Introduction

I welcome this opportunity to speak on the future of nuclear weapons -- a subject that has become something of a moving target, one that merits a close watch by all who are concerned about the future of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and its important non-proliferation and disarmament objectives.

The treaty and the international regime of rules and norms that have grown around it are constantly adjusting to the dynamic forces that shape modern international relations. Trite though it may sound, we are indeed in an era of rapidly growing interdependence -- an era, however, that is constantly reminded of the darker forces of its unstable past, a legacy that...
includes all-too familiar memories of nationalism, militarism, mutual suspicions, and distrust of international legal and organizational machinery. We may well be heading toward a strange new bipolar world -- a world described by Arundati Roy, the Indian novelist and anti-nuclear activist, as "dangerously armed -- one with the nuclear arsenal of the obscenely powerful, the other with the incandescent, destructive power of the utterly hopeless." Others, drawing upon rhetorical devices used during the Cold War, are viewing the world in Manichean terms of good and evil. It now appears that a crusading zeal against terrorism has been converted into a fresh rationale not only for the retention of nuclear weapons but also for new uses for them and the need for R&D on new types of such weapons.

Avoiding such an outcome, while deepening the sense of community among all peoples, will require a great deal of enlightened leadership, backed by an informed public. This leadership will be increasingly important in an age where sudden events could one day -- wilfully or not -- unleash the fury of weapons of mass destruction, with incalculable costs to humanity and its natural environment. Let us consider just for a moment some of the major events that have taken place since my last speech in Annecy in May 2001, for they are already having a profound effect upon the world's efforts to eliminate nuclear weapons.

A Cascade of Significant Events

No one can deny that the terrorist attacks in the United States on September 11, 2001 constituted a watershed event for international peace and security. There is less agreement, however, over precisely how future events might evolve, particularly in the fields of non-proliferation and disarmament. On the one hand, these acts -- which Secretary of Defense Donald Rumsfeld has estimated cost the US economy between $170-250 billion -- abruptly demonstrated that nuclear deterrence offers no guarantees whatsoever of national or international security. Yet, on the other hand, many nuclear-weapons advocates around the world still cannot bring themselves to yield this point.

Though these differences will likely persist, the world community must now dedicate itself to achieving something positive for international peace and security in response to those events. Together, let us honour with deeds -- not just words -- the memory of the over three thousand innocent civilians from dozens of countries who perished on that tragic day. The timing for such collective action is good, for the world is united as never before in a common commitment to cooperate against the scourge of terrorism. I also believe that leaders and citizens everywhere are aware of how much worse that day might have been if terrorists had used weapons of mass destruction, in particular nuclear or biological weapons. As public awareness of the horrors of terrorism grows -- in particular the horrors of WMD terrorism -- I believe everyone will increasingly appreciate the contributions that the WMD treaty regimes can make in preventing such nightmares.

The regimes stand for the premise that the world is better off getting rid of all such weapons -- they reject the alternative of merely gambling on management techniques to limit the effects of
such weapons, to lower their frequency of use, or to contain their geographic spread. I believe that weapons that kill large numbers of human beings indiscriminately have no moral or legal justification regardless of who is holding them. The world will be best able to keep such weapons out of the hands of terrorists only when they and their special weapons materials are in the hands of no one.

The UN Security Council's Counter-Terrorism Committee and the Secretary-General's Policy Working Group on terrorism are now actively working to strengthen the contributions of the United Nations in curbing the global terrorist threat. Coupled with an extensive debate and several resolutions from the General Assembly on this subject, it is quite clear that terrorism has now become a "front-burner" issue at the United Nations. This is an issue -- very much like disarmament itself -- with cross-cutting implications for agencies and offices literally throughout the United Nations system. I hope that the events of 9/11 will specifically rekindle a new spirit of determination to ensure the fulfilment of all of the non-proliferation and disarmament commitments under the NPT, while also promoting peaceful uses of nuclear energy that are consistent with those goals.

In times when most of the world is expecting great progress on diminishing the role of nuclear weapons in the world, people are dismayed to see new rationalizations for such weapons, even for their use against non-nuclear-weapon states. While the release of the general conclusions of the U.S Nuclear Posture Review last January was yet another noteworthy event, the U.S. is hardly the only state that continues to stress the continuing value of nuclear weapons in defence of national security interests. Implicitly or explicitly, nuclear deterrence remains deeply rooted in the national security strategies of some eight states -- the P-5 plus India, Pakistan, and Israel -- and many more, if one includes alliances. While the nuclear-weapon states parties to the NPT deny that they are developing new nuclear weapons, they are constantly seeking to improve existing weapons by giving them new capabilities, in some cases including the ability to destroy hardened or underground bunkers. We are also continuing to hear that nuclear weapons may be used in retaliation for attacks involving chemical or biological weapons, and could well be used pre-emptively. Among the nuclear-weapon states, only China has ruled out the first-use of nuclear weapons. Meanwhile, a US official confirmed last April that a Pentagon advisory board was "looking at" the option of placing nuclear weapons on missile-defence interceptors. None of this is at all consistent with the global goal of diminishing the role of nuclear weapons in security policies.

Yet not all of the news since my address last year has been negative. Some significant developments represent some positive steps forward in our global journey to reach a nuclear-weapon-free world. The first session of the Preparatory Committee for the 2005 NPT Review Conference proceeded this April more smoothly than many had expected -- one non-governmental organization even referred to the event as a "Prep-CALM." It is clear that much of the credit for the efficient handling of the event is due to the ample diplomatic talents of this session's Chairman, Ambassador Henrik Salander, who was able to bring the event to a relatively smooth conclusion, despite some profound differences of views among participating
It is always a sign of health for a treaty regime when its member states show up at such events with constructive and thoughtful proposals for achieving the treaty's goals. Without making any invidious comparisons among these proposals, I would like to identify two in particular that will likely receive further attention in future sessions leading up to the next Review Conference. I am referring here to Canada's call for a standardized reporting format for progress on Article VI and to Germany's related proposal for an inventory of existing nuclear weapons and weapons-usable nuclear materials.

Under the surface of this relatively tranquil event, however, lay murky undercurrents that portend serious challenges ahead -- making the PrepCom a "calm before a storm" perhaps. While no single state will likely determine the future of the NPT, the policies and practices of the world's strongest economic and military power -- the United States -- undoubtedly have profound repercussions throughout international society and merit close attention for just this reason.

All delegations attending the last session of the NPT PrepCom could not help observing some significant, unapologetic backtracking by the United States on its commitments with respect to the 13 steps for nuclear disarmament agreed at the 2000 NPT Review Conference. With respect to two of the steps, the US has now unilaterally abandoned the ABMT and still does not support ratification of the CTBT, while maintaining -- for now -- its moratorium on nuclear explosive tests. With respect to another of the 13 steps -- the "early entry into force" of START II, which outlawed land-based MIRVs -- this treaty is now also on the scrap heap, as Russia has recently announced that it will no longer be bound by the treaty since the US never fully ratified it.

It would be troubling enough if the evidence of this backtracking were limited to the new US posture toward these major international treaties. The 13 steps, however, also included an emphasis on improvements in transparency and the issuance of regular reports -- yet none of the nuclear-weapon-states (NWS) showed any support for Canada's proposal for a standardized reporting format for gauging progress on Article VI -- nor did they appear ready to reveal the size of their stockpiles of nuclear weapons and materials. And in contrast to the importance attached to the "principle of irreversibility" found in the 13 steps, the US and other nuclear powers seem all too focused these days on maintaining flexibility -- not even as a means, but as an end in itself. With respect to the CD, we still do not have any "negotiations" underway on a fissile material treaty, nor do we have a subsidiary body to deal with nuclear disarmament -- another two of the 13 steps. Nor is there any evidence of progress in reducing non-strategic nuclear weapons as an integral part of the nuclear arms reduction and disarmament process, yet another of the 13 steps. There was also little progress to report at the PrepCom in implementing the resolution adopted at the 1995 NPT Review and Extension Conference concerning the creation of a zone free of weapons of mass destruction in the Middle East.

The NPT regime, of course, also faces some significant challenges in the field of nuclear non-proliferation, challenges including but extending well beyond the instances of non-
compliance by Iraq and the Democratic People's Republic of Korea. Following his consultations with Iraqi officials earlier this month on resuming weapons inspections and other issues, the Secretary-General stated that while "There has been some movement," he added, "I would have preferred to move further." It is important to note that "non-proliferation" was one of the key "Principles and Objectives" included among the decisions leading in 1995 to the indefinite extension of the NPT. Decision 2 specifically stated that "the proliferation of nuclear weapons would seriously increase the danger of nuclear war" and that because of this threat "every effort should be made to implement the Treaty in all its aspects to prevent proliferation of nuclear weapons and other nuclear explosive devices ...". The same Decision also stated that new nuclear supply arrangements should require recipients to accept IAEA full-scope safeguards as a "necessary precondition" to such cooperation.

Yet even in this area, we find some troubling indicators. Other NPT non-nuclear-weapon State parties have been accused of seeking nuclear weapons, though no evidence has been provided to substantiate such a claim, nor have these claims been brought to the attention of the United Nations Security Council. Elsewhere, external nuclear assistance continued to flow to both India and Pakistan well after the 1998 nuclear tests without any requirement for full-scope IAEA safeguards. And despite their failure to undertake the measures identified in UN Security Council Resolution 1172 following the nuclear tests in 1998, these same countries are now receiving large amounts of foreign military assistance, even amidst recurrent rumours of war.

With respect to the Middle East, the Washington Post reported last month that another non-NPT state -- Israel -- was now equipping three submarines with nuclear-capable cruise missiles, according to former Pentagon and State Department officials. In addition, there has been no apparent progress in achieving a zone free of weapons of mass destruction as called for in the 1995 Middle East Resolution. That resolution also addressed WMD "delivery vehicles" -- yet missiles and long-range fighter planes continue to proliferate both vertically and horizontally virtually throughout the region.

In other regions, various remarks from senior public officials have also not helped the twin causes of disarmament and non-proliferation. We have heard several recent statements from officials of one NPT non-nuclear-weapon State that were widely interpreted as favouring the acquisition of nuclear weapons, while various other officials from nuclear-weapon States continue to refer to disarmament -- when they refer to it at all -- as only some distant objective, as opposed to a subject meriting earnest negotiations and practical action. With respect to the global non-proliferation challenge, additional high-level statements have narrowed the global non-proliferation challenge to one of merely keeping nuclear weapons out of the hands of so-called "rogue nations" and terrorists.

All together, if these trends continue, we may find one day that the NPT's non-proliferation and disarmament objectives have evolved -- simply through the flow of events -- into "managed proliferation" and massive re-armament.
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The NPT regime has always had to struggle with its inherently discriminatory division of the world into nuclear "haves" and "have nots" -- what some have labelled a case of "nuclear apartheid." It has had to struggle with the appearance of double standards -- what might be called the "disarmament divide" -- which appears whenever rigorous standards are enforced for non-proliferation purposes, while there is no equivalent international efforts to monitor, let alone verify, progress on disarmament. In the Final Document of the 2000 NPT Review Conference, for example, the States parties fully endorsed the IAEA's Model Additional Protocol, an instrument that the Final Document said would provide the IAEA with "enhanced information about a State's nuclear activities and complementary access to locations within a State." Yet when one contrasts this language with the words of the nuclear-weapons states in vigorous opposition to any enhanced transparency over their own nuclear arsenals, we see the familiar old double standard in the broad light of day.

The house of the NPT will survive and prosper only if it ceases to be a theatre for playing out an "upstairs/downstairs" drama. A decent respect for the opinions of humanity requires a somewhat fairer standard of public accountability -- something that might pass for "good governance" in the implementation of one of the world's most indispensable treaties. The tools are there to achieve this goal -- the challenge is to ensure that they are used.

In particular, I cannot overstate the importance of the decisions at the 1995 NPT Review and Extension Conference on strengthening the treaty's review process and on prescribing certain "principles and objectives" to guide the implementation of the treaty. Together with the Middle East Resolution, these decisions comprise the integrated "package" that enabled the states parties to agree to an indefinite extension of the treaty. I am as convinced now as I was as President of the 1995 Conference that the future of this treaty will rest upon the fate of the package that led to its indefinite extension. Think of these key elements of the 1995 consensus, plus the 13 steps agreed five years later, as the four pillars sustaining the future of the treaty and the world's efforts to eliminate all nuclear weapons. Any state that discards or weakens these pillars only erodes the foundations for non-proliferation and disarmament for the entire world community.

This brings me to one of the most fundamental questions of all: are we really making progress on global nuclear disarmament? On 24 May, Presidents Bush and Putin signed the Moscow Treaty requiring a substantial reduction by 2012 in the numbers of the deployed strategic nuclear weapons of the US and Russia. While not at all a disarmament treaty -- since it does not require the destruction of even a single warhead -- it is a welcome step forward in the ongoing rapprochement between two former nuclear rivals and may yet lead to more substantive achievements. The leaders also signed a non-binding Joint Statement that re-affirmed their shared commitment to intensify their efforts to halt terrorism and the global spread of WMD and their delivery vehicles. In addition, they established a joint experts group to consider ways to reduce further inventories of plutonium and highly-enriched uranium. On 20 June, President Bush sent the treaty to the Senate for its advice and consent to ratification. The next day, the Russian Ministry of Foreign Affairs announced that the preparatory process for ratification of the
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Treaty had begun within the State Duma and the Federation Council of the Federal Assembly.

One way to assess this treaty is to compare it against the expectations of the other States Parties to the NPT, as registered in the 13 steps. Where does it stand vis-à-vis the principle of irreversibility? The treaty expires in 2012 and has an unconditional withdrawal provision -- invocable on three-months' notice -- and it does not identify any new provisions to enhance verification capabilities of the parties nor to increase transparency amongst the wider international community. While welcome in reducing the numbers of deployed offensive strategic weapons -- which is in effect a form of partial de-alerting -- the world is still awaiting concrete evidence of substantial progress in actually eliminating nuclear weapons. Instead, deployed weapons will reportedly be placed into non-deployed status and both parties will continue to retain their strategic nuclear triads, along with -- evidently -- their first-use nuclear doctrines. As for delivery systems, not only does the treaty fail to address the disposition of such weaponry, there are many reports indicating that the parties are developing new nuclear-weapon delivery systems.

In this light, hope for the future of nuclear disarmament depends less on the contents of the Moscow Treaty, than on what might materialize as a result of it. If a future agreement addresses the issue of irreversibility, it is still possible for good progress to be made in this vital area. If the treaty is followed by revisions of nuclear doctrines genuinely to diminish the role of nuclear weapons in security policies, this would also mark a step away from current postures that continue to trumpet such weapons as vital, essential, or a "supreme guarantee" of security interests. An agreement marking the end of deployments of non-strategic nuclear weapons would also be a step forward, especially if followed by an agreement eliminating them entirely. Finally, if the treaty is followed by a new commitment by all the nuclear-weapon states to enhance the transparency of their nuclear arsenals, along the lines proposed by Canada and Germany for example, this too would help to dispel concerns in the world community about the true intentions of these states with respect to nuclear disarmament.

One of the chronic obstacles faced in the disarmament process concerns the availability of resources to fulfil such commitments. On 27 June, the G8 countries (US, UK, France, Germany, Italy, Canada, Japan, and Russia) announced a $20 billion programme to assist Russia and other countries to dismantle its stockpiles of weapons of mass destruction over the next 10 years. It is noteworthy that the first of six principles offered by the G8 to keep terrorists from acquiring WMD was through promoting "the adoption, universalization, full implementation and, where necessary, strengthening of multilateral treaties and other international instruments whose aim is to prevent the proliferation or illicit acquisition of such items" and to strengthen the institutions designed to implement these instruments. It will be interesting to see how far the G8 will go in pursuing what they call, "mutually agreed effective monitoring, auditing and transparency measures and procedures" needed to ensure that cooperative activities meet agreed objectives. It seems to me that a good place to begin might be for the nuclear-weapon states to start implementing the transparency proposals made by two of the G8 -- Canada and Germany -- at the 2002 NPT PrepCom.
The G8 Summit drew specific attention to the danger of terrorists acquiring weapons of mass destruction, a problem that is particularly grave with respect to the possibilities that terrorists will acquire sufficient fissile nuclear materials, or other radioactive substances, to manufacture a nuclear explosive device or radiological weapon. Last March, the IAEA Board of Governors concluded that "national measures for protecting nuclear material and facilities are uneven in their substance and application" and -- while recognizing the primary responsibilities of states for their own security -- approved in principle an "Action Plan" to strengthen such controls worldwide. The IAEA's Director General, Mohamed ElBaradei, issued a statement underscoring the global scope of the threat, saying "All of us are vulnerable because all of us use nuclear materials and radioactive materials can easily move across borders.

On 25 June, the IAEA issued a press release citing what it termed, "inadequate control" over radioactive materials that could be used in so-called "dirty bombs." The agency said that "more than 100 countries may have inadequate control and monitoring programs" necessary to prevent "or even to detect" the theft of these materials. The report noted that the Newly Independent States, the United States, and the European Union have all lost track of many radiological sources, some of which could pose a risk if used in a dirty bomb. Following an agreement between the IAEA, the Russian Ministry of Atomic Energy, and the US Department of Energy, a tripartite working group on "Securing and Managing Radioactive Sources" is now developing a strategy to locate, recover, secure, and recycle uncontrolled or "orphan" sources in the Former Soviet Union. The IAEA notes that literally millions of such sources have been distributed worldwide over the last 50 years -- since 1993, the IAEA has noted 284 confirmed cases of trafficking in radioactive substances (other than nuclear weapon material). According to Director General ElBaradei, "The danger of handling powerful radioactive sources can no longer be seen as an effective deterrent, which dramatically changes previous assumptions."

Criteria for Gauging Progress in Disarmament

The seemingly endless list of problems associated with nuclear materials and the ever-diversifying proliferation threats they pose highlights another difficult challenge facing the global nuclear regime: how to evaluate its success. How will we achieve results-based disarmament? The criteria for appraising the NPT or any other serious non-proliferation or disarmament measure are actually very straightforward. They may be reduced to a few but tremendously important words -- compliance and reciprocity are two of them. If the nuclear-weapon and non-nuclear-weapon states fulfil their commitments under all the articles of this treaty, the future will be bright indeed. Yet if compliance becomes only selective, then one should not be at all surprised to witness a countervailing trend, under which partial compliance with the norm of disarmament will be met by only partial compliance with the norm of non-proliferation. What is good for the goose is also good for the gander. If there is one moral tenet linking every religion on earth, it is the ethic of doing unto others as you would have them do unto you. The NPT is a package of mutual obligations among its states parties: it will achieve its goals if its members continue to believe that these mutual obligations are fair and equitably maintained.
I must add here my growing concerns over this difficult issue of non-compliance -- not just with respect to treaties, but also with respect to resolutions of the Security Council, the entity in United Nations system with "primary responsibility for the maintenance of international peace and security," according to the Charter. Whether the resolutions address issues relating to South Asia, Iraq, the Democratic People's Republic of Korea, arms embargoes, or even the terms for participating in peacekeeping operations -- compliance is crucial to the integrity of the international rule of law. Attempts by states to place themselves above that law will only beget similar attempts by others, and the specific consequences of such an approach could well prove catastrophic not just to the NPT, but to the future of international peace and security.

Along with compliance and reciprocity, the road to disarmament will require another necessary ingredient: verification. Verification is absolutely crucial in addressing the most often-heard complaint raised by critics of disarmament: namely, that one can never be sure that cheating will not occur, and given the nature of weapons of mass destruction, even a little cheating can be catastrophic for national or international security.

For non-proliferation, this means not just full-scope IAEA safeguards, but also significant progress toward universal adherence to the IAEA's Model Additional Protocol, combined with substantially improved measures to ensure the physical security of fissile nuclear materials. For disarmament, this means an incremental process of placing increasing amounts of such materials recovered from warheads under the control of the IAEA, pending their final peaceful disposition. Improvements in so-called "national technical means" -- in particular advancements in the field of remote sensing and the development of other sophisticated means of detecting prohibited weapons activities -- can help to reinforce these safeguards, which are already in many ways serving as "international technical means," the harbinger perhaps of a new "revolution in disarmament affairs." Complementing national and international verification is a relatively new subject -- societal verification. A strong fundamental norm among all peoples against the very possession of nuclear weapons is undoubtedly the strongest possible foundation for a global disarmament verification regime to rest.

One specific initiative that would help enormously in reducing both the costs while increasing the effectiveness of verification would be a global moratorium on the stockpiling or production for any purpose of weapons-usable nuclear material -- in particular, separated plutonium or highly-enriched uranium. As long as such activities are permissible in some countries, pressures will grow, in the name of equity, for such production activities to take place in other countries, with all the additional attendant risks of theft, terrorism, and proliferation. The claim by some states of the exclusive right to produce such materials simply cannot be reconciled with the peaceful uses rights under Article IV of the treaty -- the best way to resolve this problem, however, is not to enable all countries to produce weapons-usable nuclear material, but to acknowledge the common security benefits of excluding such materials from all states.

The fourth key issue is the related subject of accountability with all articles of the treaty.
Accountability need not necessarily imply sanctions, though it does indeed require states to accept concrete responsibilities for the good faith performance of their legal obligations -- responsibilities that are subject to the review of the international community. This is what the whole concept of "the NPT review process" is all about: accountability, a shared responsibility of all parties to report on their activities and to participate in meaningful international dialog. Accountability is linked closely with transparency -- a commitment by states to describe how they are implementing their responsibilities under the treaty.

The last issue is irreversibility -- the global nuclear regime is but one branch of a wider universe of norms that together is known as the "rule of law." The fundamental legal norm of _pacta sunt servanda_ is particularly vital in the field of disarmament, given that states will not readily relinquish devastating weapons that may reappear in their neighbour's arsenals after a simple change of national policy.

Each of these challenges I have just identified is enormously complex, both politically and technologically. Tackling such problems will require responses that are both multilateral and multidisciplinary. They will require great initiatives that will not emerge overnight, nor will they likely flow from any single source. In such circumstances -- when the problems are big and the customary forums for resolving them seem mired in indecision or inaction -- the time has come to consider some alternative ways to proceed.

In recent weeks, I have proposed the creation of an international commission on weapons of mass destruction. Its mandate would cover all of the weapons that have been slated for elimination under the NPT, BWC, and the CWC. It would address both disarmament and non-proliferation, as well as responses to terrorist threats. It could be organized either as a special United Nations panel -- like the Brahimi panel on UN Peace Operations -- or it could be an independent commission organized outside the UN, with co-chairs from the North and South, an advisory board, the capacity to undertake research, a secretariat, and funding from supportive governments and private foundations. It would have a balanced membership -- in terms of gender and geographic representation. I have proposed that the new commission should pay some particular attention to institutional issues, which is especially important given the inability of the General Assembly to reach a consensus to convene a Fourth Special Session on Disarmament. It could also usefully examine questions relating to technology needed to verify the elimination of WMD. As was the case with the Canberra Commission -- on which I was honoured to have served in 1995-1996 -- the whole idea is not to usurp the responsibilities of any other institution of the multilateral disarmament machinery, but to investigate creative new ways of strengthening the entire enterprise, by giving it new energy and direction.

**Conclusion**

When all is said and done -- after all the alternatives of missile defence, arms control, counter-proliferation, deterrence (extended or minimal), and the quixotic pursuit of "full-spectrum dominance" are tried -- nothing quite delivers the concrete security benefits that all countries
would enjoy from the total elimination of nuclear weapons. This is not simply an ideal, but arguably the most truly realistic of all approaches to international peace and security at the global strategic level.

This is the ultimate source of my confidence in the future of the NPT and the final achievement of the goal of global nuclear disarmament. It is the only result that is fully consistent with the ideals and practical self-interests of all peoples. Of all the alternatives, it alone offers a legacy that we should all be proud to pass on to our grandchildren.