

will have to be accepted in any case. We live in an ever more interdependent world and the time has come for an extension of the loyalty to one's nation to a new loyalty, a loyalty to mankind.

Mikhail Gorbachev, whose adoption of a new way of thinking has transformed the world was the first contemporary world leader to realize that a nuclear-weapon-free world is an integral part of stable peace. He suggested the year 2000 as a target date, but this has to be understood to mean the time for agreement on a treaty, rather than for the actual destruction of the weapons, which is bound to take many years.

The main task for the remaining years of this century is to convince world leaders and the general public of the necessity of a treaty to eliminate nuclear weapons, binding all nations. During this period we should also seek the implementation of intermediate steps, such as a comprehensive test-ban; adoption of a no-first-use policy; tightening the safeguard measures of the International Atomic Energy Agency; and strengthening the peace-keeping and peace enforcing powers of the United Nations. An accelerated programme of dismantlement of nuclear warheads and further deep reductions of nuclear arsenals are of course essential steps.

The very first resolution of the UN General Assembly unanimously called for the elimination of atomic weapons. At long last, the UN is in a position to fulfil the functions for which it has been set up, and the time has come to implement Its first resolution; the time has come for a decision to create a nuclear-weapon-free world.

This was produced as a background paper for a book published by the Pugwash Conference called 'A nuclear Weapons free World. Feasible? Desirable?' If you would like to obtain copies of this please contact TUCND.

A NUCLEAR WEAPON FREE WORLD

A DREAM THAT MUST BECOME A REALITY

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Until recently the likelihood of achieving a world without nuclear weapons was very, very small. But now we are living in a different world, and in this new configuration, what was a utopian dream yesterday can be the subject of serious discussions today, and put into practice tomorrow.

It was by a quirk of history that the conception of the atom bomb coincided with the start of the Second World War. The main motivation of the scientists who initiated the atom bomb was that the bomb should not be used. Our argument was that we needed the bomb in order to deter Hitler from using his bomb against us. But as it happens our bombs were used, they were used as soon as they were made, and they were used against civilian populations. The bombs on Hiroshima and Nagasaki have brought the Second World War to a rapid end. But they also had another effect, namely they demonstrated to the Soviet Union the newly-acquired overwhelming power of the United States. From the very beginning nuclear weapons were seen as a major tool in the ideological struggle between the United States and the Soviet Union.

With the end of the Cold War and the collapse of one of the combatants in the world power struggle, a unique opportunity was created for a radical solution to the nuclear weapons issue. But instead the nuclear arsenals are being maintained, albeit at reduced levels. The main reason given for this is that nuclear weapons are needed as a safeguard against the potential threat from new nations acquiring these weapons.

Horizontal proliferation is a real danger, but retention of nuclear weapons as a means of dealing with it is the worst possible answer. At the heart of horizontal proliferation is the perception that nuclear weapons confer power prestige and protection. This motivated the earliest proliferators, France and Britain, and is sustained by the fact that the only five permanent members of the security council, with the right of veto are the five nuclear weapons states. As long as this nuclear cult exists, as long as the belief is sustained that nuclear weapons bestow status, strengths and security, the pressure to join the club will be irresistible.

The main instrument to prevent nuclear proliferation is the Non-Proliferation Treaty. By now 157 states have signed the Treaty, including all five nuclear-weapon states. But the NPT is an

interim arrangement, a step toward nuclear disarmament, as clearly stated in its Preamble. A stable world order must be based on the rule of law, and one cannot imagine an international law that permanently discriminates between nations. If some states are allowed to keep nuclear weapons, because- they claim- they are needed for their security, one cannot deny the acquisition of these weapons to other states.

In the long term there are only two alternatives: allow the possession of nuclear weapons to all states that desire them, or deny them to all states by eliminating these weapons. There can be no doubt the former would lead to a highly dangerous unstable world. The creation of a nuclear-weapon-free world is therefore essential for peace and stability.

A nuclear-weapon free world is also called for on moral grounds. The whole fabric of civilised society is based on moral values, and if these are violated in one important area, how can they be defended in others? Security achieved by the threat of wholesale destruction, possibly genocide, is bound in the long term to erode the ethical basis of civilisation.

Several arguments have been advanced against the idea of a world without nuclear weapons. One is the idea that the genie is out of the bottle and cannot be put back. Nuclear weapons can, of course, not be disinvented, but this does not mean that we have to keep them in perpetuity. It is a hallmark of a civilized society that it can control - by national legislation or international treaties - the undesirable products of science and technology. It is on these grounds that biological weapons have been banned, and a similar ban on chemical weapons has just been agreed to.

Another argument is that nuclear weapons have kept the peace in Europe since 1945. This is a supposition without proof but it has gained credence only by constant repetition. It ignores 125 wars, with over 40 million deaths, in other continents; in Europe too now we have a bloody war. It also ignores the fact that during the past four decades there has been a relentless arms race that has resulted in extremely large nuclear arsenals.

A more serious objection is that a treaty to eliminate nuclear weapons could be violated by a state concealing a clandestine nuclear cache, or by a later "break-out". Considering the enormous destructive potential of these weapons, such action might give the transgressing state vast power. However, this is not an insurmountable obstacle.

Even with the present state of technology, it is possible to design a system of verification that will greatly reduce the chances of undetected violation. This technological verification can be enhanced by "societal verification", that is by calling on the whole community, to report to an international authority any attempted violation of an international treaty. To be effective this would require a clause in the treaty, and indeed the national legislation, to make such reporting a citizens duty.

A recent Pugwash study of such schemes, as well as of methods of enforcing treaties in a nuclear-weapon-free world, concluded that the problems of ensuring the integrity of a treaty to eliminate nuclear weapons is less difficult than is generally believed. The study has shown that more international intervention will be needed, such as control of all fissionable material; and enforced national legislation, such as guaranteed protection of whistle-blowing. Measures like these will constitute infringements on national sovereignty, but limitations on sovereignty