Implementation of the Treaty on the Non-Proliferation of Nuclear Weapons: disarmament

Working paper submitted by the United States of America

In his April 2009 speech in Prague, President Obama highlighted the nuclear dangers of the twenty-first century and declared that, to overcome these threats, the United States reaffirms our enduring commitment “to seek the peace and security of a world without nuclear weapons”. Speaking in Seoul in March 2012, the President reaffirmed United States support for this goal and highlighted the near-term, practical steps that the United States is taking to move in that direction. These include reducing the role of nuclear weapons in our national security strategy, further reducing our nuclear stockpile, implementing the Treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New Strategic Arms Reduction Treaty), pursuing United States ratification of the Comprehensive Nuclear-Test-Ban Treaty, and seeking a treaty that verifiably ends the production of fissile materials for use in nuclear weapons or other nuclear explosive devices. He also called for strengthening the Treaty on the Non-Proliferation of Nuclear Weapons as a basis for cooperation.

At the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, parties pulled together to reaffirm their support for the Treaty as a vital instrument of global security and their own security. Essential to that reaffirmation was the parties’ agreement on a forward-looking action plan that includes steps towards the goal of nuclear disarmament. The United States is committed to working with all other countries to implement the action plan effectively. By supporting the action plan, the United States reaffirms our commitment to the principles of irreversibility, verifiability and transparency as necessary building blocks of nuclear disarmament.

As summarized in the present paper, the United States is committed to leading by example by working towards fulfilling the nuclear and non-nuclear disarmament obligations under article VI of the Nuclear Non-Proliferation Treaty and the commitments set out in the 2010 Treaty action plan.
Nuclear arms reductions

The United States has been reducing our inventory of nuclear weapons for more than four decades. By September 2009, the United States nuclear stockpile was reduced by 84 per cent from its peak in 1967. In absolute numbers, the nuclear warheads in the United States stockpile declined from 31,255 in 1967 to 5,113 on 30 September 2009. During this period, the United States unilaterally reduced our non-strategic nuclear warheads by 90 per cent, dismantling more than 8,700 of them since 1994.

The New Strategic Arms Reduction Treaty, which entered into force on 5 February 2011, is a further demonstration of the commitment of the United States to work towards President Obama’s ultimate goal of a world without nuclear weapons. When the Treaty is fully implemented, the strategic nuclear forces of the United States and the Russian Federation will reach their lowest level since the 1950s. Under the New Strategic Arms Reduction Treaty, the United States and the Russian Federation must limit their deployed strategic warheads to no more than 1,550 by February 2018. As at 1 March 2012, the United States had 1,737 warheads on deployed intercontinental ballistic missiles, deployed submarine-launched ballistic missiles and nuclear warheads counted for deployed heavy bombers. In addition, we had 812 deployed intercontinental ballistic missiles, submarine-launched ballistic missiles and heavy bombers, and 1,040 total deployed and non-deployed intercontinental ballistic missiles launchers, submarine-launched ballistic missiles launchers and heavy bombers. The New Strategic Arms Reduction Treaty will remain in force for 10 years, until 5 February 2021. When President Obama signed the New Strategic Arms Reduction Treaty on 8 April 2010, he said that the United States would pursue a future agreement with the Russian Federation for broad reductions in all categories of nuclear weapons — strategic, non-strategic, deployed and non-deployed. To this end, the United States seeks to promote strategic stability and increase transparency on a reciprocal basis with the Russian Federation by means of ongoing dialogue in the Arms Control and International Security Working Group of the Bilateral Presidential Commission.

The 2010 United States Nuclear Posture Review outlined the United States Administration’s approach to reducing nuclear dangers and pursuing the goal of a world without nuclear weapons. It makes clear the view of the United States that the fundamental role of nuclear weapons is to deter the use of nuclear weapons. Accordingly, to reflect the security environment of the twenty-first century, the Review announced that the United States will not use or threaten to use nuclear weapons against non-nuclear-weapon States that are party to the Nuclear Non-Proliferation Treaty and in compliance with their nuclear non-proliferation obligations. In making this strengthened assurance, the Review affirmed that any State eligible for the assurance that used chemical or biological weapons against the United States or its allies and partners would face the prospect of a devastating conventional military response. The Review also has ruled out the development of new United States nuclear warheads and new missions and capabilities for existing warheads.

As President Obama repeated in Seoul in March, the goal of a world free of nuclear weapons will not be reached quickly. It will take patience and persistence and must start with concrete steps. The President noted that as long as nuclear weapons exist, the United States will maintain a safe, secure and effective arsenal,
both to deter potential adversaries and to assure United States allies and other security partners that they can count on the security commitments undertaken by the United States. The President also said in Seoul that, after the New Strategic Arms Reduction Treaty is implemented, we will still have more nuclear weapons than we need. The United States is now conducting the follow-on analysis called for in the 2010 Nuclear Posture Review to set goals for future nuclear reductions in line with strategic requirements.

Verification, transparency and confidence-building

The United States strongly supports the principle that compliance with arms control and disarmament agreements must be monitored and diligently enforced. Transparency is essential to building trust and confidence among States in order to create the necessary foundation for further disarmament.

The rigorous and extensive verification provisions of the New Strategic Arms Reduction Treaty testify to the importance of transparency and effective verification in providing predictability and stability in international relations. The Treaty’s first year saw vigorous implementation by both parties. Highlights included: exchanging information on numbers, locations and technical characteristics of weapons systems and facilities that are subject to the Treaty; completing the annual quota of 18 on-site inspections by each side; completing agreed exhibitions of strategic offensive arms as required under the Treaty, including the United States exhibitions of the B-1B and B-2A heavy bombers, and the Russian exhibition of the RS-24 intercontinental ballistic missiles and its associated launcher; and convening the Treaty’s Bilateral Consultative Commission for three sessions to discuss Treaty implementation issues. In addition, through their respective nuclear risk reduction centres, the United States and the Russian Federation have already exchanged more than 2,000 notifications relating to United States and Russian strategic forces covered by the Treaty. These included notifications relating to United States and Russian eliminations of strategic forces. Our experience is already demonstrating that the Treaty’s verification regime works and is setting an important precedent for future agreements with the Russian Federation.

Unilateral transparency measures are also important. Examples include the United States release in 2010 of the United States nuclear-weapon stockpile figures and articulation in the 2010 Nuclear Posture Review of the reduced role of nuclear weapons in the United States national strategy. In addition, the United States nuclear community is exploring the technical steps needed to ensure irreversibility, verifiability and transparency as essential building blocks of nuclear disarmament, and is considering ways to collaborate with other parties to the Nuclear Non-Proliferation Treaty in this undertaking. The United States is laying the groundwork for future transparency and verification initiatives, such as managing access at sensitive sites and sharing potentially sensitive verification measurements. Research includes the development of advanced nuclear detector materials, the advancement of chain-of-custody capabilities and the completion of seismic source physics and noble gas migration experiments to improve nuclear testing detection capabilities.

Since the 2010 Review Conference, the five nuclear-weapon States under the Nuclear Non-Proliferation Treaty (also known as the “P-5”) have met regularly to discuss their commitments under the Conference’s action plan and to review their
progress towards fulfilling them. Following the 2009 London and 2011 Paris P-5 conferences, the United States will host a P-5 conference in Washington later this year. The P-5 process now under way is expanding the long-standing United States-Russian Federation nuclear disarmament dialogue into an ongoing process of P-5 engagement on issues related to nuclear disarmament, consistent with our obligations under article VI of the Nuclear Non-Proliferation Treaty and our commitments under the 2010 Treaty action plan. Discussions have covered verification, transparency, confidence-building and non-proliferation, which are important for establishing a firm foundation for further disarmament efforts. At the Paris Conference, the P-5 reaffirmed their unconditional support for the Treaty, reaffirmed the recommendations set out in the action plan, stressed the need to strengthen International Atomic Energy Agency (IAEA) safeguards and worked together in pursuit of their shared goal of nuclear disarmament under article VI.

**Nuclear testing**

In his Prague speech, President Obama pledged that his Administration would pursue United States ratification of the Comprehensive Nuclear-Test-Ban Treaty. The Administration has been engaging with the United States Senate on the Treaty, laying the groundwork for positive Senate reconsideration of the Treaty. While preparing for United States ratification, the Administration has encouraged all States that have yet to do so to sign and ratify the Treaty and to work for its early entry into force. In support of this objective, the United States co-sponsored a 2011 General Assembly resolution urging the entry into force of the Treaty.

The last United States test of a nuclear explosive device was carried out in September 1992. Since then, the United States has maintained a voluntary moratorium on nuclear explosive testing. The United States remains committed to this moratorium and calls upon all States to refrain from nuclear explosive testing. The 2010 Nuclear Posture Review reiterated that the United States no longer requires nuclear explosive testing to ensure the safety and effectiveness of our remaining nuclear weapons, relying instead on our long-standing Stockpile Stewardship Programme.

In addition to enhanced United States national technical means to monitor for nuclear explosions, the United States has continued to support the completion of the monitoring and verification regime under the Comprehensive Nuclear-Test-Ban Treaty, including the International Monitoring System supported by the International Data Centre and the Treaty’s on-site inspection elements. The United States provided technical expertise to refine the use of Treaty-specified on-site inspection technologies in 2011, and we are currently working with the Provisional Technical Secretariat of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization and with international partners to prepare for an on-site inspection integrated field exercise in 2014. In 2011, the United States also announced an agreement with the Provisional Technical Secretariat to provide up to $25.5 million to underwrite the reconstruction of the hydroacoustic monitoring station on Crozet Island in the Indian Ocean, and voluntary contributions in kind of $8.9 million for projects to expedite and enhance various elements of the monitoring and verification regime under the Treaty.
Fissile material

For many years, the United States has been unilaterally dismantling thousands of nuclear warheads and taking other measures to reduce our nuclear arsenal, in addition to fulfilling requirements set out in international agreements. Meanwhile, the United States has not produced highly enriched uranium for weapons since 1964 or produced plutonium for weapons since 1988.

The United States has worked with the Russian Federation for a number of years to eliminate excess stocks of fissile material that could be used in nuclear warheads. In 1994, 174 metric tons of highly enriched uranium was removed from the weapons programme. In 2005, the United States announced that an additional 200 metric tons would be removed, which would be enough for more than 11,000 nuclear weapons. Of that amount, 160 metric tons was designated for use as naval reactor fuel, 20 metric tons was designated for research and space reactor requirements, and 20 metric tons was designated for down-blending to low-enriched uranium. In an arrangement with the Russian Federation, 442.5 metric tons of Russian highly enriched uranium, which is equivalent to material for thousands of additional nuclear weapons, was down-blended for use as commercial reactor fuel.

In addition, more than 60 metric tons of plutonium was removed from United States defence stocks, of which 34 metric tons was included in the Agreement between the Government of the United States of America and the Government of the Russian Federation concerning the Management and Disposition of Plutonium Designated as No Longer Required for Defence Purposes and Related Cooperation. In July 2011, the United States and the Russian Federation brought the Agreement and the 2006 and 2010 Protocols thereto into force. The amended Agreement commits each country to dispose of at least 34 metric tons of excess weapon-grade plutonium, enough in total for approximately 17,000 nuclear weapons. Disposition will be subject to IAEA monitoring and will transform the material into spent fuel, effectively preventing its use in nuclear weapons. The United States remains certain that a verifiable end to the production of fissile material for use in nuclear weapons is an essential and the next logical multilateral step towards disarmament. We regret the lack of progress in the Conference on Disarmament on negotiating a fissile material cut-off treaty, and, as President Obama said in Seoul in March 2012, we will continue with our partners to look for a productive path forward on this critical treaty.

Non-nuclear disarmament and arms control efforts

Early and significant demonstrations of United States commitment to the goal of general and complete disarmament were the 1969 United States decision to unilaterally dismantle our biological weapons programme, and our leadership role in negotiating the 1975 Biological and Toxin Weapons Convention. Over the years, we have also contributed to strengthening the Convention and have led efforts to address changing threats through the Convention. Most recently, for example, Secretary of State Hillary Clinton unveiled a new United States Bio-Transparency and Openness Initiative at the 2011 Review Conference of the Parties to the Convention.

The United States remains committed to the Chemical Weapons Convention. We continue to make every effort to accelerate our destruction programme in a manner consistent with the national safety and environmental standards set out in
the Convention. We also continue to update the Organization for the Prohibition of Chemical Weapons and States parties to the Convention on United States destruction efforts. To date, we have destroyed approximately 90 per cent of our chemical weapons stockpile. We have also provided financial and technical aid to other Convention States parties for the elimination of their declared chemical weapons stockpiles.

The United States has continued to take a lead role within the international community in conventional arms control efforts, which have played an important supporting role to nuclear disarmament efforts. For example, the United States is a participating State or State party to Vienna Document 2011 of the Negotiations on Confidence- and Security-Building Measures, the Treaty on Open Skies, and the Treaty on Conventional Armed Forces in Europe, which constitute the three conventional arms control pillars in Europe. These regimes allow for increased confidence, transparency and verifiable equipment limitations. Strengthening and maintaining conventional arms control in Europe is a critical effort that can facilitate future nuclear accords and contribute to broader article VI commitments. The United States continues to actively engage with North Atlantic Treaty Organization Allies, the Russian Federation, and other partners to determine current and future requirements in an effort to modernize the conventional arms control regime in Europe.

The United States has contributed to conventional weapons disarmament efforts in other ways as well. At the end of 2010, we ended all use of persistent landmines, both anti-personnel and anti-vehicle. We have continued our support for eliminating ageing, surplus, loosely secured or otherwise at-risk conventional weapons and munitions, and explosive remnants of war. Since 1993, we have provided more than $1.9 billion in aid in over 80 countries for conventional weapons destruction programmes, including clearance of landmines and unexploded munitions. Since 2003, we have cooperated with countries to destroy approximately 33,000 excess, loosely secured, illicitly held or otherwise at-risk man-portable air defence systems (MANPADS) in over 30 countries. We have also continued to participate in the Arms Trade Treaty process and to support the implementation of the Convention on Certain Conventional Weapons and the Protocols thereto.

The way ahead

The United States is making significant and far-reaching strides to implement article VI of the Nuclear Non-Proliferation Treaty, and United States actions are under way at home and with the other P-5 countries to put in place the building blocks for further progress. The implementation of President Obama’s Prague agenda and the 2010 Treaty action plan is well under way. Much progress has been achieved, yet much remains to be done.

The United States will continue to work towards fulfilling our obligations under article VI and our commitments under the 2010 Nuclear Non-Proliferation Treaty action plan. The United States will also continue to urge other parties to the Treaty to do the same. As article VI makes clear, all parties to the Treaty have a role to play in disarmament.