Conference on Nuclear Proliferation

ADDENDUM

Athens, 30 and 31 May 2003

CENTRE FOR POLICY ANALYSIS AND PLANNING
MINISTRY OF FOREIGN AFFAIRS

Athens, GREECE

ADDENDUM

Explanatory note of the editors:

The present booklet is an Addendum to the main book, which has appeared under the same title some weeks ago. The Addendum contains two additional written contributions made at the Athens Conference; the one is the paper presented at the Athens Conference by Mr. Randy Rydell, Senior Political Affairs Officer, UN Department for Disarmament Affairs, New York; the other is a paper by Mr. Jonathan Granoff, President of the Global Security Institute (GSI), San Francisco; Mr Granoff's paper, a GSI Policy brief, is in fact an updated and more extensive version of his original contribution in Athens last May, incorporating elements from the remarks and discussions at the Conference.

The editors
Centre for Policy Analysis & Planning
Greek Ministry of Foreign Affairs
Athens, GREECE

CONTENTS

FISSILE NUCLEAR MATERIALS AND THE FUTURE OF NUCLEAR DISARMAMENT AND NON-PROLIFERATION

By Randy Rydell *
Senior Political Affairs Officer
Department for Disarmament Affairs
United Nations, New York, NY

A few years ago, an American terrorist parked a truck containing roughly 1,000 pounds of explosives (TNT equivalent) in front of a government building in Oklahoma City and detonated it, destroying the building and killing or injuring scores of innocent civilians. Such was the explosive effect of only 1,000 pounds – only half a ton – of TNT.

The nuclear weapons detonated over Hiroshima and Nagasaki – using 1945-vintage technology – ranged between 10 and 20 thousand tons (kilotons) in yield. In the US, a "low-yield" nuclear weapon is defined by law as one with a yield of less than 5 kilotons, i.e., 5,000 tons of TNT. Smaller devices, on the order of only 0.1 kiloton either exist or are under development for tactical battlefield use, for use in destroying underground bunkers, or for preemptive or retaliatory strikes relating to other weapons of mass destruction.

A tenth of a kiloton of TNT means a blast of 100 tons (or 200,000 pounds) of TNT. In short, a nuclear weapon with an explosive yield of only 0.1 kiloton is 200 times the size of the blast-potential of the explosion that destroyed the Murrah Federal Building in Oklahoma City. In the book by John McPhee, The Curve of Binding Energy (published in 1974), the author quotes Ted Taylor – a veteran US nuclear weapons designer – as saying that a nuclear explosive with a yield of 0.1 kiloton would be enough to "knock down" or "bring down" one of the Twin Towers at the World Trade Center.[1] He added that if terrorists had access to enough weapons-usable nuclear material, they could indeed make a nuclear explosive device.

The quantity of such material (plutonium or highly-enriched uranium) required to make a nuclear explosive device is officially on the order of 8 kilograms of plutonium or 25 kilograms of highly-enriched uranium – these are the figures used by the International Atomic Energy Agency (IAEA) as "significant quantities" for safeguards purposes. Plutonium, of course, is also highly toxic – a billionth of a gram can produce a lung cancer. It also has a half-life of 24,000 years.

---

1. John McPhee, *The Curve of Binding Energy* (NY: Farrar, Straus, Giroux, 1974), p. 156 and 194.

Highly-enriched uranium has its own hazards – it too has a long half-life, but is more easily made into a nuclear explosive. Scientists in 1945, for example, had such confidence in the design of the Hiroshima bomb (which was used highly-enriched uranium) that they did not even need to test it. Luis Alvarez, a bomb designer who worked with the Manhattan Project, wrote in his memoirs that if one had a sufficient amount of highly-enriched uranium, one could get a nuclear explosion by simply dropping one half of such material on top of the other.

The key, therefore, to reducing the risks of both nuclear terrorism and nuclear proliferation comes back to the same old question posed at the dawn of the nuclear age: how can one prevent plutonium or highly-enriched uranium from being used to make a nuclear explosive device? There are essentially two general responses to this challenge: regulation (which accepts the existence of existing stocks and continued production, albeit under stricter security conditions) or prohibition (which seeks to eliminate threats by eliminating the material rather than just eternally seeking to improve conditions of use). Elements of both approaches are easy to find in the history of global nuclear disarmament and non-proliferation efforts.

The first attempt to address this question is found in the Acheson-Lilienthal Report – the basis of the subsequent Baruch Plan. Because the authors of this US-government report were skeptical of the ability of nationally-operated, safeguarded facilities to answer this question satisfactorily, they favoured instead international ownership of the nuclear fuel cycle, especially those parts of it that were inherently "dangerous." This was thus a hybrid scheme: while it would have prohibited national production of separated plutonium and highly-enriched uranium, it would have allowed (even legitimized) such production to facilities under international ownership or auspices.

The collapse of this early control effort in the 1950's led to the "Atoms for Peace" period, which allowed and in some cases even encouraged an array of peaceful – but sensitive – nuclear activities under safeguards. Here is perhaps the classic expression of the permissive, regulatory approach. India's so-called "peaceful nuclear explosion" in 1974 (accomplished with materials and technology provided for peaceful uses), growing political and economic pressures to export fuel-cycle facilities in the 1970s, the destruction of Iraq's nuclear facilities in 1981 and again in 1991 – coupled with numerous other proliferation-related developments – inspired the IAEA and its Member States to reassess the adequacy of the existing safeguards approach for reducing or eliminating proliferation risks from the fuel cycle. The result was the "Additional Protocol," a major improvement on full-scope safeguards as they had hitherto been implemented under the NPT. It is the latest evolution of the regulatory approach – along with various "cooperative threat reduction" schemes designed to enhance security of existing or future weapons-usable nuclear materials, without infringing upon current or future commercial uses (or non-explosive military uses, such as fuel in submarines).

Today, however, more countries are seeking – or actively building – very sensitive nuclear fuel-cycle facilities, including both enrichment and reprocessing plants. The production of separated, weapons-usable plutonium (noting here that even "reactor-grade" plutonium is weapons-usable) and/or the production of highly-enriched uranium for military or civilian purposes – continues in some countries. This continued production makes it harder diplomatically to deny such capabilities to other States. The production, storage, use, and

transportation of such materials necessarily entails physical security risks, opportunities for theft or diversion, and threats of terrorist attacks – not to mention new dangers to the environment and to human health. These risks, emphatically, are not limited to Russia, the overwhelming focus of the currently-prevailing regulatory approach.

The future of nuclear industry, fortunately, does not require the use of either plutonium or highly-enriched uranium as a nuclear fuel. Using plutonium as a fuel only adds costs and new risks to nuclear power generation. Indeed, if terrorists one day acquire and use weapons-usable nuclear materials, such an event could well prove devastating to that entire industry, which continues its longstanding struggle to prove its economic competitiveness, safety, and security against proliferation threats. This industry therefore has a huge stake in the maintenance of strict controls over such materials.

In recent years, "counter-proliferation" has received increased attention, and not just in the United States, as a means to cope with the threats posed by these materials. This policy or doctrine, as the case may be, is in essence a regulatory scheme, one that simply draws more on military responses to the problem – it reserves its prohibitory language for specific cases and avoids universal norms. It tacitly assumes the eternal availability of the relevant bomb materials and offers nothing by way of global prohibitory norms relating to the production or use of such materials. Yet the adequacy or effectiveness of such an approach is open to serious question, particularly when the central security problem is defined as global in scope and inescapability tied to the realities of threats posed by weapons-usable nuclear materials, wherever they may be.

In the case of Iraq, it was not surgical military strikes that neutralized that country's weapons threats, but a full-fledged invasion and the change of a regime weakened by years of international sanctions and multilateral disarmament activities. The "military tool" had been used repeatedly before, yet perceptions of threats continued. The question begged by the Iraq experience is, will one State or a group of States – when confronted with new weapons proliferation threats – have the political will, the economic wherewithal, and the ready availability of military resources to invade countries and overthrow their governments as the appropriate remedy? If not, the doctrine of counter-proliferation faces serious questions of basic insolvency – it in no way obviates the need to continue the search for ways to eliminate weapons threats, rather than just manage them, and this brings us back to the materials issue.

The world community is rapidly approaching a crossroads with respect to how it confronts threats posed by such materials. Will each country be allowed to acquire – under various national or international regulatory frameworks – the capability to produce weapons-usable nuclear materials, or will the production of such materials become, one day, a global taboo?

The alternative of a world in which only some countries may produce such materials, while others may not, is both inequitable and, in the long-term, unsustainable. Such a strategy will only beget indigenous programmes, driven by a mixture of motives, including nationalism, bureaucratic advocacy, claims of economic necessity, and other such rationales. This has happened in the past, is happening today, and will continue to happen as long as such a strategy is practiced.

While the IAEA's Additional Protocol is without question a significant improvement in

safeguards, nobody claims it offers any panacea for the persisting risks from fissile nuclear materials. The Agency must, moreover, struggle for funds each year, as it continues its ongoing efforts to encourage more States to agree to the Additional Protocol, and to tighten nuclear physical security and safety standards that are implemented nationally. It faces, in short, the classic need to reconcile its ends and means. The challenges facing the IAEA will surely continue to grow as more and more countries acquire sensitive fuel-cycle facilities. This growth will make it increasingly difficult for the IAEA to detect the diversion of a significant quantity of the most sensitive nuclear materials, a challenge that will grow exponentially with the size and number of the facilities producing such materials.

Though only a handful of States now produce such materials, serious terrorist and proliferation risks will persist even if new sources of supply are somehow blocked – and such risks will grow even more if production is actually increased. The universal adoption of the Additional Protocol – which is still far from achievement – can lower but not fully eliminate this risk.

Between one extreme of a complete shut-down of the world's nuclear power industry, and the other extreme of universal availability of the means to produce weapons-usable nuclear materials, lies a middle course: a comprehensive ban on the production of weapons-usable nuclear materials, regardless of end-use. This would constitute a focused, universal, prohibitive approach to remedy the global security challenges posed by the very existence of weapons-usable nuclear materials.

Another option would be the establishment of multinational nuclear fuel-cycle facilities, though the world community has considered various proposals to this effect for many years and it remains, at best, a longer-term option – and, of course, is regulatory in orientation. Many of the most serious problems of stockpiling and transporting such materials, of guaranteeing against losses of very small quantities of material, and of protecting against technology transfers remain unsolved. A related approach would involve the creation of an international repository for the long-term secure storage – without reprocessing – of irradiated fuel from nuclear reactors and various forms of materials that could be used in radiological weapons.

A prohibition, however, limited only to the actual use of fissile nuclear material in making weapons – the goal of the long-discussed "fissile material treaty" – leaves open the risk that states will proceed to build large stockpiles of plutonium and highly-enriched uranium under safeguards. These have the potential serve as "mines" for materials to supply a future nuclear weapons programme. The DPRK's recent departure from the NPT illustrates one of the gravest shortcomings of regulatory approaches: the fact they merely seek to manage or lower risks, while offering no guarantees of a permanent solution.

The growing risks of nuclear terrorism, and the potential threats posed by radiological weapons, are subjecting this approach to much closer analysis. Is the world better off with no production of separated plutonium or highly-enriched uranium – and the progressive elimination of existing stockpiles – or with the regulated, limitless production of such materials by some States today, and more States tomorrow?

Total nuclear disarmament is already a global norm. It is enshrined in Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), as reaffirmed by the International

Court of Justice in its historic Advisory Opinion of 1996. The big question facing the world community is whether this goal – or for that matter, the nuclear non-proliferation and nuclear counter-terrorism goals as well – can ever be achieved in a world where the continued production, transportation, export, and use of weapons-usable nuclear material is allowed, condoned, and even promoted? To say the least, chances for success appear least auspicious in a climate of chronic non-compliance with solemn nuclear disarmament commitments, coupled with schemes merely to regulate weapons-usable nuclear materials.

The stakes are enormous, so enormous that the world community may well wish to re-consider the appropriate goal of a fissile material treaty – should it seek merely to regulate the production, sale, use, and transportation of weapons-usable nuclear material, or should it aim at closing this path permanently to nuclear armament, nuclear proliferation, and nuclear terrorism? The matter is entirely in the hands of nation-states, their leaders, and ultimately, their fellow citizens. Their collective efforts are what is needed to ensure that these materials do not end up in the hands of the terrorists – and to strengthen the global norm against the acquisition or possession of nuclear weapons at all, by anyone.

---

* The views expressed in this paper are solely those of the author.

NATO AND THE NPT

By Jonathan Granoff
President of the Global Security Institute

Introduction

Nuclear weapons are the only weapons that pose an immediate risk to civilization, are deployed with impunity by members of NATO, and are not governed by a legal instrument universally banning them.

Neither reason nor imagination is sufficient to grasp the magnitude of what we have created. The International Court of Justice, in its landmark opinion in 1996 on the Legality of the Threat or Use of Nuclear Weapons stated: "The destructive power of nuclear weapons cannot be contained in either space or time. They have the potential to destroy all civilization and the entire eco-system of the planet." Nuclear weapons are the sword of Damocles over our heads.

Nuclear weapons exemplify a thoroughly modern dilemma where the means of pursuing security undermine the end of obtaining security. As Henry David Thoreau said, "Improved means to unimproved ends."

There is a grave risk of increased nuclear proliferation if the Nuclear Non-proliferation Treaty (NPT) loses its capacity to guide conduct. The NPT is the world's central legal instrument designed to constrain proliferation. It embodies commitments to reduce the status of nuclear weapons and to take actions toward disarmament. Disregarding these commitments will undermine the NPT's legitimacy and respect for nonproliferation promises will diminish.

NATO countries can make an enormous difference in this area. NATO is composed of nations that extol the rule of law, policies based on reason, democracy, universal norms of civilized conduct, constitutionalism, and peace. It constitutes a bastion against superstition, fear, and the pursuit of political goals through violence. Because of the more than 150 U.S. nuclear weapons based in six non nuclear weapons states of NATO (Belgium, Germany, Greece, Italy, Netherlands, and Turkey), control over which could only be formally shared in a time of war, NATO is the world's only multilateral nuclear alliance. All its members share membership in the Nuclear Non-Proliferation Treaty (NPT).

The opportunity presented by the complete dissolution of the only other multilateral nuclear alliance in the world (the Warsaw Pact) and the end of the Cold War to fulfill the nonproliferation and disarmament promises of the NPT has been recently obscured by an upgrading of the role of nuclear weapons and the downgrading of the role of the treaty.

The need to more thoroughly address Article IV concerns relating to peaceful uses and greater controls over fuel cycles are being addressed by proposals by the IAEA leadership and even the U.S. President has indicated a willingness to soberly meet the issue in his February 11, 2004 speech. Of course the IAEA Protocols need to be supported in every way possible. But the demand for an immediate nuclear weapons convention by many non-allied countries

and the failure of progress on disarmament by the nuclear weapons states is straining the regime and bridge building is needed by countries in the center.

Failure to adequately address the inconsistency of the continuing deployment of NATO tactical nuclear weapons constrains NATO members from strongly advocating bridge building nonproliferation disarmament initiatives, such as those contained in the NPT Review of 2000, supporting the New Agenda, or effectively dealing with the thousands of Russian tactical weapons. Do these weapons in today's world have such great value to warrant paying the cost of failing to move the nonproliferation disarmament agenda forward with appropriate vigor?

Depth of Predicament

We seem to have forgotten how we got here. Nuclear weapons were created to make us more secure. Some nations claim that possession of this weapon of mass destruction enhances security. Now non-state actors who are motivated by beliefs or greed unconstrained by law may gain possession of these devices. Over 90 percent of the weapons are in the hands of two countries (Russia and the U.S.) that keep thousands pointed at each other in high alert status even though the two countries are not enemies, thus implicitly extolling their alleged value. Paradoxically, weapons that were created for security have become the greatest threat to security. Is there presently a problem that nuclear weapons solve that is a greater danger than the weapons themselves? Can a nonproliferation regime based on the premise of "do as we say and not as we do" be sustained?

Despite nearly universal consensus that we must move incrementally toward a nuclear weapons free world, in a stunning assertion of militarism and unilateralism over international cooperation and the rule of law, the U.S. is taking steps to construct new nuclear weapons. Some of these weapons are called "mini-nukes" and are ready to be integrated into conventional war fighting plans while others are modifications of existing weapons designed for new targets. This quest represents an enormous shift in the basic rationale for the production and use of nuclear weapons. The basis of the nonproliferation regime is presently threatened. The legal instrument is fine; the policies and failure to muster courage and political will are problematic.

Previously, deterrence doctrine was designed to ensure that nuclear weapons would not be used, or at least only used as an absolute last resort. The logic was that if each nuclear equipped party had enough weapons to inflict unacceptable damage to the other—even after being hit with a nuclear attack—then neither would actually dare to use their arsenal.

Until now, there has also been a nearly universal international consensus that the proliferation of nuclear weapons posed a paramount threat to the security of the world. President Bush has challenged this presumption. In his 2003 State of the Union address he said, "The gravest danger facing America and the world is outlaw regimes that seek and possess nuclear, chemical and biological weapons." The emphasis has shifted from the weapons themselves to concern for regimes, and the policies that arise from this shift are dramatic. Instead of a policy of containment and elimination of weapons through international

law, we are now seeing a policy of "regime change" based on U.S. unilateral decision-making. This is very hazardous to international order, and we are only beginning to see its consequences in the aftermath of the Iraq war.

Moreover, rather than working to fulfill treaty commitments for disarmament, the U.S. Nuclear Posture Review of 2002 calls for proliferation:

"The need is clear for a revitalized nuclear weapons complex that will ... be able ... to design, develop, manufacture, and certify new warheads in response to new national requirements; and maintain readiness to resume underground nuclear testing if required."

The U.S. National Security Strategy emphasizes that the United States will take anticipatory preemptive action. Since the Nuclear Posture Review calls for incorporating nuclear weapons into conventional war fighting capabilities, we now have a doctrine that can rationalize the pre-emptive use of nuclear weapons.

The irrationality of the quest to address the problem of proliferation by building more weapons of mass destruction and threatening to use them remains inadequately challenged.

These new doctrines both challenge the moral taboo against use, and undermine the commitments made under the NPT, to negotiate the elimination of nuclear arsenals. This duty was emphasized by the unanimous adoption at the Treaty's review in 2000 of a final statement which contained the following commitment: "An unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament, to which all States parties are committed under Article VI."

The reality of the hazards of a new contemplated use of nuclear weapons has yet to dent the public debate, and its effect on the nonproliferation regime has certainly not been appreciated by the relevant public. Nor has it been addressed adequately by NATO. NATO cannot sit back silently because it is utilizing U.S. nuclear deployments to fulfill its mandate to pursue peace and security.

It is easy to understand why much of the world is so afraid. We should all be afraid.

Mohammed ElBaradei, Director General of the International Atomic Energy Agency (IAEA), recently stated the situation clearly:

"These are double standards. On the one hand, the U.S. says that the proliferation of nuclear weapons must be fought. On the other, it perfects its own arsenal. This is not acceptable... The U.S. Administration demands from other states not to have any nuclear weapons, while it fills its own arsenals... If we do not give up such double standards, we will have even more nuclear powers. We are at a turning point now."

Does NATO's failure to establish a policy consistent with the promises its members have made under the NPT preclude its members from choosing the effective route to safety that Mr. ElBaradei has highlighted? Are NATO and its members without nuclear weapons advancing policies that protect the NPT?

NPT Context

The NPT remains central to international security. Without its legal normative value the world could be an unsustainably dangerous place. As Ambassador Thomas Graham, who lead the

U.S. negotiations for START I and the Extension of the NPT in 1995, recently said in the U.S. Congress:

"In 1962, there were reports estimating that there would be 25-30 nuclear weapons states with nuclear weapons integrated into their national arsenals by the end of the 1970s. If this had happened, there would likely be more than 50 nuclear weapon states today. This would have created a nightmarish world, one in which every conflict would run the risk of going nuclear, it would be impossible to keep these weapons out of the hands of terrorists because they would be so widespread and the continued existence of our civilization would hang in the balance every day."

The principal reason that this did not happen was the negotiation of the Nuclear Non-proliferation Treaty, the NPT in 1968, its entry into force in 1970, and its permanent extension in 1995. It converted what had been an act of national pride (the acquisition of nuclear weapons) into an act of international outlawry. In exchange for the then five nuclear weapon states agreeing to certain nuclear arms control and disarmament commitments, the rest of the world agreed never to acquire nuclear weapons. But, we must not forget that the NPT did come at a price in arms control commitments for the nuclear weapon states (the United States, Russia, France, the UK and China), including, for example, deep reductions in nuclear weapons leading to their elimination, a comprehensive nuclear test ban treaty, and a pledge never to use nuclear weapons against non-nuclear weapon NPT parties (now 182 nations – almost the whole world).

The Treaty will be reviewed in 2005 and its future is uncertain. NATO and its members cannot evade their responsibility in either helping or preventing a descent into a third nuclear age where counter proliferation and the use of military force, even including the possible use of a nuclear weapon, becomes the accepted mode of international conduct. This tragic possibility should be compared to security enhancing steps that reaffirm the collective commitment to downgrading the role of nuclear weapons, the affirmation of the strong taboo against their use except in the most dire and extreme situations, the strengthening of international law and the movement toward fulfilling the promise of nuclear disarmament contained in the NPT.

In 1995 the Treaty was indefinitely extended based on a negotiated framework to evaluate implementation of the disarmament commitments contained in Article VI of the treaty, which calls for negotiations leading to nuclear disarmament. These "Principles and Objectives for Nuclear Nonproliferation and Disarmament" included the "determined pursuit by the nuclear weapons States of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons..." There was also a commitment to complete a comprehensive test ban treaty by 1996 and explicit negative security assurances were offered.

In 1996 the International Court of Justice offered an advisory opinion on the legality of nuclear weapons. The court held that the threat or use was "generally" contrary to international law, but could not reach a conclusion that when a state's very survival was at risk that the law would prohibit use. However, it was unanimous and specific in holding what Article VI requires of nuclear weapons states:

"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."

At the 2000 Review of the Treaty, the agreements of 1995 were clarified and elaborated by the adoption of 13 "practical steps" which enhance security and fulfill the commitments to Article VI. All members of NATO have offered their allegiance to the NPT and the commitments they have made, yet NATO's policies remain incoherent.

NATO inconsistencies

At the NATO press release of the Final Communiqué of the Ministerial Meeting of the Defense Planning Committee and the Nuclear Planning Group, on June 6, 2002, a reaffirmation of a commitment to implementing the conclusions of the 2000 NPT Review was made. Yet, the 1999 NATO Strategic Concept stated "Nuclear weapons make a unique contribution in rendering the risks of aggression against the Alliance incalculable and unacceptable. Thus, they remain essential to preserve the peace." When the North Atlantic Council met in Washington, DC on April 23rd and 24th, 1999 it stated that, "The supreme guarantee of the security of the allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States; the independent nuclear forces of the United Kingdom and France, which have a deterrent role of their own, contribute to the overall deterrence and security of the Allies." The nuclear sharing arrangements remain in place, and the contradiction enfeebles advocacy.

Again, NATO's Defense Planning and Nuclear Planning Group met in December and released a December 2 1999 Press Communiqué M-DPC/NPG-2(99) 157 that stated:

"We confirmed the principles underpinning the nuclear forces of the Allies as set out in the new Strategic Concept. These forces continue to have a fundamental political purpose: to preserve peace and prevent coercion and any kind of war. They play an essential role by ensuring uncertainty in the mind of any aggressor about the nature of the Allies' response to military aggression and by providing an essential political and military link between the European and North American members of the Alliance. The Alliance will therefore maintain adequate nuclear forces in Europe at the minimum level sufficient to preserve peace and stability. Taking account of the present security situation, we affirmed that the circumstances in which any use of nuclear weapons might have to be contemplated by Allies are extremely remote."

NATO's weapons arose from the unique circumstances of the Cold War, and the preservation of the right of first use arose in response to the Warsaw Pact's overwhelming conventional force superiority. This rational is long gone, yet the weapons and the posture remain, despite negative security assurances under the NPT. When the world's most powerful military alliance in human history claims a need for these deployments for security, what message does a weak state in a dangerous region hear? Do the weapons provide prestige or military value? Can the resources of NATO not come up with a better way of enhancing security and thus set a proper example?

A weakened treaty: a critical challenge

Because NATO countries have been ineffective in meeting challenges to the integrity of the NPT it has already been dangerously weakened.

Commitments explicitly made to fulfill the NPT's disarmament negotiations have been ignored. These include the failure of the five NPT-bound NWS to take direct steps toward fulfillment of their primary Article VI obligation – elimination of their nuclear arsenals – and three have declared, in effect, that elimination will not be pursued "for the foreseeable future." Important elements of the 1995 bargain for the permanent extension of the NPT and of the commitments made in the Final Document of the 2000 Review Conference remain unfulfilled and have in some cases been repudiated. START II is dead, the Anti-Ballistic Missile Treaty has been scrapped, the Comprehensive Nuclear-Test-Ban Treaty is not yet in force and the United States, although a signatory, has stated that it "will not become a party" to the treaty. Moreover, no progress has been made on new measures such as a Fissile Materials Cutoff Treaty and, while the U.S. and Russian nuclear arsenals are being reduced (a fact noted but essentially unaffected by the almost-provisionless Strategic Offensive Reductions Treaty of 2002), those arsenals remain huge and thousands of weapons remain deployed on high alert. There are new nuclear weapons technical developments (e.g., "mini-nukes" and "bunker busters"). The proposed deployment of missile defences' space weapons threatens to slow or halt further reductions and even spur increases in the arsenals of some states in response.

Non nuclear state members of NATO formally support the retention of nuclear weapons "for the foreseeable future" and have not explicitly rejected new U.S. doctrines that lower the threshold for use. Could it be that the inconsistencies between NATO policy and NPT promises have been overlooked or considered insignificant? Could it be that the political weight of the "sharing" arrangements of over 150 nuclear weapons precludes non nuclear weapons members of NATO from being effective disarmament advocates?

The net effect of this incoherence is that neither NATO and nor its members are able to exercise good faith as leadership in the world on this issue. Persistence in contradictions prevents NATO countries from vigorously pushing to fulfill disarmament and threat reduction commitments of the nuclear weapons states under the NPT. As the nonproliferation regime corrodes, we are increasingly being encouraged to rely on counter-proliferation: war in the name of disarmament. The hypocrisy of this is only too obvious to the non-nuclear, non-allied world.

Conclusions

If the NATO members can take principled positions that ensure alignment with the commitments made in the 2000 Review of the NPT, security enhancing examples for the larger world community will be realized. The rule of law will be advanced enormously.

There needs to be a serious strategic planning project that fully evaluates how to lower the value of nuclear weapons as committed in the NPT.

All of the NATO allies of the United States have ratified the Comprehensive Test Ban Treaty. Thus there must be greater pressure, explicit pressure, to maintain the moratorium and

to bring the need for ratification back to the table. Testing will undermine the NPT and that cannot be tolerated.

While use of nuclear weapons by NATO is regarded as a very remote contingency, NATO policy does include a possible first use option, which could, in theory, be against non-nuclear parties to the NPT. This position of commitments made in the context of the NPT that non-nuclear states can take refuge in negative security assurances must be clarified.

The need to downgrade the political status of nuclear weapons is essential. The goal should be that NATO policy lowers the value of nuclear weapons. A de-nuclearized NATO would not only mean a more secure Europe, but also a more secure United States and a more secure world.

Excerpted from the NPT 2000 review final document

The Conference agrees on the following practical steps for the systematic and progressive efforts to implement Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and paragraphs 3 and 4 (c) of the 1995 Decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament".

1. The importance and urgency of signatures and ratifications, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty.
2. A moratorium on nuclear-weapon-test explosions or any other nuclear explosions pending entry into force of that Treaty.
3. The necessity of negotiations in the Conference on Disarmament on a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices in accordance with the statement of the Special Coordinator in 1995 and the mandate contained therein, taking into consideration both nuclear disarmament and nuclear non-proliferation objectives. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate commencement of negotiations on such a treaty with a view to their conclusion within five years.
4. The necessity of establishing in the Conference on Disarmament an appropriate subsidiary body with a mandate to deal with nuclear disarmament. The Conference on Disarmament is urged to agree on a programme of work which includes the immediate establishment of such a body.
5. The principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures.
6. An unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament to which all States parties are committed under Article VI.
7. The early entry into force and full implementation of START II and the conclusion of START III as soon as possible while preserving and strengthening the ABM Treaty as a

cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with its provisions.

8. The completion and implementation of the Trilateral Initiative between the United States of America, the Russian Federation and the International Atomic Energy Agency.
9. Steps by all the nuclear-weapon States leading to nuclear disarmament in a way that promotes international stability, and based on the principle of undiminished security for all:
   - Further efforts by the nuclear-weapon States to reduce their nuclear arsenals unilaterally.
   - weapons capabilities and the implementation of agreements pursuant to Article VI and as a voluntary confidence-building measure to support further progress on nuclear disarmament.
   - The further reduction of non-strategic nuclear weapons, based on unilateral initiatives and as an integral part of the nuclear arms reduction and disarmament process.
   - Concrete agreed measures to further reduce the operational status of nuclear weapons systems.
   - A diminishing role for nuclear weapons in security policies to minimize the risk that these weapons ever be used and to facilitate the process of their total elimination.
   - The engagement as soon as appropriate of all the nuclear-weapon States in the process leading to the total elimination of their nuclear weapons.
10. Arrangements by all nuclear-weapon States to place, as soon as practicable, fissile material designated by each of them as no longer required for military purposes under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside of military programmes.
11. Reaffirmation that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control.
12. Regular reports, within the framework of the NPT strengthened review process, by all States parties on the implementation of Article VI and paragraph 4 (c) of the 1995 Decision on "Principles and Objectives for Nuclear Non-Proliferation and Disarmament", and recalling the Advisory Opinion of the International Court of Justice of 8 July 1996.
13. The further development of the verification capabilities that will be required to provide assurance of compliance with nuclear disarmament agreements for the achievement and maintenance of a nuclear-weapon-free world.