressed the importance of concluding a chemical weapons convention and called upon all States to become original parties to the convention as soon as it was concluded.

The negotiations in Geneva have now entered their final stages. The 1992 mandate of the Ad Hoc Committee on Chemical Weapons of the Conference on Disarmament aims at achieving a final agreement on a chemical weapons convention during 1992. Under the convention, the parties would agree to the complete and effective prohibition of the development, production and stockpiling of chemical weapons and on their destruction. The convention would also include provisions relating to: assistance and protection against chemical weapons; economic and technological development; and measures to redress a situation to ensure compliance, including sanctions.

In anticipation of, and as a complement to, the conclusion of the Geneva negotiations on a chemical weapons convention, a number of States have proposed bilateral and regional limitations on chemical weapons as well as other weapons of mass destruction. An important step in this regard was the agreement between the United States and the Soviet Union (since reaffirmed by Russia) to destroy the bulk of their large chemical weapon stockpiles and to cease production of chemical weapons. Under the agreement, which was signed in June 1990, though it is not yet in force, both sides pledged to reduce their stockpiles to 5,000 agent tons by the year 2002, a reduction of between 80 and 90 per cent of each country's inventory.

In the same spirit, regional agreements prohibiting chemical weapons have also been proposed in recent years. These efforts have been concentrated primarily in Latin America and the Middle East. For example, in September 1991, Argentina, Brazil and Chile, joined subsequently by Uruguay, and then by Bolivia, Ecuador and Paraguay, signed the Joint Declaration on the Complete Prohibition of Chemical and Biological Weapons (Mendoza Accord) in which they declared "their full commitment not to develop, produce, acquire in any way, stockpile or retain, transfer directly or indirectly, or use chemical or biological weapons". Later that year, Bolivia, Colombia, Ecuador, Peru and Venezuela signed the Cartagena Declaration on the renunciation of weapons of mass destruction, in which they expressed their commitment "to renounce the possession, production, development, use, testing and transfer of all weapons of mass destruction, whether nuclear, bacteriological (biological), toxin or chemical, and to refrain,

under any circumstances, from stockpiling, acquiring or retaining such categories of weapons". Finally, the draft Treaty on Central American Security put forward by Honduras in July 1991 stipulated that the five Central American countries should agree not to acquire, maintain, or station on their territory chemical, radiological and bacteriological weapons.

In the Middle East, the idea of eliminating weapons of mass destruction goes hack to at least 1974, when Iran, later joined by Egypt, first proposed the establishment of a nuclear weapon free zone in the region. Since that time, the United Nations General Assembly has consistently called, in resolutions on the subject, for "practical and urgent steps required for implementation of the proposal to establish a nuclear weapon free zone in the Middle East". Since 1980, these resolutions have been adopted without a vote.

In recent years, with the reported proliferation of chemical and biological weapons in the region, proposals have been made to free the Middle East of other weapons of mass destruction. For example, in January 1989, Israel proposed the establishment of a chemical weapon free zone in the Middle East. In April 1990, Egypt proposed the establishment in the Middle East of a zone free of all weapons of mass destruction. This proposal has been endorsed by a wide range of States, regional and other organisations and by the Security Council in resolution 687 (1991). The resolution stressed that actions to disarm Iraq regarding its nuclear, chemical and biological weapons and missiles for their delivery should be regarded as "steps towards the goal of establishing in the Middle East a zone free from weapons of mass destruction and all missiles for their delivery and the objective of a global ban on chemical weapons". The importance of this goal was further stressed by the United States in President Bush's arms control proposal for the Middle East of May 1991 and by France in its June 1991 "Plan for Arms Control and Disarmament", which also emphasised that the goal of regional zones free of weapons of mass destruction should be pursued in other parts of the world as well.

A strengthened bacteriological (biological) and toxin weapons convention and the rapid conclusion of a chemical weapons convention (both of which now seem to be within reach) represent crucial steps towards the promotion of "defensive security". These conventions will reaffirm an international norm, first, included in the Geneva Protocol of 1925, that the use (and now the possession) of chemical and biological weapons represents a breach of international peace and security.

As regards nuclear weapons, important developments have taken place in recent years. Considerable progress has been achieved in nuclear disarmament and the policy of reducing nuclear arsenals is actively pursued. Starting with the INF Treaty of 1987, which banned United States and Soviet intermediate- and shorter-range nuclear missiles, the nuclear powers have embarked on a concerted effort to limit and reduce their respective stockpiles.

In June 1990, the United States and the Soviet Union agreed to a verification protocol for the Threshold Test Ban and the Peaceful Nuclear Explosion Treaties, enabling their ratification and entry into force later that year. During the Moscow summit in July 1991, the United States and the Soviet Union signed the START Treaty reducing their strategic offensive forces by about 30 per cent. In September and October 1991, the United States and the Soviet Union respectively announced sweeping unilateral reductions in tactical nuclear weapons based on land and at sea and other changes in strategic nuclear forces, as described in chapter II above. Also in October 1991, NATO endorsed an 80 per cent reduction in its substrategic nuclear weapons. Finally, in June 1992, President George Bush and President Boris Yeltsin agreed to reduce United States and Russian strategic nuclear warheads by 70 per cent from current levels.

These facts demonstrate that we are well on the way towards halting and reversing the arms race. However, serious problems still exist, including the continued presence of large numbers of nuclear weapons in the arsenals of some States, the continuance of nuclear weapon tests by some States and problems relating to the proliferation of such weapons, both vertically and horizontally. Consequently nuclear disarmament should continue to be pursued with increasing resolve. Within the framework of general and complete disarmament, an objective which shall need a long transitional period, the nuclear weapon States should undertake further substantial reduction of their nuclear weapon stockpiles, as a step towards their total elimination.

The possession of weapons of mass destruction poses a specific problem as regards the achievement of a system of international relations based on the concept of "defensive security". In recent years, however, the prospect of limiting and eventually eliminating these weapons by agreement and with effective international controls has markedly improved. This trend bodes well for the promotion of "defensive security" in the years ahead.

2. Conventional Weapons

Conventional weapon systems are legitimate instruments for preserving the inherent right of individual or collective self-defence enshrined in Article 51 of the Charter of the United Nations. The central problem is therefore how to limit such forces without undermining the ability of States to meet their legitimate defensive needs.

There is no universally applicable model for conventional arms limitations that guarantees sufficient defensive capabilities but eliminates offensive capabilities *in toto.* Accordingly, conventional arms limitations will have to be agreed to as part of a more general strategy to promote the idea of "defensive security". To this end, limitations on conventional arms should be pursued in parallel with confidence- and security-building measures and the strengthening of collective security arrangements.

Conventional arms limitations designed to enhance the defensive orientation of military capabilities should contain at least three elements. First, the ability to generate strategic thrust through a combination of high mobility and concentrated firepower should be reduced in a balanced fashion. Secondly, forces capable of destroying targets deep in an opponent's territory should be adequately curtailed. Finally, the readiness and sustainability of conventional military formations should be limited commensurate with defensive requirements. In each of these cases, it is important to ensure that capabilities are reduced on a reciprocal, equitable and balanced basis within a given region or subregion.

Conventional arms limitations should focus on reducing those capabilities that provide armed forces with the ability to generate the thrust necessary for large-scale, strategic offensive operations and surprise attack. These capabilities consist of those weapon systems that combine a high rate of mobility with the ability to concentrate firepower. In the naval area, these include long-range naval guns and missiles, carrier-borne aircraft, and attack submarines. In the land forces area, battle tanks, armoured combat vehicles, artillery pieces (including mortars and multiple rocket launchers) and combat helicopters and aircraft fall in this category. Not surprisingly, the November 1990 CFE Treaty places strict limits on each of these five categories of ground-combat armaments. These weapons were limited because tanks and armoured vehicles form the core of the ability to seize and hold territory; artillery provide for direct fire support; and helicopters and aircraft combine firepower and high mobility into single weapon systems.

The CFE Treaty limits these categories to equal levels for both sides (consisting of the Group of Sixteen composed of the NATO countries and the Group of Thirteen composed of former Warsaw Treaty countries). In addition, the Treaty provides for a "sufficiency rule", under which no one country is allowed to possess more than a certain percentage about 33 per cent of all treaty-limited armaments. This aims at ensuring that no one country will have an overriding superiority in armaments, yet takes account of the fact that some countries are larger than others. A final noteworthy aspect of the CFE Treaty is that it limits the deployment of residual force levels in each of these five armament categories to specific zones. Thus, the Treaty's area of application, which stretches from the Atlantic to the Ural mountains, is divided into a set of concentric circles, within which specific force limits are set. Specific force limitations have also been agreed to for the flank areas to take account of the geographical peculiarities pertaining to these regions and to avoid a concentration of forces in these areas.

The net effect of these limitations is to eliminate any one country's ability to conduct a surprise attack within the Atlantic-to-the-Urals region. Equal ceilings between the two Groups of States ensure a balance of forces at lower levels; the sufficiency rule deprives any one country of the ability to conduct offensive operations against a coalition of other countries; and the zonal force limitations reduce the concentration of forces at any particular point. In this manner, the CFE Treaty effectively curtails the ability to generate a sufficient degree of strategic thrust necessary for large-scale offensive operations. At the same time, the Treaty allows each country to retain sufficient forces for an effective defence.

The second element of a concerted effort to limit conventional armaments in order to promote a greater defensive orientation could consist of limiting where appropriate the range of weapons systems capable of striking targets deep into the opponent's territory. The principal weapon systems of concern here are long-range combat and carrier-borne aircraft and, particularly, ballistic missiles. The deployment of a substantial bomber force capable of delivering large quantities of munitions over great distances provides a country with the ability to conduct devastating offensive operations. Such a capability would be particularly worrisome if it is combined with a large inventory of armoured capabilities necessary to seize and hold territory. This is why agreements on the limitation of long-range aircraft should be pursued in an effort to reduce the offensive capability of military forces.

Another problematic aspect in this regard is ballistic missiles, particularly those of longer range. Given their small payload relative at least to large aircraft and their ability to penetrate an adversary's territory in a short period of time, ballistic missiles are especially well suited for attack on high value targets deep in an opponent's territory. Even if inaccurate and armed solely with conventional warheads, the use of ballistic missiles can have a profound psychological and economic, if not military and political, impact, as indeed their use during the Iran-Iraq war and recent Persian Gulf war demonstrated. Finally, their dual-capability, as well as the fact that ballistic missiles are the weapons of choice to deliver chemical, biological and nuclear weapons, suggests that their continued deployment makes them inconsistent with the condition of "defensive security".

The specific threat posed by long-range missiles has been recognised in recent arms control developments, in particular in the nuclear field. For example, the 1987 INF Treaty bans United States and Soviet ground-based ballistic and cruise missiles with ranges between 500 and 5,000 kilometres. Under the United States initiative of September 1991, United States and Russian short-range nuclear missiles and nuclear-armed cruise missiles will also be withdrawn from forward locations and naval vessels. Outside the United States-Soviet context, the United Nations Security Council decided in resolution 687 (1991) to seek the elimination of all Iraqi ballistic missiles with a range greater than 150 kilometres.

These examples show that there is scope for agreements limiting ballistic missiles in the nuclear as well as conventional fields. As a first step, States might begin by negotiating regional limitations on ballistic missiles. For instance, Security Council resolution 687 (1991) stresses that the ban on Iradi ballistic missiles should be viewed as a first step to their elimination throughout the region. The United States initiative on Middle East arms control of May 1991 also proposes "a freeze on the acquisition, production and testing of surface-to-surface missiles by States in the region with a view to the ultimate elimination of such missiles from their arsenals". Other States might also wish to negotiate agreements banning ballistic missiles within their respective regions.

The final element of a conventional arms limitation agreement aimed at promoting a greater defensive orientation consists of limiting the readiness and sustainability of military formations in peace as well as during combat. A high peacetime readiness and the ability to sustain military operations at a distance for long periods of time are both

crucial elements of an offensive military capability. Hence, limiting these readiness and sustainability factors will contribute to greater defensiveness.

Readiness levels can be reduced by limiting the peacetime manning levels of military formations. This would require limits on manpower that have some relation to the military equipment levels that each parry to the agreement can deploy. Reserve training could also be limited in terms of frequency and duration to ensure that any mobilisation will take time. Another way in which to reduce force readiness is to limit active-duty ground equipment and store the remainder. For example, under the CFE Treaty, only about 85 per cent of the allowable ground equipment holdings can be deployed with active units, with the rest placed in storage. Any withdrawal of the stored equipment is subject to 42-day advance notification and must be returned to the storage sites within six weeks.

The net effect of these limitations is to increase the dependency of active-duty formations on reserves to achieve combat strength. Since it will take time for reserve units to become combat ready, the ability to conduct military operations on short notice will be reduced. Any indication that reserves are being called up and trained would provide warning that something might be awry. With sufficient warning, States can take actions to bolster their defences and move on the diplomatic front to resolve a possible conflict. However, the exception to these measures noted in paragraph 127 above should be borne in mind.

In addition to low levels of readiness, limiting the sustainability of armed forces can also contribute to demonstrating defensiveness. The key here would be the mutual curtailment of the forward-deployed logistics base as well as the mobility of combat support operations. Deploying fuel and ammunition dumps in the rear is one way to convey defensive intentions. If the ability to bring supplies rapidly forward is limited as well, then the very capability for conducting military operations at a distance will have been curtailed. Agreements to this effect will, therefore, strengthen defensive over offensive capabilities.

Arms limitation agreements that cover these three areas of conventional forces could help to strengthen the basic defensive orientation of military capabilities. Although the agreements would not in and of themselves guarantee the absence of an ability to conduct offensive operations, they would make such operations both more difficult and less likely to succeed. As a result, the inclination to use

military force offensively will have been reduced, and mutual confidence in the basic defensive nature of respective intentions will have increased. Of course, mutual confidence requires an assurance that agreements, once negotiated, will be complied with. This is why adequate and effective verification of agreements plays a crucial part in the promotion of "defensive security".

Verification of Compliance

States have long recognised that the effectiveness of arms limitation and disarmament agreements depends on the inclusion of an adequate and effective verification regime. Only if parties to an agreement are confident that the other parties will comply with its terms will the agreement have its intended effect. Verification of compliance therefore forms an essential element in the promotion of "defensive security".

In 1988, the United Nations Disarmament Commission agreed to a set of 16 principles of verification to be used as guidelines in the negotiation of arms limitation and disarmament agreements. The principles, which were endorsed by the General Assembly in its resolution 43/81 B, are as follows:

"(1) Adequate and effective verification is an essential element of all arms limitation and disarmament agreements."

"(2) Verification is not an aim in itself, but an essential element in the process of achieving arms limitation and disarmament agreements."

"(3) Verification should promote the implementation of arms limitation and disarmament measures, build confidence among States and ensure that agreements are being observed by all parties."

"(4) Adequate and effective verification requires employment of different techniques, such as national technical means, international technical means and international procedures, including on-site inspections."

"(5) Verification in the arms limitation and disarmament process will benefit from greater openness."

"(6) Arms limitation and disarmament agreements should include explicit provisions whereby each party undertakes not to interfere with the agreed methods, procedures and techniques of verification, when these are operating in a manner consistent

with the provisions of the agreement and generally recognised principles of international law."

"(7) Arms limitation and disarmament agreements should include explicit provisions whereby each party undertakes not to use deliberate concealment measures which impede verification of compliance with the agreement."

"(8) To assess the continuing adequacy and effectiveness of the verification system, an arms limitation and disarmament agreement should provide for procedures and mechanisms for review and evaluation. Where possible, time-frames for such reviews should be agreed in order to facilitate this assessment."

"(9) Verification arrangements should be addressed at the outset and at every stage of negotiations on specific arms limitation and disarmament agreements."

"(10) All States have equal rights to participate in the process of international verification agreements to which they are parties."

"(11) Adequate and effective verification arrangements must be capable of providing, in a timely fashion, clear and convincing evidence of compliance or non-compliance. Continued confirmation of compliance is an essential ingredient to building and maintaining confidence among the parties."

"(12) Determinations about the adequacy, effectiveness and acceptability of specific methods and arrangements intended to verify compliance with the provisions of an arms limitation and disarmament agreement can only be made within the context of that agreement."

"(13) Verification of compliance with the obligations imposed by an arms limitation and disarmament agreement is an activity conducted by the parties to an arms limitation and disarmament agreement or by an organisation at the request and with the explicit consent of the parties, and is an expression of the sovereign right of States to enter into such arrangements."

"(14) Requests for inspections or information in accordance with the provisions of an arms limitation and disarmament agreement should be considered as a normal component of the verification process. Such requests should be used only for the purpose of determining compliance, care being taken to avoid abuses."

"(15) Verification arrangements should be implemented without discrimination, and, in accomplishing their purpose, avoid unduly interfering with the internal affairs of State parties or other States, or jeopardising their economic, technological and social. development."

"(16) To be adequate and effective, a verification regime for an agreement must cover all relevant weapon, facilities, locations, installations and activities."

Verification regimes have a variety of different functions. The report of the Secretary-General on the role of the United Nations in the field of verification listed five specific functions of verification: assessing implementation, generating confidence, dealing with uncertainties, discouraging non-compliance, and providing timely warning.

The primary function of verification is to assess the day-to-day implementation of the provisions of arms limitation and disarmament agreements. States must have the ability through national, regional, international or cooperative means to assess the actions of all States parties in implementing the terms of the accord. The specific means for doing so will vary according to the nature of the agreement.

Another verification function is to build confidence among the parties that the terms of the agreement are being fully complied with, and this should be achieved without prejudice to the national interests of the parties involved. The two factors contributing to confidence-building are the provision of information regarding all matters that are the subject of the agreement and the ability of States to demonstrate that this information is complete and correct. For both these reasons, openness in the verification process is necessary, which explains why recent arms limitation and disarmament agreements have included provisions prohibiting concealment measures that may impede verification and permitted monitoring through national and international means. The resultant transparency concerning activities and matters relative to an agreement helps to build confidence that agreements are, and in the future will continue to be, adhered to.

Equally important is the function of providing procedures for dealing with uncertainties and false alarms associated with implementation and compliance. These procedures are necessary since no agreement can fully anticipate every possible future eventuality relating to its subject-matter. An open and cooperative verification regime can prevent the potentially adverse impact of such uncertainties and false alarms.

Provisions for data exchanges, greater transparency through enhanced verification measures and a wide range of cooperative arrangements, including periodic review conferences, consultative procedures, and emergency meetings, are all useful for dealing with potential uncertainties.

Agreed verification provisions can create confidence in compliance by discouraging non-compliance. A well-designed verification regime will ensure early detection and produce clear evidence of non-compliant behaviour. By raising the financial, opportunity and political costs of non-compliant behaviour, adequate and effective verification provisions are likely to dissuade a party from engaging in such behaviour. It is important to stress however that a balance must be struck between the measures needed to discourage non-compliance and those necessary to carry out the provisions of an agreement without producing an excessive number of false alarms.

This latter function is very closely related to that of providing timely warning of potential compliance problems. In such cases, other States parties can consult, make representations to those contemplating prohibited activities and clarify the benefits of continuing to adhere to the agreement in question. A greater degree of intrusiveness will provide more timely access to facilities and areas of greatest concern. Properly devised challenge inspections can be particularly helpful in this regard.

The methods of verification can be grouped into two categories: national technical means (NTM) and cooperative measures. NTM are devices under the control of a State that can be used for monitoring at a distance compliance with agreements. They include observation satellites, aircraft-based systems such as radars and cameras, as well as sea- and ground-based systems. All States rely to a certain extent on NTM to verify compliance with agreements, although the technical means differ from State to State.

Cooperative measures have become increasingly useful as arms limitation and disarmament agreements have expanded in scope. They include designing weapons systems and their deployment modes in ways that simplify verification; permitting aircraft overflights to observe military-related installations and activities; pre-notifying certain weapons tests to allow others to monitor them more effectively; conducting joint verification experiments to assist monitoring efforts; arranging for foreign representatives to observe or inspect, with an appropriate degree of intrusiveness and timeliness, installations or activities; and

non-interference with NTM. The exchange of information on those items affected by the agreement also forms a critical part of cooperative verification arrangements.

Many of the agreements concluded in recent years include most, if not all, of these cooperative measures. For example, under the START Treaty, heavy bombers carrying cruise missiles are designed in a way that differentiate them from those that do not, while mobile missiles are deployed in designated areas. Under the CFE Treaty, certain types of helicopters and aircraft can be recategorised or reclassified and some tanks and armoured combat vehicles may be converted, but this must be done in a way that renders them observably different from those systems that are limited. The Open Skies Treaty provides for the right to conduct overflights over the territory of the signatory' States. Overflights are also included in the Vienna Document and form part of the Sinai Separation-of-Forces agreements. Joint verification experiments have been conducted by the United States and the Soviet Union in connection with strategic nuclear and chemical weapons arms limitation agreements. Finally, on-site inspections have in recent years become a notable element of arms limitation and disarmament agreements. The IAEA safeguards agreements, the Vienna Document, and the INF, CFE and START Treaties all include provision for a number of routine and special inspections. A most noteworthy on-site inspection regime is the one that governs the Argentinian-Brazilian nuclear agreement, which provides for a common system for accountability and control of all nuclear installations and facilities.

In the past, it has at times bee proven difficult to persuade States to endorse an adequate and effective verification regime that fulfils these functions effectively. Particularly among States in which mistrust runs high, the intrusive and open nature required by a verification regime that is capable of accomplishing its functions has often been judged as posing too great a risk to their national security interests. In such a situation, there is an important role to be performed by a third party that is recognised by all parties to be genuinely impartial. Even if States might not trust their potential opponents in conducting intrusive inspections, for example, they might have sufficient confidence in an impartial third party to perform these tasks. Over time, as confidence is built among the parties to the agreement, the verification tasks could then be undertaken by the States parties themselves.

The experience of the Sinai agreements of the 1970s demonstrates the effectiveness of third party involvement in verification. In all these

agreements, the role of the United Nations as well as of the United States, proved to be crucial to forging agreement between Egypt and Israel in implementing the provisions of the accords. Both the countries regarded the United Nations and the United States as sufficiently impartial to perform the verification tasks that were essential to the effective implementation of the agreements. Over time, as confidence was built between the two parties, the role of, first the United Nations, and later the United States, in verifying agreed provisions was reduced. In the end, verification was largely performed by Egypt and Israel themselves.

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SUFFICIENT DEFENCE AND ARMS REDUCTIONS

DEFENSIVE SUFFICIENCY AND MILITARY REALITY

As the Super-Powers and their allies seek conventional arms control formulas which will provide for adequate security and stability, defensive strategies acquire increasing prominence as the model to which many believe both sides should subscribe. Defensive strategies, it is argued, provide stability at lower levels of armament and help build confidence that military force will not be used in time of crisis.

Defence Strategies and the European Alliances

Defensive strategies are, of course, nothing new. The declaratory strategy of the North Atlantic Treaty Organisation (NATO) has been defensive since the organisation's founding. The Alliance's politico-military doctrine, force structure, planning and training have been strongly defensive in their orientation—to the point, on occasion, of eschewing even legitimately defensive plans when such plans posed a risk of being misconstrued as offensive in character. Indeed, the Alliance's force structure has never reached the levels which NATO political and military authorities felt necessary to provide a reliable conventional defence against the much larger forces of the Warsaw Treaty Organisation (WTO) facing them. Thus, for NATO forces, "defensive sufficiency" (to borrow the Soviet term) has always represented a ceiling on the Alliance's military capability—a goal perennially sought, never achieved, but not to be exceeded in any event.

For the Soviet Union and its allies, however, the situation has been quite different. Their announced shift to a defensive military doctrine marked a major departure from the offensively oriented approach which has characterised their doctrine during most of the post-war period.

This offensive orientation has been graphically manifested in the WTO's force structure, with its heavy emphasis on the capability to seize and hold an opponent's territory; and in its doctrinal emphasis on pre-emption and surprise, rapid movement, deep penetration, and massive, mobile fire-power to destroy enemy forces early and decisively on their own territory.

Thus, for the Soviet Union a military doctrine founded on the concept of "defensive sufficiency" represents a new direction, with potentially profound ramifications for all areas of Soviet military endeavour. Unlike NATO, the Soviet Union and its allies start from a set of military capabilities substantially in excess of that required for "defensive sufficiency"—a point with which they now appear to agree. Where defensive requirements have represented a ceiling for NATO, they now represent a floor for the WTO, to which its force levels must descend if a reasonable balance with NATO's capabilities is to be reached. In this context, the primary task for conventional arms control over the next several years will be to manage the reduction of WTO capabilities to a level of genuinely defensive sufficiency relative to the smaller, defensively oriented NATO force levels, adjusting NATO forces as necessary to ensure a genuine balance of capabilities.

What is "Defensive Sufficiency" in Soviet Terms?

For these reasons, the ongoing efforts of the Soviet political and military leadership to breathe substance into the concept of defensive sufficiency are of keen interest to those who see in evolving Soviet attitudes toward military power the possibility of a new era of stability and substantially reduced armaments in the centre of Europe.

Thus, far, however, "defensive sufficiency" has been more of a slogan than a guide to action—a phrase suggesting what may be an important change in Soviet outlook, but lacking the detailed elaboration which would allow both Soviet planners and non-Soviet observers to understand the specific military capabilities which the Soviet leadership believe are required for its realisation. In public forums, Soviet Defence Minister Yazov has been the concept's chief elaborator, describing "defensive sufficiency" variously as "non-offensive defence", "reasonable sufficiency", and as the stepping-stone to " a new model of security ". In Yazov's discussions, the term is sometimes used interchangeably with "dependable defence".

In a more recent elaboration, General Yazov seemed to read into the concept a somewhat higher level of military requirement than in

previous discussions, suggesting that the concept of "defensive sufficiency" is dynamic and may be the subject of continuing debate within the Soviet hierarchy. After acknowledging the importance of arms control in today's environment, Yazov pointedly noted that the Soviet leadership, none the less, "has no right to forget 1941", or to allow a repetition of that year's events. "All of this requires", he concluded, "that we have *not only a sufficient but an unconditionally dependable defence...*"

At the same time Yazov chose to contrast the purportedly defensive character of the new Warsaw Treaty doctrine with that of NATO, which he criticised for "preserving, as before, adherence to a policy of force". This inappropriate caricature suggests that *glasnost* has its limits when it comes to Soviet discussion of the two alliances' military doctrines. While this raises no insuperable obstacles to pursuit of the conventional arms control goals which both sides claim to seek, it does raise some question about Soviet sincerity and injects unnecessary friction into what are otherwise improving alliance-to-alliance relationships.

In summary, it is clear that what the Soviet Union calls the "social-political" side of Soviet military doctrine is in a process of change. That portion, the province of the country's highest political authorities, sets the broad strategic context for the military-technical portion of the doctrine, which is developed by the senior military authorities and defines in detail how the Soviet armed forces will be organised, trained, equipped and used in war. What the Soviet officials have exposed to us publicly so far has been mainly the social-political side of military doctrine. As a result, the discussions of defensive sufficiency and its variant formulations have told us relatively little about how Soviet military capabilities will, in fact, evolve. There are indications that the Soviet officials themselves are having difficulty infusing specific technical content into the rhetoric that has been used to characterise the new Soviet military doctrine, and are encountering problems in defining "sufficiency" in ways that provide a clear guide to the military officers who must translate the social-political doctrine into its military-technical derivative.

At the same time, the general statements about prospective unilateral force reductions made by Soviet leaders—most prominently General Secretary Gorbachev in his December 1988 speech at the United Nations—add little to our understanding of Soviet intentions in the absence of much more specific detail concerning equipment to be retired, proposed force realignments, military deployment areas, and the planned

rate of modernisation of Soviet conventional forces. Western observers have already encountered difficulty in matching Soviet promises with the force reductions and realignments visible on the ground.

Details of the military-technical doctrine are thus essential if we are to understand where the Soviet Union is heading with its military force structure—which is still heavily offensive in capability. Indeed, it should be noted that a major offensive capability is not necessarily inconsistent with the particular type of defensive doctrine that the Soviet officials have discussed, which relies on a massive counter-offensive to drive enemy forces from Soviet and Warsaw Treaty territory following three to four weeks of strategic withdrawal. Thus, even in an era of defensive sufficiency, the Soviet military can argue that it will continue to require substantial quantities of the types of forces that are typically associated with major offensive operations. How much offensive capability is necessary to meet its demanding criterion of a "reasonable, sufficient, and unconditionally dependable defence" remains to be seen. This is the issue with which Soviet officials will have to come to grips as they elaborate the military-technical aspects of their defensive doctrine, and which the authorities of both the NATO and the Warsaw Treaty nations will have to ponder carefully, as they seek formulas which will provide for secure and stable arms control relationships between the two alliances.

The development of a genuinely defensive Soviet military-technical doctrine, if it comes to fruition, will be a lengthy process—as Soviet officials have indicated. In the mean time, we can find many clues to Soviet thinking in the proposals the Soviet Union has made at the negotiations on conventional armed forces in Europe (CFE), and in its internal discussions concerning force structure and quality. The remainder of this article seeks to evaluate a selected few Soviet CFE position in the light of their declared doctrinal shift to defensive sufficiency.

Defensive Sufficiency and Numerical Parity

It is difficult to say definitely whether Soviet positions in the CFE negotiations thus far have been based on detailed military-technical analysis or have been primarily driven by the social-political doctrine being espoused by the top military and Party leadership. One thing is certain, however: Soviet CFE positions represent a major shift away from past Soviet policy regarding the conventional military balance in Europe.

The most obvious element of this radical change is Soviet willingness to accept the principle of numerical parity (at levels slightly below current NATO levels) between Warsaw Treaty and NATO forces in terms of major conventional weapons systems. While the precedent of Soviet acceptance of highly asymmetrical reductions was established in the United States-USSR Treaty on the elimination of their intermediate- and shorter-range missiles (INF Treaty), nothing about that agreement was in fundamental conflict with previously established Soviet military doctrine rather, it was fully consistent with Soviet efforts to reduce the likelihood of the use of nuclear weapons, especially those capable of striking the Soviet homeland, in a European war.

This is not true in the case of CFE. Soviet conventional military planning has always emphasised the necessity of favourable force ratios to guarantee the successful conduct of offensive operations, such operations being viewed as the primary means of achieving the military-political objective of destroying the enemy's armed forces on his own territory. Soviet doctrine has, thus, emphasised the need for numerical superiority over the USSR's potential opponents to ensure the proper correlation of forces in the event of war. Current Soviet force structure and today's quantitative military balance in Europe reflect this emphasis to a high degree. Thus, Soviet acceptance of numerical parity in Europe seems to reflect a true change in the USSR's view of the necessity of quantitative superiority for achieving its objectives in the event of a war in Europe.

Such a change might well indicate that it no longer sees the necessity for conducting large-scale offensive operations to ensure Soviet security, and then again, it might not. Acceptance of numerical parity does not necessarily mean the Soviet military has rejected offensive action as the *sine qua non* of Soviet military operations. Rather, it could indicate a Soviet belief that factors other than numerical superiority will determine the success of both offensive and defensive military operations in the future, and that the Soviet military intends to focus its available and potentially *perestroika-constrained* resources on those determinants of the correlation of forces, rather than on numerical superiority.

Though this would be quite consistent with Soviet articulation of defensive sufficiency, the available evidence regarding this is ambiguous, and it is not clear to what degree the Soviet military would feel compelled to retain a very significant offensive capability under an essentially defensive doctrine. Soviet CFE positions provide some clue, however.

On the one hand, there is no doubt that the establishment of numerical parity at levels 10-15 per cent below NATO's current force size would make the conduct of a successful large-scale Warsaw Treaty attack on NATO more difficult, as it is traditionally conceived. The cuts in NATO forces are not deep enough to render a coherent NATO defence across the front impossible, while the cuts in Warsaw Treaty forces would make the achievement of significant ground-force numerical superiority along sections of that front far more difficult and risky than it is today.

On the other hand, there is evidence that the Soviet Union and its allies have concluded that emerging conventional weapos Technologies will change the nature of warfare on the battlefield of tomorrow in two operationally significant ways, and that they must take those changes into account in Crafting a conventional arms control regime.

First, they see the combined increases in target acquisition, weapons range and accuracy, and destructive power of new conventional arms as permitting the concentration of fire-power against the enemy without the concentration of ground forces. Such a development would permit one to create a breakthrough in the enemy's defensive positions through the shock effect of massive "fire strikes", without the need to achieve ground-force ratios of 3-1 or greater, thus obviating the requirement for numerical superiority for successful offensive action. Secondly, they see the potential that these same types of weapons might be used by a defender to seize the initiative from the attacker by effectively striking the attacker's forces throughout his depth, thus, blurring the distinction between offensive and defensive action. This potential was summed up by a Polish Army Colonel:

> "Now the defender, being able to reach the enemy at distant pre-battle positions, on arch routes, and in assembly areas, does not have to only wait for the blow, for the strike. He himself can make the decision about the beginning of the battle. The choice of time of the encounter has ceased to be an exclusive attribute of the attacker."

The implication of this development could be that forces designed primarily for offensive action—as it is now conceived—will be ill-suited for use in future wars. Such forces could prove too vulnerable to attack by the emerging conventional weapons technologies, and insufficiently flexible for a future battlefield marked by rapid and recurring transitions between offensive and defensive operations. One team of analysts believes the Soviet Union concluded this in the early 1980s, and had started to act on that conclusion before the CFE process began:

"What is certain is that a major restructuring of the Soviet armed forces was stated to occur even before Gorbachev's announcement of unilateral reductions; that the restructuring and its doctrinal origins predate Gorbachev by several years; that the restructuring rests on considerable military-scientific analysis of the impact of new conventional technologies and the consequent need for better balance between offense and defense; and that the latter military-technical appreciation of the need for greater balance between offense and defense provides the military a convenient cover for generally supporting the 'political measures' that are producing a non-threatening Soviet image." Thus, it is possible that the Soviet military's acceptance of numerical parity between NATO and the WTO is indicative of a change in its perception of the nature of a future war in Europe rather than a fundamental change in how it views its military objectives in such a war.

There is, yet, a third possibility. Soviet plannners may have concluded that future changes in the nature of conventional war will render their traditional military objective of destroying their enemy's military forces on his own territory both unnecessary and unrelated to numerical superiority.

One thing is certain: Soviet acceptance of numerical parity in the CFE negotiations does not by itself constitute proof that the Soviet military has rejected the offensive as "the basic type of combat actions of troops". Thus, Soviet adoption of a version of defensive sufficiency which actually rejects the need for substantial offensive capabilities may or may not be indicated by willingness to reduce Warsaw Treaty forces asymmetrically to numerical parity with those of NATO. Other Soviet CFE Position need to be examined for supporting clues.

Defensive Sufficiency and Specific Weapons Ceilings

The Soviet positions regarding ceilings on specific types of conventional weapons are generally very close to NATO's own proposals, but there are also some significant differences that may shed light on Soviet concerns relevant to the questions of what constitutes defensive sufficiency.

The two sides have agreed on ceilings of 20,000 tanks and 28,000 armoured troop carriers within the Atlantic-to-the-Urals zone, with only minor differences in definitions of these weapons types. These two weapons systems are the basic building-blocks of modern mechanised armies and constitute the primary mechanisms by which

one seizes and holds territory. NATO properly views the WTO's current quantitative superiority in these two categories as reflecting both offensive capability and intent. Soviet officials' agreement to NATO's proposed levels would seem to indicate that they too view the WTO's numerical advantage as representing capabilities over and above their national security requirements.

Artillery, however, is a different story. NATO's proposed Atlantic-to-the-Urals limit of 16,500 artillery pieces of 100 mm or larger has been met by a Warsaw Treaty counter-proposal of 24,000 artillery pieces of 50 mm or larger. Thus, the WTO has proposed an artillery ceiling 50 per cent higher than NATO's proposal and has defined artillery more expansively.

The differences in definition may constitute the sole source of the differences in proposed ceilings. The Soviet Union may see no need for having more than 16,500 Warsaw Treaty artillery pieces larger than 100 mm, in which case this difference should be relatively easy to resolve and the implications for defensive sufficiency may be nil.

The definitional difference may not be the reason for the differences in proposed ceilings, however. The Soviet negotiators may want to have a higher artillery ceiling for reasons related, at least in part, to their view of what is doctrinally necessary. Their definition of "artillery" may be designed to bring NATO's inventory up to a level that would require some reduction to their proposed ceiling, while allowing them to fill out their entire proposed 24,000 artillery inventory with weapons of 100 mm or larger.

The data exchanged by the two sides in Vienna make clear that this is a real possibility. NATO's artillery data state that the WTO has 57,060 artillery pieces over 100 mm to NATO's 19,458, a figure far below the WTO's proposed ceiling of 24,000. The Warsaw Treaty data state that NATO has 43,400 artillery pieces over 50 mm to the WTO's 71,560.

What are the doctrinal implications of a Soviet desire for a higher ceiling that could permit the WTO a considerable numerical advantage in heavy artillery? The answer might be related to the Soviet view of the utility of concentrated fire-power as a potential substitute for numerical superiority in conducting offensive operations on a future battlefield. James Thomson of the RAND Corporation noted this possibility in reference to the unilateral reductions General Secretary Gorbachev announced at the United Nations in December 1988:

"It is noteworthy that the Soviets have not indicated specific numbers of artillery pieces from Eastern Europe, as they have for tanks. Of course, several hundred artillery pieces are contained in the six tank divisions [to be withdrawn from Eastern Europe]. But, beyond that implied reduction, they have said nothing equivalent to the designation of 5,300 tanks from Eastern Europe . . . *This absence of explicit mention of artillery in the East European reduction suggests the possibility that Soviet military doctrine would still feature a breakthrough strategy that relies on artillery fire to punch holes in NATO's defensive line, which would be exploited by motorised infantry, helicopters, and the remaining tanks.*"

There is evidence that Thomson was correct. In implementing the withdrawal of the 5,300 tanks promised in Gorbachev's speech to the United Nations, the Soviet Union is also restructuring its remaining tank and motorised rifle divisions in Eastern Europe. It is accomplishing this by reducing its tank strength while increasing its heavy artillery and motorised infantry strengths through the conversion of one tank regiment to a motorised infantry regiment in each division. The Soviet Union points to this restructuring as further evidence of its transition to defensive sufficiency, terming the new force structure more "defensive" than its predecessor. NATO should clearly welcome the Soviet tank reductions. But, the Alliance should also carefully consider the future offensive potential of "defensively" restructured Warsaw Treaty forces and, in particular, the role of heavy artillery in those forces, in a European balance marked by numerical parity. In sum, Soviet willingness to accept NATO's proposed artillery ceiling and definition should provide a potential test of the "defensiveness" of "defensive sufficiency".

A fourth category of specific weapons ceiling is of interest in assessing Soviet views of defensive sufficiency: tactical aircraft. The Soviet proposal seeks to place a ceiling of 1,500 on "attack" aircraft of the two sides in the Atlantic-to-the-Urals zone. NATO, in contrast, seeks a ceiling of 5,700 "permanently land-based, combat-capable" aircraft. While there are difficult problems of definition in each side's characterisation of its proposed aircraft ceiling, the meaning of the basic definitional differences is clear, unlike the case of artillery.

Whether the Soviet military views NATO's modern ground-attack aircraft from an offensive or defensive perspective, it sees the same thing: an enemy capability that must be countered if it is to conduct successful operations (offensive or defensive). This is because tactical

aircraft have the potential to perform for NATO the same mission that artillery could perform for the WTO in a European military balance marked by numerical parity, i.e., concentration of fire-power.

By seeking limits on "attack" aircraft while not limiting "defensive" interceptors, the Soviet military is attempting to counter a NATO capability that would pose genuine problems for it were it to adopt a sharply restrictive form of defensive sufficiency as doctrinal guidance. Viewed from a Soviet perspective, NATO aircraft could be used to punch holes in Warsaw Treaty defensive positions to clear the way for exploitation by NATO ground forces. The NATO negotiating position would do little to reduce NATO's multiple-role airpower and could cut the Soviet interceptor force significantly, thus reducing Soviet ability to defend against NATO air attack. The Soviet position is clearly consistent with defensive sufficiency. However, as in the case of numerical parity in general, "consistency" with defensive sufficiency does not mean "indicative" of it. If combined in an agreement with their position on artillery, the Soviet ceiling on "attack" aircraft could serve to reduce significantly NATO's capability to concentrate fire-power on a future battlefield while preserving Warsaw Treaty capability to do so.

Conclusion

This brief discussion of the nature of the Soviet concept of defensive sufficiency in the context of conventional arms reductions perhaps raises more questions than it answers. That is probably due to a number of factors.

First, there is the considerable ambiguity surrounding the meaning of defensive sufficiency itself when one seeks to translate the Soviet declaratory concept into some form of operational military reality. To put it one way, does defensive sufficiency constitute a true shift to an operationally defensive military doctrine designed so that one can prevent an attacker from achieving his military objectives by simply defending one's own territory against occupation? Or does it instead mean that, in the future, defensive operations at the outset of a war would be viewed as an essential preliminary step in a military doctrine still based upon the destruction of the opponent's armed forces through offensive operations subsequently carried forward into his territory? If the latter is the case, is the required military force structure actually distinguishable from that required to initiate offensive operations aimed, from the outset, at seizing and holding NATO territory? It may well

be that this ambiguity exists in Soviet negotiating positions because this question has yet to be resolved between the Soviet civilian leadership (who could plausibly be advocating the first formulation) and the Soviet military leadership (who might arguably prefer the second as the one more compatible with military realities and General Yazov's emphasis on "not only a sufficient but an unconditionally dependable defence").

Secondly, further ambiguity is derived from the nature of modern conventional military forces and operations themselves, that is, they are not necessarily in every case inherently offensive or defensive. This was demonstrated in the October 1973 war, when the Israelis found that Egyptian defensive anti-aircraft missiles became very offensive indeed when carried forward with attacking ground forces. In a broader context, it is worth noting that counter-attacks are an essential element of conducting a defence against a mechanised foe. Yet to conduct such operational counter-attacks in the context of a strategic defensive, one must possess forces capable of powerful, mobile offensive action.

Thus, while a conventional arms control regime can be crafted that significantly improves the stability of the military balance by creating numerical parity at levels sufficient for coherent defence, it may prove very difficult (if not impossible) to devise an agreement that eliminates the potential for offensive action altogether. Thus, it will probably always be possible to find some potential offensive aspect in Soviet CFE negotiating positions, as those positions are virtually bound to preserve some form of offensive capability. The trick is to assess first whether the Soviet position is consistent conceptually with defensive sufficiency, and then to assess as best one can from the available evidence whether it is in fact intended to further defensive sufficiency.

This process will have to be repeated again as the negotiations progress. It is particularly important that non-Soviet observers evaluate not just Soviet negotiating positions in the context of defensive sufficiency, but also the way the Soviet military intends to implement the letter of the agreement as well.

As the Soviet officials come to grips with the problems of defining the military-technical side of defensive sufficiency, we should gain essential insight into the roles which they believe offensive forces and operations will play in a defensively oriented doctrine. We will also gain insight into whether they intend to structure, train, deploy, and operate those forces in ways which will give the West confidence that they no longer possess a significant capability for initiating offensive operations against NATO. In this regard, the interplay between doctrine

and conventional arms control negotiations will be extremely important for the maintenance of peace and security in Europe.

SUFFICIENT DEFENCE AND ARMS CONTROL

For the past few years the Soviet Union has been advocating the concept of defence sufficiency, which implies a self-defence capability supported by military doctrines and strategies that are non-offensive in nature. Defence sufficiency bears close resemblance to the idea of non-offensive defence, which is being proposed in the East-West context by a growing number of Western arms control advocates. Indeed, these advocates have helped to promote the core idea of defence sufficiency in Soviet politico-military thinking. Although the discussions and model-building exercises have been devoted mainly to the East-West problem, the concept itself is hardly Euro-centric. Outside Europe, however, there has been little research on this subject, though the situation is beginning to change.

Because of space limitations and the lack of broad-based research, this article will be tentative, selective and succinct in its treatment of the subject-matter. For convenience, the terms "non-offensive defence" and "sufficient defence" will be used interchangeably, where appropriate.

Concept of Sufficient Defence

"Sufficient defence" or "reasonable sufficiency" (also coined by the Soviet leadership) reflects the Kremlin's new political thinking on the fundamental issues of war and peace. This trend has been visibly under way ever since Mikhail Gorbachev took the helm of affairs. The concept marks an important development, if not something of an emerging watershed, in official Soviet thinking on questions of national and international security.

President Gorbachev appears to be the driving force behind the Soviet support for defence sufficiency, which he has been advocating since the 27th Party Congress, in February 1986. On that occasion, he called for limitations on the military potential of States to levels of *reasonable sufficiency*, suggesting that this should be pursued on a reciprocal basis because the adversary's attitudes and actions would restrict the scope of unilateral measures. By reasonable sufficiency, Gorbachev means that "states would not possess military forces and armaments above the level that is indispensable for an effective defense, and ...that their military forces [would] have a structure that would provide all necessary means for repulsing potential aggression but at

the same time would not permit them to be used for the unfolding of offensive missions".

Gorbachev has advocated a build-down process in Europe, in which "balance would be achieved at each stage on the basis of reasonable sufficiency". He has also discussed the concept with a group of American senators and scientists. To a question raised by Senator Cranston, Gorbachev stated that reasonable sufficiency implied a defensive military doctrine, parity and equal security, as well as "a change of the character of military activities, the pattern of the armed forces, their location, a mandatory reduction in armaments and the armed forces, and strict verification".

In his article "Reality and safeguards for a secure world", Gorbachev clarified that defence sufficiency presupposed "that States' armed forces will be structured in such a way that they are adequate to repel possible aggression but not sufficient for engaging in aggressive action".

Similarly, according to the Soviet Defence Minister Dmitri Yazov, the principle of sufficiency proposed by the Warsaw Treaty Organisation (WTO) envisages reducing the military potential on a mutual basis down to the level where neither side would have forces and means for offensive actions while at the same time ensuring its defence. Yazov believes that while the existing military parity between the alliances is a decisive factor in preventing war, the whole business of maintaining parity through competitive arms buildup could prove dangerously counterproductive. The arms race not only increases the danger of war, but it can also bring it to the limits where even parity would cease to be a factor of military-strategic deterrence.

The idea of non-offensive defence—a close cousin, if not actually a precursor, of defence sufficiency—is not new. It was the subject of inconclusive negotiations aimed at banning weapons systems considered to be "most specifically offensive" or "most efficacious against national defence or most threatening to civilians", held between the major European Powers in the 1930s. Non-offensive defence was also advocated soon after the Second World War in order to forestall the emerging East-West confrontation in Europe, but significant scholarly interest as well as public support for the idea began to gain momentum only in the 1980s.

A growing body of literature on non-offensive defence exists in Western Europe, particularly in the Federal Republic of Germany, though some pioneering work has also occurred in Denmark, where a specialised

research centre was established in the early 1980s. On the whole, this literature is related specifically to the European situation, but the core idea is of universal interest, even if most models are not readily applicable elsewhere.

Anders Boserup, a leading exponent, has defined the concept in its reciprocal context as "both sides having forces that are stronger in defense than those of the opponent when used in an attack" or as both parties having "ample forces for defense and, by implication, insufficient forces for attack". It is also argued that non-offensive defence could be achieved if the side with a strong offensive capability reduced its strength, thus improving the security of its opponent, and increased its defensive strength to the extent necessary to preserve its own security. Advocates maintain that, *inter alia,* a relationship of non-offensive defence between States would strengthen crisis stability by discouraging pre-emption. For similar reasons, it would reduce the risk of escalation. Moreover, if this relationship could be established at lower levels of armaments, military expenditures could be conveniently reduced.

Limits of Defence Sufficiency

Gorbachev's view that there are limits to sufficiency under present conditions of military competition appears to be less restrictive than Yazov's. According to Yazov, the limits of sufficiency are set not by the Soviet Union, but by the actions of the United States and NATO. Thus, nuclear sufficiency is determined by the need to prevent an unpunished nuclear attack in any, even the most unfavourable, situation, while conventional sufficiency envisages a quantity and quality of armed forces and armaments which would be enough to reliably ensure collective defence of the socialist community. Curiously, Yazov emphasises a capability for not simply halting any aggression against the alliance, but also "decisively" repulsing it. Marshal Akhromeyev's reported disclosure of current Soviet strategy also indicates clear limits.

Gorbachev has however shown some initiative. In December 1988, he announced certain unilateral measures, notably a cut-back of armed forces by 500,000 men over a two-year period, despite the problems of readjusting demobilised personnel. In a substantive sense, the announcement is of limited military significance for Europe, but the decision is symbolically important. The unilateral measures for Asia have a more substantive meaning. The 200,000 troops to be withdrawn from Asia represent a higher percentage reduction since Soviet troop deployments are much smaller there than in Europe. The proposed

Soviet cut-back in Asia has reportedly prompted China to contemplate a further unilateral reduction of its armed forces after the considerable cut-backs already witnessed in recent years.

The notion that defence sufficiency is narrowly circumscribed under conditions of military competition has been explicitly challenged by a Soviet analyst, Alexei Arbatov, who aptly observes that the adversary's military potential should not only be regarded as an objective reality for Soviet planning, but also as a process directly influenced by Soviet measures. Arbatov discusses a variety of arms limitation and reduction measures, both nuclear and conventional, and changes in the defence production system which the Soviet Union could consider for unilateral implementation.

Whatever the potential for unilateral acts, it is clear that progress in arms control would greatly facilitate contemplated Soviet moves towards defence sufficiency. Marshal Akhromeyev has indicated that the success of the strategic arms reduction talks (START) and conventional arms negotiations in Vienna would enable the Soviet Union to achieve a 50 per cent reduction of its annual military expenditure by the mid-1990s, compared to the unilateral 14 per cent cut announced last May, to be accomplished over a two-year period.

Defence Sufficiency and European Arms Control

Soviet advocacy of defence sufficiency is not purely rhetorical. A significant manifestation of this is the Soviet scheme for progressive conventional arms control in Europe. The scheme consists of several stages, including the removal of asymmetries in major weapons systems through proportionate reductions in order to restore parity at a substantially lower level of armaments. Beyond the elimination of imbalances, requiring much larger cuts by the Soviet Union itself, the scheme envisages a cut-back by 500,000 men on both sides and proposes further reductions of armed forces and armaments so that those on both sides "would be given a defensive character and their offensive nucleus would be dismantled".

The Soviet approach envisages defence sufficiency as the ultimate objective of the Vienna negotiations that formally commenced in March 1989. The NATO approach remains confined to eliminating quantitative asymmetries in certain weapons categories rather than engaging in any reciprocal scheme which might involve substantial reductions of its armaments or armed forces. NATO has apparently given high priority to eliminating the capability for surprise attack or large-scale offensive

operations. This declared objective contains important elements of non-offensive defence. However, this is not fully reflected in the formula proposed for a conventional arms control agreement. The objective could be pursued through the confidence- and security-building (CSBM) process reinvigorated by the Stockholm Document of 1986, but only to a limited extent. The Soviet proposal for first-stage reductions goes further than NATO's formula. A compromise would help to push progress towards defence sufficiency as the military doctrines and strategies of both sides begin to look superfluous. More attuned to defence sufficiency is the joint proposal by Albrecht von Muller and Andrzej Karkoszka, which seeks greater conventional stability by combining substantial reductions in offensive capabilities with limits on the spatial density of certain weapons systems.

Progress towards defence sufficiency in Europe is a challenging task, which Gorbachev himself has acknowledged, but it is one that could make a significant impact on East-West relations and the future of multilateral arms control. It may prove difficult to translate non-offensive defence into a full-blown reality, but this is hardly a reason for ignoring the idea or failing to explore the limits. Fortunately, European public opinion has become a major factor. Pressures favourable to the idea of defence sufficiency could arise, once the initial ground has been traversed at the Vienna forum.

Defence Sufficiency and Global Arms Control

An effective self-defence capability can take different forms, depending on the adversary's military capability and strategy. The challenges of rapid technological innovation in weaponry are compounded by the problem of determining the adversary's present and future intentions, which defence planners cannot presume to be benign unless his military capability and strategy are unambiguously non-offensive and there is assurance about future scenarios. Without arms control efforts, the problems would remain unmanageable. A secure structure would be virtually impossible to establish.

Outside Europe, defence sufficiency has to be translated into a milieu that could consist of a number of States whose perceptions of threat would have to be addressed on a multilateral basis. The challenges of establishing defence sufficiency on a region-wide basis are reflected in the complex criteria adopted by the Contadora group for reducing and realigning the military potentials of Central American States into a nexus of defensive relationships.

Even in a bilateral context, the differences in size between States could be such that parity would not be a realistic principle. A method of proportionate limitation or reduction on the basis of a ratio provides a conceptual alternative, but it does not offer a simple solution. Security linkages, especially between contiguous regions, could add to the complexity. Thus, defence sufficiency may need to be pursued simultaneously at the bilateral, regional and global levels. There is scope for making independent progress at each level, but significant changes would depend on how well the different levels were interrelated, so that a multifaceted problem would not be approached in a one-dimensional way.

Conditions are evidently more favourable today than in the past for dealing not only with the problem of military confrontation in Europe, but also with the global capabilities of the Super-Powers. As argued elsewhere, the application of non-offensive defence to the global situation is no less important than the effort to reverse the cold war legacy in Europe.

The Soviet concept of comprehensive security contains elements that could extend the scope of defence sufficiency beyond the East-West context onto the wider global plane. The removal of external threats to a region is one aspect. The removal of regional threats to international security and the strengthening of intraregional security are other aspects. Agreements between the extraregional States, on the one hand, and between such States and those within the region, on the other, would have to be buttressed by a United Nations role so that there would be no "power vacuums". The United Nations could help provide an important hedge against any threat to international security, whether intra- or extra-regional in nature. Ensuring the security of vital oil supplies from the Gulf, where a United Nations naval presence could replace foreign military deployments, would be one such instance.

The utility of offensive capabilities could be reduced by fulfilling, even if incrementally, the collective security and arms limitation provisions of the Charter of the United Nations. Of late, the Soviet Union has become strongly supportive of implementing these provisions. For example, the reinvigorating of the Military Staff Committee has been suggested. However, the United States remains deeply reluctant to work through multilateral decision-making mechanisms. So far, it has supported cautious procedural measures that are reflected in the Declaration on the Prevention and Removal of Disputes and Situations Which May Threaten International Peace and Security and on the Role

of the United Nations in This Field, adopted by the General Assembly as resolution 43/51 in December 1988. Although preventive diplomacy is undoubtedly important, the Declaration does not represent any significant progress in this area, nor can it substitute for progress towards the collective security system envisaged by the Charter.

For geographical reasons, there are steps the Soviet Union could take towards removing the threat of military intervention with respect to its Asian neighbours. Demilitarised zones along its border, monitored by the United Nations, could give credibility to its declared intentions of nonintervention. Both regional and international security could be greatly strengthened. Significantly, notions or perceptions of a historical Russian ambition (or drive) towards the Indian Ocean could be laid to rest. Naval deployments in the area by the United States, especially its offensive capabilities under Central Command, would look more intrusive. In exchange for a non-interventionist regime, the Soviet Union could seek security assurances against any foreign military presence in a neighbouring State.

The device of a demilitarised zone could also be extended to cover non-interference, but additional measures would appear necessary. Trade, etc., could be regulated through narrow corridors at designated transit points. However, monitoring non-interference (stopping infiltration by saboteurs, etc.) could be rendered difficult if the terrain, the length of the border and the local population density were unfavourable. If faced with insuperable difficulties, the objective could be limited to non-intervention. A demilitarised zone itself could provide some deterrent against noninterference.

Demilitarised zones need not be wide. With regard to non-intervention, they could serve purely symbolic purposes. With regard to non-interference, a wide zone is unnecessary. Indeed, a narrow belt would make monitoring easier. Such zones could also be applied selectively to areas of particular concern.

In the area of strategic nuclear weapons, the attainment of a non-offensive defence posture is circumscribed by the potential of the weapon for mass destruction and by the fact that should deterrence fail, defence would take the form of retaliation. A retaliatory force can also be used for offensive purposes. Until nuclear disarmament is achieved, the offensive aspects could be reduced through arms control agreements that would provide for not only significant reductions, but also restrictions on nuclear-force modernisation. Proposals by non-offensive defence advocates for containing counterforce capabilities include a

comprehensive nuclear-test-ban treaty and a freeze on the introduction of new strategic nuclear weapons.

Defence Sufficiency and Regional Arms Control

Non-offensive defence arrangements have existed in the Middle East since the Sinai disengagement agreement of 1975 and the Israeli-Egyptian Peace Treaty of 1979. A disengagement regime has also been in force in the Golan Heights since 1974. In South Asia, the Indo-Pakistani talks to end the five-year-old armed conflict in the Siachen Glacier include demilitarisation as part of a possible solution. Central America is another region where the Contadora group's proposals envisage progress towards intraregional defence sufficiency, along with non-offensive defence and confidence-building measures to deal with extraregional threats. The wide-ranging regime includes limitations on offensive armaments, restrictions on foreign military activities and controls on the size of armed forces.

The significant improvements in Soviet-United States and East-West relations should help to focus more attention on regional arms control. The cold war, which shaped the Third World's traditional stance, has virtually disappeared. Developing States have concentrated more on extraregional dimensions and not sufficiently on intraregional aspects, whose significance has been growing.

Non-intervention also needs to be addressed in the context of relations between regional States, especially where significant military imbalances or other problems exist which could give rise to intervention. The applicability of demilitarised zones needs to be explored. No less important is noninterference, which is a fairly widespread issue in the Third World. Some of the difficulties mentioned earlier could make the latter task almost daunting. But, this may not be uniformly the case.

Besides ensuring non-intervention, demilitarised zones could play a useful role in reducing the danger of surprise attack or making large-scale offensive operations more difficult to carry out. A major reason for official Western opposition to WTO proposals for a demilitarised zone in Central Europe has been concern about NATO's lack of geographical depth. Such differences in situation may not pose serious problems elsewhere. If there are other structural impediments, however, demilitarised zones could simply cover geographical points of strategic or tactical importance, to which access would be necessary to conduct offensive operations. Where feasible, such zones could be reinforced

by creating special coterminous economic zones to foster interdependence.

Another approach could be to create force-limitation zones in order to reduce high concentrations of armaments and armed forces, or to remove specific weapons systems that may be considered particularly threatening. Such zones should be extensive enough that any offensive operation would lose the element of surprise. A start could be made with measures that would make monitoring more convenient between countries where distrust is high. For example, military airfields near the border could be demilitarised wholly or partially to reduce the danger of a surprise aerial attack as well as to improve air defence. Photo-reconnaisance by satellite or aircraft would become easier, while on-site verification would be spatially limited. Clearly, specific models would have to be developed which would take account of a region's structural characteristics or the nature of a specific problem.

Demilitarised or force-limitation zones would require extensive verification provisions as well as outside assistance in the case of Third World countries. Outside assistance itself may entail not only the supply of sophisticated monitoring instruments, but perhaps also their operation and maintenance, not to mention satellite surveillance services. Third-party participation would also seem necessary in order to deal expeditiously, impartially and authoritatively with allegations of non-compliance.

The United Nations could play a monitoring-*cum*-arbitral role. An impartial monitoring force would be easier to organise under its auspices. The United Nations involvement would also help to internationalise any established violation, thus creating an additional deterrent against non-compliance. The United Nations has acquired relevant experience both in the Sinai and the Golan Heights. The Sinai disengagement agreement has been successfully in force since 1975.

There is, however, one function that the United Nations is currently incapable of performing on its own. The decade-old French proposal for an international satellite monitoring agency seems to have receded into the background. Any important agreement envisaging a verification role for the United Nations would strengthen the case for reactivating the French proposal. Alternatively, satellite surveillance services could be obtained from the Super-Powers. Indeed, they could also be requested to loan technical personnel and assist in facilitating technology transfers in order to improve the national technical means of parties to an agreement.

The offensive capabilities of regional States could also be contained by supplier restraints on arms and defence-related technology transfers. Competitiveness among suppliers has accentuated the phenomenon of technical assistance. Licensed production has also become more marked. Political conditions are distinctly better today than in the 1970s, when the Super-Powers engaged in abortive talks to control arms transfers. But, significant reciprocal restraints would be much easier to achieve in the context of an arms control process between regional adversaries which would involve limitations on their offensive capabilities. Indeed, reciprocal as well as multilateral restraints among suppliers would become indispensable in such cases since Third World countries depend on outside suppliers for a variety of major weapons.

Unilateral measures are also conceivable in cases where a regional State enjoys distinct advantages in size *vis-a-vis* its neighbour or possesses armed forces that have grown disproportionately large as far as its defence requirements are concerned. Changes in priorities and perceptions could open up avenues for unilateral measures, as demonstrated to some extent by the Soviet Union. In the Third World, China and Indonesia have in recent years reduced their armed forces by unilateral acts. China's reductions have been almost phenomenal.

In the contemporary world, the fundamental interests of humanity, including ecological protection, could also be safeguarded to some extent by improved laws of armed conflict. The rapid proliferation of missile technology has already added a new dimension to the offensive capabilities of States, especially in the tense areas of the Middle East and South Asia. Until such capabilities are brought under control, at least their effects, in the event of use, could be lessened. For example, a start could be made by concluding bilateral or multilateral non-attack agreements pertaining to potentially dangerous and designated nuclear, chemical and biological facilities, both military and civilian.

CSBMs could play a supplementary role in advancing the idea of non-offensive defence. Or they could simply provide a useful stop-gap arrangement. CSBMs could help to reduce the danger of surprise attack, the accidental outbreak of armed conflict and the use of offensive capabilities for purposes of political intimidation. An incidental effect would be an increase in military transparency, since verification procedures would normally require intrusive inspection in the zone of application. CSBMs would become more important if substantive arms control measures were considered politically premature or technical complexities existed. Europe's decade-old experience with CSBMs should

prove very valuable for the concept's application in Third World regions, especially where the potential for armed conflict exists. CSBMs would seem to be acutely relevant in South Asia, where intraregional naval developments that are causing some growing concern may also have to be addressed.

The existence of territorial disputes, particularly of a significant geopolitical nature, can greatly limit the prospects of defence sufficiency in certain regions. An important region in this respect is South Asia, where India has major territorial disputes with both Pakistan and China. This problem underscores the importance of more efficient mechanisms for the peaceful settlement of disputes. Nevertheless, partial non-offensive defence measures could give credibility to declarations of non-use of force in the settlement of territorial disputes or to claims of non-aggressive intent in general.

Conceptually, defence sufficiency or non-offensive defence does not necessarily envisage disarmament or even significant arms control. But, the core idea can be pursued more effectively at lower levels of armaments. Structurally, the pursuit of defence sufficiency as a full-fledged concept would be less problematic in Europe. The changing situation in Europe, particularly the public opinion factor, could enhance its prospects. In other regions, if the task proves unwieldy, the concept could be pursued through partial measures to reduce threat perceptions.

Finally, the concept of defence sufficiency in Europe is still evolving, in both the Soviet Union and Western Europe. Outside Europe, much pioneering work has to be done before it can be systematically discussed and models developed for possible implementation.

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