

## THE NEED FOR NUCLEAR DISARMAMENT

### 1. THE CASE FOR NUCLEAR DISARMAMENT

*The increasing frequency of war*

»Throughout history men have sought peace but suffered war; all too often deliberate decisions or miscalculations have brought violence and destruction to a world yearning for tranquility. Tragic as the consequences of violence may have been in the past, the issue of peace and war takes on unprecedented urgency when, for the first time in history, two nations have the capacity to destroy mankind. In the nuclear age, as President Eisenhower pointed out two decades ago, there is no longer any alternative to peace«.

This quotation is from a statement entitled »The Imperative of Coexistence« made by US Secretary of State, Henry A. Kissinger, to the US Senate Foreign Relations Committee on 19 September 1974.

»There is no longer any alternative to peace.« If President Eisenhower was anticipating an era of increasingly peaceful relations between nations, he was sorely mistaken. The past two decades have been a period of growing barbarism.

According to Professor Istvan Kende, an eminent Hungarian specialist on war, a total of no less than 97 wars (international and civil) were waged between 1945 and 1969. For comparison, it is of interest that an American scholar, Quincy Wright, has listed 24 wars fought between 1900 and 1941.

War is a notoriously difficult activity to define. Not a single official declaration of war has been made since World War II — such diplomatic niceties would be counterproductive in, for example guerilla strategy — and so we are dependent on the subjective judgement of experts. But in spite of differences in definition the experts agree that wars have become increasingly frequent.

According to Kende, the total duration of the wars in the 25 years up to the end of 1969 — calculated by adding up the length of each war — was nearly 300 years. On average, therefore, each one lasted for nearly three years.

On every single day since 9 September 1945 at least one war was being fought somewhere in the world. The number of persons killed

in these conflicts amounts to tens of millions. And the territories of about 60 countries (in Europe, Asia, Africa and Latin America) were the theatres of war. Shocking though these statistics are, there is as yet no sign of any decrease in the frequency of armed conflicts. On the contrary. In 1974, as many as 14 wars were under way.

Small wonder then that man has become so inured to violence that the majority of recent armed conflicts were scantily reported — or even ignored altogether — by the mass media. How many of us could name the wars now in progress?

Some will not be impressed by these figures. War is, after all, by no means the only cause from which people die prematurely. Do not countless numbers die anyway from famine? And from natural disasters? Is overpopulation not a major cause? Or poverty? Or pollution? Even if war were abolished tomorrow, some will say, only a small minority of the world's population would live three score years and ten. War may be bad, but are not the other killers equally bad? Or worse perhaps?

These arguments contain an element of truth but they miss a crucial point. In Kissinger's words, » . . . for the first time in history, two nations have the capacity to destroy mankind«. Other potential disasters, relatively slow in maturing, could be foreseen and forestalled. But a full-scale nuclear war could, in a flash, destroy human civilization as we know it.

Some may contemplate a nuclear Armageddon with no greater horror than when imagining conditions in a world inhabited by, say, 12 billion people — the predicted population 60 years from now. This is a view with which it is easy to have some sympathy. But, perhaps as a matter of instinct rather than logic, most of us would probably opt for the survival of mankind, whatever the consequences. And it is for this reason that the existence of nuclear weapons — the greatest single threat to mankind's survival — is, or should be, of major concern.

Surprisingly, awareness of the catastrophic destructiveness of nuclear war seems to have become buried so deep in man's consciousness that he has ceased to feel his erstwhile anguish over the ever-present danger that nuclear war could, in an instant, end our lives and our society. Who would have thought, 30 years ago, when the horror of the annihilation of two Japanese cities by the only nuclear weapons then existing was fresh in people's minds, that man could possibly rest easily with thousands of weapons capable of delivering literally tens of thousands of thermonuclear warheads kept on continuous alert? Can we now really believe that these weapons, with their almost incomprehensible destructive power, will never be used? We certainly act as though we do. Will it take the emergence of many new (less »responsible«) nuclear-weapon powers to reactive public concern about the danger of nuclear war? Or must this wait until a limited

nuclear war shocks us into action — assuming, of course, that this limited war will not escalate into a general nuclear war, destroying us all?

### *Nuclear miscalculation*

President Kennedy, alarmed by the dangers inherent in vast nuclear arsenals, warned that the biggest risk of the fullscale use of these weapons of mass destruction did not arise from deliberate intention, but from »miscalculation, madness or accident«. The danger of a general nuclear war — by miscalculation — between the USA and the USSR would probably be at a maximum if the two great powers became involved in a conflict which had begun as a limited nuclear war between States who had acquired their own nuclear forces (a future Middle East war, for example). Because of the catalytic link between a possible future local nuclear war and general war brought on by great power involvement, the spread of nuclear weapons to countries which do not now have them is seen by most as a serious threat to world security.

This realization led the Irish UN delegation to propose a resolution to the General Assembly in 1961 which called for the conclusion of an international agreement under which the nuclear-weapon states would undertake to »refrain from relinquishing control of nuclear weapons and from transmitting the information necessary for their manufacture to States not possessing such weapons« and the non-nuclear-weapon states would undertake »not to manufacture or otherwise acquire control of such weapons — the concept of the non-proliferation of nuclear weapons.«

Ireland is not the only small country to be active in disarmament forums. Canada, Mexico, the Netherlands, Sweden and Yugoslavia, amongst others, have made extremely valuable contributions to the international disarmament debate. Future progress towards disarmament may well depend on the willingness and ability of the smaller powers to apply political and diplomatic pressure to the bigger powers to undertake effective negotiations to this end.

### *The need for nuclear disarmament*

The prevention of the proliferation of nuclear weapons beyond countries already having them is considered, by those interested in disarmament, as very much an interim measure. The ultimate goal is the destruction of all nuclear weapons — namely, nuclear disarmament.

The need for nuclear disarmament is most keenly felt by those who lack confidence in the ability of governments always to manage their power with the wisdom and restraint necessary to avoid nuclear war, particularly in times of severe crisis. The abolition of armed

conflict in a world of sovereign states, each intent on defending its own territory and its perceived »national interests«, is unlikely to be achieved in the foreseeable future. In fact, the increased frequency of war since World War II may be related to the increase in the number of states during this period and to a generally heightened consciousness of sovereignty. Any war may escalate into a general nuclear war — a possibility which cannot be denied. A nuclear war may also be initiated by a political leader when in an irrational mental state, a possibility of the utmost concern to disarmers, or may come about by accident.

If war cannot be abolished, the advocates of nuclear disarmament argue, nuclear weapons must be abolished, because the probability that they will be used, sooner or later, is unacceptably high. Even if this probability is very low in absolute terms, it is still unacceptably high since the consequences of nuclear war would be so catastrophic.

Few are confident that, if nuclear weapons were ever to be used, their use could be kept limited. History shows only too well that countries involved in war do not easily surrender or even back down. If the choice is between surrender and escalation, then escalation it will be. The two World Wars dramatically demonstrated the extraordinary intensity of feeling aroused on both sides when casualties are high and civilian privations great. In such circumstances emotion governs men's actions — reason certainly does not.

The case for nuclear disarmament rests, therefore, on the argument that, in today's world, governments cannot be relied on to behave in such a manner as to guarantee, for the foreseeable future, the non-use of nuclear weapons. And the more nuclear-weapon powers there are, the stronger this argument becomes.

As might be expected, some people deny this. They argue that governments can be relied on always to behave responsibly in a nuclear-armed world. Moreover, they claim that the very possession of nuclear weapons is likely to promote such responsibility, even on the part of governments previously lacking it. But does not history show the dangers of assuming that governments will consistently behave in a responsible way?

The political leaders of the present nuclear-weapon powers seem to believe, not very surprisingly, that their governments will behave with due restraint. But their opposition to the proliferation of nuclear weapons (China is perhaps the odd man out here) implies that they doubt whether other governments will.

The individual must judge the issue for himself according to whether or not he is prepared to gamble the survival of his society on the chance that all of a large number of governments will manage their affairs so rationally and judiciously that nuclear war is avoided and, moreover, that they will continue to do so over a long period.

## 2. DETERRENCE, DISARMAMENT AND ARMS CONTROL

### *Deterrence theory, the rationalization for weapon deployment*

Ever since nuclear weapons were invented, attempts have been made to justify their possession — a familiar state of affairs in military technology. To this end, very elaborate theories of deterrence have been developed by strategists and other intellectuals. And dubious beliefs have evolved about the political and/or military utility of nuclear weapons — the most common one being that these weapons actually prevent war. It is, of course, unprovable that nuclear weapons have ever prevented war but many firmly believe that they did so in the late 1940s and early 1950s. Be this as it may, it is certainly no longer true — nor has it been for a long time now — that the Soviets and the Americans are prevented from fighting each other mainly because of their possession of nuclear weapons.

All theories of nuclear strategy and deterrence based on massive assured destruction contain basic flaws. By their very nature they must. Not only are the theories often based on assumptions that defy common sense and experience — such as, political leaders will always behave rationally, countries will surrender rather than use all their nuclear weapons, adversary countries will negotiate at an early stage of a conflict, and so on — but they are inhumane, immoral, even genocidal and they seriously hamper progress towards disarmament.

Unfortunately, nuclear deterrence has become so ingrained into the thinking of politicians, strategists, military men and the general public, that it has almost become an article of faith. We have, so to speak, learnt to live with nuclear weapons.

Political leaders often subscribe to the theory of nuclear deterrence not necessarily because they believe in its virtue but for reasons of political expediency. Once new weapon systems have been developed, very strong pressures (by no means all military ones) rapidly build up within societies for their extensive deployment. But often there is no obvious strategic justification for this deployment and so one has to be invented. And a convenient rationalization is that the deployment is necessary »to maintain and strengthen deterrence«. In this way, there has been rationalization about large numbers of new types of intercontinental ballistic missiles, nuclear strategic submarines, intercontinental strategic bombers and so on — certainly in the USA and almost certainly in the USSR too (we cannot be sure about the latter because of the lack of public debate there).

It is often said that if one side were weaker in nuclear weaponry it would tempt the other side to exert political pressure and blackmail on the weaker one. But this does not affect the argument for negotiated general nuclear disarmament — which would maintain an equilibrium, and therefore a feeling of security on both sides, throughout the disarmament process.

### *What's good for one is good for all*

The public has become lulled into a false sense of security by those — most often undeniably sincere patriots — extolling the virtue of a balance of nuclear terror as a fine and sensible policy. But the advocates of this theory have become hoist on their own petard.

A »good« policy for one country is likely to be seen by others as »good« also for themselves. If the USA and the USSR are seen to perceive that nuclear deterrence is a workable doctrine then other countries will probably come to believe in it too. In international politics, perceptions are more important than facts.

The dilemma for the nuclear-weapon countries is how to dissuade other countries from acquiring nuclear weapons — which they are very anxious to do and rightly so — without de-emphasizing the importance they attach to their own. The fact is, of course, that the nuclear-weapon states cannot have it both ways. But it appears that the political leaders of these countries are not prepared to declare that, in today's world, nuclear weapons have little or no political or military value. They have probably become too carried away by their own propaganda to be able to do so, even though times have changed.

### *Disarmament versus arms control*

Throughout this century, disarmament and the control of armaments have been more or less permanent features of the foreign policies of the great powers. And since World War II, literally hundreds of international meetings have taken place mainly in an attempt to control the nuclear arms race between the USA and the USSR and then to reduce the number of nuclear weapons in the arsenals of the nuclear-weapon powers. But, in spite of so much talk, virtually no progress has been made towards either of these ends. How can this be explained?

A major reason for a lack of progress towards nuclear disarmament is related to the decision taken by politicians in the early 1960s to abandon attempts at the direct negotiation of general and complete disarmament and to work instead for partial arms control measures. The idea was that, by this method, it would be possible to move towards general disarmament by small steps.

Whereas »disarmament« normally means a quantitative reduction in total numbers of existing weapons by the traditional methods of international negotiation, leading to a multilateral treaty, »arms control« normally refers to negotiated measures leading to the slowing down (and eventual halting) of arms races. In other words, disarmament refers to the elimination of armaments (either specific armaments, such as nuclear ones in the case of nuclear disarmament, or all armaments in the case of general and complete disarmament) and arms control to curbs on acquiring new weapons.

Slow progress seems to be inherent in the arms control approach. Arms control advocates claim that, in a world of security-conscious sovereign states, disarmament can only come about — if at all — as the end product of a lengthy process. The initial stage in this process involves banning weapons of little or no military value (such as biological weapons) and banning weapons from environments of little or no military significance (such as the sea-bed, outer space, Antarctica and so on). This process, so it is said, will establish such a degree of mutual confidence between the powers and so improve the climate of international affairs that, in due course, far-reaching disarmament may be possible.

Confidence-building measures — like arrangements to minimize the risk of »nonprovocative« weapons, the adoption of »nonprovocative« strategies, and so on — and tension-reducing measures — like nuclear-free zones, demilitarized areas, nuclear test bans, nonaggression pacts and so on — are advocated as measures which may facilitate the eventual negotiation of disarmament. And, in the longer term, it is suggested that international peace-keeping institutions can be established, mechanisms for crisis management can be elaborated, verification systems can be worked out, and so on. These, the arms controllers insist, are essential prerequisites for any general disarmament negotiations rather than measures to be incorporated into a disarmament programme or established parallel with the implementation of one.

As might be expected, there is some common ground between the advocates of arms control and those of disarmament (whether nuclear or general). The first phase of a typical disarmament plan would, in fact, include a number of arms control measures. But there is a major difference between the two groups on the question of timing. Apart from the danger of irrational behaviour and accidental nuclear war, disarmers point to the extremely rapid advances taking place in military technology as a reason for urgency. Weapons are being developed and deployed which produce periods of considerable instability in international affairs. It is true that periods of rough parity occur between the strategic nuclear forces of the two great powers, but then new weapons emerge which significantly upset the balance. Sooner or later, a period of instability may occur, for example at a time of severe international tension and also possibly when one or more of the states involved is led by an irresponsible leader. Disarmament advocates see extreme dangers in such a combination of events. They also feel that these dangers will be multiplied by advances in nuclear-weapon technology (such as the improved accuracy of warhead delivery) and, as described above, if many more nuclear-weapon powers emerge.

Although disarmament advocates disagree amongst themselves on the details of the most desirable general and complete disarmament

plan, most agree on the urgent need for nuclear disarmament — usually as part of some comprehensive programme of disarmament. Arms control advocates often argue that disarmers exaggerate the dangers in a nuclear-armed world and, more importantly, they feel that it is politically unrealistic to expect significant disarmament to be achieved in a world organized as ours is today. In their turn, disarmers argue that far-reaching disarmament is a politically realistic objective (although admittedly a difficult one to achieve) in a world of sovereign states because governments could be persuaded to disarm by, for example, the pressure of public opinion. They would then direct their energies towards disarmament instead of diverting their attention to the negotiation of partial arms control measures.

An argument often used against disarmament is that even if weapons were destroyed, knowledge of their production technology would still exist and governments could order their manufacture again at any time. This is true, but the re-establishment of an armaments industry would take time and would be extremely difficult to conceal. The risk that weapons will be used is greatest if they are available for use at a moment's notice in the heat of a crisis. Any delay in the outbreak of war would give more peaceful methods of settling the conflict a chance of success.

#### *The record so far*

The record to date is a dismal one. The only disarmament that has taken place in the past quarter century is the destruction of stockpiles of biological weapons by the USA and possibly also by the USSR. The former has been officially announced, the later not yet. Apart from this, not a single weapon — not even a pistol, let alone an intercontinental ballistic missile — has been destroyed as a result of an international agreement. Instead, vast numbers of weapons — conventional, nuclear and chemical — of a bewildering variety of types have been developed and deployed as fast as technological developments will allow. Furthermore, the international trade in arms has increased alarmingly and even the most sophisticated weapons are now sold in large quantities by the advanced nations, often even before they enter the arsenal of the producing country.

Very little attention has so far been paid to the problem of controlling and reducing conventional armaments or the arms trade, even though the greatest proportion of world military expenditure is used to acquire these weapons. Yet these weapons encourage and add to the violence of local conflicts and the arms trade is one way in which the great powers, as suppliers, become embroiled in regional wars involving client states.



### 3. EXISTING ARMS CONTROL TREATIES

#### *Multilateral treaties*

So far, seven multilateral treaties have been negotiated at the Conference of the Committee on Disarmament in Geneva, the main international forum for disarmament negotiations, and a number of bilateral treaties have been negotiated directly between the USA and the USSR.

The first multilateral arms control treaty was the Antarctic Treaty (1959) which prohibits the militarization of the Antarctic — the area is to be used exclusively for peaceful purposes. The veteran disarmament advocate, Philip Noel-Baker, commented that »while disarming Antarctica, we put 7000 nuclear weapons in Europe. We should have disarmed Europe and put those weapons in Antarctica.« But the Antarctic Treaty was only the first of a series of arms control measures which merely banned weapons from environments in which there is no military interest.

Another treaty of this type is the Outer Space Treaty (1967) which controls military activity in space and prohibits the placing in orbit round the earth of any objects carrying weapons of mass destruction. Who, though, wants to conduct military manoeuvres on the moon or to establish a military base on Venus? And then there is the Sea-Bed Treaty (1971) which rules out the sea-bed for the emplacement of nuclear weapons or any other weapons of mass destruction — an activity which no one has even seriously suggested.

The intention of the Treaty of Tlatelolco (1967), to make Latin America a nuclear-free zone, is a good one. Unfortunately, the two countries in the region most likely to acquire nuclear weapons, Brazil and Argentina, have not fully acceded to the Treaty and are unlikely to do so. In their absence, the Treaty is a dead letter.

Many apologists for the arms control approach regard the Partial Test Ban Treaty (1963) as a singular success. But it has mainly functioned as an antipollution measure and, as such, it can be regarded as the first modern international treaty to control the contamination of our environment.

No one doubts that our environment would now be considerably more contaminated with radioactive material if the USA, the USSR and the UK had continued testing nuclear weapons in the atmosphere and underwater. Although France and China have not stopped conducting nuclear tests in the atmosphere, they have done so much less frequently than did the other three powers. The Treaty may also have prevented India — who has ratified it — from detonating its nuclear explosive device above ground.

After the Treaty, the USSR and the USA continued testing nuclear weapons underground at about the same rate as they had tested nuclear weapons before 1963. The Partial Test Ban has not, therefore,

significantly slowed down the nuclear arms race between the USA and the USSR. If it has had any effect at all, it was to limit the further development of very large thermonuclear weapons — but military interest in these weapons waned some time ago. On the other hand, very substantial progress has been made since 1963 by underground testing in improving the yield-to-weight ratio of nuclear warheads and thus developing, for example, very small nuclear weapons; hardening weapons against anti-ballistic missiles (ABMs); developing multiple independently-targetable reentry vehicles (MIRV) and ABM warheads; and so on. It is, therefore, difficult to claim convincingly that the Partial Test Ban was a significant step towards nuclear disarmament. Nothing short of a comprehensive test ban, prohibiting all nuclear tests, could reasonably be so described.

There is little doubt that public concern over the radioactive contamination of man's environment was the main factor which induced the UK, the USA and the USSR to agree to discontinue tests in the atmosphere, in outer space and underwater. Public opinion had been aroused by a series of dramatic nuclear events prior to 1963, such as the severe radioactive contamination of a boatload of Japanese fishermen by an American thermonuclear explosion in 1954 in the Pacific, and the Soviet atmospheric explosion at Novaya Zemlya in October 1961 of the largest nuclear device ever exploded in the world — a thermonuclear weapon with an explosive power equivalent to that of 58 million tons of TNT. The fact that the force of public opinion overcame the strong objections to a partial test ban on the part of those groups within the nuclear-weapon powers with vested interests in nuclear-weapon testing is an object lesson. It demonstrates that if successfully mobilized again, public opinion could compel reluctant politicians to move towards nuclear disarmament. This may be the best — if not the only — hope of achieving such disarmament.

The other two existing arms control measures are the Non-Proliferation Treaty (1968), and the Biological Weapon Convention (1972) which prohibits the production of biological weapons and stipulates the destruction of biological-weapon stockpiles.

The Non-Proliferation Treaty is undoubtedly a fragile instrument. The Treaty is weak because two nuclear-weapon powers (China and France), and many key states with the technical ability and the nuclear material to acquire nuclear weapons (Argentina, Brazil, Israel, Pakistan and South Africa among them) have not associated themselves with the Treaty. But the most serious weakness is the imbalance between the obligations of, and the benefits for, the nuclear-weapon parties (the USA, the USSR and the UK) and those of, and for, the non-nuclear-weapon parties. The latter states have substantial obligations but have, so far, received very few benefits. Moreover, the nuclear-weapon parties have failed to fulfill the few obligations under the Treaty which they do have. In particular, the obligation to take »effective measures relating to cessation of the nuclear arms

race at an early date and to nuclear disarmament« has clearly not been fulfilled. If the nuclear-weapon parties do not take their obligations seriously, why, say the others, should we?

In May 1975, a conference took place in Geneva to review the operation of the Non-Proliferation Treaty. Not many observers expected the conference to produce dramatic results but very few non-governmental analysts predicted that the results of the conference would be as meagre as they actually turned out to be.

A major disappointment is that the results of the conference are unlikely to accelerate the negotiation of a comprehensive nuclear test-ban — the most urgent single requirement to slow down both the horizontal and vertical proliferation of nuclear weapons. The United States and the USSR were unwilling to commit themselves formally to a reduction in the number of strategic nuclear delivery vehicles in their stockpiles. These powers seemed even to deny the existence of a link between horizontal and vertical proliferation. And they made it clear that they are determined to keep the SALT negotiations totally insulated from the rest of the world community.

Perhaps more seriously in the short term, the nuclear-weapon parties to the treaty (the UK, the US and the USSR) refused to make an unequivocal pledge not to use, or threaten to use, nuclear weapons against non-nuclear-weapon parties. The strength of the opposition of the former powers to such a »no-use« commitment may be surprising in view of the importance attached to the question of security guarantees by many near-nuclear countries. A near-nuclear country is, after all, most likely to base its political decision to acquire nuclear weapons on its perceptions of its security interests. (The failure of Japan to ratify the Treaty is indicative in this context.)

In spite of the fact that many delegates argued that the nuclear safeguards required by the Treaty — to detect diversion of nuclear material from peaceful to military use — should extend to *all* peaceful nuclear activities in all importing states (parties and non-parties), no consensus could be obtained on this issue. Nor was it possible to agree that nuclear assistance should be made available only to states which accept the Treaty safeguards of the International Atomic Energy Agency (IAEA). The IAEA was, however, generally reckoned to be fulfilling its NPT safeguards responsibilities in a very effective manner.

So far as peaceful nuclear explosions were concerned the conference nominated the IAEA as the appropriate international body, referred to in the treaty, through which the potential benefits from peaceful application of nuclear explosions could be made available to any non-nuclear-weapon state. It seems that this service will not be restricted to parties to the treaty.

Ironically, the most positive result of the conference occurred, simply because it was convened. Six states — West Germany, Italy, Belgium, The Netherlands, Luxembourg and the Republic of Korea

hastened their ratification of the treaty so that they could attend. And during the conference three other states (Gambia, Rwanda and Libya) ratified. But more than one third of the states' parties were not present at the conference and this led to an extremely disappointing turnout.

The UK, the US and the USSR are now more likely to pledge not to use, or threaten to use, nuclear weapons against states members of future nuclear-free zones. And many countries are likely to participate in the setting up of strict standards of physical security to prevent the theft of fissionable material. But the responsibility for physical security will remain national rather than international.

The main weakness of the Treaty is that two nuclear weapon states (China and France) and several near-nuclear states (including Argentina, Brazil, India, Israel, Pakistan and South Africa) have not associated themselves with it. The review conference has not increased the likelihood that these states will join the non-proliferation régime. It is, however, true that none of the members of the NPT are likely soon to withdraw from the Treaty.

The most obvious next candidates for multilateral arms control treaties are a chemical-weapon convention and a comprehensive nuclear test ban. Verification is said to be the main stumbling block in the negotiation of both of these measures but experience shows that once the political will to obtain an agreement exists, verification problems are easily dealt with. Such was the experience with, for example, the Biological Convention and the Strategic Arms Limitation agreements between the USA and the USSR.

The real reason for the delay in prohibiting chemical weapons is that they are of much greater military interest than biological weapons. Meanwhile, binary chemical weapons are being developed. These weapons contain chemicals which, although harmless singly, produce poisonous compounds when mixed. Mixing occurs either when the munition is fired or when it impacts. The deployment of binary weapons will make the negotiation of a comprehensive ban on chemical weapons considerably more complicated. And a ban not including binaries would be ineffective. This is a typical example of the way in which technological advances can complicate, as time elapses, the negotiation of arms control and disarmament treaties.

There is also considerable military interest in the further development of nuclear weapons of relatively low explosive yield, particularly for tactical purposes. Therefore, a comprehensive test ban, prohibiting all nuclear-weapons tests, has still not been negotiated, in spite of the legal commitment — made in 1963 by the USA, the USSR and the UK in the Partial Test Ban Treaty — to do so.

### *Bilateral treaties*

The first bilateral arms control agreement between the USA and the USSR established a direct communications link between Washington and Moscow — the »hot line« — and came into force in June 1963 after the events of the 1962 Cuban missile crisis. A second hot line agreement came into force in 1971 to improve the reliability of the link by the use of communications satellites.

The hot line, intended for the exchange of messages in times of emergency, was first used by the two great powers for serious business in the 1967 Middle East War for mutual reassurance of their desire to avoid direct confrontation. Similar uses occurred in 1970, again during a Middle East crisis, and yet again in the 1973 Middle East War.

A rapid communications link between the great powers is undoubtedly of value in clarifying the intentions of the great powers at times of severe crisis and, thus, minimizing the risk of unintended war between these powers.

Other Soviet-American bilateral agreements relate to measures for reducing the risk of outbreak of nuclear war between the two powers (1971); for preventing incidents on and over the high seas (1973); and for preventing nuclear war (1973). The first of these agreements provides for immediate notification in the event of the following; an accidental, unauthorized incident involving the possible detonation of a nuclear weapon; the detection by missile-warning systems of unidentified objects; or signs of interference with these systems.

The most significant provision in the agreement on the prevention of nuclear war is that if, at any time, relations between the USA and the USSR appear to involve the risk of nuclear war between them, then the two powers will immediately enter into consultations with each other and make every effort to avert the risk. The fact that the USA put its forces on nuclear alert during the 1973 Middle East War raises justifiably grave doubts about the effectiveness of this agreement.

In July 1974, the USA and the USSR signed a Treaty on the Limitation of Underground Nuclear Tests, banning the underground testing of nuclear weapons having a yield exceeding that of the explosion of 150 000 tons of TNT (150 kilotons). But this cannot be regarded as a substitute for a complete ban on nuclear-weapon tests. The very high threshold of 150 kilotons is not, in practice, a significant limitation because most American and Soviet tests during the past few years have been less than about 200 kilotons. The Treaty will, therefore, hardly affect the current development of nuclear warheads and the two great powers have given up nothing. There is a commitment to limit the number of underground tests but this is too vague to be meaningful. And the fact that the »limitation« is

to begin only from 31 March 1976 is bound to raise the suspicion that the powers have deliberately left themselves a free hand to test nuclear weapons of any size in the interim. But the most serious objection to the Treaty is that it may indefinitely delay a comprehensive nuclear test ban — a measure most urgently needed to bring the nuclear arms race under some control.

The most familiar bilateral agreements between the USA and the USSR, however, are those that have arisen out of the Strategic Arms Limitation Talks (SALT) between the two powers — these began in 1969 and have been going on ever since. The first SALT agreement (SALT I), which came into force in October 1972, included an ABM Treaty and an Interim Agreement on offensive weapons.

Under the ABM Treaty each of the two powers commits itself to limit ABM systems to the defence of the national capital plus one area where intercontinental ballistic missiles (ICBMs) are deployed. A subsequent Protocol to this Treaty, signed in Moscow in July 1974, eliminates one of these sites so that each power is now limited to the deployment of 100 ABMs (neither have yet deployed this number) at one site — either the national capital or an ICBM complex. The two powers clearly do not have much faith in the effectiveness of present ABM systems but even so they cannot bring themselves to abolish these weapons.

The 1972 Interim Agreement on offensive weapons provides for a freeze, until 1977, of the total number of fixed land-based ICBM launchers and submarine-launched ballistic missile (SLBM) launchers on modern submarines. The actual numbers of SLBM and ICBM launchers allowed to each power are specified in a Protocol to the Agreement.

A major weakness of SALT I is a total lack of any restriction on the improvement of the quality — accuracy, penetrativeness and range — of ballistic missiles and their launchers. The technological arms race is encouraged and even legitimized — better weapons can be substituted for those which become obsolete. Most significant is the lack of control of the number of nuclear warheads each missile can carry. Since SALT I, the number of nuclear warheads deployed by the USA and the USSR has increased, and is increasing, considerably.

The nuclear arms race has moved from one for quantity of strategic nuclear delivery systems (ICBMs, SLBMs and strategic bombers) to a race for quality of these delivery systems (including the number of warheads each can carry). SALT I did not, however, cause this shift — by 1972, it had already occurred.

On 24 November 1974, at their meeting in Vladivostok, President Ford and General Secretary Brezhnev agreed that the SALT negotiators would, from January 1975, work for a new agreement (SALT II) under which each side would be limited to 2400 strategic nuclear delivery systems — a net increase on the present total number de-

ployed. Within this number each side would be further limited to a total of 1320 ICBMs equipped with MIRVs.

Presumably the reason why the limit on MIRVed missiles has been set so high is to make planned deployments possible. These deployments will mean that the strategic arsenals of the two powers will total about 17000 (yes, 17000) independent nuclear warheads on missiles alone, about equally divided between them. Even the most enthusiastic military planner would be hard put to find suitable targets for such an enormous number of nuclear warheads. And — as if this were not enough — there are the several thousand nuclear warheads carried on strategic bombers. The targeting plans of the USA and the USSR must be the classic example of using sledgehammers to crack nuts!

Again, the replacement of existing strategic weapons with improved versions is totally unrestricted by the proposed SALT II agreement — on the contrary, as in SALT I, modernization is encouraged.

What the Ford-Brezhnev accord does, in fact, is not to limit the nuclear arms race but simply to define it. Worst still, the proposed SALT II agreement is to run until 1985. This will almost certainly mean that there will be no actual nuclear disarmament (presumably the main objective of SALT) until the end of the 1980s — unless strong pressures are exerted on the two powers to achieve such disarmament earlier.

### *Misconceptions of the public*

The arms control efforts — multilateral and bilateral — over the past 15 years have failed to produce any nuclear disarmament or even to halt the nuclear arms race between the USA and the USSR. In spite of this, the public has been seriously misled into believing that steady progress is being made in disarmament. The main reason for this mistaken belief is that political leaders habitually make euphoric statements about the value of arms control treaties. Each treaty is signed with much pomp and ceremony, and to the accompaniment of speeches full of high-sounding promises of bigger and better things to come. And the preambles and articles of the treaties usually contain far-reaching commitments to further progress which are rarely, if ever, followed up.

The political leaders, are, of course, aware of the almost universal human desire for a secure and peaceful disarmed world and of the considerable political benefit to be gained from paying lip-service to this desire. But perhaps not surprisingly they, and those involved in negotiating arms control treaties, take on a »professional optimism« which apparently causes them to convince themselves that substantial progress is being made. This may be a psychological necessity for those involved but it also hampers progress towards disarmament.

#### 4. FUTURE ACTION

The SALT agreements and certain other arms control measures may have considerable political importance. In particular, they may have significantly contributed to the improvement of the relations between some states. But they have not produced any actual disarmament, nor have they even brought the nuclear arms race to a halt.

While arms control negotiations have been going on, this arms race has continued virtually unabated. In addition, arms races in other regions of the world have accelerated and new ones have begun. And increased military spending and the international trade in arms have ensured a considerable militarization of the world.

The explosion by India of a nuclear device may indicate the beginning of a new round of nuclear-weapon proliferation. Any state with a significant peaceful nuclear programme could acquire nuclear weapons. At present, there are at least 20 such states. By 1980, there will be more than 30. Few would doubt that a world of many nuclear-weapon powers would be a very dangerous world indeed.

For these reasons, the abolition of nuclear weapons as part of a comprehensive programme of disarmament is essential if nuclear holocaust is to be avoided. The achievement of this objective will not be an easy task but to argue that it is impossible in today's world is not only totally incorrect — it is suicidal.

Time and energy spent on negotiating partial measures are time and energy diverted from negotiating real disarmament. The present state of world armaments is such that in this latter task we have precious little to lose.