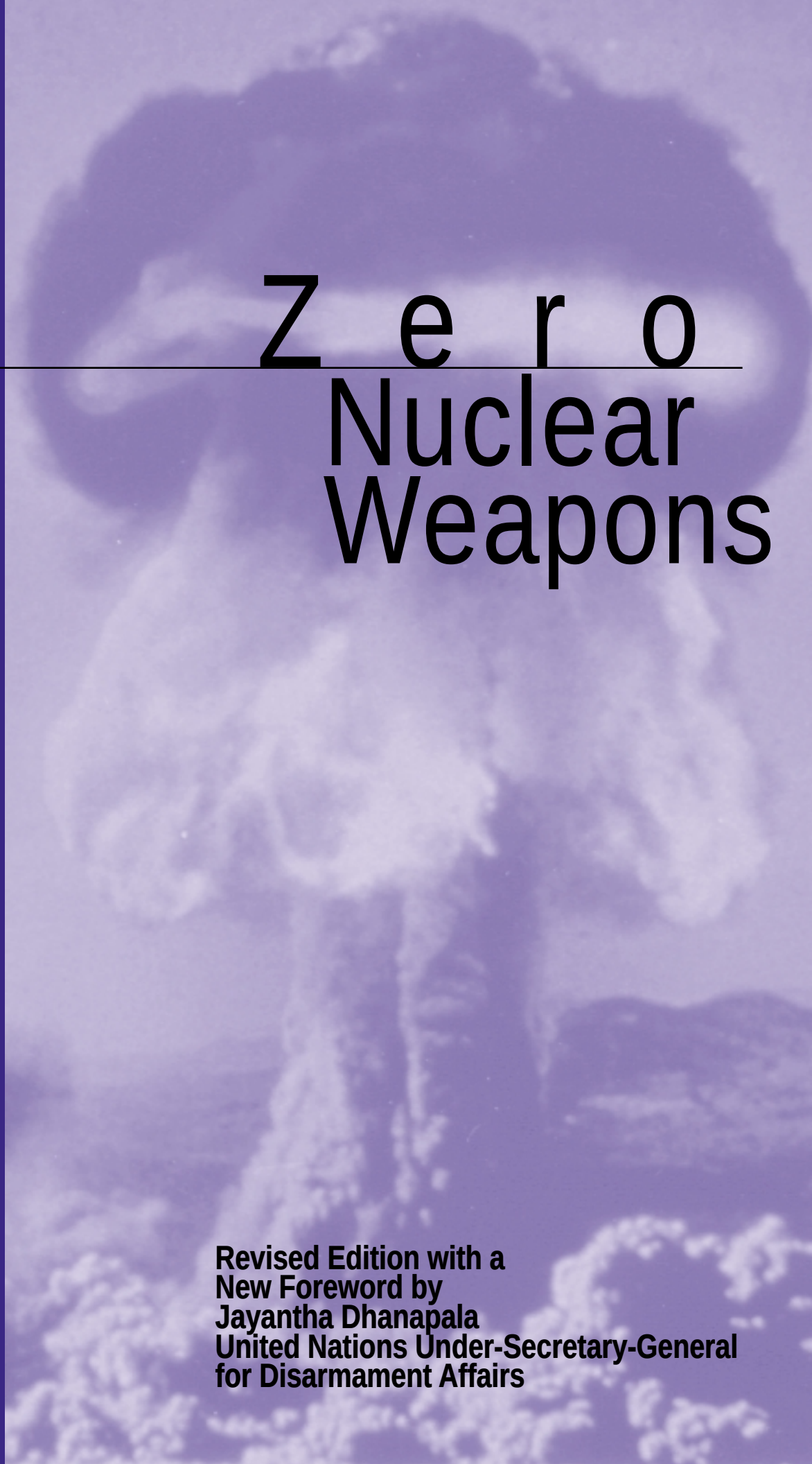
Fast Track to Zero Nuclear Weapons

The Middle Powers Initiative



Revised Edition with a New Foreword by Jayantha Dhanapala United Nations Under-Secretary-General for Disarmament Affairs

MIDDLE POWERS INITIATIVE
TO SUPPORT NEW AGENDA COALITION

19 August 1999

Senator Douglas Roche, O.C.
Chairman
Middle Powers Initiative

Dear Senator Roche,

With the adoption on 4 December 1998, by an overwhelming majority of the UN General Assembly, of the New Agenda Coalition's resolution "Towards a Nuclear Weapon-Free World: The Need for a New Agenda", an urgent message has been sent to the nuclear-weapon States to demonstrate an unequivocal commitment to the speedy and total elimination of their respective nuclear weapons, and without delay to pursue in good faith and bring to a conclusion negotiations leading to the elimination of these weapons. An urgent message was equally sent to the three nuclear-capable States that have not yet acceded to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) to clearly and urgently reverse the pursuit of all nuclear weapons development or deployment and to refrain from any actions which could undermine regional and international peace and security.

We have noted the development of the Middle Powers Initiative, which seeks to stimulate public opinion around the world to encourage the rapid move to a nuclear-weapon-free world. We recognize that the Middle Powers Initiative, co-sponsored by eight major international non-governmental organizations, has a wealth of expertise and experience in the field of nuclear disarmament.

We hope that the Middle Powers Initiative's carefully focused campaign will contribute to the efforts which our governments are pursuing by raising public awareness of the dangers inherent in the present situation, and mobilize public and media support for measures which should be pursued in parallel: by the nuclear-weapon States and the non-nuclear-weapon States, separately and together, with a view to rapid progress towards nuclear disarmament.

We therefore welcome this revised edition of the Briefing Book "Fast Track to Zero Nuclear Weapons", which is a valuable contribution to achieving our common endeavour — speeding the world community towards our ultimate goal, a nuclear weapon-free world.

David Andrews
Minister for Foreign Affairs of Ireland

Anna Lindh
Minister for Foreign Affairs of Sweden

Fast Track to Zero Nuclear Weapons

The Middle Powers Initiative

A Briefing Book

Revised Edition

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published by the Middle Powers Initiative
Cambridge, Massachusetts
USA

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ACKNOWLEDGEMENTS

In this briefing book, the Middle Powers Initiative (MPI) has sought to present in a compelling and digestible manner the problem of nuclear weapons, the solution and the route to the solution. As a new entity which is itself trying to build a bridge between civil society and like-minded states, MPI has designed the briefing book to be of assistance to both government officials and the public. We show here the historical momentum that is advancing the nuclear weapons abolition agenda. The new recognition that nuclear weapons are a threat, not an aid, to human security provides a common imperative for both governments and civil society to act.

MPI is a team effort drawing on the expertise and industry of an International Steering Committee around the world. I am grateful to Robert Green, a former British Naval Commander, author of this briefing book, who was assisted by the Editorial Committee: Kate Dewes, Jonathan Granoff, David Krieger, Alice Slater and Alyn Ware. Thanks are due to the Natural Resources Defense Council and to Westview Press (*Nuclear Weapons: The Road to Zero*, edited by Joseph Rotblat) — two invaluable sources of information used in preparation of this book. I also thank the production team in the offices of International Physicians for the Prevention of Nuclear War, where the MPI Operations Centre is located, headed by Michael Christ and Suzanne Pearce.

Jayantha Dhanapala, United Nations Under-Secretary-General for Disarmament Affairs, has graced our effort with a new Foreword for this revised edition and strengthened us with his support.

I express a special appreciation to our funders: GRACE, the W. Alton Jones Foundation, the Nuclear Age Peace Foundation, the Ploughshares Fund, Roche Securities Ltd., the Rockefeller Foundation, the Samuel Rubin Foundation, the Simons Foundation, the State of the World Forum, and several private donors.

It is our hope that the briefing book will enlarge the activism already shown by leading middle-power governments and informed members of civil society.

Senator Douglas Roche, O.C.
Chairman

ABOUT THE MIDDLE POWERS INITIATIVE

The Middle Powers Initiative (MPI) is a carefully focused campaign established by a network of international citizen organizations to encourage and educate the leaders of the nuclear weapon states to break free from their Cold War mindset, commit themselves to immediate practical steps which reduce nuclear dangers — including a no-first-use policy and de-alerting of all nuclear forces — and commence negotiations required for the elimination of nuclear weapons. MPI is helping to mobilize influential "middle-power" nations to achieve this goal by building the political will to achieve a nuclear weapon-free world. The education programmes of MPI include seminars, publications and consultations with governments, and citizen organizations. Chaired by Senator Douglas Roche, O.C., former Canadian Disarmament Ambassador, an International Steering Committee leads the campaign. The MPI Operations Centre is located in the Cambridge, Massachusetts headquarters of International Physicians for the Prevention of Nuclear War.

Co-Sponsors

International Association of Lawyers Against Nuclear Arms
International Network of Engineers and Scientists for Global Responsibility
International Peace Bureau (Nobel Peace Prize, 1910)
International Physicians for the Prevention of Nuclear War (Nobel Peace Prize, 1985)
Nuclear Age Peace Foundation
Parliamentarians for Global Action
State of the World Forum
Women's International League for Peace and Freedom

In addition, MPI has been endorsed by The Pugwash Conferences on Science and World Affairs — its third Nobel Peace Prize laureate supporter. The prize was awarded to them and their president Sir Joseph Rotblat in 1995.

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FOREWORD

As the world prepares to commence its third millennium, many observers of international affairs are directing their attention both backward and forward in an attempt to understand the full significance of the transition we are all about to enter. This is surely true with respect to those who work on security issues. With respect to the field of nuclear disarmament, it is tempting indeed only to recall the disappointments of recent years and to lose sight of the hopes and responsibilities that lie ahead.

The disappointments are easy enough to identify. A half century after the atomic bombings of World War II, there are still over 30,000 nuclear weapons in the world, including weapons that are still maintained in a high state of readiness. The weapons are supported by recently-reasserted doctrines and by institutional infrastructures whose burdens on public treasuries are matched only by their resistance to change. The standstill in the START process, the deadlock in the Conference on Disarmament, and the eleven announced nuclear explosions in South Asia last year all offer ill omens for the future of both nuclear disarmament and nuclear nonproliferation.

Genuine improvements will not come about automatically — there is no "hidden hand" that will guide mankind inexorably toward a world without nuclear weapons and other weapons of mass destruction. Progress will emerge only as the result of persistent human action — action that will command the respect and reflect the keenest aspirations of all the peoples of the United Nations and influence the political will of governments.

Unfortunately, the process of deliberating global nuclear disarmament is replete with formidable barriers to public participation, including technical complexity, lack of resources, opacity, and other obstacles erected by governments. To overcome such obstacles, groups throughout civil society must cooperate both among themselves and with relevant international organizations. The Middle Powers Initiative stands as a positive model of both types of cooperation.

On 4 December 1998, the UN General Assembly adopted by an overwhelming margin the text of Resolution 53/77 Y, entitled "Towards a Nuclear Weapon Free World: The Need for a New Agenda." This resolution wove together many strands of the global nuclear disarmament agenda into a comprehensive and easily intelligible call for action on behalf of this longstanding goal. The work of the many sponsors of this resolution, combined with the advocacy efforts of the Middle Powers Initiative, are indeed working to keep nuclear disarmament high on the international security agenda.

As the UN Secretary-General has emphasized in his landmark organizational reform initiatives — which included re-establishing the Department for Disarmament Affairs — genuine progress in addressing disarmament and other global issues will require substantial contributions from groups throughout civil society. I am pleased that many of the goals identified by the Middle Powers Initiative have now been endorsed by the General Assembly. I encourage all who are associated with the Middle Powers Initiative never to lose heart even in the face of the difficulties that lie ahead on the road to nuclear disarmament.

I welcome this update of the MPI's briefing book and commend it highly to all readers.

Jayantha Dhanapala
Under-Secretary-General
for Disarmament Affairs

United Nations
June 1999

Nagasaki in ruins in the aftermath of the second atomic bomb used at the end of World War II. Photo taken on 10 August 1945 near the hypocenter, the ground beneath the center of the explosion.
Photo: Yosuke Yamahata, Hiroshima-Nagasaki Publishing Committee.

OVERVIEW

The end of the Cold War provided an unprecedented opportunity to end the nuclear weapon era. This opportunity is now at risk of being lost in the clutter of obstacles thrown up by the nuclear weapon states, whose leaders remain trapped in a Cold War mindset.

This briefing book reviews the deepening nuclear weapon crisis, and explores the role that middle-power governments, supported by civil society, can play in overcoming the obstacles to moving rapidly to a nuclear weapon-free world.

Obstacles

Ten years after the end of the Cold War, the five original nuclear weapon states — the United States (US), Russia, China, France and the United Kingdom (UK) — are modernizing their nuclear arsenals, and maintain 5,000 warheads on hair-trigger alert. NATO, reaffirming that its nuclear weapons are "essential," has retained an option to use them first, expanded eastwards, and used military force in the Balkans without UN Security Council consent. This situation, and severe domestic military, political and economic pressures, have convinced Russia to mirror NATO's nuclear posture.

In 1998, India and Pakistan demonstrated the inherent weakness of a discriminatory non-proliferation regime by becoming overt nuclear weapon states, following the example of the five permanent members of the UN Security Council. Progress on nuclear weapon reduction agreements between the US and Russia has stalled. Constructive proposals by non-nuclear weapon states in the Conference on Disarmament are blocked by the NATO nuclear weapon states and/or India and Pakistan. The Comprehensive Test Ban Treaty is nowhere near entering into force. As a result, the Non-Proliferation Treaty (NPT) is in jeopardy.

Canberra Commissioner General Lee Butler USAF (Ret), recently in charge of all US nuclear planning, has described the situation thus:

> "Options are being lost as urgent questions are unasked, or unanswered; as outmoded routines perpetuate Cold War patterns and thinking; and as a new generation of nuclear actors and aspirants lurch backward toward a chilling world where the principal antagonists could find no better solution to their entangled security fears than Mutual Assured Destruction."

Opportunities

Yet a bridge to a nuclear weapon-free world can still — and must — be built. Alarmed by the deepening crisis, the worldwide movement to eliminate nuclear weapons has been revived and is gaining strength. This combines citizen organizations and individuals (including formerly pro-nuclear advocates), respected authorities and governments.

In July 1996, the International Court of Justice provided a legal imperative by deciding unanimously that nations must conclude negotiations to eliminate all nuclear weapons. Since then, religious leaders from many traditions have declared nuclear weapons immoral. An international group of former generals and admirals has announced that nuclear weapons are "a peril to global peace and security and to the safety and survival of the people we are dedicated to protect." General Butler added that he now condemns nuclear deterrence doctrine as "costly, wrongheaded and dangerous."

In a 1997 report entitled *The Future of U.S. Nuclear Policy*, the prestigious US National Academy of Sciences pointed to the need for a bridge when it concluded that "the potential benefits of a global prohibition of nuclear weapons are so attractive relative to the attendant risks that increased attention is now warranted to studying and fostering the conditions that would have to be met to make prohibition desirable and feasible."

On 9 June 1998, the Foreign Ministers of Brazil, Egypt, Ireland, Mexico, New Zealand, Slovenia, South Africa and Sweden offered such a bridge when they launched a Joint Declaration called "Towards A Nuclear Weapon-Free World: The Need For A New Agenda." Known as the New Agenda Coalition (NAC), they criticized both the nuclear weapon states and the three nuclear weapon-capable states of India, Israel and Pakistan, and called on them all to agree to start work immediately on the practical steps and negotiations required for eliminating their nuclear arsenals.

Though the NAC's inception pre-dated the South Asian nuclear crisis, the timing was excellent. This historic development, bringing together eight courageous "middle-power" governments determined to act for humanity and the planet, posed a serious challenge to the nuclear weapon states which they could not ignore. The NAC — drawn from nearly every continent and independent of the Cold War blocs — represents the overwhelming majority of states which have clearly lost patience with the lack of progress towards a nuclear weapon-free world. More than this, it consists predominantly of states which have forsworn nuclear weapons, have shown leadership on disarmament issues, and have good relations with the nuclear weapon states.

The Joint Declaration embodies a way to move gradually from the current unstable, unsustainable and discriminatory non-proliferation regime to a more secure world free of the threat of nuclear annihilation.

Middle Powers Initiative Priorities

The Middle Powers Initiative (MPI) grew out of an initiative by the Canadian Network for the Abolition of Nuclear Weapons. It is now co-sponsored by eight leading international organizations. The dangers arising from the continued reliance on the threat to use nuclear weapons have stimulated action by numerous professional arms control, non-proliferation, security and disarmament organizations, parliamentarians, individual experts and grassroots/civil society networks such as Abolition 2000, with nearly 1,500 endorsing groups worldwide. Founded in March 1998, MPI saw its initial aim achieved almost a year sooner than it expected by the NAC's independent initiative. Its immediate priority, therefore, became to help mobilize civil society and governments in support of the NAC.

Even in the US and UK, opinion polls show that 87 per cent of those polled want their governments to help negotiate a Nuclear Weapons Convention, like the enforceable global treaty prohibiting chemical weapons. However, their governments have not responded. MPI sees its role as helping to transform this overwhelmimg desire into political movement through a process of education about the deepening nuclear disarmament crisis and practical ways out of it.

As part of this process, a team of lawyers, scientists, engineers and disarmament experts drafted a model Nuclear Weapons Convention to stimulate debate on how realistically to achieve this goal. At the request of Costa Rica, the United Nations circulated the model as a discussion draft. MPI supports this initiative, as well as UN resolutions designed to encourage the nuclear weapon states to commence negotiations on the global elimination of nuclear weapons.

MPI's immediate priorities are:

1) Strengthening Support for the NAC's UN Resolution. The NAC, reduced to seven with the loss of Slovenia following NATO pressure, introduced a resolution in the 1998 UN General Assembly incorporating its agenda. The resolution was adopted by 114 votes to 18 with 38

abstentions. The "No" voters included all the nuclear weapon states except China (which abstained) plus India, Israel and Pakistan. Among the abstainers were US allies Australia and Japan, plus all the non-nuclear NATO states except Turkey, signalling an unprecedented call for rethinking in US-allied states. Avoiding divisive alliances of North or South, the NAC proposals are building support for a practical agenda to preserve and strengthen the non-proliferation regime.

MPI sent delegations to capitals of key NATO and other US-allied states to help change planned "No" votes to abstentions and to encourage nations under pressure from the NATO nuclear states to stand their ground. MPI continues to work with other citizen organizations to broaden and deepen support for the NAC's resolution, which will be re-introduced in the 1999 General Assembly.

2) **Campaigning for Changes to NATO Nuclear Policy.** As the NAC resolution demonstrated, NATO no longer speaks with one voice on the question of nuclear weapons. Because of this, the NATO nuclear states agreed at NATO's Washington Summit in April 1999 to allow a review of its nuclear policy. MPI is working with other citizen organizations, parliamentarians and government officials in non-nuclear NATO states to build support for changes to NATO's nuclear posture. Current NATO doctrine is immoral, dangerous, irresponsible and unlawful in its affirmation of first use and nuclear deterrence theory, with no acknowledgement of its members' obligations under Article VI of the NPT. This issue has ramifications for Japan and Australia, where MPI is also promoting debate.

3) **Ensuring the Survival of the NPT.** Most of the nuclear states are not living up to their nuclear disarmament obligations in the NPT. Many non-nuclear states feel they are being taken for granted, and that the agreements they made for indefinite extension of the NPT in 1995 have not been honoured. MPI considers it a priority to ensure that the NPT survives beyond the 2000 Review Conference as an instrument for true nuclear disarmament. It is therefore working with other citizen organizations to support the NAC's efforts towards this objective. Growing support from governments for the NAC was evident in the 37 co-sponsors of the NAC's statement to the May 1999 preparatory meeting for the NPT 2000 Review.

4) **Facilitating Strategy Consultations.** MPI is developing a role in organizing and facilitating consultations between citizen organizations and governments to advance nuclear disarmament. For example, in February 1999 it co-convened, with the Fourth Freedom Forum, a Strategy Consultation at the Rockefeller Foundation in New York. This brought together officials from the NAC plus several other governments and 37 representatives of organizations to develop and coordinate strategies to promote steps to strengthen the non-proliferation regime in the run up to the 2000 NPT Review Conference.

MPI's campaign is centred around the heart of the issue: the assault on humanity that nuclear weapons represent. Humanity provides our common bond. The NAC deserves and needs the degree of support from governments, the public and media given to the International Campaign to Ban Landmines, which focused on the inhumanity of landmines — and showed what can be achieved by a partnership between governments and civil society. As the World Court reminded us, only nuclear weapons can destroy all civilization and the entire ecosystem of the planet.

Highlighting the need for urgency, MPI plans to raise the visibility of this reality and the indiscriminate cruelty of nuclear weapons. Their continued existence represents humanity's greatest single moral, legal and political challenge.

West German citizens celebrating the fall of the Berlin Wall. Photo: Reuters/ David Brauchli/ Archive Photos.

CHAPTER 1. BACKGROUND: POST-COLD WAR HOPES DENIED

December 1999 marks the tenth anniversary of the fall of the Berlin Wall. With it were swept away the Soviet Union and the Warsaw Pact: the Cold War melted. Suddenly, NATO had no enemy.

Then came the 1990-91 Gulf War, and with it the shock that Iraq was found to have been secretly developing — with crucial Western help — a nuclear weapon capability, despite being a signatory to the Nuclear Non-Proliferation Treaty (see Figure 17). The US government threatened to use nuclear weapons against Iraqi forces if they used chemical or biological weapons, but in fact ruled out nuclear weapon use.[1]

In July 1991, US President George Bush visited the Soviet leader Mikhail Gorbachev in Moscow to sign the first Strategic Arms Reduction Treaty (START I), negotiations for which had begun in 1983. Three weeks later, a failed coup in Moscow raised new doubts about the reliable control of the Soviet nuclear arsenal: for three days the power to launch nuclear weapons passed from Gorbachev to the Defence Minister and Chief of the General Staff.[2]

Because of this, at the end of September 1991, Bush and Gorbachev made coordinated unilateral moves in addition to what had been agreed under START I. First, Bush announced that non-strategic nuclear weapons would be removed from all US surface ships and submarines. In addition, all US Strategic Command bombers plus the strategic missiles destined to be eliminated under START I — 450 silo-based Minuteman IIs, and the missiles of ten Poseidon submarines — were taken off high alert. Gorbachev reciprocated a week later.[3] (The UK followed suit in June 1992 by removing all tactical nuclear weapons from its surface ships and aircraft — it had none in submarines; France later scrapped or mothballed all its non-strategic warheads; and China welcomed these moves but made no commitments.)[4]

This happened just in time: by the end of 1991, the Soviet Union had been dissolved and Gorbachev had been ousted by Yeltsin. Almost overnight, Ukraine found it had the third largest nuclear arsenal on its territory — some 3,000

Figure 1.

FIRST STRATEGIC ARMS REDUCTION TREATY (START I)

START I entered into force on 5 December 1994. By the end of 2001, the treaty requires the US and Russia to have each reduced their strategic nuclear forces to 1,600 deployed delivery vehicles having 6,000 “accountable” warheads, of which 4,900 can be ballistic missile warheads.

Because START I was signed in July 1991 when the Soviet Union still existed, implementation of it now involves five parties: the US, Russia, Ukraine, Kazakhstan and Belarus. Good progress has been made: indeed, the US had already reduced its operational strategic forces to START I levels before the Treaty entered into force, as a result of several modernization programmes.

By contrast, modernization of Russian strategic forces proceeds at a very modest pace. Consequently, and with the break-up of the Soviet Union, over 325 ballistic missiles have been withdrawn from active service, and over 3,400 strategic warheads that were deployed in Ukraine, Kazakhstan and Belarus have been transferred to Russia.

Source: *Nuclear Weapons: The Road To Zero*, edited by Joseph Rotblat (Westview Press, 1998), pages 158-162.

warheads. To the relief of the world, it returned them all to Russia, as did Belarus and Kazakhstan; and all three joined the Non-Proliferation Treaty as non-nuclear weapon states. US President Clinton told the Belarussians: "As a new nation, one of your first decisions was to give up your nuclear weapons . . . It would have been easier to say these . . . weapons make us a great nation, they make us stronger, we will use them, we will rattle them around as threats, but you made a better choice — to live nuclear-free."[5]

Doubts grew in military and government circles about the utility of deterrence doctrine in the post-Cold War era. One US working paper even argued: "If we now had the opportunity to ban all nuclear weapons, we would."[6] It seemed that nuclear weapons had been finally recognized as a liability and security problem, no longer the ultimate political virility symbol linked to a permanent seat on the UN Security Council.

Then the pro-nuclear counter-offensive began. At its Rome Summit in November 1991, NATO reaffirmed that nuclear weapons were "essential" to its security. Two months later, a US Pentagon report recommended an enhanced

Figure 2.

SECOND STRATEGIC ARMS REDUCTION TREATY (START II)

Presidents Bush and Yeltsin concluded a framework agreement for START II on 17 June 1992, and signed it on 3 January 1993. Beginning on 1 January 2003, the Treaty limits the warheads on each side's intercontinental strategic forces to 3,500 "accountable warheads," of which no more than 1,750 may be deployed on multiple independently targetable re-entry vehicle equipped (MIRVed) Submarine-Launched Ballistic Missiles (SLBMs), with the balance on single-warhead ballistic missiles and/or bombers.

"Heavy" Intercontinental Ballistic Missiles (ICBMs) and MIRVed ICBMs are banned. "Reserve" stocks of strategic nuclear warheads, and nuclear weapons deliverable by shorter range systems, such as sea-launched cruise missiles and tactical aircraft, are not covered by the Treaty.

To achieve START II limits, the US plans to decommission 4 of its 18 Trident ballistic missile submarines, and reduce the number of warheads per missile in the remaining 14 submarines from 8 to 5.

On 26 January 1996, the US Senate ratified START II. However, the Russian Duma has not done so, and a substantial body of opinion in Russia views the Treaty as giving the US a nuclear advantage. The Treaty is also regarded as too costly to implement within the agreed timetable because it requires the early retirement of Russian ICBMs before the end of their service life and the production and deployment of an additional 500 single-warhead ICBMs just to reach the 3,500 warhead level by 2003. To maintain parity with the US, additional resources would have to be dedicated for missile submarine and SLBM modernization, silo conversion, and improved command, control and communication systems.

Because of these problems for Russia, Clinton and Yeltsin agreed at their March 1997 Helsinki summit to extend the deadline for implementing START II to the end of 2007. However, all delivery vehicles for elimination under the Treaty will be deactivated by the end of 2003, by removing their nuclear warheads or taking other jointly agreed and verifiable steps. The US is providing assistance to Russia in this.

Meanwhile, NATO's expansion eastward and Balkan intervention have provided Russian hard-liners with new arguments for not ratifying START II and for retaining large stocks of non-strategic nuclear weapons to offset a conventional imbalance — a logic reminiscent of NATO's during the Cold War.

Source: *Nuclear Weapons: The Road To Zero*, edited by Joseph Rotblat (Westview Press, 1998), pages 158-159, 179-180.

role for nuclear weapons to deter chemical and biological weapon threats from the Third World. This was affirmed in the US Nuclear Posture Review published in September 1994, which remains US policy.[7] Nevertheless, with the signing of the START II Treaty in January 1993, the US and Russia were committed to major reductions in warhead numbers; and the US ratified it three years later.

Further alarm came from Moscow in October 1993, when political conflict between Yeltsin and the then Supreme Soviet of Russia ended in the storming of the "White House," the seat of Russian power. A month later, a new Russian military doctrine was adopted which echoed NATO's, stating that nuclear weapons were no longer for war-fighting: their purpose was "political," to deter either conventional or nuclear aggression. Thus, Russia officially accepted the concept of nuclear deterrence — which throughout the Cold War had been severely criticized by the Soviets. This resulted, in 1993, in two more regressive steps (but which brought Russian policy into line with NATO's): reversing the Soviet doctrine of the 1970s and 1980s undertaking not to use nuclear weapons first, and abandoning Gorbachev's objective of nuclear abolition. No doubt Russian nuclear planners felt vindicated when Clinton announced, in January 1994, that NATO would expand eastwards.[8]

Despite all this, START I entered into force in December 1994. Earlier that year, Clinton and Yeltsin had de-targeted their strategic forces, with the UK and France following suit. In addition, the US, Russia and France agreed to a moratorium on nuclear tests, with the UK forced to comply by its dependence on the Nevada test site.

DE-TARGETING

In 1994, Presidents Clinton and Yeltsin agreed to stop aiming strategic missiles at each other's countries. The UK and France announced similar arrangements with Russia later in 1994; and, when Clinton visited China in 1998, the US and China agreed not to target each other.

Presented as a confidence-building measure in the post-Cold War era, it is also a way to maintain nuclear forces on alert — in accordance with nuclear deterrence doctrine — while reducing the consequences of an accidental nuclear weapon launch. Though a welcome gesture, it is a minimal step with little military significance. Other criticisms include:

- Missile commanders can reload target coordinates into guidance computers within seconds.
- It is claimed that de-targeting solves the problem of an accidental nuclear weapon launch because it would be directed to a location in the Atlantic or Pacific Oceans. However, it is believed that an unprogrammed Russian missile would automatically switch back to its primary wartime target.
- No missile can be ordered to self-destruct after launch — presumably because of the risk of radioactive fallout in the possessor state.
- There is still the problem of confusion following such an accidental launch, with so little time to decide on a course of action.

Source: Bruce G. Blair, Harold A. Feiveson and Frank N. von Hippel "Taking Nuclear Weapons off Hair-Trigger Alert" *Scientific American* (November 1997), page 80.

Figure 3.

Figure 4.

FISSILE MATERIAL CUT-OFF TREATY

A ban on the production of fissile materials for weapon purposes has been a priority demand for over forty years. With the end of the Cold War, the US and Russia are awash with surplus stocks of weapon-usable plutonium and highly-enriched uranium (HEU).

Russia ceased HEU production in 1989 and intends to shut down its ageing plutonium-producing reactors by 2000. In 1992, President Bush announced the halt of all US fissile material production for weapons. The UK and France did likewise in 1995. China has not made a formal statement but has indicated privately that it has, or is about to, stop as well.

In March 1995 in the Conference on Disarmament (CD), a mandate was given to establish an ad hoc committee to consider how to ban fissile material production for weapon purposes. However, because of disagreement concerning existing stockpiles of military plutonium and HEU, and the relation between the envisaged ban — known as the Fissile Material Cut-off Treaty (FMCT) — and nuclear disarmament, negotiations remained deadlocked until recently.

In August 1998, following nuclear tests by India and Pakistan, India dropped its linkage between FMCT negotiations and time-bound nuclear disarmament. Pakistan, under pressure from US sanctions, agreed to drop its objection despite its concerns about a wide disparity between its stockpile and that of India. However, it stipulated that it would only negotiate under the 1995 Shannon Report mandate, which is restricted to a ban on future production. When Israel also agreed to negotiations under US pressure, on 11 August the Conference on Disarmament announced that it had decided to establish the ad hoc committee.

However, there was considerable divergence of views on several fundamental issues, including:

- Whether the FMCT should constitute a nuclear disarmament measure or, as the five nuclear weapon states see it, merely a non-proliferation measure. For the latter view to prevail, the Permanent Five (P5) will probably have to agree to convene a similar ad hoc committee on nuclear disarmament in parallel, which hitherto they have blocked.
- Whether stocks should be addressed or just a ban on future production. In light of Pakistan's position, the most likely solution would be for stocks to be considered separately in parallel. Indeed, they are an obvious topic for P5 talks — but hitherto they have refused.

What is not in dispute is that negotiations will be long and arduous — unless, as with the Comprehensive Test Ban Treaty, a target date could be set. Moreover, the significance of an FMCT is increasingly questionable: many states believe it is no longer worth the time and trouble for only a minor step whose time has passed. Since the five declared nuclear weapon states have stopped production, they will not be constrained by it. Their motive for insisting on multilateral negotiations is to halt production among the nuclear-capable and threshold states and to place their facilities under full-scope safeguards. There is also concern that the P5 will use negotiations to tie up the resources and work of the CD, thereby delaying progress on nuclear disarmament. At the time of writing (July 1999), no progress had been made in almost a year.

Sources: Rebecca Johnson, "Prospects for Further Multilateral Nuclear Disarmament Treaties" *Nuclear Weapons: The Road To Zero* edited by Joseph Rotblat, Westview Press, 1998, pages 288-292; Acronym Institute CD Updates 30 July-13 August 1998.

Although there was no consensus at the 1995 Non-Proliferation Treaty Review and Extension Conference, the states parties decided without a vote to extend the treaty indefinitely. However, the conference ended in acrimony with a significant number of non-nuclear weapon states concerned that they had failed to gain in return a stronger commitment by the nuclear weapon states to complete nuclear disarmament. Meanwhile, Abolition 2000 — a new global citizen network campaigning for the elimination of nuclear weapons — was formed from a caucus of citizen groups monitoring the conference (see Figure 6).

Within days, their fears were confirmed when China resumed nuclear tests, followed by France in the South Pacific. The latter provoked worldwide outrage, forcing France to curtail its test programme and press for rapid conclusion of a Comprehensive Test Ban Treaty. This was achieved in September 1996, 42 years after India had first called for one — but only after India's objections about it were circumvented by negotiations being transferred from the deadlocked Conference on Disarmament in Geneva to the UN General Assembly, where it was adopted by an overwhelming vote.[9]

Since the Comprehensive Test Ban Treaty was signed, there have been no negotiations in the Conference on Disarmament. Progress has been limited to agreement in August 1998 to start negotiating a Fissile Material Cut-off Treaty to ban the production of plutonium and highly-enriched uranium for weapon purposes. After a year, however, negotiations are no nearer.

Meanwhile on 8 July 1996, the International Court of Justice (or World Court) had released its Advisory Opinion, which confirmed that "the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict . . . ." The Opinion provided a powerful boost to the anti-nuclear movement's efforts to shift the image of nuclear weapons from asset to stigmatized liability. The 14 judges also unanimously agreed that "(t)here exists a legal obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control."[10]

In its Disarmament Session at the end of 1996, the UN General Assembly called for the implementation of this through the immediate start of negotiations leading to the conclusion of a Nuclear Weapons Convention, similar to the enforceable global treaty banning and eliminating chemical weapons. However, four of the five nuclear weapon states at the time opposed the resolution and refused to start such negotiations. A Model Nuclear Weapons Convention (see Figure 5), drafted by experts in the anti-nuclear movement — was introduced by Costa Rica in the UN General Assembly in November 1997, and is now a UN document.[11]

Figure 5.

MODEL NUCLEAR WEAPONS CONVENTION

In November 1997, at the request of Costa Rica, the United Nations circulated a Model Nuclear Weapons Convention (UN document A/C.1/52/7) as a discussion draft. The model, drafted by an international team of lawyers, scientists and disarmament experts, offers a plan for the prohibition and elimination of nuclear weapons in a series of graduated, verifiable steps. Its steps include the declaration of all nuclear weapons, nuclear materials and nuclear facilities by state parties of the Convention; phases for elimination and implementation measures; finances; and rights and obligations of individuals.

It is drafted on the same lines as the widely acclaimed Chemical Weapons Convention, which entered into force on 29 April 1997. As with nuclear weapons, the knowledge of making chemical weapons cannot be disinvented. Yet that did not prevent the world from making a legally binding, enforceable treaty to ban them — despite the fact that verification of compliance is far more difficult for chemical weapons than for nuclear weapons. While the international community has achieved global prohibitions of chemical and biological weapons, similar objectives for nuclear weapons remain unfulfilled. The Model Nuclear Weapons Convention presents a concrete and incremental-comprehensive approach that spells out the steps for achieving complete nuclear disarmament including de-alerting and destruction of nuclear weapons stockpiles. A Nuclear Weapons Convention would complete the triad and accelerate efforts toward the elimination of all weapons of mass destruction. The purposes of the model convention include:

- Demonstrating the feasibility of the elimination of nuclear weapons;
- Encouraging governments to pursue nuclear disarmament negotiations;
- Identifying policies that are inconsistent with the goal of nuclear disarmament;
- Overcoming some of the barriers that make nuclear abolition appear utopian;
- Preparing for the day when the political will to begin negotiations emerges.

A recurrent response to the demand for a Nuclear Weapons Convention is that in today's political environment it is “premature” or “unrealistic idealism” to consider and discuss a framework for the prohibition and elimination of nuclear weapons. It is neither premature to begin devising a plan for complete nuclear disarmament, nor premature for states to begin developing the necessary verification mechanisms. For many years, a Comprehensive Test Ban Treaty seemed beyond reach. Yet even during this time, verification mechanisms were studied by a scientific group of the Conference on Disarmament, and these helped the negotiations once they began.

Additional support has been mobilized and resolutions have been passed in the UN General Assembly, European Parliament and US House of Representatives calling on states to engage in negotiations and commit themselves to take active steps toward eliminating nuclear weapons.

The success of a Nuclear Weapons Conventioin, like MPI, depends on the political will of the nuclear weapons states and public, collective support of individuals. The efforts of MPI and the wider non-governmental community must be complementary.

In light of the ongoing threat posed by nuclear weapons, discussions of a Nuclear Weapons Convention should be seen as an urgent need rather than a premature wish. The primary aim of MPI is to get commitment from the nuclear weapon states to begin multilateral negotiations that would lead to the signing of a Nuclear Weapons Convention. The model is offered to states and NGOs in the hope that it can inspire and enrich these discussions.

Source: Merav Datan and Alyn Ware, *Security and Survival: The Case for a Nuclear Weapons Convention* (International Physicians for the Prevention of Nuclear War, May 1999) and Annaken Toews, IPPNW.

ABOLITION 2000

Abolition 2000, a global network to eliminate nuclear weapons, grew out of a caucus of citizen groups campaigning for abolition who monitored and lobbied the Nuclear Non-Proliferation Treaty Renewal and Extension Conference in New York in April 1995. Its central aim is to have in place by the new millennium a Nuclear Weapons Convention committing the nuclear weapon states to get rid of their nuclear arsenals within a fixed timetable.

Several Working Groups have been established, which focus on issues including:

- Overcoming nuclear threats/legal issues;
- Drafting a Model Nuclear Weapons Convention;
- NATO;
- Sustainable energy;
- Radiation health effects;
- Non-violent direct action;
- Weapon-usable radioactive materials;
- Depleted uranium;
- Nuclearization of space.

Since then, Abolition 2000 has grown to nearly 1,500 endorsing groups, with national networks established in the US, Canada, New Zealand, Britain, Germany and also a European regional one.

An electronic newsletter called "The Sunflower" is published monthly by the Nuclear Age Peace Foundation in California. Abolition 2000 adopted the sunflower as its logo after the US, Russian and Ukrainian defence ministers planted sunflower seeds on the site of the last missile silo on 4 June 1996, the day Ukraine officially celebrated sending the last former Soviet nuclear weapon back to Russia, and pronounced itself nuclear weapon-free. US Secretary of Defense Perry said that sunflowers instead of missiles in the soil would ensure peace for future generations.

Abolition 2000 works primarily through the Internet. There is an e-mail listserver called <abolition-caucus@igc.apc.org> which exchanges information of global interest. Others cover specific topics, like the expansion eastwards of NATO.

An Abolition 2000 international petition is being promoted; and city councils are being asked to adopt a resolution supporting Abolition 2000.

The network plans gatherings around major conferences on nuclear issues: in Geneva in April-May 1998, over 100 delegates came to monitor and lobby government representatives at the Second Preparatory Committee Conference before the Year 2000 Review of the Non-Proliferation Treaty. In May 1999, Abolition 2000 held its annual general meeting in the Hague following the Hague Appeal for Peace Citizens' Centennial Conference.

Figure 6.

20 May 1998: Indian women cheer as Prime Minister Atal Bihari Vajpayee visits the test site at Pokharan where India tested five nuclear devices. Vajpayee said that India was willing to "pay any price" for its security.
Photo: AP/Ajit Kumar.

CHAPTER 2. THE DEEPENING CRISIS

Nuclear Tests by India and Pakistan

On 11 May 1998, India announced that it had carried out three nuclear tests — the first since 1974. Two more followed on 13 May. Pakistan replied with its own tests on 28 and 30 May.[12] India and Pakistan had challenged the sustainability of the present non-proliferation regime, raising the spectre of an escalating nuclear arms race in South Asia, the Middle East and elsewhere.

On 11 June 1998, *The Bulletin of the Atomic Scientists* moved its "Doomsday Clock" five minutes closer to midnight. According to the *Bulletin*, this decision was taken not just in response to the South Asian tests: it was also "to dramatize the failure of world diplomacy in the nuclear sphere." It now stands at nine minutes to midnight. (In 1953, the clock stood at two minutes to Armageddon, and in 1984, it stood at three.)

The nuclear weapon states must choose: either an enforceable global ban on all nuclear weapons, or nuclear weapons will continue to spread.

However, the core of the problem lies beyond India and Pakistan. A major pretext prompting India to test was the absolute refusal by the nuclear weapon states to implement their obligation under the Non-Proliferation Treaty, reaffirmed by the International Court of Justice, to negotiate for the elimination of nuclear weapons. In a press statement, India's prime minister argued that "the refusal of the nuclear weapon states to consider the elimination of nuclear weapons . . . continues to be the single biggest threat to international peace and security . . . it is because of the continuing threat posed to India by the deployment of these weapons . . . that India has been forced to carry out these tests."

India's decision to test may also have been stimulated by their languishing campaign to become a permanent member of the UN Security Council. Despite being the world's largest democracy with the second largest population, India's candidacy was receiving much less attention than those of smaller but more influential countries like Japan and Germany. The fact that the current permanent members are also the nuclear weapon states may therefore have been another factor prompting India's decision. This was borne out when some US commentators raised India's candidacy for the Security Council after the tests.

India also cited the hypocrisy of the nuclear weapon states, which criticized India's tests while continuing their own nuclear testing by non-nuclear explosive means such as sub-critical and hydrodynamic tests (see page 32 and Figure 15). India has refused to join the Comprehensive Test Ban Treaty and Non-Proliferation Treaty because it sees both as discriminatory, saying that they allow the nuclear weapon states to continue their possession and development of nuclear weapons while denying this to others. The tests by India and Pakistan show that such a discriminatory regime can no longer be sustained. The nuclear weapon states must choose: either an enforceable global ban on all nuclear weapons, or nuclear weapons will continue to spread.

The fact that both India and Pakistan had the technology to produce nuclear weapons for decades, but refrained from becoming overtly nuclear until recently, demonstrates that political considerations drive proliferation as much as feasibility.

The "Six" in Stockholm: (left to right) De la Madrid, Nyerere, Carlsson, Papandreou, Gandhi, and Caputo. Photo: General Secretariat for Press and Information, Athens, Greece. Used with permission from the Papandreou Institute.

India, and Pakistan to a lesser degree, had been at the forefront of efforts to eliminate nuclear weapons. As early as 1954, Prime Minister Nehru called for a nuclear test ban; and in 1956 the Indian government raised the idea of requesting a World Court Advisory Opinion on the legality of testing. In 1978, India advocated the total prohibition of the use of nuclear weapons on the grounds that their use "would be a violation of the (UN) Charter and a crime against humanity."

In the early 1980s, Indira Gandhi was the first leader to join the Six-Nation Initiative aimed at getting the US and Soviet Union back to the nuclear disarmament negotiating table at the height of the Cold War. When Rajiv Gandhi addressed the 1988 UN Special Session on Disarmament, he proposed a plan for the elimination of nuclear weapons by 2010.

After the initial euphoria, evidence of growing domestic concern included a 250,000-strong Hiroshima Day demonstration on 6 August 1998 opposing the Indian tests in Calcutta; and a joint statement by retired Indian and Pakistani military leaders which ended as follows: "We are convinced that the best way of resolving disputes is through peaceful means and not through war — least of all by the threat or use of nuclear weapons. India and Pakistan need to address their real problems of poverty and backwardness, not waste our scarce resources on acquiring means of greater and greater destruction."[13]

According to polls taken a year after the tests, 73 per cent of Indians polled now oppose making or using nuclear weapons.[14] Independent Indian commentators condemn the tests: "The Bomb has comprehensively failed to raise India's stature, strengthen our claim to a Security Council seat, expand the room for independent policy-making, or enhance our security" (see Appendix B).

Figure 7.

THE SIX-NATION INITIATIVE

Launched in 1984 by the leaders of Argentina, Greece, India, Mexico, Sweden and Tanzania, the Six-Nation Initiative aimed to revive negotiations on a Comprehensive Test Ban Treaty at a particularly dangerous moment in the Cold War. Parliamentarians for Global Action, one of the eight co-sponsors of the Middle Powers Initiative, initiated the idea and coordinated the approach to governments, which was presented as a "Five Continent Peace Initiative" free from the West/East blocs.

Led by Swedish Prime Minister Olof Palme until his assassination in 1986, it resulted in the Stockholm Declaration. At the Third UN Special Session on Disarmament in 1988, Palme's successor Ingvar Carlsson said that this " . . . stressed that all states have the responsibility to uphold the rule of law in international relations. Those who possess nuclear weapons have a crucial role . . . . One important step would be to prohibit the use of nuclear weapons. And I believe that the time has come to explore the possibility of such a step . . . . Now that we approach the end of the 20th century, states and political leaders should be civilized enough to accept the rule of law in international relations."

The primary value of the initiative was that it raised the level of political awareness and action around the world; and it awakened the realization among non-nuclear states that they could influence the nuclear weapon states.

Nuclear Disarmament Stalled

Nearly a decade after the end of the Cold War, approximately 30,000 nuclear weapons remain (see Figure 8). No new nuclear disarmament negotiations are taking place; and in the Conference on Disarmament (CD) the only progress since 1995 was the August 1998 decision to start negotiations on a treaty to halt the production of fissile material — but at the time of writing (July 1999), the decision to start negotiations has been thwarted, since the CD has been unable to reconvene the ad hoc committee charged with negotiating the treaty. The non-aligned group has proposed a comprehensive programme of disarmament measures culminating in the elimination of nuclear weapons within a time-bound framework.[15] However, this is opposed by the nuclear weapon states. The Russian Duma has not ratified START II. Until Clinton and Yeltsin met at the G-8 Summit in Cologne, 20 June 1999, START III had been immobilized because of this (see Figure 10). Russia, concerned about its crumbling conventional force structure in the face of superior NATO forces, echoes NATO's insistence that nuclear weapons are essential to its security. This was reinforced by NATO's intervention in the Balkans, which Russia saw as evidence that NATO was exploiting its economic and military weakness.

Even if START II is ratified and fully implemented, there will still be at least 10,000 nuclear weapons of all kinds remaining on each side at the end of 2007. Besides, over half the weapons reduced by START II would have come to the end of their useful lives in that time, and been scrapped anyway. Even full compliance with START III would leave about 2,000 strategic warheads on each side — and would not touch the British, French or Chinese arsenals. Finally, there are still no plans to include the thousands of tactical nuclear weapons in any disarmament negotiations — yet these are the ones most likely to be used first in a future regional conflict, and to be coveted by paranoid regimes or terrorist groups.

NATO's intervention in the Balkans threatened to have serious consequences for nuclear disarmament, severely straining US relations with Russia and China.

CURRENT NUCLEAR ARSENALS

By the end of 1998, estimates of the number of nuclear weapons in the five nuclear weapon states were as follows:

Country	Nuclear Weapons
Russia	10,000*
US	10,000**
France	450
China	400
UK	185

* An additional 5,000-10,000 are being disassembled.

** This figure includes some 150 B56 bombs at 10 air bases in Belgium, Germany, Greece, Italy, the Netherlands, Turkey and the UK.

Source: "Nuclear Notebook," *The Bulletin of the Atomic Scientists* (January/February, March/April and May/June 1999) and personal communication by Robert S. Norris, Natural Resources Defense Council.

Figure 8.

Global Nuclear Stockpiles, 1945-1997

Year	U.S.	Russia	U.K.	FR	CH	Total
1945	6	0	0	0	0	6
1946	11	0	0	0	0	11
1947	32	0	0	0	0	32
1948	110	0	0	0	0	110
1949	235	1	0	0	0	236
1950	369	5	0	0	0	374
1951	640	25	0	0	0	665
1952	1,005	50	0	0	0	1,055
1953	1,436	120	1	0	0	1,557
1954	2,063	150	5	0	0	2,218
1955	3,057	200	10	0	0	3,267
1956	4,618	426	15	0	0	5,059
1957	6,444	660	20	0	0	7,124
1958	9,822	869	22	0	0	10,713
1959	15,468	1,060	25	0	0	16,553
1960	20,434	1,605	30	0	0	22,069
1961	24,173	2,471	50	0	0	26,694
1962	27,609	3,322	205	0	0	31,136
1963	29,808	4,238	280	0	0	34,326
1964	31,308	5,221	310	4	1	36,844
1965	32,135	6,129	310	32	5	38,611
1966	32,193	7,089	270	36	20	39,608
1967	31,411	8,339	270	36	25	40,081
1968	29,452	9,399	280	36	35	39,202
1969	27,463	10,538	308	36	50	38,395
1970	26,492	11,643	280	36	75	38,526
1971	26,602	13,092	220	45	100	40,059
1972	27,474	14,478	220	70	130	42,372
1973	28,449	15,915	275	116	150	44,905
1974	28,298	17,385	325	145	170	46,323
1975	27,235	19,443	350	188	185	47,401
1976	26,199	21,205	350	212	190	48,156
1977	25,342	23,044	350	228	200	49,164
1978	24,424	25,393	350	235	220	50,622
1979	24,141	27,935	350	235	235	52,896
1980	23,916	30,062	350	250	280	54,858
1981	23,191	32,049	350	275	330	56,195
1982	23,091	33,952	335	275	360	58,013
1983	23,341	35,804	320	280	380	60,125
1984	23,621	37,431	270	280	415	62,017
1985	23,510	39,197	300	360	425	63,792
1986*	23,410	45,000	300	355	425	69,490
1987*	23,472	43,000	300	420	415	67,607
1988*	23,236	41,000	300	415	430	65,381
1989*	22,827	39,000	300	415	435	62,977
1990*	21,781	37,000	300	505	435	60,021
1991*	20,121	35,000	300	540	435	56,396
1992*	18,340	33,000	200	540	435	52,515
1993*	16,831	31,000	200	525	435	48,991
1994*	15,456	29,000	250	485	435	45,626
1995*	14,111	27,000	300	485	425	42,321
1996*	12,937	25,000	260	450	400	39,047
1997*	12,000	23,000	260	450	400	36,110

* U.S. (from 1988) and Soviet/Russian (from 1986) warheads include those in active, operational forces; retired, non-deployed warheads awaiting dismantlement; and weapons in reserve. For recent years, the estimate for the former Soviet Union/Russia is 50 percent active, 50 percent retired/reserve. For more detail on Russian and U.S. stockpiles see "Nuclear Notebook" May/June 1997 and July/August 1997.

Figure 9.

"Global Nuclear Stockpiles" by William M. Arkin and Robert S. Norris, NRDC Nuclear Notebook, *The Bulletin of the Atomic Scientists* (November-December 1997), p. 67. Reprinted by permission of *The Bulletin of the Atomic Scientists*, copyright 1998 by the Educational Foundation for Nuclear Science, 6042 South Kimbark, Chicago, Illinois, 60637, USA. A one-year subscription is $28.

Figure 10.

THIRD STRATEGIC ARMS REDUCTION TREATY (START III)

At their Summit in Helsinki on 21 March 1997, Presidents Clinton and Yeltsin agreed that, once START II enters into force, the US and Russia will immediately begin negotiations on a START III agreement. This will include the following:

- Establishment by 31 December 2007 of lower aggregate levels of 2,000-2,500 strategic nuclear warheads on each side.
- Measures relating to the transparency of strategic nuclear warhead inventories and their destruction, to promote the irreversibility of deep reductions.
- Resolving issues related to the goal of making the current START treaties unlimited in duration.
- Placement in a deactivated status of all strategic nuclear delivery vehicles which will be eliminated under START II by 31 December 2003 (See Figure 2).
- Extending the deadline for implementing START II to 31 December 2007. The sides will agree on specific language to be submitted to the Russian State Duma and, following Duma approval of START II, to be submitted to the US Senate. The Presidents therefore underscored the importance of prompt ratification of START II by the Duma.
- US and Russian experts will explore possible measures relating to nuclear long-range, sea-launched cruise missiles, tactical nuclear systems and nuclear materials, to include appropriate confidence-building and transparency measures.

Note: However, at the G-8 Summit, 20 June 1999, Clinton and Yeltsin agreed to resume negotiations on START III irrespective of the Duma's ratification of START II.

Sources: *Nuclear Weapons: The Road To Zero* edited by Joseph Rotblat (Westview Press, 1998), pages 179-180; Reuters Report of 21 June 1999.

In August 1994, German police confiscated a suitcase used to smuggle plutonium from Moscow to Munich. Photo: AP/Wide World.

NATO's decisions to encourage nine more nations to join it having welcomed Poland, Hungary and the Czech Republic,[16] operate aggressively out-of-area, and bypass the UN Security Council in taking military action against the former Yugoslavia, have angered and alienated Russia and China, and ensured that START II will be further delayed.

In the US, an additional $300 billion will be pumped into the defence budget by 2003. Yet it is already 18 times larger than the combined defence spending of the seven so-called "rogue" states identified by the Pentagon. The US Congress has enshrined in national security policy the intention to field a national ballistic missile defence capability; and the Pentagon has budgeted $10.5 billion over the next six years to create a workable system. In the Conference on Disarmament, the US is the sole opponent of an ad hoc committee to discuss the weaponisation of space. Not only is the Anti-Ballistic Missile Treaty now under threat: the whole non-proliferation regime is under siege. A new nuclear arms race is certain unless Washington, Moscow and Beijing can quickly put collaborative nuclear disarmament efforts back on track.

Insecure Nuclear Weapon Materials and Nuclear Terrorism

"Suppose that instead of mini-vans filled with hundreds of pounds of the crude explosives used in Oklahoma City and New York, terrorists had acquired a suitcase carrying 100 pounds of highly enriched uranium, roughly the size of a grapefruit."

On 13 October 1997, the *New York Times* focused on persistent reports of smuggling of nuclear materials from an insecure Russian system. General Alexander Lebed, former Secretary of Russia's National Security Council, insisted that 84 "suitcase" bombs were missing. Economic deprivation, ethnic unrest, religious fundamentalism, terrorist connections and old warheads at risk make a volatile cocktail.

The problem is not confined to Russia. In addition to sites for storing intact nuclear weapons, there are about 25 separately fenced areas in the US handling weapon-usable fissile nuclear materials. About 100 such sites are known to exist in the former Soviet Union, of which about ten are outside Russia (in Belarus, Georgia, Kazakhstan, Latvia, Ukraine and Uzbekistan). In November 1994, the Kazakh and US governments cooperated to airlift over 600 kilogrammes of insecure highly enriched uranium from Kazakhstan to the US. However, there is an urgent need to establish more accurately how much nuclear material is stored at the remaining sites before building new, secure storage.[17]

A particular vulnerability, which applies to all countries with nuclear weapons or materials, is their transport. The US is helping Russia by providing more secure transport equipment. There is also cooperation in improving Russian regulatory support, but this will take years to establish and cost more than Russia can afford.

Once such fissile materials are stolen, the difficulty of finding and recovering them before they can be used rises dramatically. This is a global problem requiring intensive international cooperation. As a 1995 report by International Physicians for the Prevention of Nuclear War warns, "Nuclear proliferation with its potential for nuclear terrorism has replaced a nuclear world war as the most serious nuclear

threat in the post-Cold War world, at least in the short term."[18] To date, the main (minor) successes have come from informers and sting operations.

President Clinton understands the implications. In May 1995 he said: "As horrible as the tragedies in Oklahoma City and the World Trade Center were, imagine the destruction that could have resulted had there been a small nuclear device exploded there." A recent Harvard study develops this theme:

> "It does not require a large step to get from terrorist acts like Oklahoma City and the World Trade Center to the first act of nuclear terrorism. Suppose that instead of mini-vans filled with hundreds of pounds of the crude explosives used in Oklahoma City and New York, terrorists had acquired a suitcase carrying 100 pounds of highly enriched uranium, roughly the size of a grapefruit. Using a simple, well-known design to build a weapon from this material, terrorists could have produced a nuclear blast equivalent to 10,000 to 20,000 tons of TNT. Under normal conditions, this would devastate a 3 square mile urban area . . ."[19]

Growing Risk of Accidental Nuclear War

With Russia's early warning and nuclear command systems deteriorating for economic and political reasons, the possibility of a weapon launch by accident, miscalculation or design has increased since the end of the Cold War[20] (see Figure 12).

FISSILE MATERIALS HOLDINGS

The following table lists the estimated holdings (in tonnes) of military fissile material in the nuclear weapon and nuclear weapon-capable states, and the corresponding number of nuclear explosives that could be built with this material.

Country	Plutonium	HEU	Nuclear Explosives*
Russia	130	1,050	120,000
US	100	645	80,000
UK	12	8	4,000
France	5	25	3,000
China	4	20	3,000
Israel	0.5	—	100
India	0.3	—	80
Pakistan	—	0.2	20
TOTAL (rounded)	250	1,750	210,000

*Assumes 4 kg of plutonium or 12 kg of uranium-235 for each fission explosive.

Source: D. Albright, F. Berkhout, and W. Walker, *Plutonium and Highly Enriched Uranium 1996: World Inventories, Capabilities and Policies* (Oxford University Press, 1997).

Figure 11.

The possibility of a weapon launch by accident, miscalculation or design has increased since the end of the Cold War.

Despite de-targeting agreements, US, Russian and French strategic nuclear forces remain on hair-trigger alert (see page 52 and Figure 24). However, in its Strategic Defence Review published in July 1998, the UK announced that it had relaxed the alert status of its single deployed Trident submarine to "several days' notice to fire."[21] China's posture is not known for certain, but it claims its nuclear warheads are not on high alert.

The *New England Journal of Medicine* became so concerned by this situation that, in April 1998, it published a special report.[22] This concluded that, despite the end of the Cold War, the risk of an accidental nuclear attack "has increased in recent years, threatening a public health disaster of unprecedented scale." It pointed to the alarming number of US military personnel who had to be removed from involvement with nuclear weapons because of alcohol or other drug abuse, or psychiatric problems; and to the admission by a former Commander of US Strategic Command that he had "investigated a dismaying array of accidents and incidents involving strategic weapons and forces."[23]

As if this situation were not serious enough, a Presidential Decision Directive (PDD60) issued in late 1997 recommitted the US to policies of threatened first use and retaliation, and permitted nuclear strikes against any non-nuclear state which had used chemical or biological weapons — again increasing the risk of nuclear weapon use (see Figure 13). What is more, according to Robert Bell, a special assistant to the President and Senior Director for Defense Policy at the National Security Council, the Directive affirmed that the US will continue to rely on nuclear weapons as a cornerstone of its national security for the "indefinite future."[24]

The "Millennium/Y2K" Computer Problem and Nuclear Weapons

The millennium computer problem is caused by the inability of some computer software to recognize the validity of the sequence from 31 December 1999 to 1 January 2000, because — in order to save cost and computer storage space — year data were written using only the final two digits. This means that such computers recognize 99 as greater than 00: thus the change of century will be interpreted as 1900 instead of 2000 (hence the acronym Y2K, for "Year 2000" after the first letter of the Latin word "kilo" for a thousand).

The consequences of this are unpredictable (in many cases, it is difficult or impossible to test, let alone correct). There is a high risk that such systems will be vulnerable to a variety of malfunctions from midnight, local time, onward at the end of the year 1999. Moreover, similar problems exist beginning on other dates that occur in the months before and after January 2000.

All military organizations are heavily dependent on date-sensitive computers for communications, intelligence sensors and assessment, and weapon system control. A particular difficulty will be the uncertainty as to whether a malfunction is associated with the millennium computer problem or not. This

suggests that there will inevitably be an increased risk of misunderstandings and suspicions relating to the international security situation during the period in question.

The Pentagon's Problem. According to a recent report published by the Federation of American Scientists,[25] the US nuclear weapon establishment is the most heavily dependent of all, and has some of the oldest computers in the world — many of them embedded in "systems-within-systems." Even if a system is "de-bugged," it could still be affected by a linked malfunctioning system. Moreover, the Pentagon has admitted that, despite a massive remediation effort costing over $2 billion, there are severe and recurring problems, and it cannot guarantee that there will be no failures. Specifically, the Commander-in-Chief of Strategic Command has warned that several crucial systems in the US nuclear arsenal cannot be fixed in time.[26] In addition, US military planning for this problem has been dogged by secrecy, incompetence, mismanagement and lack of political oversight, prompting resignations by key personnel.[27]

Russia. The Russian nuclear weapon establishment, though not so complex or old as its US counterpart, is experiencing shortages of funds and resources, and its operators are struggling to survive in the deepening financial and economic crisis. Worse, the leaders have denied that they have a Y2K problem at all, though the Defence Ministry has admitted it is "working on it"; but it can only afford to spend $6 million on it.[28]

The dangers of a computer malfunction are intensified by the persisting US and Russian policy of "launch on warning." If computer breakdowns were to produce inaccurate early warning data, or if communications and command channels were to be compromised, the combination of hair-trigger force postures and millennium computer failures could be disastrous.

The UK. Early in 1997, the UK Ministry of Defence (MoD) announced it would be spending an estimated £100 million to ensure UK Trident missile guidance systems worked properly at the turn of the century. In June 1998, the MoD gave an assurance that "our procedures are robust enough to preclude any possibility of an accidental launch of a Trident missile through equipment malfunction. We are not, however, complacent about possible risks in this area. We have been in close contact with the US and France over this issue. The Year 2000 problem has also been raised with Russia and China."[29] This relates to the fact that the UK Trident system is heavily dependent upon US satellite communications and targeting information, and uses US missiles.[30]

Why Not De-Alert? When challenged about de-alerting to avoid the risk, MoD replied: "Taking missiles off alert would not eliminate the residual risk. The problems might, for example, only materialize when the systems were turned back on. In a worst case they might arise in early warning and communications systems leading to decisions to reactivate missiles even if they had been taken off alert. The way to eliminate these residual risks is therefore to take action, as we will continue to do, to raise the subject in all relevant international fora and with various international organizations, including the other nuclear weapon states."[31] This fails to acknowledge that, while not eliminating the risk, de-alerting would greatly reduce it by providing a "firebreak" if a Y2K problem arose, in the form of more time to decide on a response. The obvious way to

The obvious way to minimise if not to eliminate the risk — not to "turn the systems back on," and preferably separate warheads from missiles — was rejected, because this would undermine current nuclear deterrence doctrine.

minimize if not to eliminate the risk — not to "turn the systems back on," and preferably separate warheads from missiles — was rejected because this would undermine current nuclear deterrence doctrine.[32]

The Federation of American Scientists' report warned that "systems operators and commanders should accept reductions in alert status and war-fighting readiness pending resolution of Y2K-induced problems, rather than attempting to sustain high alert rates through implementing or improvising contingency plans that could contribute to increasing the risk of accidental or inadvertent nuclear war." It noted that current nuclear strike strategies made such a plan essential.

Figure 12.

RUSSIAN ROULETTE

On 25 January 1995, the world came close to accidental nuclear weapon use when the Russian military detected an unidentified ballistic missile over Norway possibly heading for Russia.

For the first time, the Russian "nuclear briefcase" carried by the President was activated as Yeltsin prepared to respond. Orders were given to Russian ballistic missile submarines to go to battle stations. Disaster was averted by only a few minutes when the missile was reassessed as harmless, as it continued north over the Arctic to observe the Northern Lights. Its identity and research mission had not reached the Russian early warning system.

If such an incident should occur at some future time when relations between the US and Russia might not be so cordial, disaster might not be averted. This is because, despite the end of the Cold War, the US and Russia still have more than 5,000 nuclear weapons ready to launch at each other within half an hour.

Military planners on both sides remain fixated on the possibility of a deliberate nuclear surprise attack from their former adversary. To deter such a "first strike," each country strives to ensure that it could respond with a similar counterattack — which amounts to a first strike, too. In order to meet this demand, both rely on a "launch-on-warning" strategy, which means releasing a massive retaliatory salvo before the incoming missiles arrive.

Despite having thousands of invulnerable warheads deployed in submarines, the US adheres to this stance because of the vulnerability of its land-based missile silos and command systems.

The Russians feel much more vulnerable because lack of resources means that currently only two of their submarines are at sea on patrol at any time. What is more, the Russian warning time is reduced by the relative proximity of NATO submarines; and the performance of its early warning system has been eroded with the break-up of the Soviet Union and technical problems — five of the eight radar stations which formed the Soviet system are now outside Russia.

Source: "Taking Nuclear Weapons off Hair-Trigger Alert", by Bruce G. Blair, Harold A. Feiveson and Frank N. von Hippel *Scientific American* (November 1997), pages 74-76.

Figure 13.

US PRESIDENTIAL DECISION DIRECTIVE 60

In November 1997, President Clinton issued Presidential Decision Directive 60, the first such directive on military nuclear planning since 1981.

While formally renouncing the official US Cold War commitment to prevailing in a prolonged nuclear war, it prioritized the pursuit of effective deterrence, if necessary through the threat of use of US nuclear weapons.

Threatening nuclear weapon use to prevent the use of chemical or biological weapons was reportedly included as a legitimate option, along with striking first against Russian targets.

Sources: "Clinton Directive changes strategy on nuclear arms" (Washington Post, 7 December 1997); "Nuclear Futures: Proliferation of Weapons of Mass Destruction and US Nuclear Strategy" (British American Security Information Council Research Report 98.2, March 1998).

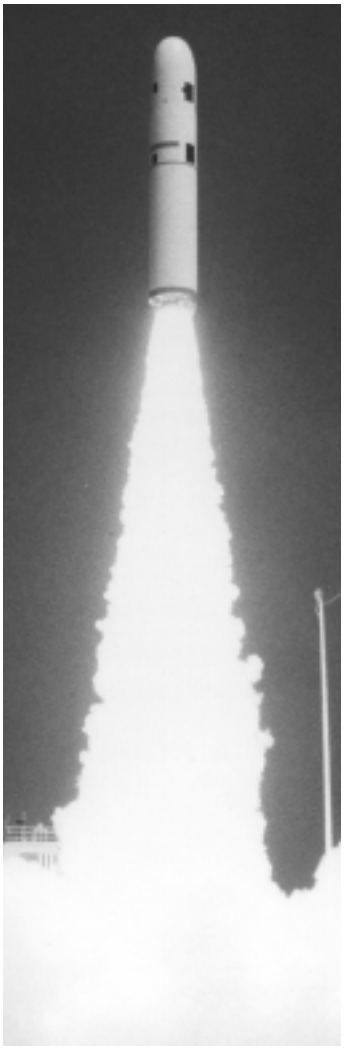
Russian and American experts both say it is virtually impossible for the problem to trigger an accidental nuclear launch, but suggested that both sides take extra precautions to prevent a computer malfunction from causing a false alarm. As evidence that both the US and Russian governments now acknowledge this concern, in September 1998 Clinton and Yeltsin instituted exchanges of personnel to share early warning information and guard against a nuclear crisis based on faulty information.[33] However, NATO's intervention in the Balkans prompted the Russians to suspend this arrangement.[34]

What is clear is that, by the time any serious risks materialize, it will be too late to take appropriate action. Thus the only responsible way to guarantee no risk is for the nuclear weapon states to de-alert all their deployed nuclear weapons, by verified removal of nuclear warheads from delivery vehicles, before 31 December 1999.

Nuclear Weapon States Undermining the Comprehensive Test Ban Treaty

Despite the signing of the Comprehensive Test Ban Treaty (CTBT), the development of new nuclear weapons and delivery systems continues. The US nuclear weapons laboratory programmes are being funded by a dramatic expansion in annual defence budgets which, after their initial post-Cold War decline, are now expected to rise by 33 per cent, costing $60 billion over a 13-year period (see Figure 14).

In April 1998, the US-based Natural Resources Defense Council warned: "The U.S. government clearly intends to maintain under the CTBT, and indeed significantly enhance, its scientific and technical capabilities for undertaking development of advanced new types of nuclear weapons." The report stated that the US has embarked on a program "to design, develop, prototype and flight test an indisputably new-design warhead for the Trident II missile to replace the current W76 and W88 warheads."[35]



The warhead on the Trident II missile is slated for re-design. Photo: US Navy.

Figure 14.

US NUCLEAR WEAPONS COST OVER $5 TRILLION

A recent study by the Brookings Institution reported that, since the start of the Manhattan Project in 1940, the US Government has spent $5.5 trillion (or five and a half million million dollars) on nuclear weapons up to the end of 1996.

This is more than on any other single public spending program, with the exception of pensions ($7.9 trillion) and non-nuclear defence ($13.2 trillion). Federal spending on nuclear weapons has roughly equalled combined spending on state medical insurance ($2.3 trillion), health ($1.7 trillion) and education ($1.6 trillion). It amounts to 29% of all US military spending and nearly 11% of all US government spending through the 56 years.

Even after the collapse of the Soviet Union and the end of the Cold War, the US continues to spend an estimated $35 billion (35 thousand million dollars) a year on nuclear weapons and related programs.

Source: *The Costs and Consequences of U.S. Nuclear Weapons Since 1940*, edited by Stephen T. Schwartz (The Brookings Institution Press, 1998).

A glovebox for handling plutonium is a sealed environment kept under negative pressure and, when necessary, filled with inert gas to keep the plutonium inside it from igniting in the air. Safety procedures require this worker at the Plutonium Finishing Plant at the US Hanford site to wear anti-contamination clothing and to handle plutonium through the rubber gloves attached to the box.
Photo: Robert Del Tredici.

Under the designation "Stockpile Stewardship Program," the US has begun "sub-critical" nuclear weapon tests to improve their reliability and efficiency — but this also provides diagnostic information to enable new weapons to be developed through computer simulation (see Figure 15). In addition to the new Trident warhead, new projects include:

- Deployment of the B61-11 earth-penetrating nuclear weapon, capable of variable yield between 0.3-340 kilotons.
- A replacement for the Trident missile itself.
- Development of a new submarine.
- A nuclear warhead for theatre ballistic missile defence systems designed to intercept and incinerate chemical and biological warheads.
- A plan to resume production of plutonium triggers for nuclear weapons.
- Resuming production of tritium, a key component of nuclear weapons.

Maintaining and strengthening its nuclear weapons capacity in this manner was a condition set forth by President Clinton in the transmittal documents submitted to the US Senate to convince it that ratification of the CTBT would not jeopardize US nuclear superiority. It was also made clear that the US would resume nuclear tests if its supreme national interests so demanded (see Figure 16).

The US is not alone in planning new generations of nuclear weaponry. It has an extensive joint programme with Russia of explosive pulsed-power experiments. Meanwhile, the UK is participating in the US Stockpile Stewardship programme in order to extend the life of its Trident warheads and missiles;[36] and France is conducting its own laboratory tests in the Laser Megajoule project in Bordeaux.

All this advanced experimentation by the nuclear weapon states is seen by the non-nuclear weapon states as clearly contravening the spirit, if not the letter, of the CTBT. A study by the Institute for Energy and Environmental Research argues that fusion research planned at the National Ignition Facility under construction in California would do so.[37] This is because it would involve tiny thermonuclear explosions in violation of the CTBT prohibition against any nuclear explosion — as do "sub-critical" tests at the Nevada test site. It could also pave the way for a new generation of nuclear weapons using pure fusion reactions, a development which the treaty was clearly meant to prevent.

The world is poised to enter the 21st century in a "Cold Peace" in which the CTBT will remain unratified by some key states. In addition, the non-nuclear weapon states feel strongly that the nuclear weapon states are betraying their obligation in Article VI of the Non-Proliferation Treaty to pursue nuclear disarmament in good faith. Finally, all this activity is irresponsibly reviving the nuclear arms race — as demonstrated by India and Pakistan. Significantly, India announced its own stockpile stewardship programme after it conducted its nuclear tests.

A FAUSTIAN BARGAIN

While many US arms control groups are pressing hard for ratification of the Comprehensive Test Ban Treaty (CTBT), few are willing to analyze the "Science Based Stockpile Stewardship" program, a Faustian bargain that is the central element of the Clinton Administration's strategy for achieving it. In addition, key portions of the program may violate the CTBT.

The US nuclear weapons laboratories and the Department of Energy (DOE) have asserted as an unquestionable axiom the need for an upgraded research and testing program of Cold War proportions as an essential condition of CTBT ratification.

In exchange for a ban on full-scale underground nuclear test explosions, nuclear weapons design will be advanced through simulations carried out by using superfast computers costing hundreds of millions of dollars, coupled with archived data from more than 1,000 past test explosions.

New diagnostic information will be obtained from inertial confinement, pulsed power and chemical explosive-driven fusion experiments in the National Ignition Facility, a huge laser fusion research device costing well over $1 billion being built at Lawrence Livermore National Laboratory in California. Other experiments include above-ground hydrodynamic explosions at the Dual Axis Radiographic Hydrotest Facility and sub-critical "zero yield" underground tests at the Nevada test site.

Over the next decade, the US plans to invest $45 billion in the deceptively named "Stockpile Stewardship" program, an amount well above the Cold War annual spending average for nuclear weapons research, development, testing, production and disassembly — which are directly comparable activities.

Pure Fusion Weapons

It is suspected that what is driving much of the research — which is being mirrored in France — is the desire to establish the feasibility of pure fusion weapons, in which explosive thermonuclear ignition is achieved without the need for fissile materials like plutonium or highly-enriched uranium.

Pure fusion weapons have long been a dream for nuclear weapon designers because they would produce little radioactive fallout and could be any size. Verification would therefore be more difficult, and they would lower the threshold for using nuclear weapons.

Sources: Andrew Lichterman and Jacqueline Cabasso, "A Faustian Bargain: Why 'Stockpile Stewardship' is Fundamentally Incompatible with the Process of Nuclear Disarmament" (Western States Legal Foundation, 1440 Broadway, Suite 500, Oakland, California USA 94612, April 1998); Arjun Makhijani PhD and Hisham Zerriffi, "Dangerous Thermonuclear Quest: The Potential of Explosive Fusion Research for the Development of Pure Fusion Weapons," (Institute for Energy and Environmental Research, 6935 Laurel Avenue, Takoma Park, Maryland MD 20912 USA, July 1998).

Figure 15.

Target chamber of the National Ignition Facility (NIF) dedicated in June 1999 by Secretary of Energy Bill Richardson. NIF, under construction at Lawrence Livermore National Laboratory in California, is suspected of being designed to research fusion reactions for a whole new generation of weapons.
Photo: Jim Stevens.

EXTRACTS FROM PRESIDENT CLINTON'S TRANSMITTAL LETTER TO THE US SENATE FOR RATIFICATION OF THE CTBT

On 22 September 1997, in his letter transmitting the Comprehensive Test Ban Treaty (CTBT) to the US Senate for ratification, President Clinton included the following safeguards:

"The maintenance of the basic capability to resume nuclear test activities prohibited by the CTBT should the United States cease to be bound to adhere to this Treaty."

"The understanding that if the President of the United States is informed by the Secretary of Defense and the Secretary of Energy (DOE) — advised by the Nuclear Weapons Council, the Directors of DOE's nuclear weapons laboratories, and the Commander of the U.S. Strategic Command — that a high level of confidence in the safety or reliability of a nuclear weapon type that the two Secretaries consider to be critical to our nuclear deterrent could no longer be certified, the President, in consultation with Congress, would be prepared to withdraw from the CTBT under the standard 'supreme national interests' clause in order to conduct whatever testing might be required."

"If the President is advised, by the above procedure, that a high level of confidence in the safety or reliablility of a nuclear weapon type critical to the Nation's nuclear deterrent could no longer be certified without nuclear testing, or that nuclear testing is necessary to assure the adequacy of corrective measures, the President will be prepared to exercise our 'supreme national interests' rights under the Treaty, in order to conduct such testing."

Figure 16.

The Non-Proliferation Treaty in Jeopardy

The history of the Non-Proliferation Treaty (NPT) shows growing frustration with the nuclear weapon states' promise of "ultimate" nuclear disarmament. The NPT was signed in 1968. At the first review in 1975, it was only endorsed by determined action by the Chair. In 1980, there was no agreement. In 1985, a consensus was only maintained by stating in the final document that some states agreed and others did not. There was no agreement again in 1990. In 1995, despite the NPT's indefinite extension, the review process again broke down, with 13 states denouncing the extension. The Chair of the Review & Extension Conference, Ambassador Jayantha Dhanapala of Sri Lanka, warned:

> "If there is naked cynicism on the part of the nuclear weapon States and a total disregard of nuclear disarmament commitments . . . then we might see not just one or two countries for individual reasons wanting to opt out . . . but a major threat of an exodus from the treaty . . . We must never ever let the Treaty be in jeopardy, and for that there has to be progress in nuclear disarmament."[38]

Later that year when presenting its oral testimony to the World Court on the nuclear weapon question, Mexico warned that if the disarmament obligations of the NPT are not met, "we would need to revise our continuation as party to the Treaty . . . as a country, we are not prepared under any circumstances to accept a monopoly in the possession of nuclear weapons or to allow the modernization of these devices through tests whose legality we also respectfully question."[39]

Three days after the first preparatory conference in 1997, which took a step back from the Extension Conference, India warned the UN: "The stubborn position of the nuclear weapon states has paralysed the debate on nuclear disarmament. The window of opportunity opened at the end of the Cold War is closing."

"The stubborn position of the nuclear weapon states has paralysed the debate on nuclear disarmament. The window of opportunity opened at the end of the Cold War is closing."

Figure 17.

The Nuclear Non-Proliferation Treaty

Opened for signature in 1968, the Treaty on the Non-Proliferation of Nuclear Weapons (known as the NPT) entered into force on 5 March 1970. Its objective was to prevent the spread of nuclear weapons and to further the goal of achieving general and complete disarmament. To achieve this

- The nuclear weapon states agreed not to transfer nuclear weapons to any recipient (Article I); and non-nuclear states agreed not to receive them or seek any assistance in manufacturing them (Article II).
- As a confidence-building measure, non-nuclear signatory states were obliged to accept a "safeguards" system of confidence-building measures, under which the International Atomic Energy Agency (IAEA) conducts inspections to verify compliance with the Treaty (Article III). However, no such verification was imposed on the nuclear weapon states.
- In exchange, Article IV not only declared the "inalienable right" of the signatory states to develop "peaceful" nuclear energy, but non-nuclear weapon states were offered cooperation in developing "peaceful" nuclear technology by the three depository nuclear weapon states — the US, USSR and UK. (China and France signed in 1992 as the only other two nuclear weapon states because they too had exploded a nuclear weapon before 1 January 1967.)
- Article V allows the peaceful applications of nuclear explosions, and for any "potential benefits" to be made available to signatory non-nuclear weapon states.
- Article VI states: "Each of the Parties to the Treaty undertakes 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."

The NPT's duration was originally limited to 25 years. Four Review Conferences have been held every five years since 1970. In the 1995 Review & Extension Conference, the NPT was extended indefinitely, but with a strengthened review process. There are 186 signatory states, but Cuba, India, Israel and Pakistan refuse to sign. Differences have centred on whether the nuclear weapon states have sufficiently complied with Article VI, and on nuclear testing, nuclear weapon improvements and security assurances to non-nuclear weapon states by the nuclear states regarding the threat or use of nuclear weapons.

More fundamentally, the NPT is criticised because

- It legitimises the division of the world into nuclear "haves" and "have nots"; and it imposes stringent controls on the latter while the obligations of the former are not so strict or enforceable. Moreover, despite the controls, Iraq evaded them as a signatory non-nuclear weapon state; and an aspiring nuclear weapon state can withdraw from it under Article X by giving three months' notice (as North Korea threatened to do) and then acquire nuclear weapons with impunity.
- It ignores the insurmountable link between the military and peaceful uses of nuclear technology, highlighted by the double role of the IAEA as promoter and controller of nuclear energy.

Sources: NPT Treaty Text; UN Department of Information Fact Sheet No. 1, DPI/1654-March 1995; Acronym Institute Report of the NPT Review and Extension Conference, New York, 17 April-12 May 1995 (ACRONYM No7, September 1995).

In light of the undertaking by the NPT signatory states to disarm, it is also a disturbing fact that, although the US nuclear warhead stockpile is about half what it was when the NPT was signed in 1968, only now are the Russian and UK arsenals returning to their 1968 levels; whilst those of France and China are almost four times greater (see Figures 8 and 11). Moreover, France and China refuse to consider any further reductions until the US and Russian totals approach theirs — for which currently there are no plans. On the other hand, the UK government announced in its recent Strategic Defence Review that it was unilaterally reducing its stockpile of operationally available warheads from 300 to 200. [40]

Nuclear Weapon States Flouting the World Court

Unique Characteristics of Nuclear Weapons. In its Advisory Opinion of 8 July 1996 (see Figure 18), the Court cited the uniquely appalling characteristics of nuclear weapons: ". . . in particular their destructive capacity, their capacity to cause untold human suffering, and their ability to cause damage to generations to come." Indeed, it added that only they ". . . have the potential to destroy all civilization and the entire ecosystem of the planet."[41] In the words of the then Court President, Judge Mohammed Bedjaoui, they are "the ultimate evil." This effectively confirmed that nuclear weapons are in the same stigmatized category as chemical and biological weapons, which are banned regardless of size — only in most respects nuclear weapons are far worse.

World Court President Mohammed Bedjaoui reads the court's opinion on the legality of nuclear weapons, 8 July, 1996. Photo: Martin Dunkerton/World Court Project.

Threat and Use Indivisible. No attempt was made to separate use and threat. On the contrary, the Court stated that the notions of "threat" and "use" of force under Article 2, paragraph 4 of the UN Charter stand together in the sense that if the use of force is illegal, the threat to use such force will likewise be illegal.[42] In addition, the Court determined unanimously that any threat or use of nuclear weapons must conform to international humanitarian law.[43] In so doing, it confirmed that the principles of the Law of War apply to nuclear weapons (see Figure 19). Massive retaliation with strategic nuclear weapons would fail to meet these requirements. Thus nuclear deterrence doctrine, which entails the threat to use massive retaliation to prevent an attack, is implicitly illegal.

Military Implications. The Court confirmed that the Nuremberg Principles form a part of international humanitarian law.[44] This has serious implications for all those involved in planning and deploying nuclear forces. In particular, what is at stake here is a crucial difference between military professionals and hired killers or terrorists: military professionals accept legal constraints on their action as codified in military, international and domestic law. That is why they would be constrained from using prohibited weapons of mass destruction such as chemical and biological weapons. They need to know that, through the Court's decision, nuclear weapons are now effectively in the same category.

Figure 18.

WORLD COURT ADVISORY OPINION ON LEGAL STATUS OF NUCLEAR WEAPONS — DISPOSITIF

The World Court gave a 34-page main Advisory Opinion, plus over 200 pages of separate statements and dissenting Opinions by individual judges. The final paragraph of the main Opinion, known as the "Dispositif", follows:

"For these reasons, THE COURT

(1) *By thirteen votes to one,* Decides to comply with the request for an advisory opinion;

IN FAVOUR: President Bedjaoui (Algeria); Vice-President Schwebel (US); Judges Guillaume (France), Shahabuddeen (Guyana), Weeramantry (Sri Lanka), Ranjeva (Madagascar), Herczegh (Hungary), Shi (China), Fleischhauer (Germany), Koroma (Sierra Leone), Vereshchetin (Russia), Ferrari Bravo (Italy), Higgins (UK); AGAINST: Judge Oda (Japan).

(2) Replies in the following manner to the question put by the General Assembly:

A. *Unanimously,* There is in neither customary nor conventional international law any specific authorization of the threat or use of nuclear weapons;

B. *By eleven votes to three,* There is in neither customary nor conventional law any comprehensive and universal prohibition of the threat or use of nuclear weapons as such;

IN FAVOUR: President Bedjaoui; Vice-President Schwebel; Judges Oda, Guillaume, Ranjeva, Herczegh, Shi, Fleischhauer, Vereshchetin, Ferrari Bravo, Higgins;

AGAINST: Judges Shahabuddeen, Weeramantry, Koroma.

C. *Unanimously*, A threat or use of force by means of nuclear weapons that is contrary to Article 2, paragraph 4, of the United Nations Charter and that fails to meet all the requirements of Article 51, is unlawful;

D. *Unanimously*, A threat or use of nuclear weapons should also be compatible with the requirements of the international law applicable in armed conflict particularly those of the principles and rules of international humanitarian law, as well as with specific obligations under treaties and other undertakings which expressly deal with nuclear weapons;

E. *By seven votes to seven, (by the President's casting vote)*, It follows from the above-mentioned requirements that the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law;

However, in view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake;

IN FAVOUR: President Bedjaoui; Judges Ranjeva, Herczegh, Shi, Fleischhauer, Vereshchetin, Ferrari Bravo; AGAINST: Vice-President Schwebel; Judges Oda, Guillaume, Shahabuddeen, Weeramantry, Koroma, Higgins.

F. *Unanimously*, There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control."

Source: "Legality of the Threat or Use of Nuclear Weapons" (Advisory Opinion of July 8), UN Document A/51/218 (1996), reprinted in 35 I.L.M. 809 & 1343 (1996). Also available at the website: http://www.law.cornell.edu/icj1/opinion.htm.

Political Implications. The Court's Opinion can help politicians who support nuclear disarmament to take the legal high ground against the pro-nuclear lobby, who are now vulnerable to accusations of flouting the law. With an overwhelming majority of public opinion in the US, UK, Japan, Australia and at least five leading non-nuclear NATO states — Belgium, Canada, Germany, Netherlands and Norway — wanting their governments to negotiate a Nuclear Weapons Convention (see page 44), the Opinion is being used to present the new drive for nuclear disarmament as upholding the law.

Self-Defence Caveat No Loophole. The Court had one caveat. It stated: "(I)n view of the current state of international law, and of the elements of fact at its disposal, the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake."[45] Nonetheless, it decided unanimously that, even in such an extreme case, threat or use must comply with international humanitarian law.

The explosive power of even one Trident missile, for example, means that there is no scenario where its use could be lawful.

The nuclear weapon states argued that the use of small, precisely targeted nuclear weapons in self defence would not be unlawful. However, the Court decided that it did not have enough evidence to support this claim. Thereby, the Court left no exception. On the contrary, it challenged the nuclear weapon states that they had neither specified any legal circumstance for use, nor convinced it that "limited use would not tend to escalate into the all-out use of high-yield nuclear weapons."[46] Of immediate relevance is the 1997 US Presidential Decision Directive 60 referred to earlier (see Figure 13), echoed by a joint UK-France doctrine, which together threaten use of low-yield "warning shots" against non-nuclear weapon states threatening chemical or biological weapon attacks against US, UK or French "vital interests" anywhere in the world (see Figure 20). This also applies to the insistence by all the nuclear weapon states except China on the option to use nuclear weapons first.

The explosive power of even one Trident missile, for example, means that there is no scenario where its use could be lawful. The US version carries up to eight independently targetable warheads, each with a yield of 475 kilotons — which amounts to about 315 times the power of the Hiroshima bomb per missile (the Hiroshima bomb had a yield of about 12 kilotons). Following the 1998 Strategic Defence Review, each UK Trident missile carries only three warheads each of about 100 kilotons — but that is still the explosive power of 24 Hiroshima bombs.

Unanimous Call for Complete Nuclear Disarmament. As mentioned earlier on page 17, the Court unanimously held that ". . . (t)here exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control." It explained that Article VI of the NPT imposes "an obligation to achieve a precise result — nuclear disarmament in all its aspects — by adopting a particular course of conduct, namely, the pursuit of negotiations on the matter in good

Figure 19.

LAW OF WAR APPLIES TO NUCLEAR WEAPONS

In deciding that the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, the World Court confirmed that the principles of the Law of War (*jus in bello*) apply to nuclear weapons.

These principles are drawn from international treaties and agreements such as the Hague Conventions, Geneva Conventions and Genocide Convention. These prohibit the use, even in self-defence, of weapons which:

- Fail to discriminate between military and civilian personnel (Principle of Discrimination);
- Cause harm disproportionate to their preceding provocations and/or to legitimate objectives (Principles of Proportionality and Necessity);
- Cause unnecessary or superfluous suffering (Principle of Humanity);
- Affect neutral states (Principle of Neutrality);
- Cause widespread, long-lasting and severe damage to the environment (Principle of Environmental Security);
- Use asphyxiating, poisonous or other gases, and all analogous liquids, materials or substances (Principle of Toxicity).

Source: "Implications of the Advisory Opinion by the International Court of Justice on the Legal Status of Nuclear Weapons", Discussion Paper by the World Court Project International Steering Committee (Pottle Press, London, 1996), page 17.

NUCLEAR GUNBOAT DIPLOMACY

The 1998 UK Strategic Defence Review stated: "The credibility of deterrence also depends on retaining an option for a limited strike that would not automatically lead to a full scale nuclear exchange…Trident must also be capable of performing this 'sub-strategic' role."

That was almost all it had to say on a role which involves the most likely scenarios for the potential use of Britain's nuclear arsenal. This is because even only three independently targeted 100 kiloton warheads on a single Trident missile are not a credible threat to a "rogue" regime or terrorists — because the explosive power of each warhead equates to about eight times the Hiroshima bomb.

The US, UK and France therefore have plans to threaten to use "low-yield" warheads against non-nuclear "rogue" regimes in reprisal for attacks using chemical or biological weapons against their vital interests anywhere in the world.

In a UK *Financial Times* article on 31 October 1995, it was reported that the UK and France had agreed on a broad definition of sub-strategic deterrence which goes further: "(T)he use of a low-yield 'warning shot' against an advancing aggressor, with a threat warning of a massive nuclear strike unless the attack halts. This warning shot would apparently be fired as soon as a country's 'vital interests' were threatened…"

These plans clearly threaten first use where the survival of the nuclear weapon-using state is not at stake, which the World Court confirmed as illegal.

Another related concern is the total silence on the nature of the UK warhead to be used in this role. It is rumoured that several missiles in the deployed Trident submarine are carrying only one warhead, possibly capable of a choice of yield of 1 kiloton (only the trigger detonates), 10 kilotons (trigger plus fission boost), or 100-120 kilotons (full fission-fusion burst).

The US recently deployed the B61-11 earth-penetrating nuclear warhead with a variable yield between 0.3-340 kilotons for this purpose, for delivery by the B-2 "stealth" bomber. In February 1998, the US indicated that it was considering using such a weapon against suspected underground Iraqi chemical and biological weapon production and storage sites — but international protests forced it to back off (see Appendix A).

Sources: "The Strategic Defence Review", Cm 3999 (London: The Stationery Office, July 1998) paragraph 63; "Nuclear Futures: Proliferation of Weapons of Mass Destruction and US Nuclear Strategy" (British American Security Information Council Research Report 98.2, March 1998); Greg Mello, "The Birth of a New Bomb" (*Washington Post*, 1 June 1997).

Figure 20.

faith." The Court observed that at the time 182 states, "the vast majority of the international community," were parties to the NPT, and that nuclear disarmament is "an objective of vital importance to the whole of the international community today."

Of special significance is the phrase "to achieve a precise result": talking is not enough — it must lead to action. Also importantly the Court omitted the clause from Article VI relating to a treaty on general and complete disarmament — with which the nuclear weapon states link nuclear disarmament in Article VI. So the nuclear weapon states can no longer plausibly rely on the rationale that elimination of nuclear weapons must await the utopian achievement of comprehensive global disarmament. Finally, this last finding by the Court applies to all states, thus binding nuclear weapon-capable states not signatory to the NPT such as India, Israel and Pakistan.

As in all legal cases, the findings are open to interpretation. The same happened with slavery — until public opinion was mobilized in support of the self-evident legal case against it.

Reactions by the Nuclear Weapon States. Three years on, NATO has taken no position on the World Court Opinion; but the NATO nuclear weapon states have each baldly asserted that they are "confident" that it requires no change to their nuclear policies. What is more, NATO's review of its Strategic Concept showed no change, reaffirming NATO's commitment to maintain nuclear weapons for political reasons: "They will continue to fulfil an essential role by ensuring uncertainty in the mind of any aggressor about the nature of the Allies' response to military aggression."[47] Its nuclear weapon sharing arrangements with most of its European non-nuclear weapon member states are retained, and it keeps open an option to use nuclear weapons first.

Sub-strategic nuclear weapons "provide an essential political and military link between Europe and the North American members of the Alliance." In addition to US nuclear bombs, the updated Concept identifies for the first time "a small number of United Kingdom Trident warheads" to be part of NATO's sub-strategic nuclear posture in Europe. The UK government explains: "A sub-strategic capability is an essential element in ensuring that no nuclear-armed aggressor could gamble on us being self-deterred from crossing the nuclear threshold in extreme circumstances of self-defence by fear of an inevitable strategic exchange. In such extreme circumstances this capability would allow the limited use of nuclear weapons to send an aggressor a political message of the Alliance's resolve to defend itself. The UK has a degree of flexibility in the choice of yield for the warheads on its Trident missiles."[48] Nothing more is known about the choice of yield of this warhead — yet it is the most likely UK one to be used. More information is known on almost every other deployed nuclear weapon, including Russian and Chinese ones.

NATO's determination to retain its nuclear option is perhaps not surprising when the issue relates to probably the greatest investment in financial, political and human terms by the nuclear weapon states since the Second World War (see Figure 14). As in all legal cases, the findings are open to interpretation.

The same happened with slavery — until public opinion was mobilized in support of the self-evident legal case against it (see Figure 21). Ever since the atrocities of Hiroshima and Nagasaki, the US — with willing accomplices in successive UK and French governments as they ruthlessly acquired nuclear weapons to compensate for losing their empires — have gone to any lengths to try to insulate nuclear weapons from the law.

Nevertheless, in an article in the US *Air Force Law Review* by the Staff Judge Advocate, US Strategic Command,[49] the Court's Opinion was taken very seriously: "(I)t is influential in the court of world opinion and, indeed, may be accepted by a considerable number of countries as an expression of customary international law." Linking it with the view of a former Commander-in-Chief of US Strategic Command from 1992-94, General Lee Butler USAF (Ret), that nuclear weapons are "morally indefensible," the Judge Advocate saw this as questioning the legality of associated orders. He raised the possibility that this might cause some allies to decline to support a nuclear mission. He went on to reveal a recent US decision to enhance the level of legal advice on the "special issues that arise in the nuclear operations arena."[50]

However, in his conclusion, he argued not for the US to amend its policies and practices to conform with the legal restraints against nuclear weapon use. Instead, he warned "potential adversaries not to miscalculate the resolve of the U.S. military" to use nuclear weapons when and as they see fit: "Should deterrence fail, our forces are — and must continue to be — ready to immediately execute orders of the national command authorities to employ nuclear weapons."

This conclusion was reinforced by another chilling document which came to light recently. A partly declassified 1995 assessment — again by US Strategic Command — called "Essentials of Post-Cold War Deterrence" argued that having US military or civilian leaders "appear to be potentially 'out of control' can be beneficial to creating and reinforcing fears and doubts within the minds of

SLAVERY AND NUCLEAR WEAPONS

It was among a few thoughtful, committed British citizens that the anti-slavery campaign began in 1785. Surprisingly, the campaign focused on the illegality of slavery — not just its cruelty. For the first time, it harnessed the law and public opinion on a human rights issue: this was what forced politicians to vote against a system which underpinned their nation's entire wealth.

In 1785, slavery was accepted in much the same way as nuclear weapons now are — by a small group of predominantly Western/Northern nations and their allies. Three of the leading slaving nations are now NATO's nuclear trio: the US, UK and France. Unlike Russia and China, it is only within NATO's professed mature democratic process that citizens can demand change, and have any hope of influencing decision-makers.

The pro-nuclear fundamentalists argue that nuclear weapons are a "necessary evil," "cost-effective," "not against the law", and "there is no alternative." These were the slavers' arguments.

It took 58 years for a global treaty banning slavery to be agreed in 1833. US emancipation of slaves was proclaimed in 1863, and incorporated into the US Constitution two years later.

If we take the start of the anti-nuclear struggle as 1945, 58 years brings us to 2003. Moreover, the anti-slavery campaign did not have the UN, the World Court, the International Criminal Court, modern communications, and 87 per cent support among the American and British people — 93 per cent among Canadians, Germans and Norwegians — for a Nuclear Weapons Convention.

Figure 21.

an adversary's decision makers.... That the U.S. may become irrational and vindictive if its vital interests are attacked should be a part of the national persona we project to all adversaries."[51]

Nuclear Weapon States Ignoring Public Opinion

In March 1997, a US survey showed that 87 per cent of those polled wanted their government to negotiate a Nuclear Weapons Convention.[52] When the same question was asked by Gallup in the UK in September 1997, again 87 per cent agreed. What is more, large majorities (83 per cent in the US and 59 per cent in the UK) felt that it would be best for their respective nations' security if they did not have nuclear weapons. There was even a clear majority (54 per cent) for placing UK nuclear warheads in storage.[53] Public opinion on nuclear weapons in China is difficult to assess: but this is not so among the mature democracies of the NATO nuclear weapon states. And in Russia, an October 1998 survey showed that 61 per cent of those polled want all nuclear weapon states to eliminate their nuclear arsenals.[54]

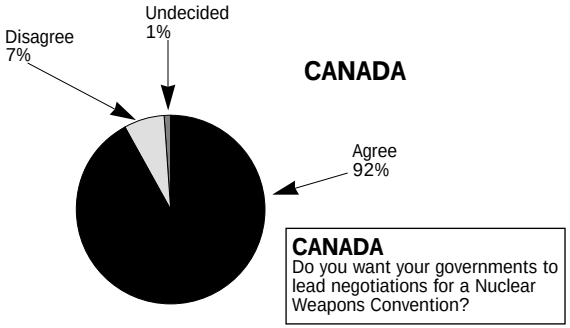
Recent polls conducted in the US and UK showed that 87 per cent of those polled wanted their government to negotiate a Nuclear Weapons Convention.

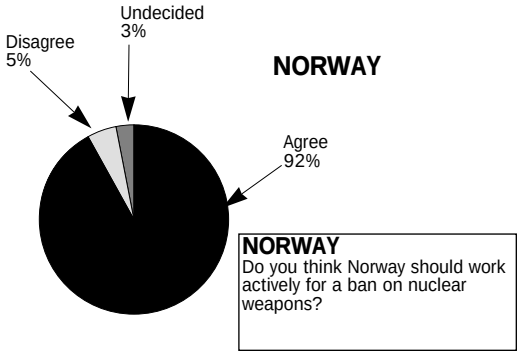
These remarkable findings confirmed a growing loss of public support for nuclear weapons following the end of the Cold War. In NATO, this trend was accelerated by resumption of French testing in 1995, where polls indicated even majority condemnation in France — though, alone among NATO members, there was still a small majority supporting nuclear weapons. In a February 1998 survey in non-nuclear NATO member Canada, no less than 92 per cent of Canadians polled wanted their government to lead negotiations for a Nuclear Weapons Convention — reflecting Canada's widely acclaimed role in securing a global ban on anti-personnel landmines the previous December.[55] This was echoed in a German poll in June 1998, where 87 per cent wanted the nuclear weapon states to get rid of their nuclear arsenals as quickly as possible;[56] and in July 1998 a Norwegian poll showed that 92 per cent wanted their government to work actively for a ban on nuclear weapons.[57] In September 1998, 72 per cent of Belgians polled wanted the same from their government;[58] and in a Netherlands poll in October 1998, 62 per cent disagreed that nuclear weapons are needed for security, and that a nuclear weapon-free world is unthinkable.[59] Meanwhile, in US-allied Japan and Australia, surveys in October and November 1998 respectively produced figures of 78 per cent of Japanese polled agreeing that all nuclear states should eliminate their nuclear arsenals,[60] while 92 per cent of Australians polled want their government to help negotiate a Nuclear Weapons Convention.[61]

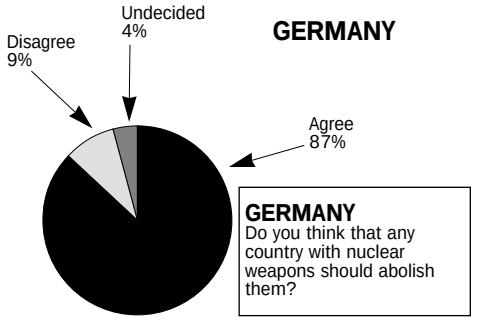
To date, only the UK government has acknowledged the strength of public support for a Nuclear Weapons Convention, a spokeswoman adding: "We play close attention to that."[62] Clearly a public mandate now exists for at least the US and UK to begin negotiations — and for Canada, Germany and Norway to play a strong supporting role in NATO. Indeed, such an initiative would appear to have become a vote-winner.

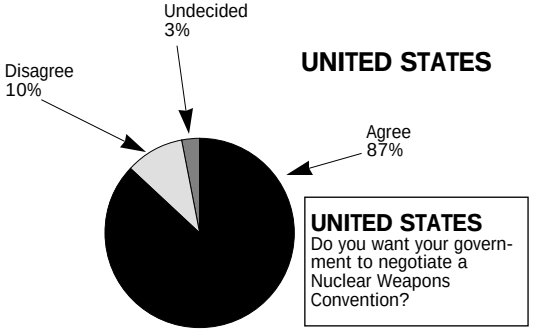
Figure 22.

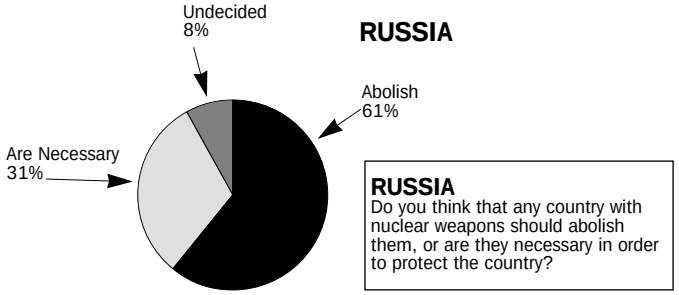
Opinion Polls on Nuclear Weapons 1997-1998

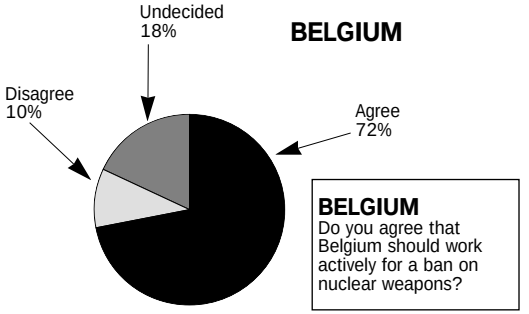


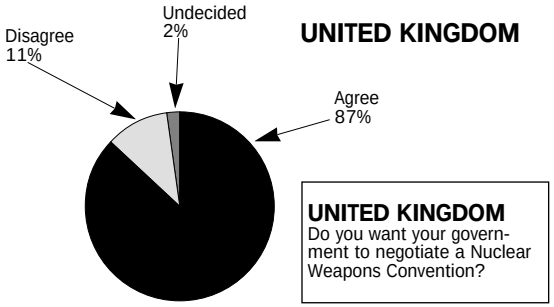


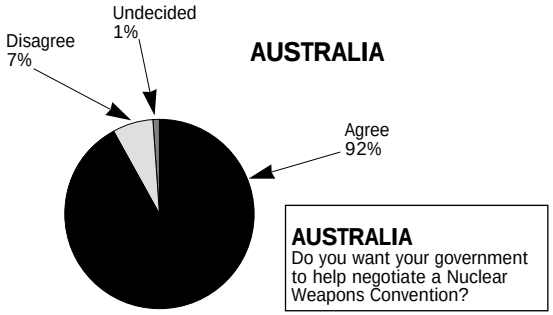


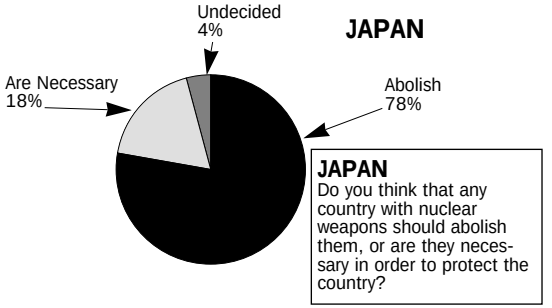












Source: Global Resource Action Center for the Environment (GRACE)

Concerned for his future, this child in Rarotonga joins more than 1,500 people (one-quarter of the island's population) marching on 23 June 1995 to protest French nuclear testing at Moruroa.
Photo: Greenpeace/Morgan.

CHAPTER 3. WARNINGS AND CALLS FOR ACTION

The sustained pressure by citizen organizations — assisted by the global outcry against French tests and the World Court Advisory Opinion — has resulted in a succession of authoritative reports and statements recommending complete nuclear disarmament.

General Lee Butler and General Andrew J. Goodpaster address the National Press Club in December 1996. Photo: Art Garrison.

Canberra Commission on the Elimination of Nuclear Weapons

Established by the Australian government despite its nuclear alliance with the US, the Commission consisted of 17 distinguished world figures including: Nobel Peace Prize-winner Joseph Rotblat; General Lee Butler USAF (Ret), Commander-in-Chief US Strategic Command in charge of all US nuclear forces 1992-94; Robert McNamara, US Secretary of Defense during the 1962 Cuban missile crisis; Field Marshal Lord Carver, UK Chief of Defence Staff 1973-76, and former French Prime Minister Michel Rocard. In their August 1996 report they concluded:

> "The risks of retaining nuclear arsenals in perpetuity far outweigh any possible benefit imputed to nuclear deterrence . . . . The end of the Cold War has created a new climate for international action to eliminate nuclear weapons, a new opportunity. It must be exploited quickly or it will be lost."

The report warned the nuclear weapon states about the risk they were running of encouraging the spread of nuclear weapons — borne out by India and Pakistan — through their perceived failure to honour their obligation to disarm under Article VI of the NPT:

> "The NPT rests on this promise and it must be kept. To deal effectively with proliferation therefore means also tackling head on the problem of nuclear disarmament and the elimination of nuclear weapons at the earliest possible time."

US National Academy of Sciences

In a 1997 report entitled *The Future of US Nuclear Policy*, the prestigious US National Academy of Sciences concluded that "The potential benefits of a global prohibition of nuclear weapons are so attractive relative to the attendant risks, that increased attention is now warranted to studying and fostering the conditions that would have to be met to make prohibition desirable and feasible."

Generals' and Admirals' Statements

On 5 December 1996, an unprecedented statement calling for the elimination of nuclear weapons was released by 61 former Generals and Admirals from 17 countries, including 18 Russians and 17 from the US. Among them were: Alexander Lebed, Yeltsin's former national security adviser and a Presidential candidate; Andrew Goodpaster, former NATO Supreme Allied Commander; Lee Butler; and Charles Horner, who commanded the allied air forces in the Gulf War. The statement began:

> "We, military professionals, who have devoted our lives to the national security of our countries and of our peoples, are convinced that the continuing existence of nuclear weapons in the armories of the nuclear powers, and the ever present threat of acquisition of these weapons by others, constitute a peril to global peace and security and to the safety and survival of the people we are dedicated to protect."

Introducing the statement to the National Press Club in Washington D.C., General Lee Butler explained why he had "made the long and arduous journey from staunch advocate of nuclear deterrence to public proponent of nuclear abolition." He warned:

> "Options are being lost as urgent questions are unasked, or unanswered; as outmoded routines perpetuate Cold War patterns and thinking; and as a new generation of nuclear actors and aspirants lurch backward toward a chilling world where the principal antagonists could find no better solution to their entangled security fears than Mutual Assured Destruction."

General Lee Butler USAF (Ret) on Nuclear Deterrence. General Butler has said the following about nuclear deterrence:

"The theory of nuclear deterrence . . . is costly, wrong-headed and dangerous."

- "(T)he theory of nuclear deterrence, the bedrock principle of US national security during the Cold War, is costly, wrong-headed and dangerous."
- "(Deterrence) evolved from an increasingly convoluted morass of unwarranted assumptions, unprovable assertions and logical contradictions. By the end of the first decade of the Cold War, it had effectively served to suspend rational thinking about the ultimate aim of national security: to ensure the survival of the nation."
- "Little wonder that deterrence was the first victim of real world crises, leaving the antagonists to grope fearfully through a fog of mutual misperception toward the brink of nuclear holocaust." (the 1962 Cuban missile crisis)
- "While we clung to the notion that nuclear war could be deterred, Soviet leaders held fast the conviction that even a nuclear war must be won — and took herculean measures toward that end."
- "Deterrence was a dialogue of the blind with the deaf. In the final analysis, it was largely a bargain we in the West made with ourselves."
- "Deterrence was flawed equally in that the consequences of its failure were intolerable."
- "Deterrence carried a demon seed, born of an irresolvable contradiction, that spurred an insatiable arms race."

Civilian Leaders' Statement

The above quotes are from General Butler's speech on 2 February 1998 in the National Press Club when he launched a statement by some 120 civilian leaders. He described them as "a compelling addition to the roster of distinguished international figures who have joined their voices in calling publicly for the abolition of nuclear weapons." Former Heads of State and government including Jimmy Carter, Lord Callaghan, Helmut Schmidt and Pierre Trudeau ended their statement with the following words:

> "The world is not condemned to live forever with threats of nuclear conflict, or the anxious, fragile peace imposed by nuclear deterrence. Such threats are intolerable and such a peace unworthy. The sheer destructiveness of nuclear weapons invokes a moral imperative for their elimination. That is our mandate. Let us begin."

CHAPTER 4. LEADERSHIP FROM THE NEW AGENDA COALITION

It has become obvious that the process of nuclear disarmament cannot be left to the nuclear weapon states. Article VI of the Non-Proliferation Treaty obliges all states to negotiate nuclear disarmament as well as general and complete disarmament. As the World Court confirmed, these two elements are not dependent on each other. Because of their unique threat to civilization and the planet, the elimination of nuclear weapons must be given the highest negotiating priority.

The nuclear weapon state leaders are trapped by a 50-year legacy of the gigantic resources — financial, material, human and psychological — invested in their nuclear arsenals, beginning with the Manhattan Project. What would it take for them to break free from this?

Tragically, it often takes a disaster to motivate people to act. If a nuclear weapon was used by accident, miscalculation or design by either a state or terrorist group, the result would be so devastating that global outrage and fear would most likely force rapid progress to eliminate nuclear weapons. However, the great question before us is: how can the political momentum for nuclear abolition be generated before such a disaster strikes?

Irish Minister for Foreign Affairs David Andrews presents the Joint Declaration of the New Agenda Coalition on 9 June 1998 at a press conference. Photo: Mark Maxwell, Maxwell Picture Agency, Dublin.

No one state can move the nuclear weapon states. With nuclear disarmament in deepening crisis, a concerted effort by a number of influential states is needed to convince the nuclear weapon states to change their potentially suicidal and omnicidal nuclear policies.

The Middle Powers Initiative, therefore, welcomed the historic launch on 9 June 1998 of the New Agenda Coalition (NAC) of eight countries drawn from every continent, independent of the Cold War blocs. Their Joint Declaration (see Figure 23) — released simultaneously by their Foreign Ministers in the capitals of Brazil, Egypt, Mexico, Ireland, New Zealand, Slovenia, South Africa and Sweden — courageously criticized both the nuclear weapon states and the three nuclear weapon-capable states of India, Israel and Pakistan, before proposing a practical, realistic plan for achieving a fast track to zero nuclear weapons. That plan rightly starts with the nuclear weapon state leaders making an unequivocal commitment to complete disarmament. The NAC then stated:

> "The international community must not enter the third millennium with the prospect that the maintenance of these weapons will be considered legitimate for the indefinite future, when the present juncture provides a unique opportunity to eradicate and prohibit them for all time."

A concerted effort by a number of influential states is needed to convince the nuclear weapon states to change their potentially suicidal and omnicidal nuclear policies.

Having specified a list of immediate practical steps to be taken by the nuclear weapon states and nuclear weapon-capable states, the Declaration concluded as follows:

> "We, on our part, will spare no efforts to pursue the objectives outlined above. We are jointly resolved to achieve the goal of a world free from nuclear weapons. We firmly hold that the determined and rapid preparation for the post-nuclear era must start now."

New Agenda Coalition Joint Declaration of 9 June 1998

Figure 23.

TOWARDS A NUCLEAR-WEAPON-FREE WORLD: THE NEED FOR A NEW AGENDA

1. We, the Ministers for Foreign Affairs of Brazil, Egypt, Ireland, Mexico, New Zealand, Slovenia, South Africa and Sweden have considered the continuing threat to humanity represented by the perspective of the indefinite possession of nuclear weapons by the nuclear-weapon States, as well as by those three nuclear-weapons-capable States that have not acceded to the Treaty on the Non-Proliferation of Nuclear Weapons, and the attendant possibility of use or threat of use of nuclear weapons. The seriousness of this predicament has been further underscored by the recent nuclear tests conducted by India and Pakistan.

2. We fully share the conclusion expressed by the commissioners of the Canberra Commission in their Statement that "the proposition that nuclear weapons can be retained in perpetuity and never used — accidentally or by decision — defies credibility. The only complete defence is the elimination of nuclear weapons and assurance that they will never be produced again."

3. We recall that the General Assembly of the United Nations already in January 1946 — in its very first resolution — unanimously called for a commission to make proposals for "the elimination from national armaments of atomic weapons and all other major weapons adaptable to mass destruction." While we can rejoice at the achievement of the international community in concluding total and global prohibitions on chemical and biological weapons by the Conventions of 1972 and 1993, we equally deplore the fact that the countless resolutions and initiatives which have been guided by similar objectives in respect of nuclear weapons in the past half-century remain unfulfilled.

4. We can no longer remain complacent at the reluctance of the nuclear-weapon States and the three nuclear-weapons-capable States to take that fundamental and requisite step, namely a clear commitment to the speedy, final and total elimination of their nuclear weapons and nuclear weapons capability and we urge them to take that step now.

5. The vast majority of the membership of the United Nations has entered into legally binding commitments not to receive, manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices. These undertakings have been made in the context of the corresponding legally binding commitments by the nuclear-weapon States to the pursuit of nuclear disarmament. We are deeply concerned at the persistent reluctance of the nuclear-weapon States to approach their treaty obligations as an urgent commitment to the total elimination of their nuclear weapons.

6. In this connection we recall the unanimous conclusion of the International Court of Justice in its 1996 Advisory Opinion that there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.

7. The international community must not enter the third millennium with the prospect that the maintenance of these weapons will be considered legitimate for the indefinite future, when the present juncture provides a unique opportunity to eradicate and prohibit them for all time. We therefore call on the Governments of each of the nuclear-weapon States and the three nuclear-weapons-capable States to commit themselves unequivocally to the elimination of their respective nuclear weapons and nuclear weapons capability and to agree to start work immediately on the practical steps and negotiations required for its achievement.

8. We agree that the measures resulting from such undertakings leading to the total elimination of nuclear weapons will begin with those States that have the largest arsenals. But we also stress the importance that they be joined in a seamless process by those with lesser arsenals at the appropriate juncture. The nuclear-weapon States should immediately begin to consider steps to be taken to this effect.

9. In this connection we welcome both the achievements to date and the future promise of the START process as an appropriate bilateral, and subsequently plurilateral, mechanism including all the nuclear-weapon States, for the practical dismantlement and destruction of nuclear armaments undertaken in pursuit of the elimination of nuclear weapons.

10. The actual elimination of nuclear arsenals, and the development of requisite verification regimes, will of necessity require time. But there are a number of practical steps that the nuclear weapon states can, and should, take immediately. We call on them to abandon present hair-trigger postures by proceeding to de-alerting and de-activating of their weapons. They should also remove non-strategic nuclear weapons from deployed sites. Such measures will create beneficial conditions for continued disarmament efforts and help prevent inadvertent, accidental or unauthorized launches.

11. In order for the nuclear disarmament process to proceed, the three nuclear-weapons-capable States must clearly and urgently reverse the pursuit of their respective nuclear weapons development or deployment and refrain from any actions which could undermine the efforts of the international community towards nuclear disarmament. We call upon them, and all other States that have not yet done so, to adhere to the Non-Proliferation Treaty and take the necessary measures which flow from adherence to this instrument. We likewise call upon them to sign and ratify the Comprehensive Nuclear Test Ban Treaty without delay and without conditions.

12. An international ban on the production of fissile material for nuclear weapons or other nuclear explosive devices (cut-off) would further underpin the process towards the total elimination of nuclear weapons. As agreed in 1995 by the States parties to the Non-Proliferation Treaty, negotiations on such a convention should commence immediately.

13. Disarmament measures alone will not bring about a world free from nuclear weapons. Effective international cooperation to prevent the proliferation of these weapons is vital and must be enhanced through, *inter alia*, the extension of controls over all fissile material and other relevant components of nuclear weapons. The emergence of any new nuclear-weapon State, as well as any non-State entity in a position to produce or otherwise acquire such weapons, seriously jeopardizes the process of eliminating nuclear weapons.

14. Other measures must also be taken pending the total elimination of nuclear arsenals. Legally binding instruments should be developed with respect to a joint no-first use undertaking between the nuclear-weapon States and as regards non-use or threat of use of nuclear weapons against non-nuclear-weapon States, so called negative security assurances.

15. The conclusion of the Treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba, establishing nuclear-weapon-free zones as well as the Antarctic Treaty have steadily excluded nuclear weapons from entire regions of the world. The further pursuit, extension and establishment of such zones, especially in regions of tension, such as the Middle East and South Asia, represents a significant contribution to the goal of a nuclear-weapon-free world.

16. These measures all constitute essential elements which can and should be pursued in parallel: by the nuclear-weapon States among themselves; and by the nuclear-weapon States together with the non-nuclear weapon States, thus providing a road map towards a nuclear-weapon-free world.

17. The maintenance of a world free of nuclear weapons will require the underpinnings of a universal and multilaterally negotiated legally binding instrument or a framework encompassing a mutually reinforcing set of instruments.

18. We, on our part, will spare no efforts to pursue the objectives outlined above. We are jointly resolved to achieve the goal of a world free from nuclear weapons. We firmly hold that the determined and rapid preparation for the post-nuclear era must start now.

Commitment to Multilateral Negotiations

The most important first step required of the nuclear weapon states is to give an unequivocal commitment to complete nuclear disarmament, by commencing multilateral negotiations leading to the elimination of nuclear weapons through a Nuclear Weapons Convention. All other steps should be seen as contributing to that goal. The NAC stated: "The maintenance of a world free of nuclear weapons will require the underpinnings of a universal and multilaterally negotiated binding instrument or a framework encompassing a mutually reinforcing set of instruments."

Maintaining nuclear forces on high alert needlessly sustains the risk of hair-trigger postures.

However, there are also interim achievable steps which the nuclear weapon states can take immediately — unilaterally, bilaterally or multilaterally — to make the world safer, and show a responsible example to the nuclear weapon-capable states. The most important of these, as emphasised by the NAC, is to stand down all nuclear forces from hair-trigger alert.

De-Alerting

In their report of August 1996, the Canberra Commission made the following points about the continuing practice of maintaining nuclear-tipped missiles on alert:

- It is a highly regrettable perpetuation of Cold War attitudes and assumptions.
- It needlessly sustains the risk of hair-trigger postures.
- It retards the critical process of normalizing US-Russian relations.
- It sends the unmistakable and, from an arms control perspective, severely damaging message that nuclear weapons serve a vital security role.
- It is entirely inappropriate to the extraordinary transformation in the international security environment.[63]

The report added: "Taking these missiles off alert is a natural counterpart to the stand-down of bombers from nuclear alert which was implemented in late 1991." Terminating nuclear alert would:

- Reduce dramatically the chance of an accidental or unauthorized nuclear weapons launch.
- Have a most positive influence on the political climate among the nuclear weapon states.
- Help set the stage for intensified cooperation.

The Commission concluded: "Taking nuclear forces off alert could be verified by national technical means and nuclear weapon state inspection arrangements. In the first instance, reductions in alert status could be adopted by the nuclear weapon states unilaterally."[64]

Figure 24.

DE-ALERTING

Figure 3 explained de-targeting. De-alerting is the process of standing down nuclear missile systems from readiness to be launched.

A notable precedent for de-alerting was set by President Bush in September 1991 when the Soviet Union began to break up in the wake of the August coup attempt. On the advice of General Lee Butler, Bush ordered an immediate stand-down of the many US strategic bombers that had remained ready for decades to take off with only a few minutes' warning.

Practically, it was simply a question of making sure that the bombers never flew armed with nuclear warheads, which were separated from their missiles where applicable and placed in storage. The crews could still fly practice missions, simulating warhead settings and responses; but they were relieved of the risk of accidents during loading/unloading, let alone in flight.

The practical process of taking land-based Inter-Continental Ballistic Missiles (ICBMs) and Submarine-Launched Ballistic Missiles (SLBMs) off alert is potentially as simple as for bombers: remove the missiles from the silos and submarines, separate the warheads and put them into verifiable storage. As with the bombers, simulation packages could be provided.

However, no conventional roles are currently available for ICBMs and ballistic missile submarines. This may be about to change: the US Navy is planning to re-equip Trident submarines withdrawn under the START II Treaty with conventional warheads on their missiles.

Less radical, verifiable de-alerting measures include:

- ICBM silo lids can be immobilized so that only a large crane could open them.
- The battery that operates the missile guidance system can be removed.
- Missiles can have their safety switches pinned open so that they cannot be launched.

De-Alerting Objections and Rebuttals

Military leaders and planners in the NATO nuclear weapon states and Russia give a number of reasons for refusing to take all nuclear forces off alert:

1) They could be susceptible to a disarming first strike which destroys their warheads. In the event of a warning of such a strike, there would not be time to re-install and launch their missiles before they were hit.

Rebuttal: This argument is only valid if one side is fully de-alerted and the other on high alert. If both sides are verifiably de-alerted, neither side could launch a massive first strike without having to re-install and re-alert their systems — which would immediately be detected and give the time needed to respond.

2) It is politically easier to use nuclear weapons as an actual threat in a conflict if no change in force structure is needed. The continuous deployment of nuclear weapons in submarines, for example, allows the US to insinuate a threat of their use against Iraq without having to confirm it through any change in deployment status. A variant on this line is that re-alerting would create new risks of crisis escalation.

Rebuttal: The problem with this strategy — and therefore an additional argument for de-alerting — is that it sustains one of the most dangerous aspects of current nuclear strategy: the political ease of threatening to use nuclear weapons. This makes it much more likely that such weapons will be used.

3) De-alerting would undermine nuclear deterrence doctrine, and its stabilizing role in a developing crisis.

Rebuttal: De-alerting does not affect general deterrence policy. Each side would continue to have its nuclear arsenal and the capability to deliver it. What de-alerting does is to place a small but useful political and physical firebreak between the weapon systems and their potential use. This would reduce the irresponsible instability of continuous deployment at high alert.

De-alerting is consistent with other stabilizing force posture changes made since the end of the Cold War, such as confidence-building measures under the Conventional Forces in Europe Treaty.

Sources: Bruce G. Blair, Harold A. Feiveson and Frank N. von Hippel,"Taking Nuclear Weapons off Hair-Trigger Alert," *Scientific American* (November 1997), pp 74-81); *Navy News*, Vol. 2, No.13, *Jane's Defence Upgrades* (3 July 1998), p 3; *The Strategic Defence Review*, Cm 3999 (London: The Stationery Office, July 1998), Supporting Essay Five, "Deterrence, Arms Control, and Proliferation", paragraph 13.

These Strategic Air Command missileers work together in a capsule 60 feet underground. They will execute nuclear weapons launch commands when issued orders to do so. Photo: Robert Del Tredici

An obvious follow-up to such an initiative would be the Commission's second recommended step: removal of warheads from delivery vehicles. This would strongly reinforce the gains achieved by de-alerting. Advantages cited by the Commission include:

- This measure can be implemented to the extent that nuclear forces can be reconstituted to an alert posture only within known or agreed timeframes, much as is the case with bomber forces.
- Adequate response to nuclear threats would remain certain, but the risk of large-scale pre-emptive or surprise nuclear attack and the imperative for instantaneous retaliation would be avoided.
- The barriers against inadvertent or accidental use would be greatly strengthened.[65]

The Commission added that the range of verification procedures already in place between the US and Russia could be applied as the basis of a regime to ensure that no state would have a meaningful advantage in terms of the ability to reassemble its nuclear force for a first-strike capability.

General Lee Butler was responsible for recommending to President Bush the proposal to stand down his own Strategic Command bombers in 1991. General Butler later commented: "Among its advantages, it is easily explainable, and easily reversible in physical terms. However, once implemented, politically it would be extremely difficult to reverse."[66]

When President Clinton was first considering de-targeting, he apparently misunderstood it to mean de-alerting, yet accepted the latter before being corrected.[67] At the signing of the NATO/Russia Founding Act in May 1997, Yeltsin made a similar error.[68] What this suggests is that there may be widespread support now for standing down Cold War-style deterrence doctrine in favour of "existential" deterrence, which — as demonstrated by Israel — simply relies on possession of a nuclear arsenal and the capability to deliver it.

In the 1998 UK Strategic Defence Review, the government announced that it had taken the Trident force off high alert, but had rejected separating warheads from missiles and placing them in verifiable storage.[69]

Ending Deployment of Non-Strategic Nuclear Weapons

As demanded by the NAC, the nuclear weapon states should unilaterally remove all non-strategic nuclear weapons from deployed sites to a limited number of secure storage facilities on their territories. This would be a logical follow-on to the 1991 unilateral declarations by the US and Soviet Union, whereby each pledged to remove all non-strategic nuclear weapons from surface ships and store them on shore.

The Canberra Commission commented: "As regards NATO, with the dissolution of the Warsaw Pact and all that has followed in its wake, the nuclear threat long felt by the Alliance has evaporated. US tactical nuclear weapons deployed in Western Europe serve no security purpose. To the contrary, they send a subtle but unmistakable message that Russia is still not to be trusted, thus feeding the fears that NATO harbours aggressive designs against it. These nuclear weapons can be returned to US territory and stored so that, much like strategic forces removed from alert, they cannot be readily redeployed."[70] However, such a move would also entail withdrawing non-strategic nuclear-tipped cruise missiles deployed in submarines by both the US and Russia.

A missile silo is opened for inspection by the Russian rocket forces at a site about 70 kilometers from Saratov. Armed missiles in the area remain ready.
Photo: Reuters/Archive Photos

No-First-Use

The NAC stated: "Legally binding instruments should be developed with respect to a joint no-first-use undertaking between the nuclear-weapon States. . . " The NATO nuclear weapon states and Russia should join China in making a commitment not to be the first to use nuclear weapons under any circumstances. Hitherto, NATO has refused on the grounds that nuclear weapons may be needed to counter an overwhelming conventional attack. Now Russia has the same excuse because of NATO's conventional superiority. This means that the onus is now on NATO to take the initiative, especially in light of the World Court Opinion.

However, it must be recognized that no-first-use agreements do not remove the threat of use of nuclear weapons. In times of conflict, adversaries with nuclear arsenals may doubt whether their opponents would keep such a pledge, or they may launch a first strike mistakenly thinking it to be in response to a nuclear attack. No-first-use must therefore be accompanied by de-alerting and followed quickly by dismantling and elimination. Also, support for no-first-use implies that second use is acceptable — but the World Court confirmed that any threat or use would generally be unlawful (see Figure 18).

Reinforcing Steps

The NAC proposed most of the following steps which the nuclear weapon states should take. These would build on the solid foundation of commitment, accomplishment and goodwill established through implementation of the steps recommended above for immediate action:

- Transforming into a legally binding elimination treaty the 1991 unilateral declarations withdrawing non-strategic weapons from deployment.
- Reaching a binding agreement on "negative security assurances" (undertakings by nuclear weapon states not to use nuclear weapons against non-nuclear weapon states).
- Achieving deep cuts in stockpiles.
- Establishing a registry of all nuclear weapons and weapons-grade fissile materials.
- Placing all fissile material under international control.
- Ending all nuclear weapon research, design, development, testing and production.
- Developing verification arrangements for a nuclear weapon-free world.

These steps are similar to those proposed in the "Programme of Action for the Elimination of Nuclear Weapons", which was introduced in the Conference on Disarmament by the "Group of 28" in August 1996.

Supporting the UN Resolution for a Nuclear Weapons Convention

In October 1996, Malaysia introduced a resolution to the UN General Assembly entitled "Follow-up to the Advisory Opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons." The resolution noted the Court's Advisory Opinion, and particularly its unanimous conclusion that all states have an obligation to pursue and conclude negotiations on nuclear disarmament (see page 39). The resolution called for multilateral negotiations to begin in 1997 leading to an early conclusion of a Nuclear Weapons Convention prohibiting the development, production, testing, deployment, stockpiling, transfer, threat or use of nuclear weapons and providing for their elimination.

New Zealand noted that the resolution "allows for . . . a programme of intermediate steps towards the final goal of a Convention banning nuclear weapons."[71] Like the "Group of 28" programme, the Malaysian resolution envisaged that such disarmament steps should not be in isolation, but part of an ongoing programme leading to the elimination of nuclear weapons. Unlike the former, however, the resolution did not specify what steps should be taken, nor did it impose any timeframe for completion of them, thus offering considerable flexibility to the nuclear weapon states. Most importantly, the resolution drew

attention to what will be needed in an international regime to eliminate nuclear weapons.

It was adopted by 115 votes to 22 with 32 abstentions. In 1997 and 1998, it was reintroduced and adopted by similar majorities, with an additional call for states to report to the UN Secretary-General on progress made by them towards implementing the Court's decision and the resolution. In 1998, for example, New Zealand reported that the NAC initiative was one of the actions it was taking to fulfil its obligations.

As its response in 1997, Costa Rica submitted to the UN Secretary-General a model Nuclear Weapons Convention setting forth the legal, technical and political issues that should be considered in order to obtain an actual global treaty (see Figure 5). As a UN document, the model will help to dispel some of the institutional doubts about the feasibility of achieving a verified, enforceable nuclear abolition regime.

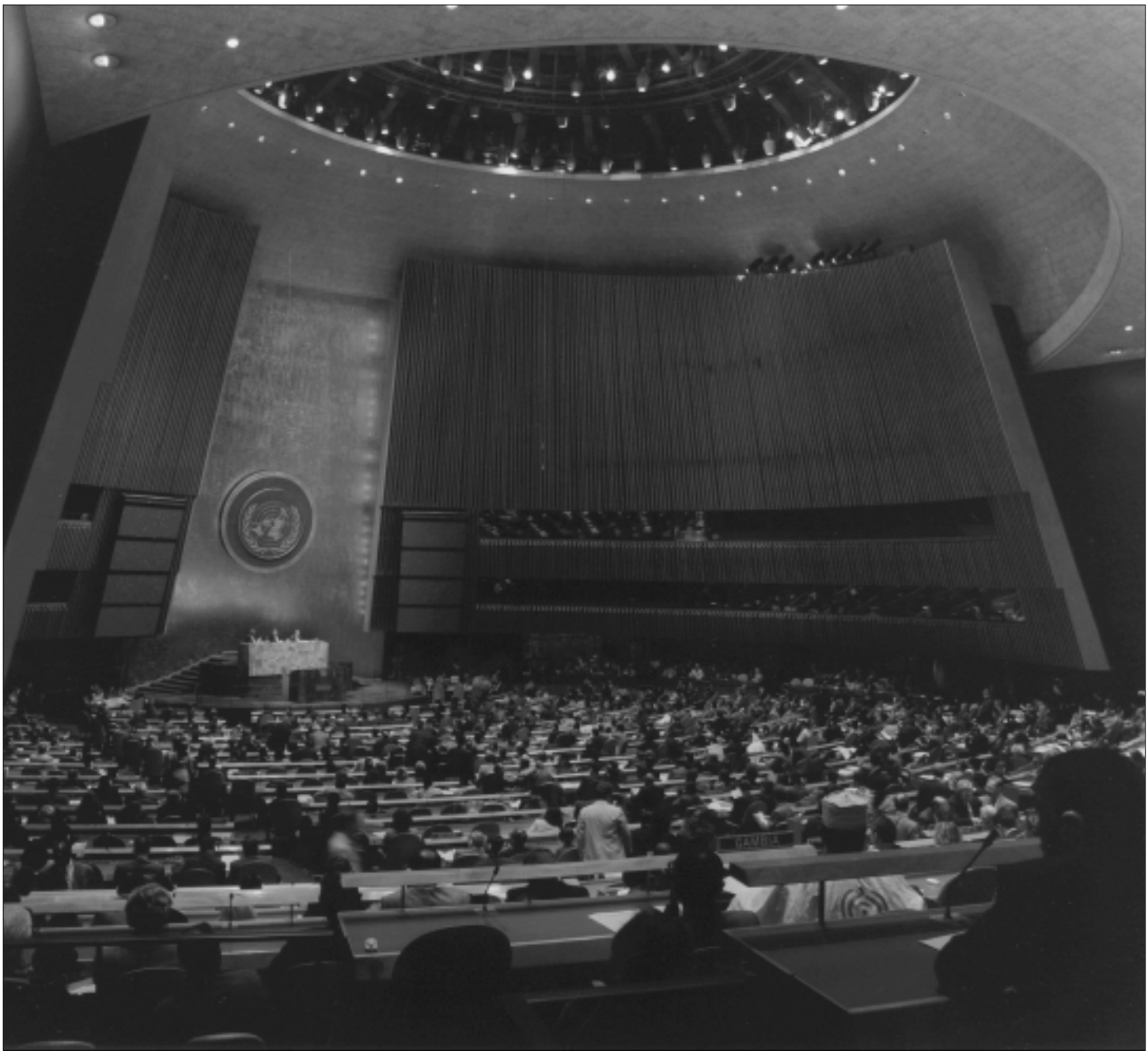
The very act of starting — regardless of how long the negotiations last or what is agreed — would restore the political impetus towards nuclear disarmament.

The debate has now been carried forward further by an important new book, *Security and Survival: The Case for a Nuclear Weapons Convention*,[72] in which the latest concerns from the nuclear weapon states are discussed and practical solutions offered. Such careful, non-confrontational work by citizen experts is a crucial tool in the struggle to achieve "a paradigm shift of thinking from the impossibility to the practicality of nuclear weapons abolition."[73]

Starting multilateral negotiations with such an aim would be how the nuclear weapon states could best demonstrate a commitment to their obligations to achieve nuclear disarmament. The very act of starting — regardless of how long the negotiations last or what is agreed — would restore the political impetus towards nuclear disarmament. Nuclear weapon-capable states could no longer justify acquiring nuclear weapons by pointing to the lack of progress towards abolition, as did India.

On 16 June 1999 in an article in the *International Herald Tribune* headlined "The Way to Get On With Nuclear Disarmament," China's President Jiang Zemin demonstrated the leadership that is needed when he wrote:

> "A convention on the comprehensive ban of nuclear weapons should be negotiated. Since biological and chemical weapons have been prohibited, there is no reason why nuclear weapons, which are more destructive, should not be comprehensively banned and thoroughly destroyed. All it takes to reach this objective is strong political will."



The UN General Assembly in session.
Photo: UN/DPI photo by Eskinder Debebe.

CHAPTER 5. THE MIDDLE POWERS INITIATIVE

The Middle Powers Initiative (MPI) is a carefully focused and coordinated campaign by a network of international citizen organizations to encourage and educate the leaders of the nuclear weapon states to break free from their Cold War mindset, and move rapidly to a nuclear weapon-free world. It grew out of an initiative by the Canadian Network for the Abolition of Nuclear Weapons. It is now co-sponsored by eight leading international organizations. The dangers arising from the continued reliance on the threat to use nuclear weapons have stimulated action by numerous professional arms control, non-proliferation, security and disarmament organizations, parliamentarians, individual experts and grassroots/civil society networks such as Abolition 2000, which is supported by almost 1,500 citizen organizations worldwide (see Figure 6).

MPI originally planned to facilitate the forging of a new coalition of influential middle-power governments with good track records in nuclear disarmament from nearly every continent, free of the Cold War blocs, to act together to help the nuclear weapon states abandon their dependence on nuclear weapons. Then, completely independently on 9 June 1998, eight Foreign Ministers of middle-power countries formed the New Agenda Coalition (NAC) and released its Joint Declaration (see Figure 23). This bold and courageous action achieved MPI's initial aim nearly a year sooner than anticipated.

Supporting the New Agenda Coalition

While the Joint Declaration and UN resolution did not go as far as MPI proposes, the NAC made a spectacular start. An immediate MPI priority, therefore, was to support the NAC in its campaign to break the deadlock in nuclear disarmament, and in particular its call for an immediate first step of de-alerting all nuclear forces. However, MPI's primary aim is to seek the start of multilateral negotiations leading to the signing of a Nuclear Weapons Convention. Other objectives include:

- Reaching out to key states to support the NAC.
- Holding seminars, particularly in the NAC countries and the nuclear weapon states, to generate support among decision-makers.
- Raising media awareness.
- Mobilizing public opinion.

This process allows for intermediate steps as outlined earlier, and places them firmly in a negotiating path to complete nuclear disarmament. Such a framework enables the NAC to discuss a Nuclear Weapons Convention as an end goal. It also provides a basis for all states to join negotiations on disarmament steps and possibly sign, and even ratify, the Comprehensive Test Ban Treaty. In sum, the demand for a Nuclear Weapons Convention and practical step-by-step progress are mutually reinforcing strategies, not competitive or mutually exclusive. This approach should stand a good chance of gathering considerable media, public and political attention.

The nuclear weapon states are committed to ultimate abolition in principle; and undoubtedly achieving this goal will be immensely complex. This is where a model

Nuclear Weapons Convention (see Figure 5) comes in, to demonstrate concrete solutions to concerns such as verification and compliance, and as a starting point for negotiations.

The Heart of the Issue

MPI's campaign is centred around the heart of the issue: the assault on humanity that nuclear weapons represent. Humanity provides our common bond. The NAC's challenge deserves and needs the degree of support from governments, the public and media given to the International Campaign to Ban Landmines, which focused on the inhumanity of landmines — and showed what can be achieved by a partnership between governments and civil society. As the World Court reminded us, only nuclear weapons can destroy all civilization and the entire ecosystem of the planet.

Apathy over nuclear weapons arises mostly because the nuclear threat, though far more dangerous, is hidden from view. Whereas an arm or leg lost to a landmine is obvious, the cancer or genetic deformity caused by a nuclear weapon test or radiation leak from a nuclear weapon production plant is less visible and harder to attribute directly to nuclear weapons.

Similarly, the deployment of nuclear weapons in submarines hidden in the oceans and heavily guarded underground silos generates an "out of sight, out of mind" mentality. So while the public overwhelmingly supports nuclear abolition, these difficulties make it easier for the nuclear weapon states to avoid their obligation to get rid of their nuclear arsenals.

MPI, therefore, aims to mobilize that public support by focusing media attention on the urgent need to make the nuclear threat more visible, including the following specific aspects:

Among the most highly exposed groups of downwinders are those who live near Semipalatinsk nuclear weapons test site in Kazakhstan.
Photo: Yuri Kuidin.

- The casualties from thousands of nuclear tests (especially those from the US, Pacific, Australia and Kazakhstan).
- The nature of nuclear weapons, including the unique, cumulative effects of radiation on generations to come; the irrational risks of maintaining nuclear weapons on hair-trigger alert; and the appalling effects of the detonation of even a small nuclear weapon.
- The irresponsibility, immorality, and illegality of nuclear deterrence doctrine — and growing doubts that it works.

MPI will also focus on bringing this information to the attention of nuclear weapon decision-makers. Their preoccupation with abstract strategy and politics insulates them from the physical realities of nuclear weapons — like the potential deaths of hundreds of thousands of people within minutes of a major nuclear detonation — especially when the horrors of Hiroshima and Nagasaki are so remote from them.

The Need for Urgency

The need for urgency may be summarized as follows:

- Human fallibility makes a nuclear exchange ultimately inevitable if nuclear weapons are retained indefinitely.
- Such an exchange could destroy civilization as we know it.
- Technical advances, and the growing difficulty of controlling the spread of information, make the acquisition or production of nuclear weapons increasingly feasible.
- Failure by the nuclear weapon states to implement their NPT obligation to eliminate their nuclear arsenals and fissile material stockpiles increases the risk of nuclear proliferation.
- Current and potential conflicts, such as those over Kashmir, North and South Korea, and the status of Taiwan involve the possibility of nuclear weapon use.
- Notwithstanding the alienation of Russia and China caused by NATO's intervention in the Balkans, currently the nuclear weapon states are not in major conflict with each other: so the opportunities for nuclear disarmament are as good as they are ever likely to be.

MPI compares the risk of maintaining the nuclear status quo while continuing to drift towards catastrophe, with the possible risk of one state secretly maintaining a nuclear weapon capability while others eliminate their arsenals. With the current agenda of the nuclear weapon states, it is increasingly likely that nuclear weapons will be used again, either by accident or intent; and the worst case is full-scale nuclear war. In the other, the worst case would be the threat or use of a small number of nuclear weapons, the result of which would be instant condemnation and international action against the state or actors for violating the anti-nuclear norm where nuclear weapons have been placed beyond the pale, like chemical or biological weapons. However, the probability of such a "break-out" would be much less than in a world where nuclear weapons are still accepted.

So the question to be addressed is not whether a nuclear weapon-free world is desirable: it is whether it is preferable to current nuclear state policy. For the reasons outlined above, the answer must be a resounding "Yes."

An MPI delegation met with Canadian Prime Minister Jean Chretien (fourth from right) and Minister of Foreign Affairs and International Trade Lloyd Axworthy (second from left) in September 1998. Delegation members included Dr. Mary-Wynne Ashford, IPPNW Co-President; Jonathan Granoff; US Senator Alan Cranston; actor Michael Douglas; Jennifer Allen Simons; and Senator Douglas Roche, OC. Photo: J.M. Carissa/Office of the Prime Minister.

CHAPTER 6. PROGRESS SINCE SEPTEMBER 1998

The NAC's 1998 UN General Assembly Resolution

The release by the eight New Agenda Coalition (NAC) Foreign Ministers of their Joint Declaration on 9 June 1998 was envisaged as a first step in cooperative work to encourage and assist the nuclear weapon states and nuclear-capable states to achieve nuclear disarmament. The next major step was to secure endorsement by a majority of states of the programme outlined in the Declaration, in order to demonstrate that this was a practical and politically realistic approach. To achieve this, the NAC submitted a resolution to the First Committee (Disarmament and International Security) of the UN General Assembly on 27 October 1998.

Introduced by Ireland and co-sponsored by 34 states, Draft Resolution L.48/Rev.1 (see Figure 25 for final text) encapsulated the Declaration. Its centrepiece was Operative Paragraph 1, which called upon the nuclear weapon states "to demonstrate an unequivocal commitment to the speedy and total elimination of their respective nuclear weapons and without delay to pursue in good faith and bring to a conclusion negotiations leading to the elimination of these weapons, thereby fulfilling their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)."

L.48, probably the most significant disarmament resolution to be adopted at the UN in 1998, succeeded in its primary aim of securing majority support.

L.48, probably the most significant disarmament resolution to be adopted at the UN in 1998, succeeded in its primary aim of securing majority support. The first vote in committee on 13 November was carried by 97 votes to 19, with 32 abstentions and 37 not voting. In addition the resolution engaged the nuclear weapon states, although not as sympathetically as had been hoped. More impressively, it stimulated an internal NATO debate on nuclear weapons policy.

The Nuclear Weapon States Respond. The UN debate the US, UK and France each gave detailed responses to the resolution and the steps it proposed, indicating that they saw it as a serious initiative — not just rhetoric that could easily be dismissed. However, all three plus Russia rejected, in present circumstances, the steps proposed. India and Pakistan were also opposed because the resolution called for universal adherence to the NPT.

The UK objected that the resolution was "incompatible with the maintenance of a credible minimum deterrent." NAC member Mexico boldly retorted that it was "not intended to be compatible with nuclear deterrence, as the policy of deterrence is outmoded, inconsistent with NPT obligations for nuclear disarmament, and must go." Despite significant softening of the text (including reducing reference to no-first-use to merely an examination of "further interim measures"), the core of the resolution proved to be incompatible with the continued insistence by the NATO nuclear weapon states that nuclear weapons are "essential" to their security.

Figure 25.

Towards a Nuclear Weapon Free World: The Need for a New Agenda

U.N Resolution 53/77Y adopted 4 December, 1998

Introduced by Ireland, with co-sponsors:

Benin, Botswana, Brazil, Cameroon, Chile, Colombia, Costa Rica, Ecuador, Egypt, El Salvador, Guatemala, Ireland, Lesotho, Liberia, Malaysia, Mali, Mexico, New Zealand, Nigeria, Peru, Samoa, Solomon Islands, South Africa, Swaziland, Sweden, Thailand, Togo, Uruguay, Venezuela

The General Assembly,

Preambular Paragraph 1 (PP1) Alarmed by the threat to the very survival of mankind posed by the existence of nuclear weapons,

PP2 Concerned at the prospect of the indefinite possession of nuclear weapons,

PP3 Concerned at the continued retention of the nuclear-weapons option by those three States that are nuclear-weapons capable and that have not acceded to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT),

PP4 Believing that the proposition that nuclear weapons can be retained in perpetuity and never used accidentally or by decision — defies credibility, and that the only complete defence is the elimination of nuclear weapons and the assurance that they will never be produced again,

PP5 Concerned that the Nuclear-Weapon States have not fulfilled speedily and totally their commitment to the elimination of their nuclear weapons,

PP6 Concerned also that those three States that are nuclear-weapons capable and that have not acceded to the NPT have failed to renounce their nuclear-weapons option,

PP7 Bearing in mind that the overwhelming majority of States entered into legally-binding commitments not to receive, manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, and that these undertakings have been made in the context of the corresponding legally-binding commitments by the nuclear-weapons States to the pursuit of nuclear disarmament,

PP8 Recalling the unanimous conclusion of the International Court of Justice (ICJ) in its 1996 Advisory Opinion that there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control,

PP9 Stressing that the international community must not enter the third millennium with the prospect that the possession of nuclear weapons will be considered legitimate for the indefinite future and convinced that the present juncture provides a unique opportunity to proceed to prohibit and eradicate them for all time,

PP10 Recognizing that the total elimination of nuclear weapons will require measures to be taken firstly by those nuclear-weapon States that have the largest arsenals, and Stressing that these States must be joined in a seamless process by those nuclear-weapon States with lesser arsenals in the near future,

PP11 Welcoming the achievements to date and the future promise of the START process and the possibility it offers for development as a plurilateral mechanism including all the nuclear-weapon States, for the practical dismantling and destruction of nuclear armaments undertaken in pursuit of the elimination of nuclear weapons,

PP12 Believing that there are a number of practical steps that the nuclear-weapon States can and should take immediately before the actual elimination of nuclear arsenals and the development of requisite verification regimes take place, and in this connection noting certain recent unilateral and other steps,

PP13 Welcoming the agreement recently reached in the Conference on Disarmament (CD) on the establishment of an Ad hoc Committee under Item 1 of its agenda entitled "Cessation of the nuclear arms race and nuclear disarmament", to negotiate, on the basis of the report of the Special Coordinator (CD/1299) and the mandate contained therein, a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices and considering that such a treaty must further underpin the process towards the total elimination of nuclear weapons,

PP14 Emphasizing that for the total elimination of nuclear weapons to be achieved, effective international cooperation to prevent the proliferation of nuclear weapons is vital and must be enhanced through, inter alia, the extension of international controls over all fissile material for nuclear weapons or other nuclear explosive devices,

PP15 Emphasizing the importance of existing Nuclear-Weapon-Free Zone treaties and of the signature and ratification of the relevant protocols to these treaties,

PP16 Noting the Joint Ministerial Declaration of 9 June 1998 and its call for a new international agenda to achieve a nuclear-weapon-free world, through the pursuit, in parallel, of a series of mutually reinforcing measures at the bilateral, plurilateral and multilateral levels,

Operative Paragraph 1 (OP1) Calls upon the Nuclear-Weapon States to demonstrate an unequivocal commitment to the speedy and total elimination of their respective nuclear weapons and without delay to pursue in good faith and bring to a conclusion negotiations leading to the elimination of these weapons, thereby fulfilling their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT);

OP2 Calls upon the United States and the Russian Federation to bring START II into force without further delay and immediately thereafter to proceed with negotiations on START III with a view to its early conclusion;

OP3 Calls upon the Nuclear-Weapon States to undertake the necessary steps towards the seamless integration of all five Nuclear-Weapon States into the process leading to the total elimination of nuclear weapons;

OP4 Calls upon the Nuclear-Weapon States to pursue vigorously the reduction of reliance on non-strategic nuclear weapons and negotiations on their elimination as an integral part of their overall nuclear disarmament activities;

OP5 Calls upon the Nuclear-Weapon States, as an interim measure, to proceed to the de-alerting of their nuclear weapons and in turn to the removal of nuclear warheads from delivery vehicles;

OP6 Urges the Nuclear-Weapon States to examine further interim measures, including measures to enhance strategic stability and accordingly to review strategic doctrines;

OP7 Calls upon those three States that are nuclear weapons-capable and that have not yet acceded to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) to clearly and urgently reverse the pursuit of all nuclear weapons development or deployment and to refrain from any actions which could undermine regional and international peace and security and the efforts of the international community towards nuclear disarmament and the prevention of nuclear weapons proliferation;

OP8 Calls upon those States that have not yet done so to adhere unconditionally and without delay to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and to take all the necessary measures which flow from adherence to this instrument;

OP9 Calls upon those States that have not yet done so to conclude full-scope safeguards agreements with the International Atomic Energy Agency (IAEA) and to conclude additional protocols to their safeguards agreements on the basis of the Model Protocol approved by the IAEA Board of Governors on 15 May 1997;

OP10 Calls upon those States that have not yet done so to sign and ratify, unconditionally and without delay, the Comprehensive Nuclear Test-Ban Treaty (CTBT) and, pending the Treaty's entry into force, to observe a moratorium on nuclear tests;

OP11 Calls upon those States that have not yet done so to adhere to the Convention on the Physical Protection of Nuclear Material and to work towards its further strengthening;

OP12 Calls upon the Conference on Disarmament (CD) to pursue its negotiations in the Ad hoc Committee established under Item 1 of its agenda entitled "Cessation of the nuclear arms race and nuclear disarmament", on the basis of the report of the Special Coordinator (CD/1299) and the mandate contained therein, 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, taking into consideration both nuclear non-proliferation and nuclear disarmament objectives, and to conclude these negotiations without delay; and pending the entry into force of the treaty, Urges all States to observe a moratorium on the production of fissile materials for nuclear weapons or other nuclear explosive devices;

OP13 Calls upon the Conference on Disarmament to establish an appropriate subsidiary body to deal with nuclear disarmament and, to that end, to pursue as a matter of priority its intensive consultations on appropriate methods and approaches with a view to reaching such a decision without delay;

OP14 Considers that an international conference on nuclear disarmament and nuclear non-proliferation, which would effectively complement efforts being undertaken in other settings, could facilitate the consolidation of a new agenda for a nuclear-weapon-free- world.

OP15 Recalls the importance of the Decisions and Resolution adopted at the 1995 NPT Review and Extension Conference, and Underlines the importance of implementing fully the "Strengthening the Review Process for the Treaty" Decision;

OP16 Affirms that the development of verification arrangements will be necessary for the maintenance of a world free from nuclear weapons and requests the International Atomic Energy Agency (IAEA), together with any other relevant international organisations and bodies, to explore the elements of such a system;

OP17 Calls for the conclusion of an internationally legally-binding instrument to effectively assure non-nuclear-weapon States Party to the Treaty on the Non Proliferation of Nuclear Weapons (NPT) against the use or threat of use of nuclear weapons;

OP18 Stresses that the pursuit, extension and establishment of Nuclear-Weapon-Free Zones, on the basis of arrangements freely arrived at, especially in regions of tension, such as the Middle East and South Asia, represent a significant contribution to the goal of a nuclear- weapon-free world;

OP19 Affirms that a nuclear-weapon-free world will ultimately require the underpinnings of a universal and multilaterally negotiated legally binding instrument or a framework encompassing a mutually reinforcing set of instruments;

OP 20 Requests the Secretary General, within existing resources, to compile a report on the implementation of this resolution;

OP21 Decides to include in the provisional agenda of its fifty-fourth session the item entitled "Towards a Nuclear Weapons Free-World: The Need for a New Agenda", and to review the implementation of this resolution.

Figure 26.

Objections to the 1998 NAC UN Resolution Rebutted

The following objections and rebuttals are excerpted from the Introductory Statement on behalf of the Co-Sponsors of the Draft Resolution contained in L.48 entitled "Towards a Nuclear Weapon Free World: The Need for a New Agenda" by Dr Darach MacFhionnbhairr, Head of Disarmament and Non-Proliferation, Department of Foreign Affairs, Ireland, 27 October 1998.

"The text presents dangerous new concepts, such as 'nuclear weapons capable' states."

"The Foreign Ministers in the Joint Declaration were specific as to the states which were covered by this term — namely India, Israel and Pakistan. To avoid any misunderstanding in the resolution, the sponsors amended the text to read: 'States that are nuclear weapons capable and that have not acceded to the NPT.' There are only those three."

"At a time when the international community has raised its serious concerns about the Indian and Pakistan nuclear tests, the draft resolution makes no reference to them, and thereby lends aid and comfort to India and Pakistan…"

"There is another resolution before this committee specifically dealing with nuclear testing. The origins of this draft resolution are in a Joint Ministerial Declaration which was in preparation well in advance of recent tests. The goals of this draft resolution are universal. They are forward looking and were as relevant before as they are after the recent nuclear testing. This is a proposal for a new agenda, not a response to actions taken by certain states. The sponsors' purpose is to focus on actions that are required now. The urgency of immediate action to eliminate nuclear weapons has been heightened by the recent tests."

"The draft resolution does not acknowledge the threat posed by those States Party to the NPT who do not live up to their obligations under that Treaty."

"This draft resolution is a call for an agenda. The draft resolution on the report of the IAEA (International Atomic Energy Authority) before the plenary of the General Assembly considers questions of compliance with safeguards agreements concluded on foot of obligations under Articles II and III of the NPT. The Security Council is also apprized of questions relating to proliferation."

"The draft by implicitly rejecting the agenda contained in the Principles and Objectives agreed at the 1995 NPT Review and Extension Conference, also tends to undermine the international non-proliferation regime."

"The agenda set by the 1995 Review and Extension Conference of the NPT includes (a) the negotiation of the CTBT, since concluded, (b) the fissile treaty negotiations, about to begin, and (c) negative security assurances, also under consideration. This draft calls for the signature of or ratification as appropriate of the first (paragraph 10), the determined pursuit of the second (paragraph 12), and the conclusion of negotiations on the third (paragraph 17). The purposes of the resolution are to re-ignite the pursuit of nuclear disarmament, phrased at all times in conformity with the Principles and Objectives of the NPT and with any decisions or resolutions adopted by the parties to that Treaty. The draft in Operative Paragraph 15 underlines the importance both of the agenda and the review process set out in the 1995 Review and Extension Conference. The entire draft resolution is informed by the sponsors' unequivocal commitment to the NPT and its full implementation."

In their Explanations of Vote, the US and France also cited nuclear deterrence doctrine for opposing it. The US Ambassador drew in NATO: "Along with our allies we reviewed it (nuclear deterrence doctrine) recently and concluded that *it should remain the basis of our defense*." He then candidly revealed the US position on the World Court Advisory Opinion when he added: "Let me be clear: you will not make nuclear disarmament occur faster *by suggesting that a fundamental basis of our national security for more than fifty years is illegitimate*." France (calling the resolution "nefarious") stated that it called into question the principle of nuclear deterrence, which underpinned NATO doctrine and was *"fundamental to French security."* [Italics added in this section for emphasis.] Russia, driven by NATO expansion and its collapsing conventional military strength to rely increasingly on its nuclear arsenal, agreed. On the other hand, China called on the other nuclear weapon states to abandon deterrence doctrine.

Traditionally, NATO members oppose resolutions which might impact on NATO nuclear policy.

The Struggle for Votes. Traditionally, NATO members oppose resolutions which might impact on NATO nuclear policy (an exception was the UN resolution "Follow-up to the International Court of Justice Advisory Opinion on the threat or use of nuclear weapons" in which Denmark, Iceland and Norway abstained). The NAC hoped that some NATO states might abstain or even support its resolution. Canada was reviewing its nuclear weapons policy in light of the World Court Advisory Opinion. Germany had just had a change in government to a coalition of Social Democrats and Greens, both of which in opposition had called for changes in nuclear policy.

The US, UK and France, fearing there might be a "break in the ranks" in the Western alliance, sent *démarches* to NATO capitals plus Tokyo and Canberra urging them to oppose the resolution. Initial indications were that most NATO members would remain opposed, including Germany. However, the NAC and citizen groups in the NATO states, Japan and Australia did their own intensive lobbying. The NAC engaged US-allied states in discussions on the text, softening it slightly in order to encourage NATO to review its nuclear policy, but not to pre-judge such a review (see rebuttals to principal objections in Figure 26.) The NAC also succeeded in encouraging 27 other states to co-sponsor the resolution, which gave them more political clout. In addition, citizen groups in some NAC capitals met their foreign ministers and officials to keep them strong.

Citizen groups in US-allied states publicized the NAC resolution, encouraged parliamentarians to raise the issue in parliament and met foreign ministry officials. MPI sent delegations to Canada, Germany and the Netherlands, meeting the Canadian Prime Minister, Canadian and German Foreign Ministers, and foreign ministry officials and parliamentarians of all three countries. MPI also sent delegates to Tokyo and Canberra to encourage Japan and Australia, despite their close security links with the US, to vote for the resolution. The Japanese Foreign Ministry indicated it supported "95 per cent" of the text.

Debates took place: the European Parliament adopted a supportive resolution, while in Canberra the Senate passed a motion calling for a "Yes" vote. Also in Australia, MPI helped organize the first opinion poll on nuclear weapons for thirteen years: the result — that 92 per cent of those polled wanted Australia to help negotiate a Nuclear Weapons Convention — was communicated to the Foreign Minister the day before the first vote.

Australia, Japan and all NATO countries except the US, UK, France, and Turkey abstained.

Following MPI's visit to Canada, Foreign Minister Lloyd Axworthy let it be known that Canada would vote "Yes" if one more NATO member would join it. It then sent *démarches* to nine important capitals, mostly in NATO. This led to a joint abstention strategy with the newly-elected German government, which probably swayed other NATO and US-allied states. As a result Australia, Japan and all NATO countries except the US, UK, France and Turkey abstained.

Run-up to the Final Vote. The success of the NAC resolution in the Disarmament Committee gave Germany's Foreign Minister Joschka Fischer the political support to float the idea of dropping NATO's first-use policy in a *Der Spiegel* interview on 21 November. It also gave political backing to Canada's Parliamentary Standing Committee on Foreign Affairs and International Trade, which on 10 December made public a report calling for Canada to "argue forcefully within NATO that the present re-examination and update as necessary of the Alliance Strategic Concept should include its nuclear component."[74]

In the final plenary vote on 4 December 1998, the UN General Assembly adopted the NAC resolution — now designated 53/77/Y — by 114 votes to 18, with 38 abstentions (see Figure 27). Opponents of the resolution lost one vote while supporters gained 17. Most of the nations which had been absent from the First Committee but attended the General Assembly voted in favour; and none which voted in favour in the First Committee switched votes in the plenary (Armenia was the nation which switched from "No" to abstention).

VOTE ON RESOLUTION 53/77 Y, "Nuclear Disarmament: The Need for a New Agenda" in the UN General Assembly on 4 December 1998

YES: 114

NO: 18

ABSTAIN: 38

YES: Afghanistan, Angola, Antigua-Barbuda, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bolivia, Botswana, Brazil, Brunei Dar-Salam, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Chile, Colombia, Comoros, Costa Rica, Cote D'Ivoire, Cuba, Cyprus, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Indonesia, Iran, Ireland, Jamaica, Jordan, Kenya, Kuwait, Lao People's Democratic Republic, Lebanon, Lesotho, Libya, Liechtenstein, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mexico, Mongolia, Morocco, Mozambique, Namibia, Nepal, New Zealand, Nicaragua, Niger, Nigeria, Oman, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Rwanda, Saint Lucia, St. Vincent-Grenadines, Samoa, San Marino, Saudi Arabia, Senegal, Sierra Leone, Singapore, Solomon Islands, South Africa, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Syria, Thailand, Togo, Trinadad-Tobago, Tunisia, Uganda, United Arab Emirates, United Republic of Tanzania, Uruguay, Vanuatu, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe

NO: Bulgaria, Czech Republic, Estonia, France, Hungary, India, Israel, Latvia, Lithuania, Monaco, Pakistan, Poland, Romania, Russian Federation, Slovakia, Turkey, United Kingdom, United States

ABSTENTIONS: Albania, Algeria, Andorra, Armenia, Argentina, Australia, Belgium, Bhutan, Canada, China, Croatia, Denmark, Finland, Georgia, Germany, Greece, Honduras, Iceland, Italy, Japan, Kazakhstan, Kyrgyzstan, Luxembourg, Mauritius, Marshall Islands, Micronesia, Myanmar, Netherlands, Norway, Portugal, Republic of Korea, Republic of Moldova, Slovenia, Spain, Tajikistan, The Former Yugoslav Republic of Macedonia, Ukraine, Uzbekistan.

Figure 27.

NATO Summit Opens Door to Nuclear Policy Review

Paragraph 32 of the Washington Summit Communique "An Alliance for the 21st Century," issued by NATO on 24 April 1999, stated: "In the light of overall strategic developments and the reduced salience of nuclear weapons, the Alliance will consider options for confidence and security-building measures, verification, non-proliferation and arms control and disarmament. The Council in Permanent Session will propose a process to Ministers in December for considering such options. The responsible NATO bodies will accomplish this. We support deepening consultations with Russia in these and other areas in the Permanent Joint Council . . ."

Lloyd Axworthy confirmed the willingness of NATO "to have a review initiated" of its nuclear weapon policy.

At a news conference, Canadian Foreign Affairs Minister Lloyd Axworthy confirmed the willingness of NATO "to have a review initiated" of its nuclear weapon policy. Explaining that this was the thrust of the recommendations that came out of the 10 December 1998 report of Canada's Parliamentary Foreign Affairs Committee on Canada's nuclear weapon policy,[74] he added: "It's a message that the (Canadian) Prime Minister took (to) certain NATO leaders . . . I think we have now gained an acknowledgement that such a review would be appropriate and that there would be directions to the NATO Council to start the mechanics of bringing that about." On 19 April 1999, in its response to the Parliamentary Committee's report, the Government of Canada had requested NATO to review its nuclear policy.

On the other hand, as already mentioned on page 42, NATO's new Strategic Concept reaffirmed its commitment to maintain nuclear weapons for political reasons. Paragraph 62 stated: "They will continue to fulfil an essential role by ensuring uncertainty in the mind of any aggressor about the nature of the Allies' response to military aggression." The 1999 use of the word "essential" in reference to nuclear weapons repeated 1991 language: therefore, at first glance it appeared that NATO had not moved.

However, paragraph 40 indicated a shift on disarmament: "The Allies take seriously their distinctive role in promoting a broader, more comprehensive and more verifiable international arms control and disarmament process." Whereas in 1991 NATO had seen use of nuclear weapons as "even more remote," now use was "extremely remote" and "NATO's nuclear forces no longer target any country" (Paragraph 64). These small changes gained significance when read in the context of the Communique's commitment to start a review process. The NATO door had been opened.

This gave non-nuclear NATO member states — particularly the 12 "conscientious abstainers" on the NAC's 1998 UN General Assembly resolution — a new opportunity to press for a substantive, not just perfunctory, review. It also provided a new opening to the NAC to work with those NATO states and other US allies on common goals — particularly supporting the 1999 NAC resolution.

The May 1999 NPT Preparatory Committee Meeting

The 1999 preparatory meeting for the April 2000 NPT Review concluded on 21 May with an "agreement to disagree." In the arcane world of nuclear diplomacy, this was considered a step forward, since the 1998 meeting had ended in disarray. However, the 1999 outcome failed to hide the deadlock persisting between the Western nuclear weapon states plus Russia and the leading non-nuclear states. China warned the US and its NATO allies that they were "provoking the proliferation of weapons of mass destruction." Calling for the negotiation of a Nuclear Weapons Convention, it supported the work of the NAC.

The 1999 outcome failed to hide the deadlock persisting between the Western nuclear weapon states plus Russia and the leading non-nuclear states.

The NAC was widely considered to have had a "good conference," building on the support for its UN resolution. It tabled a working paper with 37 other co-sponsors, which expressed "profound concern" at the lack of evidence that the nuclear states are living up to their commitments to Article VI:

> "On the contrary, the continued possession of nuclear weapons has been re-rationalized. Nuclear doctrines have been reaffirmed . . . The indefinite extension of the NPT does not sanction the indefinite retention of nuclear weapons . . . It is imperative to secure a clear and unequivocal commitment to the speedy pursuit of the total elimination of these weapons . . ." which "will require a multilateral agreement."

A lengthy list of proposals was blended into a 61-paragraph Chairman's Paper, which echoed NAC language and went well beyond what the Western nuclear states would accept. These included:

- A call for negotiations on the elimination of non-strategic nuclear weapons.
- De-alerting, de-targeting and de-activating all nuclear weapons and removing nuclear warheads from delivery vehicles.
- A call to Israel to accede to the NPT and place all its nuclear facilities under full-scope IAEA safeguards "without further delay and without conditions."
- A legally-binding negative security assurances regime.
- An ad hoc committee at the Conference on Disarmament "with a negotiating mandate to address nuclear disarmament."

Several hours of debate on the Chairman's Paper revealed once more the continuing wide split between the Western nuclear states and the gathering forces of the non-nuclear states which are increasing their demands that the "systematic and progressive efforts to reduce nuclear weapons globally," promised in 1995, be met. Almost to the end, it appeared that absolute deadlock would again prevail. But deft steering by the Chairman, and a general feeling on all sides that a second total collapse of the preparatory process could prove fatal for the 2000 Review, led to an agreement to send to the 2000 Review the Chairman's Paper along with all the papers submitted by states with the notation: "The Preparatory Committee was unable to reach agreement on any substantive recommendations to the 2000 Review Conference." Given the worsening international climate, this signals a massive struggle to maintain the viability of the NPT after 2000.

This field of ceramic nose-cones represents, in miniature, all the warheads that were in the US nuclear arsenal by the end of the Cold War. Estimates set that total at about 25,000. With many of these warheads being dismantled, there are now an estimated 30,000 nuclear weapons in the arsenals of the nuclear states.
Amber Waves of Grain: Barbara Donachy.
Photo: Robert Del Tredici.

CHAPTER 7. CONCLUSION

This campaign for a fast track to zero nuclear weapons will require skilled diplomacy, extraordinary perseverance, and good teamwork between the NAC governments and supporting citizen organizations. The political power of the NATO nuclear weapon states — and especially that of the US military-industrial complex — is daunting. Russian militarism and paranoia are being revived by NATO expansion. China is still unpredictable. Both have been angered and alienated by NATO's Balkan intervention. Gigantic vested interests are opposed to nuclear weapons abolition.

Only a decade after the end of the Cold War, the hopes for a cooperative global security system have been dashed on the rocks of power. The trust engendered during the early post-Cold War years is now shattered. New arms races are underway.

The NPT stalemate, crucial as it is to the hopes for a viable non-proliferation regime in the 21st century, is itself part of a larger world struggle today. How will international law be imposed in the years ahead: by the militarily powerful deciding what the law will be, or by a collective world effort which upholds the UN system?

Former World Court President Mohammed Bedjaoui stated that the goal of nuclear disarmament ". . . is no longer utopian, and that it is the duty of all to seek to attain it more actively than ever." We may look back at past campaigns, such as the abolition of slavery, the struggles against apartheid in South Africa and colonialism and for women's suffrage, where the forces resisting them seemed overwhelming.

The rest of the world is not powerless against the nuclear weapon states. Progress is being made. Nuclear arsenals are being reduced. Good documentation, even if not agreed, has been prepared for the April 2000 NPT Review Conference. The NAC is gaining support. NATO is committed to reviewing its nuclear weapons policy. In Japan, where there is deep alarm at the security implications for North-East Asia of India and Pakistan becoming overtly nuclear-capable, a public debate is under way on whether Japan should continue to rely on the so-called US "nuclear umbrella."

There is an interplay in these NPT-NAC-NATO developments. Singly, they may not amount to much. Taken together and built upon by a new fusion of strength between like-minded governments and civil society, as with the campaign to ban landmines they can create enormous political momentum which the nuclear weapon states will not be able to ignore.

The world is staring into a new abyss of nuclear weapon proliferation. The risk that nuclear weapons will be used, by accident or miscalculation, is growing. The recognition of this should galvanize intelligent and committed citizens, in governments and civil society, to action.

Demonstration at International Citizens Congress for a Nuclear Test Ban in Kazakhstan. Photo: James Lerager.

APPENDIX A

SOME CLAIMS FOR NUCLEAR WEAPONS REBUTTED

1) "Nuclear weapons cannot be disinvented"

Neither can chemical weapons. Far from despairing about them, the international community has agreed on an enforceable treaty banning every aspect of chemical weapons; while efforts are proceeding to strengthen a similar one against biological weapons. An immediate result is that military professionals refuse to operate them. To claim that "this approach won't work for nuclear weapons" amounts to a limp mix of appeasement and fatalism. The world must, and can, do better than that.

Chemical and biological weapons are prohibited despite verification problems from the large number of chemicals and biological agents capable of use in such weapons. Many of these agents have dual uses, and thus are readily available and easy to convert to weapon use.

Nuclear weapons, on the other hand, require fissile materials — plutonium or highly enriched uranium — which are extremely difficult and dangerous to make, not generally used for other purposes, and thus much easier to monitor. This means that verification of a Nuclear Weapons Convention would be significantly easier than for other weapons of mass destruction.

Recent opinion polls in two nuclear weapon states show that the American and British people overwhelmingly want their governments to negotiate a global, enforceable treaty like the Chemical Weapons Convention to outlaw nuclear weapons, with an agreed plan for their verified elimination.

All that is missing is the political will.

2) "Nuclear weapons prevent war between the major powers"

First, this unprovable assertion is threatened by the current irresponsible and unnecessary hair-trigger alert status of strategic nuclear forces. Second, the carnage of World War II had reaffirmed that serious war between major states was not a rational instrument of policy and must be avoided at almost any cost.

Third, the new danger of nuclear escalation merely underlined this. For example, we now know how the US and Soviet Union in the Cuban missile crisis only avoided a nuclear exchange by luck, with both sides hugely miscalculating the other's nuclear deployments and plans.

What this teaches us — along with the many other crises where nuclear weapons were threatened — is an undeniable, overriding reality: nuclear weapons make nuclear war possible; and major nuclear war has the unique capacity to destroy civilization and possibly all life on Earth.

Besides, what constrains modern industrial states from going to war with each other is their increasing dependence on multinational conglomerates and the globalization of trade, and their sensitivity to public opinion associated with the risk of casualties and instant media coverage.

3) "Nuclear deterrence works"

Whether nuclear deterrence works is unproven. However, there are growing doubts about it, particularly against a desperate regime, religious fundamentalists or terrorist group armed with nuclear, chemical or biological weapons.

Consider a scenario where a 1991 Irish Republican Army mortar bomb attack from a van in London against the British Cabinet had involved instead a threat to use even a crude nuclear device. A threat of nuclear retaliation is utterly incredible. Yet a greater threat to the government of a nuclear weapon state could barely be imagined.

Most countries have never subscribed to the nuclear deterrence myth and never sought to acquire nuclear weapons. Instead, they have opted to rely on modest conventional defence forces backed up by recourse to a mix of diplomatic, legal and economic forms of deterrence through international institutions like the United Nations and the International Court of Justice, which have become much more effective since the Cold War ended.

Current nuclear deterrence doctrine is irresponsible because it:

- Requires the continued deployment of nuclear weapons, which flouts the World Court Advisory Opinion and treaty obligations by the nuclear weapon states to eliminate their nuclear arsenals.
- Risks accidental nuclear weapon launch (see Figure 12).
- Provokes the spread of nuclear weapons, as proved by Iraq, India and Pakistan.
- Causes health and environmental damage through the need to develop and produce nuclear weapons.
- Stimulates constant pressure to improve nuclear arsenals.
- Maintains an unstable, hostile attitude between nuclear possessor states, and inhibits cooperation in promoting true security.

There is another fundamental objection to relying on nuclear deterrence. If deterrence based on conventional weapons fails, the damage would be confined to the belligerent states — and the environmental damage would usually be reparable. What is at stake from the failure of nuclear deterrence is the devastation and poisoning of not just the belligerents, but potentially of all forms of life on Earth. See also General Lee Butler's (USAF-Retired) views on page 48.

4) "What if terrorists tried nuclear blackmail?"

On no account should nuclear retaliation be threatened. The bluff will be called — because targeting them with even a small nuclear weapon would be impossible without incurring unacceptable collateral damage and provoking global outrage. Indeed, some extremists would relish taking as many others with them as they could. So nuclear weapons are worse than useless.

The only way to deal with nuclear blackmail is by negotiation while trying to neutralize the blackmailers using exhaustion, disorientation etc., and if necessary, Special Forces with sophisticated precision weapons.

However, by far the best and most responsible solution is to shift the image of nuclear weapons from asset to stigmatized liability. Thereby, the risk of a regime or terrorists even wanting to get one is minimized, because this would destroy any support for their cause. This merely reinforces the urgent need to agree an enforceable global treaty banning nuclear weapons.

5) "Nuclear weapons are essential for my country's ultimate security"

South Africa, Ukraine, Belarus and Kazakhstan had nuclear weapons: but they got rid of them. Their governments understood that, far from being essential to their security, they were an unacceptable threat to it. Brazil and Argentina had nuclear weapon programmes, but mutually abandoned them.

Most countries have joined the Non-Proliferation Treaty as non-nuclear weapon states, thereby rejecting the possession of nuclear weapons. Most of these are now covered by nuclear weapon-free zones rejecting the stationing of nuclear weapons within their territories. New Zealand has gone even further and adopted nuclear-free legislation.

The reality is that nuclear weapons are a security problem, not a solution. This is because the claim by the nuclear weapon states that they need nuclear weapons for their security provokes the greatest threat: namely, the spread of nuclear weapons to paranoid regimes and terrorists — who are least likely to be deterred. Also, NATO's renewed insistence that its nuclear arsenal is "essential" risks a revived nuclear arms race, and even a renewed Cold War with the risk of nuclear war. If the rich nuclear weapon states, with their superior conventional arsenals, need nuclear weapons, then why not every other country — and especially those with real security threats?

In military terms, current security threats are mostly from internal conflicts, where nuclear weapons are irrelevant. Nuclear weapons are useless to tackle the major security threats: economic collapse, environmental disasters, lack of water, poverty, and associated famine and disease. In fact, nuclear weapons exacerbate many of these problems through diversion of funds and other resources, and generating radioactive contamination; and the risk of regional nuclear war is being provoked by the intransigence of the nuclear weapon states.

The only way to overcome these security threats is by co-operative international action — which is made more difficult by the secrecy, suspicion and need for enemies associated with the doctrine of nuclear deterrence.

6) "Nuclear weapons are needed to counter chemical and biological threats"

The justification for this is that only a nuclear weapon has the explosive power to destroy such a target, especially if underground, and its enormous heat would incinerate germ warfare agents. The extreme dangers of such an approach — amounting to military incompetence — are as follows:

- The nuclear explosion would create and disperse massive amounts of radioactive fallout.
- Any chemicals or biological toxins not destroyed in the blast could be dispersed with catastrophic effects.
- Any state with chemical or biological weapons is unlikely to store them in one place. Thus any attempt to destroy them would require several nuclear weapons, multiplying the risk of civilian casualties and environmental damage.
- Instead of deterring the possession or use of chemical or biological weapons, the mere threat to use a nuclear weapon would give that state the political and military justification to use their own weapons of mass destruction.

In the US confrontation with Iraq in February 1998, the possibility of using nuclear weapons against suspected underground Iraqi chemical and biological weapon production and storage sites caused a worldwide outcry. General Lee Butler, who in the Gulf War had helped to convince General Colin Powell to rule out plans to use nuclear weapons, added this comment:

> "What could possibly justify our resort to the very means we properly abhor and condemn? Who can imagine our joining in shattering the precedent of non-use that has held for over fifty years? How could America's irreplaceable role as leader of the campaign against nuclear proliferation ever be re-justified? What target would warrant such retaliation? Would we hold an entire society accountable for the decision of a single demented leader? How would the physical effects of the nuclear explosion be contained, not to mention the political and moral consequences? In a single act we would martyr our enemy, alienate our friends, give comfort to the non-declared nuclear states and impetus to states who seek such weapons covertly."

The official response was: "We have worked hard to fashion non-nuclear responses to the threat or use of weapons of mass destruction." This suggested that the US was stepping back from the revised Presidential Decision Directive issued in December 1997, which stated that the US would consider using tactical nuclear weapons against non-nuclear states attacking US vital interests with chemical or biological weapons.

7) "Nuclear weapons are essential for my country's status in the world"

This, tragically, is France's position. Following the war in Chechnya and in the face of NATO expansion, Russia now agrees. Secretly, the UK still sees nuclear weapons as compensation for loss of Empire; but its dependence on the US for Trident missiles, targeting intelligence and communication satellites, and the grotesque size, cost and uselessness of the Trident force, make it look increasingly ridiculous. China has never taken nuclear weapons as seriously. Of all nations, the US, with its massive conventional military strength, technological prowess and economic might, has no need of nuclear weapons to give it status.

However, the status conferred upon those states which have developed nuclear weapons is like that of the neighbourhood bully, feared and resented but not respected. France was shocked by the global outrage and boycott of its products by civil society when it resumed testing in the South Pacific in 1995. The US imposed economic sanctions on India and Pakistan when they tested in 1998, and India's hopes of achieving permanent membership of the Security Council were dashed.

If either the UK or France were to give up their nuclear weapons all indications are that this would be a way to secure their continuing permanent membership, because of the urgent need following the South Asian tests to break the wrongly perceived link between a permanent seat and possession of nuclear weapons. The obvious intention to retain their nuclear arsenals is undermining the respect in which they are seen by the world, and hence their status.

Much greater status is gained by leaders and their countries if they take action to help eliminate nuclear weapons. US President Kennedy achieved considerable status for signing, with his Soviet counterpart, a Partial Test Ban Treaty in 1963. In 1987, New Zealand and its Prime Minister David Lange achieved extraordinary international status and influence for adopting nuclear-free legislation.

The first leader of a nuclear weapon state to grasp the current opportunity and call for multilateral negotiations to start for a Nuclear Weapons Convention will gain massive status and prestige — and secure his or her name in history.

8) "If we go for nuclear weapons abolition, how do we know some state won't cheat, make one and then dominate us?"

Because nuclear weapons are mainly possessed by nations with great power status, a decision by them to join with the overwhelming majority of other nations in removing this threat to humanity will inevitably usher in a new approach to global security. The world will be better motivated and organized to tackle the root causes of insecurity which might drive a regime or terror group to such a desperate measure.

The status of nuclear weapons will have shifted from asset to stigmatized liability — like chemical or biological weapons, only worse. Above all, there will be a clear understanding that nuclear blackmail cannot be dealt with by threatened retaliation with nuclear weapons (see claim 4).

World outrage against such breakout from a nuclear weapon-free world would be so massive — including probable conventional military intervention on the scale of the Gulf War, plus economic isolation — that there would be no political or military incentive to do so.

The risk will diminish as the verification and enforcement arrangements are set in place. Moreover, that risk is minimal compared to the near inevitability of nuclear blackmail under the current policy.

APPENDIX B

The Naked Nuclear Emperor: India on the First Anniversary of Its May 1998 Nuclear Tests

By Praful Bidwai*

(*This article, edited from one published in* The Times of India*, 2 June 1999, illustrates the realities of acquiring nuclear weapons. While using India as a topical example, the arguments apply to all current and prospective possessors of nuclear weapons.*)

One year after Pokharan-II, the Bomb has comprehensively failed to raise India's stature, strengthen our claim to a Security Council seat, expand the room for independent policy-making, or enhance our security.

India stands morally and politically diminished: a semi-pariah state to be equated with Pakistan, and periodically reminded of Security Council Resolution 1172. Most Third World countries see India as contradictory: a nation that for 50 years rightly criticized the hypocrisy of the Nuclear Club, only to join it; a country that cannot adequately feed its people, but has hegemonic global ambitions. Our neighbours, crucial to our security, see us as an aggressive, discontented state that violated its own long-standing doctrines without a security rationale.

After prolonged talks with the US, in which we put our "non-negotiable" security up for discussion, India remains a minor, bothersome factor in Washington's game-plan as a non-nuclear weapons state. South Asia's nuclearization has enabled Washington to grant Pakistan what Islamabad has always craved, and which New Delhi has always denied it: parity with India.

Nuclearization has put India on the defensive in ASEAN, the NAM and the World Bank. Damage control remains the main preoccupation of our diplomacy one year after the mythical "explosion of self-esteem." Worse, nuclearization has drawn India into dangerous rivalry with Pakistan and China. India has eight times more fissile material than Pakistan. But in nuclear, more isn't better. The truth is, India has become for the first time vulnerable to nuclear attacks on a dozen cities, which could kill millions, against which we are wholly defenceless.

By embracing the "abhorrent" doctrine of nuclear deterrence, we have committed what we ourselves used to describe as a "crime against humanity." This doctrine, or rather, article of faith, assumes that adversaries have symmetrical objectives and perceptions; they can inflict "unacceptable" damage on each other; and will behave rationally 100 per cent of the time. These assumptions are dangerously wrong. India-Pakistan history is replete with asymmetrical perceptions, strategic miscalculation, and divergent definitions of "unacceptable." For fanatics, even a few Hiroshimas are not "unacceptable." Deterrence breaks down for a variety of reasons: misreading of moves, false alerts, panic, and technical failures. The US and USSR spent huge sums on sophisticated command and control systems to prevent accidental, unintended or unauthorized use of nuclear weapons. But the Cold War witnessed many near-misses. Each could have caused devastation. General Lee Butler, who headed US Strategic Command from 1992-94, says it was not deterrence, but "God's grace," that prevented disaster.

Generally disaster-prone India and Pakistan will have no reliable command and control systems for years. A nuclear disaster is substantially, qualitatively more probable in

South Asia than it ever was between the Cold War rivals. It would be suicidal for India and Pakistan to deploy nuclear weapons and then "manage" their rivalry. They must never manufacture, induct or deploy these weapons. India must not erase her own memory.

For decades, she correctly argued that deterrence is illegal, irrational, strategically unworkable, unstable, and leads to an arms race. The "minimum deterrent" proposition does not weaken this argument's force. Minimality is variable and subjective, determined not unilaterally, but in relation to adversaries. Embracing deterrence means entering a bottomless pit. That is why the nuclear weapon states' "hard-nosed" realists ended up amassing overkill arsenals enough to destroy the world 50 times. The danger that India could get drawn into an economically ruinous and strategically disastrous nuclear arms race, especially with China, is very real.

Consider the larger truth. Nuclear weapons do not give security. Because of their awesome power, their use, even threat of use, is determined less by military, than by political factors. That is why America cannot translate its enormous atomic prowess into real might. Nuclear weapons have never won wars or decisively tilted military balances. Korea, Vietnam, Afghanistan, the Falklands, the Balkans, all expose their a-strategic nature. They are not even effective instruments of blackmail. State after state, from tiny Cuba to China, has defied nuclear blackmail attempts.

Nuclear weapons are false symbols of prestige. They are ruinously expensive. This will further inflate our bloated military budget. Already, New Delhi spends twice as much on the military as on health, education and social security put together.

With Pokharan-II, and now Kargil, Kashmir stands internationalized. It is widely seen as a potential flashpoint for a nuclear confrontation. Add to this debit side the enormous social costs of militarism, tub-thumping jingoism and male-supremacist nationalism; of further militarization of our science; legitimization of insensate violence; and psychological insecurity among the young. The Pokharan balance-sheet looks a deep, alarming red. But there is good news too: nuclear weapons aren't popular.

According to recent polls, 73 per cent of Indians oppose making or using them. After November's "Pokharan-vs-Pyaaz" state elections, politicians know that nukes don't produce votes. And now, Kargil should induce sobriety. For sanity's sake, the nuclear genie should be put back into the bottle. What human agency can do, it can also undo.

* *Praful Bidwai is a distinguished Indian journalist and author and Founder/Member of the Movement in India for Nuclear Disarmament (MIND).*

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http://www.pgaction.org

State of the World Forum
http://www.worldforum.org

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The global nuclear weapon crisis is deepening. General Lee Butler USAF (Ret), Commander-in-Chief Strategic Command 1992-94, warns:

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