

***Weapons of Mass Destruction:
Current Nuclear Proliferation Challenges***

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In 1965, I met Robert Kennedy while working in Washington. A small group of interns listened in rapt attention as he explained how close we were to the end of civilization during the Cuban Missile Crisis. I will never forget how he emphasized that the challenge of eliminating nuclear weapons before they eliminate us is the litmus test for humanity. Success or failure will determine our moral standard and our capacity to be led by reason and law to security, or to oblivion through fear, the quest for power and apathy.

Nearly every country in the world has accepted the nuclear Non-Proliferation Treaty (NPT) as a necessary legal instrument to address this threat. While simultaneously condemning the spread of nuclear weapons, this treaty sets forth a related obligation to obtain their universal elimination. In 1995, in order to obtain the indefinite extension of the NPT, now with 188 states parties, commitments to nuclear elimination were confirmed and strengthened by the five declared nuclear weapon states – China, United States, France, Russia, and the United Kingdom. However, the nuclear weapon states with over 96% of the weapons, the United States and Russia, have not fully addressed their fundamental dilemma: they want to keep their nuclear weapons indefinitely and at the same time condemn others who would attempt to acquire them. It is as if parents were telling their children not to smoke while puffing on cigars themselves. It is simply not effective.

This incoherence in policies leads to instability in cooperation. Nothing could be more hazardous in today's world. In order to ensure that nuclear weapons do not proliferate to more states and to dangerous sub-state actors, confidence in the restraint of the exercise of power by the most powerful is needed. The trust and cooperation needed for a global assault against such threats will not be effective if some states flaunt their disarmament obligations yet display a passion for non-proliferation.

I will highlight some of the incoherencies that are creating instability in the non-proliferation regime, and a path to coherence that simultaneously reduces threat and strengthens non-proliferation efforts. The path to stability and security is a return to promoting the pursuit of collective security through the rule of law. In the field of nuclear weapons, this translates – among other things - into fulfilling the existing legally mandated disarmament responsibilities that remain unaddressed by the

nuclear weapon states. It is simply impractical and hypocritical for some to say that nuclear weapons are morally acceptable for them to possess and even threaten to use, and evil for others to attempt to acquire.

With this in mind, allow me to address the perception, common in Washington, that the NPT is failing. Looking at the NPT's good record over the past three and one-half decades, it is hard to understand the basis for the perception. It is true that three states that stayed outside the treaty have acquired arsenals, Israel, India and Pakistan. This is unfortunate, but it is also a problem that predated the NPT.¹

In contrast to these three, other states have changed their policies over time, renounced nuclear weapons and joined the treaty. For example, South Africa relinquished its small arsenal and Brazil and Argentina gave up weapons-relevant programs. China and France accepted the NPT disarmament obligation in joining the treaty as declared nuclear weapon states in 1992. The vast majority of states have complied with the obligation of non-acquisition. Serious, demonstrated efforts to acquire nuclear weapons in violation of the treaty are known to have occurred only in a handful of cases, Iraq and Libya, where programs have been reversed, and North Korea.

With a negotiated settlement to the North Korean situation, the area of immediate concern relating to the spread of nuclear weapons is Iran. Should Iran achieve a weapons capability over the next five to ten years, or go further and acquire weapons at some point in the future, other states in the region will face enormous pressure to follow suit. Whilst speaking at a conference in Tehran hosted by the Iranian Ministry of Foreign Affairs, I put forth a "win-win-win" approach that meets the core concerns of the West, Iran and, moreover, strengthens the international disarmament and

¹ In the case of India, facing a Chinese arsenal, it made clear during NPT negotiations that a process of global elimination of nuclear weapons would be required for it to forgo the option of acquiring its own. Given that India's traditional commitment to nuclear disarmament dates back to the days of Gandhi and Nehru, I am convinced that India, as it repeatedly says in international forums, would participate in a disarmament process. The United States and India are now seeking to create an arrangement under which India would accept safeguards on civilian but not military nuclear facilities in return for access to civilian nuclear fuel and technology. While the proposed deal would partially engage India in the non-proliferation system, it undermines a core bargain of the NPT: that countries renouncing nuclear weapons are promised access to peaceful uses of nuclear technology, and would indirectly augment India's capability to produce fissile materials for weapons. It is therefore unacceptable as currently framed. Minimal criteria for approval of the deal by the US Nuclear Suppliers Group should be entry into force of a verified Fissile Materials Cut-off Treaty and the Comprehensive Nuclear Test-Ban Treaty as well as India's formal acceptance of the NPT obligation of good-faith negotiation of cessation of arms racing and nuclear disarmament.

non-proliferation regime as a whole. A policy brief on Iran further outlining this win-win-win approach is appended here as Appendix A.

The NPT Bargain: Recent Developments

The NPT has a remarkable record of preventing the spread of nuclear weapons, but is now facing multiple challenges, such as:

- 1- Iran's defiance of Security Council sanctions and its claims to rights to a fuel cycle pursuant to Article IV of the Treaty;
- 2- The encouragement of proliferation by awarding Nuclear Suppliers' Group exemptions to India;
- 3- The failure of the nuclear weapon states to unambiguously affirm and act upon their disarmament commitments.

The first issue is addressed in Appendix C. The nuclear trade arrangement with India represents a clear setback for non-proliferation. States which have ratified the Comprehensive Test-Ban Treaty, an essential element of a stable non-proliferation regime, failed to attach a condition that India sign the CTBT, thus undermining a core bargain of the NPT: that those who eschew nuclear weapons should get the benefit of nuclear technology.

A good understanding of the mechanisms of the Treaty are needed to explicate its disarmament commitments.

The basic bargain underlying the text completed in 1968 was this: In exchange for a commitment from the non-nuclear weapons states not to acquire nuclear weapons and to submit their peaceful nuclear activities to monitoring to verify compliance with the non-acquisition commitment (Article II), the NPT nuclear weapon states pledged to engage in disarmament negotiations aimed at the elimination of their nuclear arsenals (Article VI)³ and promised the non-nuclear-weapon parties unfettered access to peaceful nuclear technologies (e.g. nuclear power reactors and nuclear medicine; Article IV). During the negotiations at its creation, several prominent non-nuclear weapons states – Germany, Italy and Sweden, for example – would not permit the treaty to be permanent and ensured that it would be reviewed after 25 years and either be extended for a fixed period, be indefinitely extended (Article X), or lapse. At the 1995 Review and

³ See Thomas Graham, Jr., *Commonsense on Weapons of Mass Destruction* (2004) 10.

Extension Conference, many states were extremely dissatisfied with the progress on disarmament of the nuclear weapons states – US, Russia, UK, France, and China – and argued that they would not accept the inequity of a dual global system of nuclear haves and have-nots. They demanded and obtained a bargain. It contained a Statement of Principles and Objectives for Nuclear Non-proliferation and Disarmament,⁴ which politically, if not legally, conditioned the indefinite extension of the treaty, pledging to:

- complete a Comprehensive nuclear Test-Ban Treaty by the end of 1996
- reaffirm the commitment to pursue nuclear disarmament
- commence negotiations on a treaty to stop production of nuclear bomb materials
- encourage the creation of nuclear weapons free zones
- vigorously work to make the treaty universal by bringing in Israel, Pakistan and India
- enhance IAEA safeguards and verification capacity
- reinforce negative security assurances already given to non-weapons states against the use or threat of use of nuclear weapons against them

The bargain to extend the treaty centered on a strengthened review process with near yearly preparatory conferences and a rigorous review every five years to ensure the promise as set forth in the Principle and Objectives:

“The determined pursuit by the nuclear-weapon states of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons.”

The 1995 re-commitment to and elaboration of the NPT nuclear disarmament obligation was reinforced by the 1996 advisory opinion of the International Court of Justice. Interpreting Article VI of the NPT and other international law, the Court unanimously held: “There exists an obligation to

⁴ 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Decision 2, “Principles and Objectives for Nuclear Non-Proliferation and Disarmament,” *Final Document*, Part I, NPT/CONF.1995/32, Annex: Access at <http://disarmament2.un.org/wmd/npt/1995nptrevconfdocs.html>.

pursue in good faith and bring to a conclusion negotiations on nuclear disarmament in all its aspects under strict and effective international control.”⁵

The 2000 Review Conference successfully reached a consensus on 13 Practical Steps to advance the commitments to lower the salience of nuclear weapons in policies, reinforce non-proliferation measures, and move toward the elimination of nuclear weapons. All 187 States Parties agreed on the following measures:⁶

- 1. Entry into Force of the Comprehensive Nuclear Test-Ban Treaty (CTBT):** 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 CTBT.
- 2. Holding the Line Against Testing:** A moratorium on nuclear-weapon-test explosions or any other nuclear explosions pending entry into force of the CTBT.
- 3. Fissile Material Cut-off Treaty (FMCT):** 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. The Conference on Disarmament is urged to agree on a program of work which includes the immediate commencement of negotiations on such a treaty with a view to their conclusion within five years.
- 4. Negotiations on Nuclear Disarmament:** 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 program of work which includes the immediate establishment of such a body.
- 5. Irreversibility:** The principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures.
- 6. Commitment to Elimination:** 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.

⁵ International Court of Justice, “Legality of the Threat or Use of Nuclear Weapons,” Advisory Opinion of 8 July 1996, *ICJ Reports* (1996): 226, para. 105(2)F. Online at <http://www.icj-cij.org/icjwww/icasess/iunan/iunanframe.htm>.

⁶ 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, *Final Document*, Vol. I, NPT/CONF.2000/28, Part I: 14-15. Access at <http://disarmament.un.org/wmd/npt/finaldoc.html>. The headings in bold in the text are provided for convenience and are not part of the Final Document.

7. Verified Reductions: The early entry into force and full implementation of Strategic Arms Reduction Treaty (START) II and the conclusion of START III as soon as possible while preserving and strengthening the Anti-Ballistic Missile (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. Control of US/Russian Excess Fissile Materials: The completion and implementation of the Trilateral Initiative between the United States of America, the Russian Federation and the International Atomic Energy Agency.

9. Progress by Nuclear Weapons States: 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.
- Increased transparency by the nuclear-weapon States with regard to the nuclear 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 weapon systems. The
- 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. Excess fissile materials under IAEA control: 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 International Atomic Energy Agency (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 programs.

11. General and Complete Disarmament: Reaffirmation that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control.

12. Reporting: 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. Verifying: 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.

On this last point, the UK Government should be commended for its work to examine and experiment with potential methodologies in a future disarmament verification regime. This type of leadership by the British Government is all the more important and useful at this time, since, unfortunately, the United States, since 2000, has backtracked on key commitments made in the Practical Steps, notably the CTBT; negotiation of a *verified* FMCT; the START process and the ABM Treaty. The 2002 bilateral Strategic Offensive Reductions Treaty (SORT) with Russia fails to apply the principles of transparency, verification, and irreversibility. Furthermore, it could be argued that SORT fails to diminish the role of nuclear weapons in security policies, a duty consistent with NPT pledges. It is worth emphasizing that what is at stake here is not just a US-Russian issue. The Practical Steps, adopted at the 2000 NPT Review Conference, represent an international consensus on the means for compliance with Article VI. The US’s recent failure to live up to its good faith commitments undermines not just the NPT, but the primacy of international law.

In the absence of active US leadership, hopes for progress on nuclear non-proliferation and disarmament were dashed from the outset of the 2005 Review Conference, held at the UN in May 2005. The states parties were unable to even generate a timely working agenda and 15 out of 20 days were squandered on procedural battles. The procedural squabbles masked real debate on substantive political differences. The capacity to make substantive progress on disarmament or non-proliferation was thwarted despite efforts of the world’s best diplomats. The 2005 agenda was stalled along several fault lines. The United States would not permit the commitments already made under the treaty review process to be the basis for a working agenda and focused on the proliferation threats posed by Iran and North Korea; Egypt demanded recognition of previous commitments, in particular regarding making the treaty universal; Iran baited the nuclear weapon states on their failure to make progress on disarmament, specifically the United States for its

research on modified or new-design warheads with new military capabilities. In the end, no consensus document was generated.

This institutional deadlock has poisoned most of our other existing multilateral disarmament machinery, beyond just the NPT review process. The Conference on Disarmament (CD) has failed to make any substantive progress in over a decade. Other fora spawned from the General Assembly First Special Session on Disarmament in 1978, such as the annual Disarmament Commission, has been unable to contribute substantively to the global regime. This institutional deadlock has arisen from a profound failure of political will to work cooperatively, wherein substantive disagreements are callously masked by procedural wrangling and arcane squabbling over agendas and asterisks. This diminution of utilization of diplomacy and law renders the reliance on force and war more likely. Proliferation is unacceptable, indeed. Yet we now know that counter-proliferation efforts, such as the war in Iraq, far from an effective non-proliferation measure, actually exacerbate insecurity on a regional and global scale.

Coupling this failed review process with the recent India deal's approval by the NSG makes rapid clear progress on disarmament obligations even more important. If the commitment of the nuclear weapon states to disarmament is not vouchsafed through actions, the NPT will not be sustainable.

Looking Forward

With the next Review Conference less than two years away, our task now is to ascertain the achievable steps that can be taken now to ensure that we do not squander another important opportunity. The steps that I advocate here meet key criteria: they do not diminish the security of any state; they reinforce the NPT and enhance the rule of law; they make the world safer now; and they move the world towards the elimination of nuclear weapons.

These steps, inter alia, were derived from and advocated by a process called The Article VI Forum, an ongoing series of consultations between like-minded governments and non-governmental experts. The priorities identified by the Article VI Forum are contained in the briefing paper, *Towards 2010: Priorities for NPT Consensus*.⁸ The Article VI Forum is a project of the Middle Powers Initiative, a program of the Global Security Institute.⁹

Fissile Materials Cut-off Treaty

An FMCT would permanently end production of fissile materials, primarily separated plutonium and highly enriched uranium (HEU), for use in weapons. It would affect most directly the countries possessing nuclear weapons; NPT non-weapon states already are subject to a verified ban on diverting materials to weapons. Achievement of an FMCT would restrain arms racing involving India, China, and Pakistan, cap Israel's arsenal, and establish ceilings on other arsenals as well. A verified FMCT also would help build a stable framework for reduction and elimination of warheads and fissile material stocks; help prevent acquisition of fissile materials by terrorists; meet a key NPT commitment; and institutionalize one of the basic pillars of a nuclear weapons-free world.

The two major hurdles to an effective FMCT are: the 2004 reversal by the United States of its position to support a verification mechanism within a future treaty and; resistance by some CD

⁸ The full text of *Towards 2010* can be downloaded at: http://www.gsinsitute.org/mpi/docs/Towards_2010.pdf

⁹ For more information about MPI and GSI, see: www.gsinsitute.org

members, in particular Egypt, Israel, China and Pakistan to begin negotiations absent concurrent discussions within the CD on issues relating to outer space and/or nuclear disarmament.

The United Kingdom has maintained a careful position on this issue, neither accepting the US's claims that verification is impossible nor adamantly insisting on inclusion of verification prior to the commencement of negotiations. With increased British expertise and leadership on this issue, however, the onus is upon the UK to bring that expertise and priority to the FMCT context and work diligently to include such an effective mechanism into the final treaty.

Verification of reduction and elimination of nuclear arsenals

US President Reagan repeatedly invoked the Russian dictum, "trust but verify." The principle of verification follows from the truth that none of us can be secure in an insecure world. Verification is needed to bring greater security to the rest of the world because the rest of the world is properly concerned with the efficacy of the disarmament and arms reduction efforts of the US and Russia. It is essential to bring the principle of verification symbolized by that dictum back to center stage. Thankfully, the United Kingdom is well-situated to take up this crucial task.

The UK should be commended for its "verification laboratory" initiatives undertaken with Norway and the non-governmental organization VERTIC. The findings of these experiments will

³⁵ Read the report of the Belfer Center conference at: http://belfercenter.ksg.harvard.edu/publication/18102/gorbachev_and_belfer_center_combine_forces_to_overcome_nuclear_danger.html. For a full listing of conference participants, which included GSI President Jonathan Granoff, see: http://www.gsainstitute.org/gsi/newsletter/newsletter_2008_Spring.html#dpe

be useful to all nuclear weapon states as they work to implement their sworn “unequivocal undertaking” to the total elimination of nuclear weapons. Strict, proven, effective verification methods will do much to assuage the fears of adversaries that actual disarmament has taken place. The smaller the arsenals, the greater these insecurities become. Therefore, as global arsenals gradually reduce, the more important the UK/Norway/VERTIC’s work will be. Therefore, the UK Government must continue its financial and political support of these undertakings for the foreseeable future.

Reduction of the operational status of nuclear forces

Since 2000, the UK has reduced the operational status of its nuclear forces with a several day “notice-to-fire” readiness posture. This measure contributes to disarmament and non-proliferation by minimizing the risks of use associated with mistakes, coups, attacks on nuclear weapons facilities, false warnings, unauthorized launches, hacking into command and control systems and developments that could not now be anticipated. De-alerting also lessens the moral corruption inherent in reliance on nuclear weapons for security and defense.

The UK should pressure other nuclear weapon states to emulate its position as a step towards the goal of having zero weapons on alert or on patrol at any time. Furthermore, the UK, having demonstrated its commitment to this issue, should vote in favor of the General Assembly resolution that calls for further de-alerting measures (A/62/36), which will be put to a vote again in the 2008 First Committee.

Comprehensive Nuclear Test-Ban Treaty

As a signatory to the CTBT, the United Kingdom must strongly support all efforts to achieve its entry-into-force. It is regrettable that the UK missed the tremendous opportunity of requiring CTBT ratification as a condition of approval by the NSG for the US-India deal. Other such opportunities to advance the entry-into-force of the Test Ban Treaty must not be similarly ignored.

The United Kingdom must make entry-into-force of the CTBT one of its top foreign policy objectives, using the wide range of diplomatic carrots at its disposal.

A diminishing role of nuclear weapons in security policies and strengthened assurances of non-use of nuclear weapons against non-weapon states

The 2007 White Paper extending the life of the Trident system was a step backwards for diminishing the role of nuclear weapons. Both the Trident system and its predecessor Polaris were designed to deter aggressive action by the now defunct USSR. The downfall of the USSR eliminated that threat. No new existential threats to the UK have emerged. The UK continues to spend half of its defense budget on a system to protect against a threat that does not exist. Moreover, nuclear weapons are not only useless in the face of real threats—such as terrorists, climate change, poverty and disease—but they actually work to heighten the risks posed by these threats. Even a limited nuclear exchange would have calamitous effects on the climate and global food supplies. The continued production of fissile material and the failure to lockdown and secure the existing stockpiles heightens the risk of nuclear terrorism. The absurd sums of money spent on nuclear weapons on a daily basis are an affront to the global battle to meet the Millennium Development Goals and eradicate poverty forever. In the 21st century, nuclear weapons make us all less, not more secure. In sum, the most serious challenges to national and global security cannot be addressed by nuclear weapons. Indeed, the continued reliance on nuclear weapons exacerbate these threats.

The package of decisions adopted at the 1995 Review and Extension Conference of the NPT contained non-binding negative security assurances that nuclear weapons will not be used against non-nuclear weapon states party to the NPT. However, these assurances, and similar ones issued via Security Council resolution 984, remain insufficient. The NPT would be strengthened greatly by the codification of these assurances to non-nuclear weapon states parties. The UK should incorporate these assurances into their nuclear security doctrine, thus eliminating the perceived need of some non-nuclear weapon states to develop a nuclear deterrent of their own.

Prevent the Weaponization of Outer Space

At the Reykjavik summit in 1986, both the US and the Soviet Union were willing to discuss the abolition of nuclear weapons, not just steps to stop the arms race. But President Reagan's refusal to include Star Wars and other space-based weapons in the framework of nuclear abolition thwarted the talks. Just as nuclear weapons are not just about nuclear weapons, space weapons are not just about space weapons. Rather, the two are burlesque examples of the lack of a cooperative security framework. The pursuit of space weapons is about the pursuit of dominance. Gorbachev understood this at the time, and he reiterated it recently at a conference at the Belfer Center at Harvard in December last year.³⁵ He knew that what the Americans called defense (or missile shield), was a concomitant capacity for offensive space weapons, which would create strategic imbalances, all the more pronounced if there were actual movement toward the elimination of nuclear weapons.

Therefore, serious efforts to move towards the total abolition of nuclear weapons must also address efforts to prevent, through a legally-binding, verifiable treaty, the weaponization of outer space. The UK must support such efforts at the Conference on Disarmament and in the General Assembly First Committee.

Conclusion: Disarmament as the compass point

Implementation of the above-outlined priority measures and the regime-management reforms outlined in the Appendix I should take place in the context of a visible intent to achieve a nuclear weapons-free world. The priority measures are valuable in and of themselves. They decrease risks of use, diminish the access of terrorists to catastrophic weapons and materials to build them, raise barriers to acquisition by additional states, and generate support for strengthening the non-proliferation side of the regime and resolving regional crises. Moreover, the measures pass key tests: they enhance security generally; they do not diminish the security of any state; they reinforce the NPT and enhance the rule of law; they make the world safer now; they move the world towards elimination of nuclear weapons.

To conclude: Building an effective non-proliferation/disarmament regime is complex and challenging. The underlying principle, however, is simple, and serves as a guide to the work.

Nuclear weapons are morally, legally, and practically unacceptable. As my mentor, the late Senator Alan Cranston, used to say, “Nuclear weapons are unworthy of civilization.” Perpetual nuclear apartheid – some countries have the weapons, others are forbidden to have them – is unsustainable. Both practical and moral coherence requires application of a universal standard, a golden rule: no country may possess weapons capable of inflicting catastrophic, city-destroying or even civilization-ending, damage. If we meet the challenge of implementing this rule, we will pass down to our children and grandchildren and all succeeding generations a world preserving the advances made by hundreds of previous generations, including our own.

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Appendix A: Needed Non-proliferation Reforms

Experience since the Cold War with preventing proliferation, in particular with regard to North Korea and Iran, teaches four lessons about strengthening the regime for the future.

First, material and ongoing violations of safeguards reporting requirements should result in forfeiture of the right to acquire nuclear fuel production technology under Article IV of the NPT.

The United States made this point in NPT meetings with respect to Iran, but it has never been squarely addressed by the IAEA Board of Governors, NPT states parties, or the Security Council.

Second, institutional reform is needed to create effective compliance assessment mechanisms. There is no body empowered to assess whether a state is breaching its NPT obligation by seeking to acquire nuclear weapons nor by failing to comply with the commitment to good faith negotiations on disarmament. Under its Statute, the IAEA has the important but limited task of ascertaining whether nuclear materials have been diverted to a weapons program, which it has *not* found to be the case in Iran. But there are other aspects to a weapons program, for example warhead design and missile development. What is needed is an NPT governing body which together with the IAEA, perhaps also drawing on UNMOVIC-type resources, has this responsibility, as well as the responsibility of monitoring reduction and elimination of existing arsenals. There have been multiple proposals to strengthen NPT institutional capability, by adding a secretariat, a governing council, and/or empowered annual meetings of states parties. The proposals have come from responsible states like Ireland and Canada and from the Weapons of Mass Destruction Commission,³⁶ and have been advanced as well by Jayantha Dhanapala, chair of the 1995 Review and Extension Conference and former UN Under Secretary-General for Disarmament Affairs.³⁷ So far the United States has shown no interest.

Third, policy tools work best when integrated into the global system. Effective non-proliferation and disarmament requires a robust multilateralism based upon global norms. This is not to say that policy tools involving international cooperation short of a global regime have no

³⁶ *Weapons of Terror* at 63-66.

³⁷ See Jayantha Dhanapala with Randy Rydell, *Multilateral Diplomacy and the NPT: An Insider's Account* (UNIDIR, 2005) 129-132.

place. The tools include export control arrangements; the network of states (the Proliferation Security Initiative) prepared to interdict illicit shipments of nuclear, biological and chemical (NBC) weapon-related equipment, materials, and delivery systems; and the G-8 program building on the Cooperative Threat Reduction program aimed at securing NBC weapons and materials in Russia and other countries. But their effectiveness can be optimized by finding ways to link them to the global regime. An example of movement towards such integration is Security Council resolution 1540, which requires all states to take steps to prevent acquisition of and trafficking in NBC weapon-related items by states, terrorists and other non-state actors. Among other things, the resolution requires all states to appropriately regulate exports. It is a step toward universalizing nuclear weapons control by means of law established by the Security Council. The Bush administration is to be commended for its leadership in the solidification of global law through resolution 1540. But I must register two cautions. The first is that, as with other non-proliferation measures, the extent of compliance will depend crucially on how well the states possessing nuclear arsenals do in fulfilling their side of the bargain. The second is that given the limited membership of the Security Council and its control by the United States and other permanent members, all possessing nuclear weapons, legitimacy and in-depth commitment will best be achieved by subsequent codification of 1540 and similar requirements in multilateral treaties.

Appendix B: Underlying Practical and Moral Concerns

“The unleashing of power of the atom bomb has changed everything except our mode of thinking, and thus we head toward unparalleled catastrophes.”

Albert Einstein

“If men can develop weapons that are so terrifying as to make the thought of global war include almost a sentence of suicide, you would think that man’s intelligence and his comprehension ... would include also his ability to find a peaceful solution.” *President Dwight D. Eisenhower*

We must and we can change our course for life is precious.

General George Lee Butler, former Commander-in-Chief of US Strategic Air Command (1991-92) and US Strategic Command (1992-94), was responsible for all nuclear forces of the American Air Force and Navy. His insights should be of paramount concern to all Members of Congress:

‘Despite all the evidence, we have yet to fully grasp the monstrous effect of these weapons, that the consequences of their use defy reason, transcending time and space, poisoning the Earth and deforming its inhabitants.’ Nuclear weapons are ‘inherently dangerous, hugely expensive and militarily inefficient.’

General Butler stated that “accepting nuclear weapons as the ultimate arbiter of conflict condemns the world to live under a dark cloud of perpetual anxiety. Worse, it codifies mankind’s most murderous instincts as an acceptable resort when other options for resolving conflict fail.” He added, ‘I have spent years studying nuclear weapons effects...have investigated a distressing array of accidents and incidents involving strategic weapons and forces... I came away from that experience deeply troubled by what I see as the burden of building and maintaining nuclear

arsenals ... the grotesquely destructive war plans, the daily operational risks, and the constant prospect of a crisis that would hold the fate of entire societies at risk”³⁸

He stated his profound concern regarding how little high-level scrutiny (the US nuclear war plan) had received over the years, and by how readily his military colleagues threw up their hands and rolled their eyes at the grim challenge of converting mathematical estimates of the destructiveness of nuclear arms and the resilience of Soviet structures into dry statistical formulas for nuclear war. (reprinted from R. Jeffrey Smith, *Ex-Commander of Nukes Wants to Scrap Them, A Believer No More*, THE SACRAMENTO BEE, Mar. 29, 1998. See also R. Jeffrey Smith, *The Dissenter*, THE WASHINGTON POST, Dec. 7, 1997, at Magazine, W18.)

General Butler had a unique comprehension of how little the matter has been understood in the chambers of decision making:

“‘It was all Alice-in-Wonderland stuff,’ General Butler says. The targeting data and other details of the war plan, which are written in an almost unfathomable million lines of computer software code, were typically reduced by military briefers to between 60 and 100 slides that could be presented in an hour or so to the handful of senior US officials who were cleared to hear it: ‘Generally, no one at the briefing wanted to ask questions because they didn’t want to embarrass themselves. It was about as unsatisfactory as could be imagined for that subject matter. The truth is that the President only had a superficial understanding’ of what would happen in a nuclear war, Butler says. Congress knew even less because no lawmaker

³⁸ CHARLES J. MOXLEY JR., NUCLEAR WEAPONS AND INTERNATIONAL LAW IN THE POST COLD WAR WORLD, 535 (footnote omitted) (reprinted from Otto Kreisher, *Retired Generals Urge End to Nuclear Arsenal*, THE SAN DIEGO UNION-TRIB., Dec.5, 1996, at A-1.); See, Jonathan Granoff, *Nuclear Weapons, Ethics, Morals, and Law*, Volume 2000 Number 4, Brigham Young University Law Review, 1417 (2000)

has ever had access to the war plan, and most academics could only make ill-informed guesses.”³⁹

We remain in a state of incomplete comprehension largely because the magnitude of the destructive capacity of a nuclear bomb is simply too great to imagine. Moreover, the illogic of this improved means to an unimproved end challenges our fundamental concepts of what we are willing to do to millions of innocent people to protect our own creation, the State.

The UN in its 1991 report found the ‘(n)uclear weapons represent a historically new form of weaponry with unparalleled destructive potential. A single large nuclear weapon could release explosive power comparable to all the energy released from the conventional weapons used in all past wars.’⁴⁰

Experts have estimated that the total conventional bombs dropped by United States Air Force amounted to only two megatons for the entirety of WWII, the yield of one or two ordinary nuclear bombs today.⁴¹

What exactly does one nuclear bomb do? Former Director of Central Intelligence Stansfield Turner offers his brief description:

The fireball created by a nuclear explosion will be much hotter than the surface of the sun for fractions of a second and will radiate light and heat, as do all objects of very high temperature. Because the fireball is so hot and close to the earth, it will deliver enormous amounts of heat and light to the terrain surrounding the detonation point, and it will be hundreds or thousands of times brighter than the

³⁹ See *id.* at n 27 (quoting R. Jeffery Smith, *Ex-Commander of Nukes Wants to Scrap Them, A Believer No More*, SACRAMENTO BEE, Mar. 9, 1998; see also R. Jeffery Smith, *The Dissenter*, WASH. POST MAG., Dec. 7, 1997, at W18).

⁴⁰ MOXLEY, *supra* note 1, at 398 (quoting WORLD HEALTH ORGANIZATION, UNITED NATIONS, EFFECTS OF NUCLEAR WAR ON HEALTH AND HEALTH SERVICES 7 (2d ed. 1987); see also, UN DEPARTMENT FOR DISARMAMENT AFFAIRS, NUCLEAR WEAPONS: A COMPREHENSIVE STUDY 6, at 7, (1991).

⁴¹ See Center for Defense Information, Nuclear War Quotations 39, (hereinafter NUCLEAR WAR QUOTATIONS) (quoting Ray S. Cline *in* WORLD POWER ASSESSMENT 58 (1975).

sun at noon. If the fireball is created by the detonation of a 1-MT (megaton) nuclear weapon, for example, within roughly eight- to nine-tenths of a second each section of its surface will be radiating about three times as much heat and light as a comparable area of the sun itself. The intense flash of light and heat from the explosion of a 550-KT weapon can carbonize exposed skin and cause clothing to ignite. At a range of three miles surfaces would fulminate and recoil as they emanate flames. Particles of sand would explode like pieces of popcorn from the rapid heating of the fireball. At 3.5 miles, where the blast pressure would be 5psi, the fireball could ignite clothing on people, curtains and upholstery in homes and offices, and rubber tires on cars. At four miles, it could blister aluminum surfaces, and at six to seven miles it could still set fire to dry leaves and grass. This flash of incredibly intense, nuclear-driven sunlight could simultaneously set an uncountable number of fires over an area of close to 100 square miles.⁴²

What is the destructive effect of this blast? In his landmark opinion for the International Court of Justice, Judge Christopher Weeramantry made a short list:

Nuclear weapons

1. cause death and destruction; induced cancers, leukemia, keloids and related afflictions;
2. cause gastrointestinal, cardiovascular and related afflictions; continued for decades after their use to induce the health related problems mentioned above;
3. damage the environmental rights of future generations;
4. cause congenital deformities, mental retardation and genetic damage;
5. carry the potential to cause a nuclear winter;
6. contaminate and destroy the food chain;
7. imperil the eco-system;
8. produce lethal levels of heat and blast;
9. produce radiation and radioactive fallout;
10. produce a disruptive electromagnetic pulse;

⁴² STANSFIELD TURNER, CAGING THE NUCLEAR GENIE , app. A 127-128 (1997).

11. produce social disintegration;
12. imperil all civilizations;
13. threaten human survival;
14. wreak cultural devastation;
15. span a time range of thousands of years;
16. threaten all life on the planet;
17. irreversibly damage the rights of future generations;
18. exterminate civilian population;
19. damage neighboring states;
20. produce psychological stress and fear syndromes--as no other weapons do.⁴³

What does this mean in terms of human experience? Please read this bearing in mind that the current arsenals represent nearly one million times the horror that overtook Hiroshima. Takashi Hiroaka, Mayor of Hiroshima testified before the International Court of Justice:

‘The atomic bombs dropped on Hiroshima and Nagasaki shattered all war precedent. The mind-numbing damage these nuclear weapons wrought shook the foundations of human existence...

The dropping of the nuclear weapons is a problem that must be addressed globally. History is written by the victors. Thus, the heinous massacre that was Hiroshima has been handed down to us as a perfectly justified act of war. As a result, for over 50 years we have never directly confronted the full implications of this horrifying act for the future of the human race. Hence, we are still forced to live under the enormous threat of nuclear weapons...

Beneath the atomic bomb’s monstrous mushroom cloud, human skin was burned raw. Crying for water, human beings died in desperate agony. With thoughts of these victims as the starting point, it is incumbent upon us to think about the nuclear age and the relationship between human beings and nuclear weapons...

⁴³ Threat or Use of Nuclear Weapons, 1996 I.C.J. at 454 (separate opinion of Judge Weeramantry)

The unique characteristic of the atomic bombing was that the enormous destruction was instantaneous and universal. Old, young, male, female, soldier, civilian – the killing was utterly indiscriminate. The entire city was exposed to the compound and devastating effects of thermal rays, shock wave blast, and radiation...

Above all, we must focus on the fact that the human misery caused by the atomic bomb is different from that caused by conventional weapons. (H)uman bodies were burned by the thermal rays and high-temperature fires, broken and lacerated by the blast, and insidiously attacked by radiation. These forms of damage compounded and amplified each other, and the name given to the combination was “A-bomb disease...”

(T)he bomb reduced Hiroshima to an inhuman state utterly beyond human ability to express or imagine. I feel frustrated at not being able to express this completely in my testimony about the tragedy of the atomic bombing...’

It is clear that the use of nuclear weapons, which cause indiscriminate mass murder that leaves survivors to suffer for decades, is a violation of international law.”⁴⁴

During the Cold War the deployment of the arsenals of the Soviet Union and the US were designed to ensure nonuse. Not only does it seem that nuclear weapons challenge our capacity of using law and morality to guide our conduct but also reason as well. We have built a device which renders us less secure the more we perfect its effectiveness. Thus, George Kennan, a key figure in developing the architecture of the Cold War said about nuclear weapons:

:

“The readiness to use nuclear weapons against other human beings – against people we do not know, whom we have never seen, and whose guilt or innocence is not for us to establish – and, in doing so, to place in jeopardy the natural structure upon which all civilization rests, as though the safety and perceived interests of our own generation were more important than everything that has taken place or could take place in civilization: this is nothing less than a

⁴⁴ JOHN BURROUGHS, THE (IL)LEGALITY OF THE THREAT OR USE OF NUCLEAR WEAPONS, 90-91(1997); see also, DOUGLAS ROCHE, THE ULTIMATE EVIL and AN UNACCEPTABLE RISK (1995) for thorough expositions of the relationship between the threat of nuclear weapons and international legal and diplomatic affairs.

presumption, a blasphemy, an indignity – an indignity of monstrous dimensions – offered to God!”⁴⁵

The perverse logic of the Cold War based on having enough destructive capacity at the ready to make a use unthinkable makes no sense at all today. The hair trigger deployments of thousands of warheads between Russia and US renders logic impotent since we are not even enemies. Yet, as if we were acting rationally, we keep these arsenals precisely calibrated and well organized thus efficiently risking the destruction of all human life on the planet.

I would now like to offer a simple legal test that the National Academy has given to these devices followed by the relevant excerpts from statements of recent years of the Nobel Peace Laureates who have gathered at a Summit in Rome, Italy and then close with the entire most recent Nobel Peace Laureates Statement from Gwangju, Korea of June 2006.⁴⁶

My hope is to instill a greater sense of the moral aspect of this issue into our public discourse. At root we are addressing whether this use of the gift of science and technology solves any problem as great as the problem this use has created. I would contend that practically, legally, morally, and militarily it has not. Thus the argument to set the compass point toward abolition is well founded.

The Committee on International Security and Arms Control of the US National Academy of Sciences succinctly summed up the legal analysis of the current posture of international law:

“(T)he International Court of Justice agreed that the threat or use of nuclear weapons is strictly limited by generally accepted laws and humanitarian principles that restrict the use of force. Accordingly, any threat or use of nuclear weapons must be limited to , and necessary for, self-defense; it must not be targeted at

⁴⁵ GEORGE F. KENNAN, THE NUCLEAR DELUSION 206-207 (1982).

⁴⁶ Report on Nobel Laureate organization the International Peace Bureau delegations to the Nobel Peace Laureate Summits lists the Laureate participants and the statements in full, <http://www.gsintstitute.org/docs/IPB_NobelSummitReports.pdf>; see also the official web site of the Summits at <<http://www.nobelpeace-summit.org>>

civilians, and be capable of distinguishing between civilian and military targets; and it must not cause unnecessary suffering to combatants, or harm greater than that unavoidable to achieve military objectives. In the Committee's view, the inherent destructiveness of nuclear weapons, combined with the unavoidable risk that even the most restricted use of such weapons would escalate to broader attacks, makes it extremely unlikely that any contemplated threat or use of nuclear weapons would meet such criteria.”⁴⁷

Judge Ranjeva, of the ICJ, stated what should be axiomatic in addressing world threats, and by that I mean, threats that impact on not just United States' interests but the entire planet and generations yet unborn:

“On the great issues of mankind the requirements of positive law and ethics make common cause, and nuclear weapons, because of their destructive effects, are one such issue.”⁴⁸

In a world with many different religions and cultures there are few places where we can look for an expression of global ethical principles and norms. Many would agree that the Nobel Peace Laureates are a sufficiently distinguished group whose opinions should not be lightly ignored. Below are several quotes from Summits of this distinguished group on the subject of nuclear weapons.

From the 2005 Rome Final Statement:

While expressing regret that some African nations spend too much on conventional weapons, we commend the entire African continent for becoming a nuclear weapons free zone. It is absurd that the nations with nuclear weapons refuse even to pledge not to use nuclear weapons against all nuclear weapons free nations.

As in past years, we reiterate our insistence that the existence of nuclear weapons is morally

⁴⁷ JOHN BURROUGHS, THE LEGAL FRAMEWORK FOR NON-USE AND ELIMINATION OF NUCLEAR WEAPONS, quoted at p. 6 (2006), <<http://www.lcnp.org/disarmament/Gpeacebrfpaper.pdf>>

⁴⁸ Threat or Use of Nuclear Weapons 1996 ICJ 296 (separate opinion of Judge Ranjeva).

unacceptable and condemn military doctrines allowing their use. We demand progress by the nuclear weapons states in fulfilling their disarmament obligations under the Nuclear Non-Proliferation Treaty. The corrosion of the non-proliferation regime is a danger to world peace.

From the 2004 Rome Final Statement:

Preserving and strengthening the Nuclear Non-Proliferation Treaty. We reject double standards and emphasize the legal responsibility of nuclear weapons states to work to eliminate nuclear weapons. We call for continuation of the moratorium on nuclear testing pending entry into force of the Comprehensive Test Ban Treaty, and for accelerating the process of verifiable and irreversible nuclear arms reduction. We are gravely alarmed by the creation of new, usable nuclear weapons and call for rejection of doctrines that view nuclear weapons as legitimate means of war-fighting and threat pre-emption.

From 2003 Rome Final Statement:

The threat of weapons of mass destruction remains with us. We call for an immediate end to the newly resurgent arms race, which is being fueled by a failure to universally ratify a treaty banning nuclear testing, and by doctrines that lower the threshold of use and promote the creation of new nuclear weapons. This is particularly dangerous when coupled with the doctrine of pre-emption.

For some to say that nuclear weapons are good for them but not for others is simply not sustainable. The failure of the nuclear weapons states to abide by their legal pledge to negotiate the elimination of nuclear weapon, contained in the Nuclear Non-Proliferation Treaty, is the greatest stimulus to their proliferation.

Nuclear weapons are immoral and we call for their universal legal prohibition. They must be eliminated before they eliminate humanity.

For a list of the Nobel Peace Laureates who have endorsed these strong statements, please go to <http://www.nobelforpeace-summit.org/index-en.asp>

And most recently the following was issued at the Summit in Gwangju, Korea, which is quoted here in its entirety because of its relevance to the Korean issue:

Gwangju Final Declaration 2006

In Gwangju, the birthplace of modern Korean democracy, we, the Nobel Peace laureates, have reaffirmed our historical responsibility and the hope of human kind to achieve democracy and peace on the Korean Peninsula and the whole world. “The 2006 Gwangju Summit of Nobel Peace Laureates” was held to remember the May 18 Democratic Movement that spurred the democratization of Korea in 1980, and to uphold the spirit of the June 15 South–North Joint Declaration that opened up the way for peace on the Korean Peninsula in 2000. We have gathered in the spirit of the two global events that have occurred on the Korean Peninsula. We will search for, and promote, stable ways to bring lasting peace on the Peninsula and to spread democracy in East Asia. The Summit started from the universal insight discovered over the course of human history that democracy and human rights bring peace; and peace in turn strengthens democracy and human rights. This is not only the spirit of the Nobel Peace Prize but also the purpose of life and the course of action for the Nobel Peace laureates.

The shadows of the Cold War still linger on the Korean Peninsula and the tension and confrontation have become a huge threat to the peace and democracy of not only the Peninsula and East Asia but also the world as a whole. Meanwhile, there are still many places in Asia where democracy has not yet developed and human rights are being jeopardized. This shows us that trees of democracy and peace do not grow easily and that without endless efforts these trees will not grow and sometimes even wither. In this respect, the historical responsibility and common action of the Nobel Peace laureates are all the more crucial. Based upon our strong friendship and common philosophy, we will go to areas where democracy and peace are under threat, wherever that may be, and do our best to fulfill our role and responsibility.

Our practical actions aspire to affirm universal shared values such as compassion, love, justice, forgiveness and generosity.

Based on such goal and philosophy, we, the Nobel Peace laureates, pledge and propose the following:

Global Issues

- 1. All countries around the world must endlessly strive to further develop democracy and peace, and this must be pursued not by use of force or violence but through peaceful means such as non-violence, forgiveness and reconciliation.*
- 2. There are still many areas not only in Asia but in all parts of the world where democracy and human rights are under oppression. International cooperation, and multilateralism based on the rule of law must be strengthened. Not only political human rights, but also the more basic social human rights such as the right to eat, to receive medical treatment, to be educated and to live in peace must be achieved.*
- 3. Without rooting out poverty we cannot expect development in democracy and human rights, nor can we end terrorism and war. Along with humanitarian emergency aid, the international community needs long-term efforts to reduce poverty and bring sustainable economic development. We urge the G8 leaders meeting in St Petersburg on July 15th to fulfill the Millennium Development Goals for Africa and its peoples, especially through debt cancellation.*
- 4. To ensure a sustainable future we call for: a. Recognition and full implementation of women's rights and the full implementation of Security Council Resolution 1325 on women's role in the peace process; b. Promotion of a culture of peace where security is defined to always focus on meeting human needs with substantial reductions in military spending thus freeing up enormous resources; c. Recognition in action not just rhetoric that without a healthy environment the human community cannot survive; d. Enhancing cooperation amongst people in addressing our collective needs through rendering the institution of war as obsolete as apartheid, slavery and colonization.*
- 5. For the resolution to international disputes and for world peace, the active role of the United Nations must be respected. All countries should do their utmost to closely cooperate with the UN to resolve current global disputes and promote democracy through peaceful diplomatic measures.*

Korean Issues

- 1. The May 18 Democratic Movement and the signing of the June 15 South-North Joint Declaration were historic events contributing to democracy and peace not only on the Korean Peninsula but in Asia and the whole world. We, the Nobel Peace laureates, will do our best to uphold the vision and philosophy of both events.*
- 2. The Korean Peninsula remains the only place on earth where the darkest shadows of the Cold War still linger. We call for more active cooperation and efforts of the two Koreas, and also the concerned nations such as the United States, Japan, China and Russia, and international organizations such as the United Nations to pursue inter-Korean reconciliation and cooperation and end the state of war on the Peninsula to bring lasting peace in the region. As a modest step to enhance such cooperation, we advocate conversion of the DMZ into a de-mined Peace Park, an environmental reserve for the benefit of all people.*
- 3. The tension and confrontation surrounding the North Korean nuclear issue must be resolved. We urge all parties to resume the Six Party Talks in the spirit of mutual respect and equality. In order to advance this important process, we expect that the DPRK will completely abandon its nuclear weapons policy and accept international inspections. We also call for the US to end financial and economic sanctions on the DPRK and offer security guarantees. All parties should avoid any further obstacles to progress. All parties should fully implement the “Beijing Joint Statement” of September 19, 2005. The Six Parties should cooperate to ensure safe, peaceful energy security for the DPRK and implement economic cooperation in the fields of energy, trade and investment, bilaterally and multilaterally. We urge the United Nations and all nations involved to pursue inter-Korean reconciliation and cooperation and end the state of war on the Peninsula to bring lasting peace in the region.*
- 4. We propose that the six-party talks should not be a temporary meeting to resolve the North Korean nuclear issue and bring lasting peace on the Peninsula but be developed into a permanent multilateral organization to promote peace and democracy on the Korean Peninsula.*

Nuclear weapons

1. *If we are to have stability we must have justice. This means the same rules apply to all. Where this principle is violated disaster is risked. In this regard we point to the failure of the nuclear weapons states to fulfill their bargain contained in the Nuclear Non-proliferation Treaty to negotiate the universal elimination of nuclear weapons. To pursue a nuclear-weapons-free Korean Peninsula or Middle East or South Asia, without credible commitment to universal nuclear disarmament is akin to a parent trying to persuade his teenagers not to smoke while puffing on a cigar. There are steps available to make progress in this area and they include:*

- a. Completing a treaty with full verification mechanisms cutting off further production of highly enriched uranium or plutonium for weapons purposes;*
- b. Universal ratification of the Comprehensive Test Ban Treaty, now ratified by 176 nations;*
- c. Taking the arsenals of Russia and the US off of hair trigger, launch on warning high alert;*
- d. Legally confirmed pledges by all states with nuclear weapons never to use them first;*
- e. Making cuts in the US and Russia's arsenal irreversible and verifiable.*

(Italics added)

* * *

We, the Nobel Peace laureates, pledge to pursue joint efforts and strengthen cooperation for the development of democracy, peace and human rights on the Korean Peninsula and the world as a whole.—June 17, 2006, At the closing of the “2006 Gwangju Summit of Nobel Peace Laureates”

- *Mikhail Gorbachev, Nobel Peace Laureate 1990*
- *Kim Dae-jung, Nobel Peace Laureate 2000*
- *Mairead Corrigan Maguire, Nobel Peace Laureate 1976*
- *Shirin Ebadi, Nobel Peace Laureate 2003*

- *Wangari Muta Maathai, Nobel Peace Laureate 2004*
 - *International Peace Bureau (IPB), Organization awarded Nobel Peace Prize 1910*
 - *American Friends Service Committee (AFSC), Organization awarded Nobel Peace Prize 1947*
 - *Amnesty International (AI), Organization awarded Nobel Peace Prize 1977*
 - *International Physicians for the Prevention of Nuclear War (IPPNW), Organization awarded Nobel Peace Prize 1985*
 - *Pugwash Conferences on Science and World Affairs, Organization awarded Nobel Peace Prize 1995*
-