

*Nuclear Weapon States'
Compliance with the
Practical Steps to Disarmament*

STEP 1: SIGNING THE 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 Comprehensive Nuclear Test-Ban Treaty (CTBT).

US: In 1999, the US Senate rejected the CTBT, making it the only legislative body in the world to do so.

The US continues to make it clear that it has no intention of ratifying the CTBT. At the General Assembly in 2003, Assistant Secretary of State Stephen Rademaker stated plainly that, "The U.S. does not support the Comprehensive Nuclear Test-Ban Treaty and will not become a party to it", the strongest language against the CTBT used by the US to date.

Russia: Ratified 30 June 2000

UK: Ratified 6 April 1998

France: Ratified 6 April 1998

China: China has not yet ratified, although it has been submitted to the National People's Congress Standing Committee for examination and approval. China consistently expresses support for the CTBT in disarmament fora, including the General Assembly First Committee, where

Ambassador Hu Xiaodi affirmed on 5 October 2004 that the CTBT "is of milestone significance for promoting nuclear nonproliferation and nuclear disarmament. China firmly supports CTBT and stays committed to the moratorium on nuclear test." It is widely believed that China is awaiting US ratification before moving forward with its own national ratification.

STEP 2: MORATORIUM UNTIL CTBT ENTERS-INTO-FORCE

A moratorium on nuclear weapon test explosions or any other nuclear explosions pending entry-into-force of that Treaty.

US: On 2 October 1992, Congress imposed a testing moratorium, two weeks after the last test took place on September 23.

The Bush administration is seeking to reduce the amount of time it would take the Nevada Test Site (NTS) to resume nuclear testing, from the current 36 months to 18 months.

In a testimony to the House Armed Services Committee in February 2005, Secretary of Energy Samuel Bodman affirmed that, "We will continue our efforts to maintain the ability to conduct underground nuclear testing and complete the transition to the 18-month test readiness posture that is mandated by Congress."

Russia: Following the full-scale nuclear test conducted by the Soviet Union on 24 October 1990, then-Soviet President Mikhail Gorbachev announced a unilateral moratorium on testing, which has been in place ever since.

UK: The last explosive test conducted by the UK took place on 26 November 1991.

France: Despite the decision of the 1995 Review Conference which called for the Nuclear Weapon States (NWS) to "exercise utmost restraint" in nuclear testing, France did not cease full-scale nuclear testing until January 1996. The dismantlement of testing facilities in the Pacific was

CTBT ANNEX II STATES WHOSE RATIFICATION IS NEEDED FOR THE ENTRY-INTO-FORCE*

<i>Algeria</i>	<i>Finland</i>	<i>Rep. Korea</i>
<i>Argentina</i>	<i>France</i>	<i>Romania</i>
<i>Australia</i>	<i>Germany</i>	<i>Russian Fed.</i>
<i>Austria</i>	<i>Hungary</i>	<i>Slovakia</i>
<i>Bangladesh</i>	<i>India</i>	<i>Switzerland</i>
<i>Belgium</i>	<i>Indonesia</i>	<i>Turkey</i>
<i>Brazil</i>	<i>Iran</i>	<i>Ukraine</i>
<i>Bulgaria</i>	<i>Israel</i>	<i>United Kingdom</i>
<i>Canada</i>	<i>Italy</i>	<i>United States</i>
<i>Chile</i>	<i>Japan</i>	<i>Vietnam</i>
<i>China</i>	<i>Mexico</i>	
<i>Colombia</i>	<i>Netherlands</i>	
<i>DPR of Korea</i>	<i>Norway</i>	
<i>DR Congo</i>	<i>Pakistan</i>	
<i>Egypt</i>	<i>Peru</i>	<i>*Signed</i>
	<i>Poland</i>	<i>Ratified</i>

completed by July 1998.

China: On 29 July 1996, within 72 hours of the release of the “Decision on Principles and Objectives for Nuclear Non-Proliferation and Disarmament” which called for NWS to “exercise utmost restraint” in nuclear testing, China conducted its last test. Reportedly, the testing facility at Lop Nor has been converted for non-military purposes.

STEP 3: FMCT IN THE CD

The necessity of negotiations in the Conference on Disarmament on a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices in accordance with the statement of the Special Coordinator in 1995 and the mandate contained therein, taking into consideration both nuclear disarmament and nuclear nonproliferation objectives. 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.

US: On 14 July 1992, the US announced a unilateral moratorium on the production of plutonium

for use in nuclear weapons or other explosive devices.

HISTORY OF THE FMT NEGOTIATIONS

Since the signing of the NPT, a significant issue in the disarmament and arms control community has been the continued production of fissionable materials. Many States have long been calling for a ban on the production of fissile materials (Fissile Materials Treaty or FMT), and the issue has been on the proposed agenda of the Conference on Disarmament for years.

One of the major points of disagreement has been the issue of “existing stocks.” Many Non-Nuclear Weapon States (NNWS) wanted to negotiate a fissban that not only halted all future productions of fissile materials, but also put a cap on existing stockpiles, thereby requiring the Nuclear Weapon States (NWS) to irreversibly downblend existing stocks of weapons-grade fissile materials so that they can never be used for nuclear weapons again.

Another contentious element to an FMT is its scope. While a treaty would ban the production of most fissionable materials, it would not include tritium, an element used to amplify the explosive power of a nuclear weapon. Tritium is a radioactive isotope of hydrogen that has a half-life of 12 years. Were it to be included in an FMT, the decaying tritium in existing stocks could not be replaced, in effect limiting the weapon’s destructive power. Other materials, such as depleted uranium, neptunium, natural uranium, plutonium 240 and 242, americium, curium and californium, though not fissionable, are used in weapons programs.

In 1995, informal consultations amongst CD governments produced the Shannon Mandate (named after Ambassador Gerald E. Shannon of Canada), which calls for an Ad Hoc Committee on Fissile Material Cut-Off (FMCT) where all issues (including existing stocks) can be raised. The committee did not get off the ground, yet the Shannon Mandate remains the base for future negotiations.

On 19 July 2004, the US declared that their long-awaited policy review on the Fissile Material Cut-Off Treaty (FMCT) revealed that “realistic, effective verification of an FMCT is not achievable.” The exclusion of verification elements from the negotiation of an FMCT is contradictory to the agreed upon mandate contained from 1994, often referred to as the Shannon Mandate.

(1)

Russia: Russia ceased producing weapons-useable plutonium in October 1994.

In announcing their support of the A5 Proposal in August, 2003, Russia agreed to start negotiations on an FMCT. In their general statement to the 58th session of the General Assembly First Committee, Russia regarded the start of negotiations on an FMCT as “another logical step in the area of nuclear non-proliferation and disarmament.”(2)

UK: The UK has observed a moratorium on fissile material production since 18 April 1995.

At the 59th session of the General Assembly First Committee, the UK was the only Member State

(with the exception of Israel, a non-NPT State party) to abstain from voting on the draft resolution on an FMCT. These abstentions, together with the US' lone vote against, broke the consensus that previous versions of this resolution had accrued.

France: France ceased producing weapons-usable plutonium in 1992 and highly-enriched uranium (HEU) in 1996; its fissile material production facilities in Marcoule and Pierrelatte have been closed.

China: China is the only NWS to have never implemented a fissile material production moratorium. In his closing statement to the 2003 Preparatory Committee meeting of the NPT, Ambassador Hu Xiaodi stated that, "an undefined and unverifiable 'moratorium' on production' will not resolve the question of production in the relevant countries but may well produce more problems and adversely affect FMCT negotiations."

After accepting the Shannon Mandate as well as the A5 Proposal (see text box at right), "China is now studying in a serious manner the proposal of negotiating a FMCT without verification," as stated by Ambassador Hu Xiaodi in a statement 5 October to the 59th session of the General Assembly First Committee.⁽³⁾

STEP 4: NUCLEAR DISARMAMENT BODY IN THE CD

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.

US: Deputy Permanent Representative Sherwood McGinnis expressed the US's aversion to multi-lateral negotiations on nuclear disarmament in his closing statement to the 2003 session of the UN Disarmament Commission (UNDC). Mr. McGinnis attributed the failure of the UNDC to reach consensus on the lack of focus. He maintained that nuclear disarmament, as an item on the agenda, was too broad, which effectively stymied progress. It is logical, then, that the US would view nuclear disarmament as "too broad" a topic for the CD, a 66-member forum, as well.

Russia: Russia supports a subsidiary body on nuclear disarmament in the CD. In 2001, they proposed an agenda to the CD that would have established parallel subsidiary bodies on nuclear disarmament and the prevention of an arms race in outer space (PAROS). In August 2003, Russia

voiced support for the A5 Proposal, which would establish an Ad Hoc Committee to deal with nuclear disarmament. Russia also has supported plurilateral initiatives, such as a "standing consultative process" amongst the Permanent Members of the Security Council "in the area of nuclear disarmament and strategic stability."⁽⁴⁾

UK: While the UK prefers a bilateral framework for nuclear disarmament, the UK has accepted the A5 Proposal.

France: France has not publicly voiced support or opposition to the A5 Proposal or the creation of a subsidiary body on nuclear disarmament in the CD.

THE A5 PROPOSAL

The most likely agenda to be adopted in the CD comes from the five ambassadors from Belgium, Algeria, Chile, Colombia and Sweden in January, 2003. Now simply referred to as the "A5 proposal," the agenda would include the establishment of four ad-hoc committees on nuclear disarmament, fissile materials, the prevention of an arms race in outer space and negative security assurances. It would also appoint three Special Coordinators for new types of WMD including radiological weapons, a comprehensive programme of disarmament and transparency in armaments.

The A5 enjoys broad, though not consensus support. Nonetheless, an increasing number of delegations are viewing the A5 as the best basis for a program of work, one that is susceptible to change and evolution.

China: Previously, China linked their support for the establishment of a nuclear disarmament subsidiary body in the CD with the parallel establishment of subsidiary bodies to deal with PAROS and FMCT. In August 2003, China “de-linked” these issues and voiced support for the A5 Proposal.

The website of the People’s Liberation Army states that, “It is necessary at all stages of the arms control and disarmament process to ensure all nations from sustaining damage to their security. All nations, big or small, have the right to join in discussions and decisions on arms control and disarmament on an equal basis.” (5)

STEP 5:

IRREVERSIBILITY

The principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures.

US: The 2002 Nuclear Posture Review (NPR) calls for the deactivation of 50 MX missiles; the silos, missile stages and warheads of these “deactivated” missiles will be retained. A February 2004 report from the Defense Science Board recommended re-deploying MX missiles armed with conventional warheads. (6) In addition, 4 US Trident submarines will be converted to carry conventional, rather than nuclear weapons. At any time, the US can re-convert these submarines to be nuclear-capable. (7)

The 2002 Strategic Offensive Reductions Treaty (Moscow Treaty) between the US and Russia does not contain any provision for the destruction of delivery systems, nor does it require the dismantlement of a single warhead; “cuts” under the Moscow Treaty store, rather than eliminate, warheads, which could be re-deployed in the future.

Russia: As the focus of strategic weapons reductions in the Russian nuclear arsenal, the Moscow Treaty remains insufficient, especially in the context of ensuring irreversible disarmament. Under

this treaty, no delivery systems are destroyed and warheads are stored, not eliminated. The treaty also lacks an indicative timetable and expires the day the requirements are to be met.

The reductions in the Russian arsenal will in effect be more irreversible than those made in the US arsenal. Since the Russian Federation lacks the resources to modernize its delivery systems, it will fulfill its reduction obligations by eliminating old types of intercontinental and submarine-launched ballistic missiles. Destroying delivery systems will enhance the irreversibility of the Moscow Treaty, at least on the Russian side.

UK: The last Chevaline warhead was dismantled in 2002 in an irreversible manner, thereby making the Polaris system obsolete. (8)

France: The steps taken by France, including the dismantlement of its testing facilities in the Pacific and

the withdrawal of the Hades system were irreversible measures. However, no further measures have been taken since these acts in the late 1990s.

China: China’s statements in international disarmament fora affirm their support for the principle of irreversibility. However, due to the lack of public information about China’s nuclear arsenal, steps toward irreversible disarmament cannot be ascertained.

STEP 6: TOTAL 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.

US: The Bush administration has requested \$4 million for the Department of Energy (DoE) to study the so-called nuclear bunker buster, a nuclear warhead to penetrate deeper underground before exploding. The Air Force also requested \$4.5 million to help conduct the study. (9)

“There is a nuclear safety and reliability reason to maintain the right to re-deploy.”
- US INFORMATIONAL PAPER
SUBMITTED TO THE 2003
PREPARATORY COMMITTEE OF THE
NPT

While the US Congress rejected a \$27.6 million dollar request in the FY2005 budget for the Robust Nuclear Earth Penetrator, the Bush administration continues to pursue the funds for a program some view as “essential, prudent, and necessary.” (10) \$8.5 million was requested for FY2006.

The Bush administration envisions a \$125 million budget over the next five years to construct a Modern Pit Facility (MPF) to produce new plutonium cores, or pits, of nuclear weapons.

Under the Moscow Treaty, the rate of reduction is slower than under the Strategic Arms Reduction Treaty (START) process, which would have obliged each country to reduce their strategic arsenals to 1700-2200 by 2007. SORT provides for the same reductions by 2012. The abandonment of START, which provided for quicker and irreversible reductions, runs contrary to an “unequivocal undertaking” to eliminate nuclear arsenals.

Russia: Despite deep cut-backs, Russia maintains a considerable nuclear arsenal. Under START II, Russia had agreed to dismantle the multiple independently targetable re-entry vehicles (MIRV) from its nuclear missiles, but has now decided to retain SS-18s and SS-19s with multiple warheads until at least 2016. President Putin has said the SS-19s could be deployed until 2030.

In December, 2003, after a two-year break, Russia deployed new Topol-M missiles, which are probably the missiles that were recently equipped with unprecedented Maneuverable Re-Entry Vehicles (MARV) to counter US ballistic missile defenses.

In his 17 November 2004 address to the meeting of military commanders held in Moscow, President Putin announced that the Russian armed forces will soon receive a unique “new nuclear missile system,” which many believe is

the Bulava sea-launched ballistic missile, currently in development. (11) Russia intends on testing this new SSBN in summer, 2005. (12)

UK: Since dismantling the last Chevaline warhead in 2002, the UK has not undertaken any further cuts to their arsenal. UK intends to maintain “a minimum nuclear deterrent,” a policy stated in the Strategic Defence Review (1998) and reaffirmed in several other documents, including the SDR A New Chapter (2002) and a December, 2003 Defence White Paper, “Delivering Security in a Changing World.”

The next Parliament will debate replacing the Trident, their remaining nuclear weapon system. In the meanwhile, the UK Atomic Weapons Establishment (AWE) is continuing work “to ensure that Trident could remain an effective deterrent for up to 30 years,” (13) thereby promising the “continuing role of nuclear weapons as the ultimate guarantor of UK’s national security.” (14)

France: France declares that its Triomphant and Super Étendard meets “minimum sufficiency” and has no plans to reduce further.

“The continuing risk from the proliferation of nuclear weapons, and the certainty that a number of other countries will retain substantial nuclear arsenals, mean that our minimum nuclear deterrent capability, currently represented by Trident, is likely to remain a necessary element of our security.”

- DELIVERING SECURITY IN A CHANGING WORLD: UK DEFENCE WHITE PAPER, 2003.

In addition, new French nuclear missile submarines continue to enter service. Newly purchased M51 missiles are equipped with a new warhead, the Tête Nucleaire Oceanique. Development of the air launched nuclear missile ASMP-A continues apace. This missile will carry the Tête Nucleaire Aeroportee, another new warhead. This increases France’s nuclear weapons capabilities, and, according to the French National Assembly, will assure France’s status as a NWS until 2040. (15)

China: China is developing new, solid-fueled ballistic missiles to replace the DF-4 (CSS-3) and the DF-5 (CSS-4). (16) A 2002 Pentagon report claimed that China may triple its ICBM arsenal by the end of the decade and may place multiple warheads on existing missiles (DF-5A). (17)

STEP 7: START II, START III, ABM PRESERVATION

The early entry-into-force and full implementation of START II and the conclusion of START III as soon as possible while preserving and strengthening the 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.

US: Although the Senate ratified START II in January of 1996 and the Duma conditionally ratified it in April 2000, the treaty never entered-into-force. The US announced its withdrawal from the ABM Treaty on 14 December 2001 in order to legally pursue the development of missile defense system. The withdrawal was effective as of 14 June 2002, and as a direct effect, Russia declared START to be null and void.

Russia: Moscow regarded the US's unilateral withdraw from the ABM treaty as an "erroneous decision" that "has not been determined by the search of a response to actual missile threats (but rather) is reflecting a certain approach, a unilateral one, which runs contrary to the security interests of other countries and international security in general."⁽¹⁸⁾

On 13 June 2002, the day after the US's withdrawal, Russia announced that START II was null and void.

UK: The UK did not protest the US's withdrawal from the ABM Treaty. A spokesperson for Prime Minister Tony Blair said that "What is important is the maintenance of strategic stability rather than a particular framework to achieve that." The December 2003 Defence White Paper

states that, "missile defence technology is a growing area of interest following the ending of the Anti Ballistic Missile Treaty," signifying the UK's probable participation in the development of missile defenses with the United States, which is already using the British facilities at Menwith Hill and Fylingdales for missile defense purposes.

France: France vocalized only modest apprehension to the US's withdrawal from the ABM Treaty, stating that France hoped that a "binding international instrument" would replace it.

China: Despite its vocal opposition to the US's intent to withdraw from the ABM Treaty, once the withdrawal was final, China quieted its objections. China remains an adamant, leading supporter of a PAROS mandate, which would ban all weapons from outer space.

OFF TO THE ARMS RACE

When the US began talking about withdrawing from the ABM Treaty, critics held that such a move would re-trigger a new arms race.

The US' plans for a missile defense system are proceeding apace; in fiscal year 2005, the US budget for missile defense surpassed \$10 billion.

In 2004, Russia developed a new warhead that they boasted could evade any missile defense. According to First Deputy Chief of Staff Colonel-General Yuri Baluyevsky, the warhead is "part of our unilateral response to the creation or future creation of a missile defense system by any state or bloc of states."

Deployment of this system is expected in 2006. (Textbox7)

STEP 8: TRILATERAL INITIATIVE

The completion and implementation of the Trilateral Initiative between the United States of America, the Russian Federation, and the International Atomic

Energy Agency (IAEA)

US: In September 2002, the three parties to the Trilateral Initiative announced that the preparatory work was nearly complete. However, a legally binding agreement with the IAEA has not yet been finalized.

The US has not agreed to allow for verification of its stored fissile material, thereby holding up verification mechanisms in Russia (see Russia below), though US\$2.3 billion has been budgeted for verification under the Trilateral Initiative.

STEP 9: STEPS

The US is also concerned with liability protection for its nationals working on converting fuel in Russia- a legal dispute that is stalling implementation of the Trilateral Initiative.

There also exists a Congressional mandate which stipulates that US plutonium disposition must proceed on a parallel track with plutonium disposition in Russia- the transparency and accountability of which is still in question.

Questions also remain over whether the IAEA is expected to continue to monitor the material even after it has been converted to civil use. (20)

Russia: Russia agreed to allow for verification of fissile material stored at its Mayak facility, so long as the US agrees to a similar arrangement for the verification of its stored fissile material.

Russia has not yet satisfied some of the transparency, accountability and legal concerns of the United States- (see US, above) unresolved questions which continue to delay implementation of the Trilateral Initiative.

UK: In the Chairmen's summaries from the Preparatory Committees, States parties stressed the importance of arrangements by all Nuclear Weapon States to place excess nuclear weapons' fissile material under IAEA verification as well as to provide for this material's disposition. The UK has not made any such arrangements with the IAEA. The UK has, however, begun a national inventory of its fissile material.

France: France has not yet declared any fissile materials to be in excess of its weapons program.

China: China has not yet declared any fissile materials to be in excess of its weapons program. It is notable that China was the first Nuclear Weapon State to ratify the Additional Protocol with the IAEA, on 28 March 2002.

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.

a) further efforts by Nuclear Weapon States to reduce their nuclear arsenals unilaterally

US: The Nuclear Posture Review calls for the elimination of MX ICBMs, 4 Trident SSBNs from strategic service, and downloading weapons from Trident SLBMs, Minuteman III ICBMs, and B-52H and B-2 bombers. By 2007, there will be 3,800 operationally deployed warheads, and 1700-2200 by 2012. These unilateral cuts were planned for before the signing of the Moscow Treaty; however, they are now included as part of the reductions called for in that treaty.

*"We will continue... to build up the armed forces in general and its nuclear component... These are projects which do not exist elsewhere and which other nuclear states will not have in the next few years."
- Russian President Vladimir Putin (21)*

These cuts however are not irreversible (see Step 5, page 5). The Defense Department's program, "Operationally Responsive Spacelift," calls for using the retired Minuteman III rockets for a variety of new missions, including first-strike nuclear assaults. (22)

Russia: Russian defense officials announced a new plan for future strategic forces which aims to reduce the number of deployed strategic warheads to 2,022 by 2015. These cuts are a combination of both unilateral decisions as well as obligations under the Moscow Treaty.

UK: In the 1990s, the UK reduced the nuclear arsenal to fewer than 200 weapons, downgraded its surface ships from nuclear capabilities, and dismantled all of its air-launched nuclear weapons. The Labour Government lowered the maximum number of warheads on its Trident submarines from 96 to 48. Trident II missiles were reduced from 65 to 58.

No further progress has been made. Foreign Office Minister Chris Mullen testified to the House of Commons on 8 March 2005 that, "the

continuing risk from the proliferation of nuclear weapons and the certainty that a number of other countries will retain substantial nuclear arsenals means that our minimum nuclear deterrent capability, currently represented by Trident, is likely to remain a necessary element of our security for the foreseeable future... When we are satisfied that sufficient progress has been made to allow us to include British nuclear weapons in any negotiations without endangering our security interests, we shall do so.”⁽²³⁾

France: There have been no further unilateral cuts since those of 1996-1998 (see pages 36-37).

China: China repeatedly insists that those countries having the largest nuclear arsenals “bear a special and primary responsibility toward nuclear disarmament, and that they should take the lead in drastically reducing their nuclear arsenals and destroy the reduced nuclear weapons.”⁽²⁴⁾

b) Increased transparency by the Nuclear Weapon States with regard to their 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.

US: The Moscow Treaty does not incorporate any warhead reduction transparency measures.

There are, however, other bilateral technical agreements in effect, such as the Warhead Safety and Security Exchange Agreement and the Highly Enriched Uranium Purchase Agreement, both of which contain stipulations for data exchanges and other transparency measures.⁽²⁵⁾

Russia: It has been reported that, during negotiations of the Moscow Treaty, In the negotiation of

the Moscow Treaty, the US offered some warhead transparency measures that were rejected by Russia. ⁽²⁶⁾

In late 2004, Russia announced a new nuclear posture review, outlining the plan for future strategic forces based on unilateral policy and implementation of the Moscow Treaty. ⁽²⁷⁾

UK: The UK is undergoing significant work in the field of verification (see Step 13, page 12), an important step in the promotion of transparency. The UK has also submitted informal reports (see Step 12, page 12) to the Preparatory Committee meetings, another important transparency measure. The Strategic Defence Review states that a component of Britain’s nuclear deterrent includes “being much more open about Trident and other nuclear issues.”

France: The activities that take place on France’s former testing grounds in the Pacific, closed since 1996, are fully transparent. There is also a significant amount of public information in regard to France’s nuclear capabilities.

The nuclear research undertaken at the facilities at Bordeaux is highly secretive, however, and not subject to any measures of cooperation or transparency.

China: There is very little public information released about China’s nuclear arsenal, arguably making it the most opaque Nuclear Weapon State.

If nuclear forces of both sides are maintained at lower levels of combat readiness, there is no need to have large quantities of warheads and delivery vehicles, which are maintained out of the fear that a large portion of the arsenal could be destroyed in a preventive surprise strike by the adversary.
- Russian Academy of Sciences
⁽²⁸⁾

c) 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.

US: In January 2003, the US completed dismantling of all non-strategic nuclear weapons under the 1991 Presidential Nuclear Initiative.

The US maintains that a legal agreement on tactical weapons is “not possible” because tactical reductions are difficult to verify.⁽²⁷⁾

Russia: No further reductions in non-strategic nuclear weapons have been made since the Presidential Initiatives of 1991. The principles contained therein directed the elimination of more than 30% of nuclear munitions of tactical sea-launched missiles. All tactical nuclear munitions previously deployed outside of Russia have been brought back to Russian territory and are being eliminated.

In addition, the production of nuclear munitions for tactical ground-launched missiles, nuclear artillery shells and nuclear mines has been halted, and the destruction of nuclear re-entry vehicles for tactical missiles and nuclear artillery shells, as well as nuclear mines, continues.

UK: The UK has had no tactical nuclear capabilities since 1999.

France: France maintains 24 air-launched tactical nuclear weapons (the Super Étendard).

China: The only tactical system remaining is the DF-3, which is being retired. *Chinese Defence Today* claims that the DF-11 and DF-15, both single-stage, solid-fuel missiles “are modern and capable compared to similar systems developed by US and Russia (and)...indicate China's capability to launch a high-tech, theatre-operation-style attack to any target in the region.”⁽²⁸⁾

d) Concrete agreed measures to further reduce the operational status of nuclear weapons systems

US: While the Moscow Treaty remains an insufficient disarmament measure (see Step 5, page 5), it could be viewed as the most significant de-alerting measure in the history of nuclear weapons. It does not require the destruction of a single warhead, but it does require the US and Russia to remove thousands of strategic war-

heads from operation deployment by 2012, thus effectively reducing the number of strategic warheads on hair-trigger alert to 880.⁽²⁹⁾

Russia: Ballistic missiles have been on “zero” launch mission since 1997.

Russia has agreements with the US (May 1994), UK (February 1994), China (September 1994) de-targeting their missiles.

Russia retains the technical capability to launch their missiles within minutes.⁽³⁰⁾

UK: Only one Trident submarine is on patrol at any time, with de-targeted missiles and a readiness of several days.⁽³¹⁾

France: Reportedly, France has reduced the readiness of its arsenal from minutes to days. No weapons have been targeted since 1997.⁽³²⁾

China: The launch prepare time for the DF-31 is less than 15 minutes; the DF-5 ICBM requires 120 min (if mobile), or 45-60 min (in silo).⁽³³⁾

e) A diminished 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.

US: The NPR, cornerstone of US nuclear policy, refers to nuclear weapons as “indispensable” to US national security.

Many critics also fear that the development of low-yield bunker busters, as advocated by many senior-level officials in the Bush administration, would dramatically lower the threshold for nuclear use.

Russia: Russia maintains the central role of deterrence in its national security strategy, as articulated in the National Security Concept, first developed by Boris Yeltsin in 1997 and updated and reaffirmed by Vladimir Putin in 2000.

“The Great Powers who have nuclear weapons are not in the least thinking of abandoning them.”
- French Minister of Defense Michèle Alliot-Marie

The 2000 reaffirmation also lowered the threshold for nuclear weapon use. In 1997, the policy stated that nuclear weapons could be used only in “a threat to the very existence of the Russian Federation as an independent sovereign state.” In 2000, the “very existence” language was removed, thereby allowing for nuclear weapon use in any conflict in which “all other measures...have been exhausted or proven ineffective.”

The cornerstone of Russian nuclear policy focuses on defending the country from a nuclear attack by NATO.

UK: The White Paper released in December 2003 states that, “(t)he continuing risk from the proliferation of nuclear weapons, and the certainty that a number of other countries will retain substantial nuclear arsenals, mean that our minimum nuclear deterrent capability, currently represented by Trident, is likely to remain a necessary element of our security.” (34)

France: Nuclear deterrence remains a central component of French national defense, as outlined in the 1994 White Paper on Defense, Appended report 2003-2008 Military programme, “Arms control, disarmament, and non-proliferation: French policy.” (35)

China: China views its nuclear arsenal- the smallest of the 5 recognized Nuclear Weapon States- as an important element in deterrence, although it repeatedly voices support for global elimination of nuclear weapons, as well as support for codification of Negative Security Assurances for Non-Nuclear Weapon States.

f) The engagement as soon as appropriate of all the Nuclear Weapon States in the process leading to the total elimination of their nuclear weapons

There has been no attempt- by any of the five NWS- to engage one another in the process lead-

ing to the total elimination of their nuclear weapons.

STEP 10: FISSILE MATERIALS UNDER IAEA TO REMAIN PERMANENTLY OUTSIDE OF MILITARY PROGRAMS

Arrangements by all Nuclear Weapon States to place, as soon as practicable, fissile materials designated by each of them as no longer required for military purposes under IAEA or other relevant international verification and arrangements for the disposition of such material for peaceful purposes, to ensure that such material remains permanently outside of military programs.

US: The United States had downblended about 50 metric tons of its declared excess HEU stock of about 170 metric tons. (38)

Russia: By the end of 2003, Russia had downblended 200 metric tons of military HEU into LEU to be used as fuel in nuclear power reac-

“What I am affirming before you is that France, while remaining faithful to its concept of non-use, has and will conserve the means of maintaining the credibility of its deterrence in face of all new threats...”
- President Jacques Chirac, 8 June 2001

tors. (37)

UK: At the 2004 PrepCom, the UK announced that it has placed fissile material no longer required for defence purposes under international safeguards. It further declared that all enrichment and reprocessing facilities are now liable to international inspection, and that the UK has begun national historical accounting for fissile material produced. (38)

France: France did not declare any excess fissile materials.

China: China did not declare any excess fissile materials.

**STEP II: REAFFIRM ULTIMATE
OBJECTIVE OF GENERAL AND
COMPLETE DISARMAMENT
UNDER EFFECTIVE
INTERNATIONAL CONTROL**

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

US: The US military budget constitutes nearly half of global military expenditures. In 2003, the US spent \$417.4 billion, 47% of the world share.⁽³⁹⁾

The US is party to the Biological Weapons Convention (BWC), though it did not support a Protocol to the BWC at the last Review Conference.

The US is party to the Chemical Weapons Convention (CWC) though not to the Ottawa (APM) Convention to prohibit anti-personnel landmines.

Russia: Russia is the world's 11th top military spender and the lowest of the nuclear 5; 2003 expenditures are estimated at \$13 billion.

Russia is party to the BWC, CWC and the Ottawa Convention.

UK: In 2003, the UK spent \$37.1 billion on military expenditures, ranking third highest in the world.

France: France is the world's fourth largest military spender with \$35 billion spent in 2003.

China: China spent an estimate of \$32.8 billion on military matters in 2003, ranking fifth in the world.

STEP 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.

US: At the 2002 PrepCom, the US strongly objected to the inclusion of reporting in special time set aside for disarmament matters. Nevertheless, they continue to make general statements and offer "information papers" that could be viewed as informal reports.

Russia: Russia has not submitted an official report, though it refers to its statements as a "report".

UK: The UK has not submitted an official report, though it referred to the statement that it made during special time devoted to disarmament as a "report."

France: France joined the US in objecting to the inclusion of reporting at the first PrepCom in 2002, though it has signaled that it will submit a formal report at the 2005 Review Conference.

China: At the 2002 PrepCom, China agreed that "specifics, format and frequency" should be determined by the individual states. Its statements and working papers, outlining China's nuclear policy, can be considered an informal report.

**STEP 13: DEVELOPMENT OF
VERIFICATION CAPABILITIES**

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.

US: It is believed that the US is undertaking verification research at the Sandia National Laboratory, including the Cooperative Monitoring Center, and at the Lawrence Livermore Laboratory, but this research is classified and not publicly available.

The Verification and Control Technologies program at Sandia National Laboratory researches

and develops systems and technologies to help verify agreements for transparency and arms limitations and assist non-proliferation. At Los Alamos National Laboratory, there is also a Non-proliferation and Assessments program.

There are no verification measures called for under the Moscow Treaty.

Russia: There are no verification measures called for under the Moscow Treaty, partly due to Russian objections over warhead production and storage facilities inspections. US proposals for a data exchange mechanism under START III were rejected outright.

UK: At the Atomic Weapons Establishment laboratories at Aldermaston, the UK is conducting a program to enhance the efficacy of various warhead authentication work. They submitted a working paper on their progress (NPT/CONF.2005/PC.II/WP.1) to the 2003 PrepCom and will submit a full report at the 2005 conference.

The UK's paper on verification measures was based on recent studies conducted by the Ministry of Defence on the Chevaline, WE177 and Trident systems (the first two of which have been decommissioned). The study is based on the assumption that there will be "future arrangements seeking to reduce and ultimately eliminate stockpiles of nuclear weapons," and that capabilities to verify these arrangements will be necessary. The study has focused so far on warhead authentication, i.e. "establishing that an item declared to be a nuclear warhead or component from a warhead is consistent with those declarations." It indicates that such authentication is technically possible. Further work will cover the more difficult tasks of verifying warhead dismantlement, fissile material and its disposition, and the ongoing monitoring of nuclear complexes.

At the 2005 Review Conference, the UK will present on the range, technologies and approaches researched over the past five years. ⁽⁴⁰⁾

France: The French have not made public any research on verification programs that they might be undertaking. As the French have been dis-

mantling the missile-based leg of their arsenal, just as the British are dismantling the Chevaline, they could be using this opportunity as the British are using theirs. However, no public information on this is available.

China: In 1999, the three main weapons laboratories in the US (Livermore, Los Alamos and Sandia) established an unofficial program of scientific interactions with China's nuclear weapon laboratories in support of verification.

There remains no public information on China's verification measures.

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