



Build a World of Non-use of Nuclear Weapons

建设一个不使用核武器的世界

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Summary ...

- ◆ The international community has set itself the lofty goal of building a nuclear-free world. Many difficulties exist, however, in realizing this goal in the short term. Nuclear states will not eliminate their weapons, and many other state and non-state actors are still trying to acquire weapons illicitly.
- ◆ Since the end of WWII, the non-use of nuclear weapons has become an informal international norm that has had, and still does have, a constraining effect on the external behavior of nuclear states. A more realistic goal of the international community would be to legalize the non-use norm and build a world of non-use of nuclear weapons as an intermediate step towards a world free of nuclear weapons.
- ◆ We propose that the United Nations establish a Convention on Non-use of Nuclear Weapons. The Convention should include the following six key elements:

All nuclear state parties commit to no first-use of nuclear weapons against one another, and shall not use or threaten to use nuclear weapons against non-nuclear state parties to the Convention.

All nuclear state parties undertake to cease developing and deploying new combat-based tactical nuclear weapons, including low-yield nuclear warheads, and to destroy all tactical nuclear weapons within a specified period.

All nuclear state parties undertake not to transfer nuclear technology for military or civil use to non-governmental organizations.

All nuclear state parties refrain from military action that could result in another nuclear state party mistaking a conventional weapon for a nuclear weapon.

All non-nuclear state parties undertake not to use or threaten to use chemical or biological weapons against nuclear state parties.

All state parties undertake to oppose any implied nuclear threat by nuclear state parties in official statements or documents, and are obligated to expose and denounce any intentions of nuclear state parties to use nuclear weapons.

Build a World of Non-use of Nuclear Weapons

The enormous power of nuclear weapons induces many state and non-state actors to acquire them illicitly. The consequent proliferation of nuclear weapons jeopardizes international security. The international community has set itself the lofty goal of building a nuclear-free world. Many difficulties, however, exist in realizing it in the short term. A more realistic course could be that of taking an intermediate step towards a world free of nuclear weapon by legalizing the contemporary norm of non-use of nuclear weapons. Even if nuclear weapons were not eliminated in the short term, rendering them unusable would considerably improve the security of the international community.

I. Nuclear Proliferation

The signing of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) categorized states as nuclear-weapon states (NWS) and non-nuclear-weapon states (non-NWS). Later developments, however, made matters less simple than the initial parties had envisioned. We can now classify states under six categories according to their nuclear technological capabilities and political intentions. They are: 1) licit nuclear powers, including the United States, Russia, China, the United Kingdom and France; 2) illicit nuclear states, including India, Pakistan and North Korea; 3) illicit nuclear states in secret possession of nuclear weapons -- Israel alone (Libya and South Africa secretly developed nuclear weapons but have since relinquished them.); 4) states that have intentions to develop nuclear weapons but do not yet have a comprehensive grasp of nuclear technology, including Iran and Syria; 5) states that claim nuclear weapon capabilities but do not intend to develop them, including Japan and Ukraine; and 6) states that have neither nuclear weapon capabilities nor intentions, including all those that do not fall under any of these five categories.

India

India was the first among the illicit nuclear states to cross the nuclear threshold after the NPT coming into effect, having started research into civilian nuclear technology

as early as 1946. While Nehru was in power, India pursued “a peaceful nuclear program” of not developing nuclear weapons but providing energy for the people. Stung by defeat in the China-India Border War and unnerved by China’s first successful nuclear test in 1964, however, India responded by refusing to sign the NPT, under the excuse that China had declined to sign the treaty, and by proceeding to develop its own nuclear weapons. On 18 May, 1974, India conducted its first underground nuclear detonation, which it called a “peaceful nuclear explosion”. India’s nuclear weapon development program thereafter went underground, focusing on uranium enrichment, plutonium production, R&D on nuclear weapon parts, and nuclear facilities. By 1998, India had nine nuclear power plants, six heavy water plants, one nuclear reactor and one uranium enrichment plant. It is estimated that by 1995 India had stored enough plutonium for 70 to 90 atomic bombs and enough uranium for 20 to 50 nuclear warheads. On 11 and 13 May, 1998, India openly conducted five nuclear tests which formally took it over the nuclear threshold. India now has about 50 nuclear warheads, according to estimates by the Nuclear Policy project at the Carnegie Endowment for International Peace.

Pakistan

Pakistan started a secret nuclear weapons program after the 1971 India-Pakistan War. The program accelerated after India’s nuclear test in 1974 and by the mid-1980s had made substantial progress. Pakistan conducted six nuclear tests of various TNT equivalences on 28 and 30 May, 1998, in response to India’s earlier nuclear tests, thus also formally crossing the nuclear threshold. As Pakistan’s nuclear weapons are largely dependent on enriched uranium, it has focused on developing centrifuge enrichment technology and building facilities capable of producing weapons-grade uranium, meanwhile developing post-processing technology to produce and stockpile fissile plutonium. Pakistan has about 60 nuclear warheads according to estimates by the Nuclear Policy project at the Carnegie Endowment for International Peace.

North Korea

North Korea initiated research on nuclear technology in the mid 1960s, using a research reactor supplied by the former Soviet Union. In the 1980s, North Korea started to build 200 MW nuclear reactors and post-processing facilities in Taechon and Yongbyon, and conducted neutron bombardment tests. Under pressure from the Soviet Union, it signed the NPT in December 1985. In October 1994, North Korea and the United States signed the Agreed Framework. During the next nine years, North Korea did not reprocess its reactor fuel or restart its reactors. When President George W. Bush assumed office in 2001, however, his hard-line policies towards North Korea met with the DPRK’s defiance. On 10 Jan, 2003, North Korea

announced it would quit the NPT and restart its nuclear reactor and post-processing plant in Yongbyon. The first nuclear test took place on 9 October, 2006 and the second on 25 May, 2009. On 4 September, 2009, North Korea announced that its uranium enrichment test was at the final stage and that it would obtain weapons-grade plutonium by reprocessing spent fuel rods. It is unclear how many warheads North Korea actually has. Nuclear non-proliferation experts estimate that North Korea has nuclear materials enough for a minimum of six to eight warheads.

Israel

Israel's development of nuclear power can be traced back to the late 1950s. France originally supplied Israel with a nuclear reactor, and through foreign aid helped with its construction of nuclear facilities. By 1967, Israel had acquired plutonium enough for one nuclear warhead. It also obtained 100 kilograms of high-enriched uranium from the United States, raw and processed uranium from the United States, South Africa and other countries, heavy water from Norway, documents on nuclear weapon design and production from France, and nuclear test data from France and the United States. All these data attest to the generally held belief that Israel built its first nuclear weapon in the late 1960s. Ambiguous about its nuclear weapons development and status, Israel has neither admitted nor denied that it has nuclear weapons, has not publicly debated on nuclear weapons, and has not clarified under what circumstances it believes nuclear weapons should be employed. Israel has 64 to 112 nuclear warheads, according to estimates by the Nuclear Policy project at the Carnegie Endowment for International Peace.

Iran

Iran's development of nuclear energy began in the 1950s, with aid from the United States and other Western countries. After severance of diplomatic relations in 1980, the United States accused Iran on many occasions of secretly developing nuclear weapons under cover of "peaceful use of nuclear energy", and carried out a containment policy against Iran. In February 2003, Iran announced that it had produced enriched uranium for use on its nuclear power plants. The United States repeatedly warned Iran to stop all uranium enrichment activities, and threatened to take the matter to the United Nations Security Council. In September 2003, the International Atomic Energy Agency (IAEA) adopted a resolution calling on Iran to suspend all further uranium enrichment-related activities, and urging Iran to sign the NPT Additional Protocol. In December, Iran signed the Additional Protocol but reserved the right of peaceful use of nuclear energy. The suspension of uranium enrichment-related activities, however, later experienced several rollbacks. On 3 January, 2006, Iran renewed research on nuclear energy that had been suspended

for more than two years. In April 2009, Iranian Vice President and Head of the Atomic Energy Organization of Iran (AEOI) Gholam Reza Aghazadeh announced that Iran was running 5,000 uranium-enrichment centrifuges. In February 2010, Iran produced first batch of 20 percent enriched uranium. Although Iran has not acquired nuclear weapons grade uranium or any nuclear weapon, Western countries have grounds to suspect Iran of still secretly developing nuclear weaponry.

Syria

Syria signed the NPT in 1969 and the Safeguards Agreement in 1984, and has long denied any secret nuclear activity. Neither the IAEA nor the United Nations nuclear watchdog agency has found any evidence that Syria has either nuclear engineers or the fuel necessary to run large-scale nuclear facilities. American and Israeli intelligence agencies have nonetheless long suspected Syria of secretly developing nuclear weapons. In 2007, the United States announced that Israel reconnaissance satellites had revealed Syria's secret construction of a nuclear reactor, and that Syria might have acquired gas centrifuges that could be used for uranium enrichment. In April, the IAEA put Syria on its nuclear proliferation monitoring list. On 5 and 6 September, the Israeli air forces bombed a suspicious target in Syria. Syria claimed it had been a military plant under construction, but refused to let any IAEA personnel enter the facility for verification and sampling.

II. Causes of Nuclear Proliferation

There are both technical and political reasons for nuclear proliferation since the signing of the NPT, for which nuclear states and non-nuclear states need to take their respective responsibilities.

Dissemination of Nuclear Technologies Has Made Nuclear Weapons More Accessible

When nuclear weapons first appeared in 1945, nuclear technology was the jewel in the crown of science and technology, accessible only to the elite. Any technology related to nuclear weapons was hence top secret and jealously guarded. The development and dissemination of science and technology, however, has dispelled the mystique surrounding nuclear weapons, and there is fundamental nuclear knowledge throughout the science community. Researchers in different countries have grasped nuclear technology through various channels. One is dual-use equipment for building nuclear weapons, which is available on the international market. There are also certain nuclear experts who are prepared to proliferate for mercenary reasons. Abdul Qadeer Khan, known as father of Pakistan's nuclear weapons, for example, sold nuclear technology to

Iran, North Korea and Libya between 1986 and 1993. According to the IAEA investigation and Abdul Qadeer Khan's confessions to the Pakistan government, he organized an underground nuclear black market comprising production, supply and marketing, through which he sold high-speed centrifuges, blueprints of nuclear warheads and key production technologies. It is generally acknowledged that, when domestic and international circumstances allow, certain states go all out to acquire nuclear weapons.

Certain States Show Great Interest in Acquiring Nuclear Technology

For various political and security reasons, certain states in the international community show great interest in acquiring nuclear technology. This is a main cause of nuclear proliferation. As enemies of the sole superpower, North Korea and Iran have long been under security threats from the United States. Acquiring nuclear weapons, however, can alleviate to a large extent the US military pressure on them and enlarge their bargaining chips. The Bush Administration strengthened the role of nuclear weapons in the US national security strategy through the 2002 Nuclear Posture Review, which stipulates that nuclear weapons can be employed against targets able to withstand non-nuclear attack, and that retaliatory nuclear strikes will be launched against nuclear, biological or chemical attacks. The review moreover states that nuclear strikes can be launched against "rogue" states that try to acquire weapons of mass destruction (WMD). The review effectively lowered the threshold for the United States' use of nuclear weapons. It hence alarmed countries under military threat from the United States, such as North Korea and Iran, sufficiently to strengthen their resolve to develop their own nuclear weapons.

There are two reasons for India's development of nuclear weapons. One is that India has long regarded ownership of nuclear weapons as signifying major world power status. The second is India's claim to be under security threats from China. Pakistan's nuclear weapons program is attributable to the rivalry between it and India in South Asia. The dyad has already fought three wars. When India crossed the nuclear threshold, Pakistan inevitably followed suit. The only non-Muslim state in the Middle East, Israel has experienced four major wars with the Arab countries since its founding. Although Israel's military power is unmatched in the Middle East, it nonetheless perceives nuclear weapons as fundamental assurance of its ultimate security.

The United States Employs Double Standards when Dealing with Nuclear Non-proliferation.

Although the above-mentioned states have illicitly acquired or are developing nuclear weapons, the United States has employed double standards in its dealings with them, based on whether it regards them as friend or foe. Having adopted a policy of acquiescence and acceptance

towards its allies or major regional powers, the United States has been indifferent to the nuclear weapons program of its close ally, Israel. And as India is a regional power, the United States had no choice but to accept India's status as a nuclear state and sign the US-India nuclear cooperation agreement. The framework for this agreement consisted of a joint statement under which the United States agreed to work towards full civilian nuclear cooperation with India, promised to make nuclear technology, facilities and fuel available and help it to build a strategic reservoir of nuclear energy. The United States went even further by requesting a waiver from the Nuclear Suppliers Group (NSG) for India which permitted the purchase of uranium for its existing reactors, as well as technologies to reprocess, under IAEA supervision, spent fuel.

If, however, a state that it perceives as an enemy tries to develop nuclear weapons, the United States exerts on it maximum pressure and intimidation. It has, for example, been demanding verifiable and irreversible dismantlement of North Korea's nuclear program while at the same time ignoring North Korea's request for improved bilateral relations and a non-aggression treaty. The United States has also been pursuing United Nations Security Council sanctions against Iran, and shown no sign of relinquishing the option of military action against Iran's nuclear facilities.

It is hence these American double standards based on the distinction between friend and foe that have legitimized the nuclear weapons of certain states. This practice essentially violates the NPT, and seriously questions the credibility of the international non-proliferation regime.

NPT Has No Clear Schedule of Nuclear Disarmament

Article VI of the NPT stipulates that all parties undertake to pursue, "negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament", towards a "Treaty on general and complete disarmament under strict and effective international control". Compared with other articles, however, Article VI is ambiguous about nuclear disarmament and does not stipulate any clear requirements or guidelines. During the forty years since it came into effect, the international community has made no achievement toward comprehensive nuclear disarmament or reached any consensus on a timetable. This deadlock has convinced certain states to actively pursue nuclear weapons in the belief that they are an effective diplomatic and security tool.

Existence of Terrorist Groups Has Made Consequences of Nuclear Proliferation More Perilous

The 9/11 attack made the international community all too aware that the scenario under which nuclear weapons fall into the hands of terrorist groups is no longer hypothetical. As terrorists have

neither territory nor people to defend, they have fewer scruples than territorial states about using nuclear weapons. The smuggling of nuclear technology by Abdul Qadeer Khan also attests to the fact that terrorists have access to nuclear technology and material at underground black markets.

Experts have pointed out that terrorist groups would not take the trouble of either stealing an assembled bomb or openly producing nuclear material. They would be more likely to steal certain key components and items of core technology and, with nuclear material obtained through black markets, build their own atomic bomb. Self-production is not that hard nowadays; the technology and blueprint for making an atomic bomb are accessible on the internet. Experts have hypothesized four scenarios under which terrorists might make nuclear attacks. They are: first, terrorists smuggle a nuclear weapon to a beach area of a certain state and detonate it; second, terrorists obtain a nuclear weapon directly from a certain state and transport it to a densely populated area for detonation; third, terrorists attack the nuclear facilities of a certain state; and fourth, terrorists spread radioactive material through dirty bombs. Any one of these four scenarios would cause heavy casualties and have devastating psychological impact.

III. A World without Nuclear Weapons, or a World of Non-use of Nuclear Weapons

On 5 April, 2009, President Obama of the United States made a speech in the Czech capital of Prague. He announced that the United States would continue nuclear disarmament, and make global eradication of nuclear weapons a central goal of American nuclear policy. He pointed out that nuclear weapons did not disappear with the Cold War, and that although the risk of a global nuclear war is lower, the possibility of nuclear attack is now greater. More states have acquired and tested nuclear weapons. Nuclear technology has been disseminated, and terrorists are determined to buy, build or steal a bomb. As a nation that stands for freedom, and the only nuclear power that has used a nuclear weapon, the United States has “a moral responsibility” to play a leading role in enforcing nuclear disarmament.

President Obama made five proposals in this speech. They were: first, “to reduce the role of nuclear weapons in our [American] national security strategy” and urge other nuclear powers to do the same, the United States will reduce “warheads and stockpiles” and negotiate a new Strategic Arms Reduction Treaty (START II) with Russia by the end of the year. This will set the pace for further reductions of nuclear weapons. Second, President Obama’s administration will actively pursue in Congress the ratification of the Comprehensive Test Ban Treaty (CTBT). Third, the NPT will be reinforced by strengthening international inspections, imposing greater

penalties on countries breaking the rules, urging countries with nuclear weapons to move toward disarmament, and making use of peaceful nuclear energy. Fourth, the United States will pursue a treaty that verifiably ends the production of fissile materials. Fifth, a new framework should be built for civil nuclear cooperation, including an international fuel bank and other constructive initiatives, to allow countries peaceful access to power without risking proliferation of nuclear weapons and technology. This will “secure all vulnerable nuclear material around the world within four years.”

As the sole superpower and the largest nuclear power in the world, the United States thus proposed to further nuclear disarmament towards a world without nuclear weapons. These proposals were warmly endorsed by the international community and struck a chord with other nuclear powers. But although President Obama’s proposals are encouraging, bringing them into effect will not bring us any closer to a world without nuclear weapons. First, even if the United States and Russia sign START II by the end of this year, by 2018 they will still each claim 1,500 to 1,675 nuclear warheads and 500 to 1,000 strategic vehicles. Each of the other nuclear powers has less than 350 nuclear warheads. As the United States and Russia will hence still have three times as many warheads as any of the other nuclear powers, there is no incentive for other nuclear powers to reduce their nuclear weapons. Second, in order “to reduce the role of nuclear weapons in our [American] national security strategy”, the United States should play a leading role. Since the 9/11 attack, the United States has, in its avowed intent within strategic considerations to use or to threaten to use nuclear weapons against terrorist threats that are unrelated to its national survival, lowered the threshold for use of nuclear weapons. By continuing R&D on low-yield nuclear weapons such as the mini-nuke it has also made nuclear weapons technically more usable. The United States, therefore, should indeed be the first to heighten its nuclear weapon-use threshold. Third, the proposals by President Obama to strengthen nuclear non-proliferation (the second, third and fourth proposals earlier mentioned) do not touch upon exactly how the use of nuclear weapons between nuclear states, or by nuclear states against non-nuclear states can be avoided.

We believe that humankind will not see a complete eradication of nuclear weapons in the next ten-to-fifteen years. There are unmountable obstacles to a world without nuclear weapons as envisioned by President Obama. The international community should hence consider building a world of non-use of nuclear weapons as a first and more realistic step towards a world without nuclear weapons. After World War II, nuclear powers accumulated huge stockpiles of nuclear weapons that were never used. We now need to prolong the non-use of nuclear weapons norm for the long term.

IV. Emergence and Prolongation of the Norm of Non-use of Nuclear Weapons

The different terms academics have used in reference to the norm of non-use of nuclear weapons, such as a tradition, taboo, or informal international norm, have been in use for the past 65 years. History reveals complex reasons for the emergence and prolongation of the non-use norm, including rational calculations as proposed by rationality theory, and idea construction as hypothesized by constructivism. These reasons may arise from political and military considerations, or individual decision making, or simply by coincidence. The United States and the former Soviet Union actually planned to use nuclear weapons on a few occasions, but ultimately abandoned the idea because of various considerations and restrictions. Since humankind has not seen any use of nuclear weapons in the last 65 years, it is correct to say that non-use of nuclear weapons has indeed become a tradition. The rule of law ethos that the norm conveys, however, implies far more than just tradition.

Referring to non-use of nuclear weapons as a taboo is an overstatement. Although an open threat to use nuclear weapons might prompt volleys of criticisms from the international community, their use is not illegal under criminal law, as are social taboos such as incest or cannibalism, whose violators face severe judicial punishment. The advisory opinion of the International Court of Justice in July 1996 was that “the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake.” It is hence perhaps closer to reality to call non-use of nuclear weapons an informal international norm. Informal means that the norm has not been written into any international convention or customary international law, and explains why states such as the United States, the United Kingdom and Russia have openly claimed to have considered a first nuclear strike when appropriate.

The United States

As the first nuclear power and the first country to use nuclear weapons, the United States has played an important role in the emergence and prolongation of the non-use norm. Among the first to acknowledge the destructive effects of nuclear weapons, President Truman pushed for early adoption of the norm of non-use. On 10 August, 1945, the day after the United States dropped the nuclear bomb on Nagasaki, President Truman said to his cabinet, “The thought of wiping out another 100,000 people is too horrible.” In 1946, he ordered that the command of nuclear weapons to be transferred from the military to the Atomic Energy Commission (AEC), a civilian agency whose chair is appointed by the President. The authority to use nuclear weapons

was thus in the hands of the President alone. President Truman also expected the United Nations Atomic Energy Agency to control all nuclear materials and proposed that countries use atomic energy only for peaceful purposes. From 1946 to 1950, the US military worked out three plans to wage a preventive nuclear attack on Soviet industrial and military targets to stop the Soviet Union from becoming a nuclear power. President Truman, who consistently opposed the use of nuclear weapons for offensive purpose, however, vetoed all three plans. As the President put it, "You have got to understand that this isn't a military weapon . . . It is used to wipe out women and children and unarmed people, and not for military uses. So we have got to treat this differently from rifles and cannon and ordinary things like that." He once threatened to use nuclear weapons during the Korean War, but the threat did not materialize despite urgings from the military, due to opposition at home and abroad and other tactical reasons. Moreover, although the United States retained its nuclear monopoly, a study by the military showed that a nuclear war against the Soviet Union would not make it succumb.

President Eisenhower, as President Truman's successor, changed his predecessor's cautious policy by trying to conventionalize nuclear weapons and make them more usable. He adopted the massive retaliation strategy, whereby nuclear weapons are used at any time deemed appropriate, irrespective of whether the war in question was an all-out war or limited one. Secretary of State Dulles advocated on a number of occasions, both at home and abroad, removing the distinction between nuclear and conventional weapons. He also called for the United States' gradual use of nuclear weapons as well as conventional weapons for tactical purposes. The massive retaliation strategy, however, soon encountered two enormous difficulties. First was the development of mutual deterrence between the United States and the Soviet Union, which undermined the strategy's whole premise. Second was that the strategy was not applicable to regional wars. The United States was reluctant to use nuclear weapons in the Battle of Dien Bien Phu, the Suez War and the Taiwan Strait Crisis. For those two reasons, the strategy degenerated into empty talk which, in effect, prolonged the norm of non-use. The Eisenhower administration's strategy of no-war-but-a-nuclear-one also faced massive opposition from abroad, especially from allies, which forced the administration to adopt a more cautious approach to nuclear weapons. In May 1957, Dulles admitted, "If we resort to such a use of nuclear weapons we will in the eyes of the world be cast as ruthless military power, as was Germany." Although the US government was generally willing during the Eisenhower years to use nuclear weapons, it took no such action, thus prolonging the non-use norm.

In the John F. Kennedy era, the United States adopted a strategy of flexible response, which gave the US military the capability of responding to aggression with both conventional and nuclear arms. During this period, the United States and the Soviet Union achieved balance of power to

the level of Mutual Assured Destruction (MAD), which lowered the possibility of a nuclear war to a minimum and made an American nuclear strike on the Soviet Union impossible. The United States considered the use of nuclear weapons during the Cuban Missile Crisis, the China-India Border War, China's acquisition of nuclear weapons and the Vietnam War, but refrained from doing so. This was a result of rational cost-benefit analysis, but also to avoid breaking precedents and arousing adverse world opinion, according to the reputational considerations of decision-makers. The two superpowers also tried to strengthen nuclear cooperation in response to a global anti-nuclear movement. The Limited Nuclear Test Ban Treaty (LTBT), the CTBT and the NPT facilitated the prolongation of the non-use norm. The NPT in particular to some extent converted the non-use norm into international law. There was a tacit understanding that non-NWS that exhibited good compliance with the Treaty would not be targeted by NWS. The NWS, however, declared that this security assurance was a political commitment rather than a legal one, which weakened legalization of the non-use norm.

From Nixon to George H. W. Bush we see instances where the United States might well have used nuclear weapons. Luckily enough, none of these attempts came to fruition. From Clinton to George W. Bush, the use of nuclear weapons in the few regional conflicts in which the United States participated was never raised. As sole world superpower with military capabilities easily surpassing those of all other states, conventional warfare was sufficient for the United States to achieve victory. Neither president hence had any reason to break the non-use precedent that their predecessors had put in place. Clinton and George W. Bush nonetheless challenged the non-use tradition in two ways. The first was to lower the threshold for using nuclear weapons against "rogue" states with WMD; the second to allow pre-emptive, preventive or retaliatory nuclear strikes against terrorist groups. In February 1996, the Joint Chiefs of Staff (JCS) adopted the Doctrine for Joint Theatre Nuclear Operations, which allowed the United States to use nuclear weapons against terrorist groups with WMD capabilities. The doctrine lowered the command of nuclear weapons to the level of local commanders, thus allowing pre-emptive nuclear strikes. The 2005 Draft Doctrine for Joint Nuclear Operations reiterated this position, which signified that the United States had modified the security commitment it had promised to non-NWS. Meanwhile, the United States made huge investments in development and deployment of low-yield nuclear weapons (Bunker-busting Nuclear Weapons and Mini Nuke weapons). Bunker-busting Nuclear Weapons were earmarked for the destruction of underground nuclear and military facilities in "rogue" states. The development of Mini Nuke Weapons of a yield lower than one hundredth of a kiloton was in direct violation of the 1993 Spratt-Furse Amendment, according to which development of nuclear weapons with a yield lower than 5,000 kilotons is prohibited. In November 2005, Congress cut off funding for such low-yield nuclear weapons.

Russia

In spite of having one of the largest nuclear arsenals in the world, the Soviet Union rarely flaunted its nuclear force or threatened to use nuclear weapons during the Cold War, behavior that significantly contributed to the emergence and prolongation of the non-use norm. From the end of WWII to the late 1950s, the Soviet Union strongly recommended transfer of control of nuclear weapons to the United Nations, and backed the NWS commitment not to use nuclear weapons against other NWS or non-NWS. The Soviet Union also supported the CTBT, nuclear-free zones and anti-nuclear groups in the West in exerting pressure on the United States.

Khrushchev pursued a policy of peaceful coexistence with the West. Any open transfers of nuclear technology abroad or threat to use nuclear weapons would have undermined this strategic goal. That is why in October 1957 the Soviet Union reneged on its agreement to transfer nuclear technology to China, albeit at the expense of diplomatic relations with China. Khrushchev wanted to avoid the situation where China, once equipped with nuclear know-how, would try to involve the Soviet Union in confronting the United States and thus jeopardize the strategic goal of peaceful coexistence. When the 1962 Cuban Missile Crisis brought the United States and the Soviet Union to the brink of nuclear war, Khrushchev conceded because he doubted the Soviet Union's military capability for such a war.

Brezhnev took an overtly positive stance on nuclear disarmament. In 1966, the Soviet Union proposed to the United Nations the establishment of a convention on no-first-use of nuclear weapons, in a move to encourage non-NWS to sign the proposed NPT. In September 1972, Soviet Foreign Minister Gromyko proposed a ban on the use of nuclear weapons. At the Second Special Session of United Nations General Assembly on Disarmament in June 1982, Brezhnev announced that the Soviet Union would commit to no first-use of nuclear weapons and that it would only use such weapons in retaliation against a nuclear first strike. The Soviet Union did not employ nuclear weapons during the Afghanistan War, even in the later stages when, in the face of overwhelming resistance, they finally pulled out. From a rational standpoint, the Soviet Union refrained from using nuclear arms against Afghanistan because its objective in fighting the war was to install a puppet government there. Moreover, from a tactical standpoint, using nuclear weapons would have been ineffective against the mujahidin freedom fighters, who were masters of guerrilla warfare.

The Soviet Union saw the Cold War as one between different ideologies, and was happy to support Third World anti-imperialist and anti-colonialist movements in the guise of a peace-lover. Any use of nuclear weapons or threats to use them would have clashed with the international public relations image of the Soviet Union, ruined its reputation, and lost its moral and ideological

high ground vis-à-vis the West.

At the time Gorbachev came to power, strategic arms reduction and prevention of a nuclear war were the primary tasks of Soviet foreign policy. By the time he left office, the two superpowers had concluded three substantively significant nuclear disarmament and arms control treaties. They were: the 1987 Intermediate-Range Nuclear Forces Treaty (INF), the 1988 Ballistic Missile Launch Notification Agreement, and the 1991 Strategic Arms Reduction Treaty (START I).

In January 1993, Russia, as inheritor of the Soviet nuclear arsenal, and the United States signed the second Strategic Arms Reduction Treaty (START II), Russia's furthest step yet toward nuclear disarmament. Russia, however, reneged on its non-use position. The recession in Russia's national power, especially its military capabilities, forced President Yeltsin to reconsider the role of nuclear weapons in Russia's national security strategy. Hence, the Basic Provisions of the Military Doctrine of the Russian Federation were published in November 1993, which stipulated that Russia would not employ nuclear weapons against state parties to the NPT that did not possess nuclear weapons other than in the event of an attack against Russia or its allies by a non-nuclear state allied with a nuclear state, or of a joint attack by a non-nuclear state and a nuclear state. Russia thus broke its commitment to no-first-use of nuclear weapons and slowed down its nuclear disarmament. After 1993 it began to hone the effectiveness of its strategic arms by improving their penetration capabilities, accuracy, destructive capacity, mobility and survivability. This is evident in Russia's development of land-based Topol-M missiles and sea-based Bulava intercontinental ballistic missiles.

Russia has since laid more emphasis on tactical nuclear weapons, and has adopted new guidelines on their development, according to which small nuclear weapons such as neutron bombs might be put to battlefield use. Since 1998, the Russian military has run training programs during military exercises on the use of tactical nuclear weapons. This implies application of the concept of practicing with non-strategic nuclear weapons to prepare for real war. Russia has also expedited development of medium- and close-range missiles and small nuclear warheads, including SS-X26 tactical missiles (with a range of 400 to 500 kilometers) carrying both nuclear and conventional warheads, small nuclear warheads fired through long-range large-caliber artillery, and low-yield (50 to 100 kilotons) nuclear warheads. Experts in the West estimate that Russia has 18,000 to 20,000 tactical nuclear weapons.

In October 2003, the Russian Defence Ministry released a document entitled Modernization Doctrine of Russian Armed Forces, formally mentioning "preventive use of force" but without clarifying whether or not Russia would wage preventive nuclear strikes. Experts believe any

preventive nuclear strike by Russia would involve the use of tactical nuclear weapons rather than strategic ones. We, however, believe that Russia's preventive strategy is more one of deterrence. Based on the military actions of the Soviet Union in Afghanistan, we believe there is low probability of Russia making preventive use of nuclear weapons.

Other Nuclear Weapon States

The United Kingdom The United Kingdom began its nuclear program in 1946, and successfully tested its first nuclear bomb in 1952. The UK has long since pursued a policy of minimum nuclear deterrence and non-deployment of land-based nuclear warheads.

Prime Minister Attlee was concerned after the outbreak of the Korean War that the United States would abuse its nuclear monopoly. In December 1950, he visited the United States and convinced President Truman not to employ nuclear weapons against the Chinese People's Volunteer Army or the North Korean Army. He insisted that nuclear weapons be used only in an all-out-war situation, to which the Korean War clearly did not belong. The British public regarded nuclear weapons as a specific tool of mass destruction whose use was beyond the political and moral pale. After returning to power in 1951, Churchill retracted his earlier support of US nuclear deterrence against Soviet expansion. In hopes of avoiding a nuclear war, he urged the United States to adopt a more reconciliatory approach towards the heavily nuclear armed Soviet Union. The UK made no threat to use nuclear weapons against Egypt in the 1956 Suez War, even though losing the war resulted in Egypt's successful nationalization of the Suez Canal. The anti-nuclear movement in the UK in the 1950s and 1960s far surpassed that in the US, and exerted pressure on the UK government to lay more emphasis on nuclear non-proliferation

After the Cold War, the John Major government began making substantial reductions in tactical nuclear weapons. By 1998 it had relinquished WE 177 nuclear bombs, thus ridding the UK of all air-based nuclear weapons and leaving it only sea-based nuclear weaponry. By 1998, Britain's nuclear warheads had been reduced to about 200, of total yields 40% lower than in the 1970s. When Tony Blair assumed office, the UK government decided to reduce its nuclear warheads to fewer than 200. The 2006 Defence White Paper "The Future of the United Kingdom's Nuclear Deterrent" presented to Parliament by the Ministry of Defence stated that nuclear warheads would be reduced to about 160. Parliament passed the White Paper in March 2007. The UK government took a firm stand on nuclear weapons as a last resort, and in this connection turned its attention to security threats stemming from the proliferation of WMD. Prime Minister Major declared before the outbreak of the 1991 Gulf War that the UK would use nuclear weapons if Iraq made chemical or biological attacks on the allied forces or the allies of the US and the UK. This was the first time the

UK had ever threatened the use of nuclear weapons, and signified a turn in policy towards first-use of nuclear weapons. In July 1998, the Blair government published the Strategic Defence Review (SDR), which endorsed the 1991 policy on first-use of nuclear weapons in response to WMD attacks.

After the 9/11 attack, Defence Secretary Geoff Hoon publicly stated that the UK would, if appropriate, use nuclear weapons against certain “rogue” states that had WMD. The UK government had adopted a policy of ambiguity on the use of nuclear weapons to increase the complexity and difficulty of the opponents’ decision making. The 2006 Defence White Paper hence stated that the UK government would neither permit nor exclude first-use of nuclear weapons.

France France became a nuclear state in February 1960. As during the Cold War it had limited warheads which could be employed for retaliation purpose only, the French government adopted a no-first-use policy, but without specific clarification. France neither used nor threatened to use nuclear weapons against non-nuclear states. Although forced to pull out of North Africa, President De Gaulle did not consider the nuclear option to prevent Algeria’s independence. The French government, however, engaged in nuclear proliferation by providing Israel with a nuclear reactor. The French government did not join the NPT, and opposed the ban on atmospheric nuclear tests.

France’s nuclear policy changed after the end of the Cold War. During the 1991 Gulf War, President Mitterrand declared that should Iraq use chemical or biological weapons against France, France would not use nuclear weapons in retaliation. It acceded to the NPT in August 1992. From 1991 to 1995, France unilaterally reduced its nuclear weapons by 15%, and also participated in various nuclear-free zone treaties, signifying that it would not use nuclear weapons against states in such zones. In August 1995, France became the first NWS to adopt a “zero-yield” nuclear test ban -- an important breakthrough towards the Comprehensive Test Ban Treaty (CTBT). France signed the CTBT in September 1996, and ratified it in 1998, and at the same time closed two nuclear testing bases in the Pacific. President Chirac announced a halt to the production of weapons-grade plutonium and enriched uranium in 1996. The same year the French government accepted in principle the Fissile Material Cut-off Treaty (FMCT). In September 1996, President Chirac announced that there would be a further 10% reduction by September 1997.

After 9/11, France changed its nuclear policy by lowering the nuclear threshold, hence implying its willingness to use nuclear weapons against WMD states. President Chirac stated in a speech in January 2006 that any state leader who used or considered using terrorist means or WMD against France would encounter a firm and appropriate counterattack of the conventional or of another

type. By 'another' Chirac of course meant use of nuclear weapons.

Israel Israel is a dark horse nuclear state. As Israeli government officials and media are silent about nuclear weapons and nuclear policy, other states have only circumstantial information on the development and status of Israel's nuclear forces. This is first of all because Israel has never openly conducted a nuclear test. To avoid being identified as a nuclear power and hence gaining a bad reputation in the world community, Israel obtains nuclear weapon-related data through cooperation with other states. Second, Israel denies possessing any nuclear weapons, and the Israeli government has declared that Israel will not be the first country to introduce nuclear weapons into the Middle East. This statement implies Israel's unwillingness to be labelled as the first nuclear power in the region, but does not amount to a denial of possession of nuclear weapons. Third, Israel has never threatened to use nuclear weapons. As Israel does not admit to possessing nuclear weapons, however, it employs veiled means of communicating with its opponent on nuclear-related matters. During the Gulf War, for example, the Israeli Prime Minister warned Iraq that Israel would take formidable and deadly revenge for any unprovoked attack on it. Fourth, Israel has held no open debate on nuclear weapons. Neither Israeli government officials nor the media have openly discussed anything related to Israel's nuclear forces. These matters are discussed only in private.

India After five years of discussion since 1998, when India's identity as a nuclear state was made public, it adopted in January 2003 a nuclear strategy whereby India would build and maintain a reliable minimum nuclear deterrent force; adopt the no first-use policy of employing nuclear weapons only in retaliation against nuclear strikes on India's territories or armed forces; not use nuclear weapons against non-nuclear states except in cases of serious biological or chemical attacks on India's territories or armed forces; continue to restrict exports of materials and technology related to nuclear weapons and missiles, start negotiations on the Fissile Material Cut-off Treaty and continue to ban nuclear tests; and pursue the goal of a nuclear-free world by working towards global, verifiable and non-discriminatory nuclear disarmament. India emphasizes its commitment to the no-first-use policy by storing delivery systems and nuclear warheads separately, thus delaying use of the weapons for the few days necessary to assemble them.

Pakistan Pakistan is among the few states not to have signed the NPT, and the sole Islamic state with nuclear weapons. Based on the remarks of the Pakistani President and Foreign Minister and data gleaned from other research documents, Pakistan's nuclear strategy appears to be built on three main principles. They are: Pakistan maintains a minimum nuclear deterrent force for self-defence; Pakistan adopts a policy of first-use of nuclear weapons due to its modest conventional military capabilities; and in times of a war, Pakistan is prepared to rely on its conventional forces to

the point where it has no alternative but to turn to nuclear weapons. Pakistan's stand on nuclear disarmament and non-proliferation is manifest in its advocating of a South Asian Nuclear-free Zone. In May 2003, President Musharraf stated that were it possible to resolve differences over Kashmir and achieve peace and security in South Asia, Pakistan and India should work in unison towards denuclearization. After the nuclear tests in May 1998, Pakistan unilaterally announced its suspension of further nuclear tests and proposed that Pakistan and India jointly accede to the NPT.

This review of the nuclear policies of major nuclear powers in the world reveals that the norm of non-use of nuclear weapons truly exists; not one state claims that its nuclear weapons are for offensive purposes. The extent to which each state accepts this norm, however, varies. China is the most resolute, being committed to a no-first-use policy under any circumstances against non-nuclear states and states in nuclear-free zones. Pakistan ranks bottom as regards degree of acceptance of the non-use norm. Its long-term status as India's strategic opponent and its lesser armed capabilities than India's could motivate Pakistan to escalate from conventional to nuclear warfare. The degrees of commitment of other states to the non-use norm range between those of China and Pakistan. Comparatively speaking, the United States is the most likely to use nuclear weapons against "rogue" states and terrorist groups because it faces more threats of this kind than any other state. Owing to its advanced technology in small and mini nuclear weapons, the United States might indeed employ these weapons against its opponents in the future. From another perspective, as the United States possesses conventional forces far superior to any other state and the probability of its winning various armed conflicts hence higher, the United States will not lightly resort to tactical nuclear weapons.

V. Establishing the Convention on Non-use of Nuclear Weapons

A world without nuclear weapons is the dream of humankind, but not one that will be achieved in the foreseeable future. A nuclear world will continue to be the premise on which any international disarmament policy rests. It is more realistic, therefore, to prolong and strengthen the norm of non-use of nuclear weapons than to press for a world without nuclear weapons. We believe that the international community needs to build a world of non-use of nuclear weapons from the perspectives of international law and international politics. To this end, we propose that the United Nations establish a Convention on non-Use of Nuclear Weapons and that the standing members of the United Nations Security Council be the first to endorse the Convention. The Convention should include the following six key elements:

1. All nuclear state parties commit to no first use of nuclear weapons against one another, and shall not use or threaten to use nuclear weapons against non-nuclear state parties to the Convention.
2. All nuclear state parties undertake to cease developing and deploying new combat-based tactical nuclear weapons, including low-yield nuclear warheads, and to destroy all tactical nuclear weapons within a specified period.
3. All nuclear state parties undertake not to transfer nuclear technology for military or civil use to non-governmental organizations.
4. All nuclear state parties refrain from military action that could result in another nuclear state party mistaking a conventional weapon for a nuclear weapon.
5. All non-nuclear state parties undertake not to use or threaten to use chemical and biological weapons against nuclear state parties.
6. All state parties undertake to oppose any implied nuclear threat by nuclear state parties in official statements or documents, and are obligated to expose and denounce any intentions of nuclear state parties to use nuclear weapons.

The international community needs to convert the non-use norm into an international law which all nuclear states endorse, and to expand the scope of its application and acceptance. Although international law is weak because it is not enforced by a central authority, the non-use norm, once legitimized, would bring about significant and powerful effects on the behavior of nuclear states. The decision makers of nuclear states will at the very least weigh their potential use of nuclear weapons against the possible loss of national reputation and of political credibility such use would imply.

History has proven that international norms and international laws which are endorsed and practiced by powers, and especially superpowers, are likely to achieve wider application and acceptance. They are otherwise too limited in these two respects, and could easily be forgotten in passage of time. Nuclear states, therefore, especially the five nuclear powers, are the key to strengthening the non-use norm, with the United States and Russia taking the leading roles. The non-use norm emerged and was prolonged throughout the 60 years since WWII through its self-implementation by nuclear powers. It is now time for all nuclear states to work toward its legalization.



Build a World of Non-use of Nuclear Weapons

建设一个不使用核武器的世界