# BI-WEEKLY TREATY REVIEW

**01 June – 13 June 2011**

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## BIOLOGICAL WEAPONS CONVENTION (BWC)

### SIPRI Warns of Major Challenges to 1972 Biological Weapons Convention

*BioPrepWatch, 13 June 2011, www.bioprepwatch.com*

The Stockholm International Peace Research Institute recently declared that scientific and technological developments, particularly those occurring when chemical and biological sciences overlap, are becoming a major challenge to the BWC. *(238 words)* ***Click here for full text.***

## CHEMICAL WEAPONS CONVENTION (CWC)

### Two Major Utah Milestones in May: Last ONC Delivery for DCD; TOCDF Destroys Last Scheduled Munition

*U.S. Army Chemical Materials Agency, June 2011, www.cma.army.mil*

May will certainly be a memorable month, with both Deseret Chemical Depot (DCD) and the Tooele Chemical Agent Disposal Facility (TOCDF) accomplishing major milestones. *(689 words)* ***Click here for full text.***

### Russia Says Chemical Arms Destruction Effort to End in Late 2015

*Global Security Newswire, 03 June 2011; www.globalsecuritynewswire.org*

A top Russian lawmaker on Thursday announced the government had pushed back to the end of 2015 the date for completion of chemical weapons disarmament operations, RIA Novosti reported. *(224 words)* ***Click here for full text.***

## COMPREHENSIVE NUCLEAR TEST-BAN TREATY (CTBT)

### GPS Stations Can Detect Clandestine Nuclear Tests

*PHYSORG.com, 07 June 2011, www.physorg.com*

At the Comprehensive Nuclear Test-Ban Treaty Organization (CTBTO) meeting this week, American researchers are unveiling a new tool for detecting illegal nuclear explosions: the Earth's global positioning system (GPS). *(683 words)* ***Click here for full text.***

### Banning Nuclear Explosions: A Test-Ban Treaty Primer

*TIME: Battleland Blogs, 08 June 2011, battleland.blogs.time.com*

Battleland caught up with Tibor Tóth, the Hungarian head of the CTBTO, who offered a primer on the treaty. *(1,306 words)* ***Click here for full text.***

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## COMPREHENSIVE NUCLEAR TEST-BAN TREATY (CTBT) (CONT.)

### Statement of the United States to the CTBTO Preparatory Commission

*U.S. Department of State, 14 June 2011, www.state.gov*
*Remarks by Rose Gottemoeller, Assistant Secretary, Bureau of Arms Control, Verification and Compliance in Vienna, Austria*
As the Administration engages the U.S. Senate the United States has increased its participation in all of the Preparatory Commission's activities in preparation for the entry into force of the CTBT, especially with respect to the effective implementation of the Treaty's verification regime. *(1,458 words)* ***Click here for full text.***

## MISSILE TECHNOLOGY CONTROL REGIME (MTCR)

### U.S. Formally Asks Three Nuclear Export Control Regimes to Induct India as Full Member

*The Indian Express Online, 10 June 2011, www.indianexpress.com*
Last week, the United States formally approached three export control regimes, the Nuclear Suppliers Group (NSG), the Missile Technology Control Regime (MTCR) and the Australia Group, to induct India as a full member of these groups. *(487 words)* ***Click here for full text.***

## NUCLEAR NON-PROLIFERATION TREATY (NPT)

### Iran Kicks Off Second Nuclear Disarmament Conference

*Xinhua, 12 June 2011, www.xinhuanet.com/english2010*
The second International Nuclear Disarmament Conference kicked off in the Iranian capital of Tehran on Sunday. *(253 words)* ***Click here for full text.***

## NEW START TREATY (NST)

### U.S. Nuclear Risk Reduction Center

*U.S. Department of State, 01 June 2011, www.state.gov*
An interagency team led by the Director of the Department of State's Nuclear Risk Reduction Center has returned from consultations held in Moscow. *(118 words)* ***Click here for full text.***

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## NEW START TREATY (NST) (CONT.)

### Air Force Officials Fund Future ICBM Studies

*U.S. Air Force, 08 June 2011, www.af.mil*

The first of several studies to determine the best options for maintaining or replacing the nation's 450 Minuteman III Intercontinental Ballistic Missile weapons systems after 2030 is underway, Air Force officials said here recently. *(468 words)* ***Click here for full text.***

## PLUTONIUM MANAGEMENT DISPOSITION AGREEMENT (PMDA)

### Medvedev Approves Russian-U.S. Plutonium Disposal Deal

*RIA Novosti, 07 June 2011, en.rian.ru/russia*

Russian President Dmitry Medvedev has approved amendments to an agreement with the United States to dispose of excess weapon-grade plutonium. *(168 words)* ***Click here for full text.***

## FULL TEXT OF BI-WEEKLY ARTICLES FOLLOWS:

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## SIPRI Warns of Major Challenges to 1972 Biological Weapons Convention

*BioPrepWatch, 13 June 2011, www.bioprepwatch.com*

The Stockholm International Peace Research Institute [SIPRI] recently declared that scientific and technological developments, particularly those occurring when chemical and biological sciences overlap, are becoming a major challenge to the 1972 Biological and Toxin Weapons Convention [BTWC or BWC].

According to SIPRI, the parties to the BTWC need to develop a clearer understanding of the convention's role in supporting international peace and security once stockpiles are essentially destroyed. States must also continue to address determinations of what constitutes non-compliance with convention obligations or risk undermining the operational-level value of the regime, according to DefenceWeb.co.za.

The SIPRI 2011 yearbook, a guide to recent challenges to international security, details reports that emerged last May concerning severe crop damage caused by an unusual leaf disease that affected Afghanistan's poppy crop. The blight led to a 48 percent decrease in opium yields from 2009.

"There was speculation that the blight was deliberately induced," SIPRI said, DefenseWeb.co.za reports. "Such allegations highlighted the difficulty of distinguishing between fundamental and technical violations of international law and the possible role of a form of politicized legal dispute that aims to cast aspersions on the behavior of other states."

The BTWC outlawed offensive biological warfare, including the mass production, stockpiling and use of biological weapons, among signatories. Since the treaty was created, it has been ratified or acceded to by 163 countries for the purpose of preventing a biological attack that could cause mass civilian casualties or disrupt the global economy.

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## Two Major Utah Milestones in May: Last ONC Delivery for DCD; TOCDF Destroys Last Scheduled Munition

*U.S. Army Chemical Materials Agency, June 2011, www.cma.army.mil*

May [2011] will certainly be a memorable month, with both Deseret Chemical Depot (DCD) and the Tooele Chemical Agent Disposal Facility (TOCDF) accomplishing major milestones.

*Last ONC*

On May 11, DCD made its last on-site container (ONC) delivery, transporting the last two mustard-agent filled ton containers (TCs) from storage to the disposal facility. Since August 21, 1996, when the first ONC loaded with GB rockets was delivered, depot workers have safely made more than 24,000 ONC deliveries.

“We have looked forward to this for 15 years,” said DCD Commander, Col. Mark B. Pomeroy. “We have safely reached this milestone because of the workers that have done their job day in and day out, and I thank everyone for their part in reaching this accomplishment.”

Employees gathered at various viewing points to watch the historic move. For Bob Moll, URS consultant, the last ONC delivery to the TOCDF brought his long career in chem demil full circle. “I was there when the first munition – an M55 GB rocket – was delivered to [chemical agent munitions disposal system] CAMDS in 1979,” reminisced Moll. “Since I was here for the first one in, I wanted to be here for the last one out.”

At the ONC’s final destination, the Container Handling Building (CHB), Jeff Laighton waited like he had countless times before. As the TOCDF’s operations munition coordinator, Laighton has witnessed nearly every delivery and has kept the munitions under careful watch until they were transported to the Unpack Area to be unloaded and sent through the disposal process.

“The last ONC is a great achievement. We’ve done our part for the Chemical Weapons Convention treaty in an environmentally and safe manner,” stated Laighton. “This also ends my working career. There are no more munitions for me to coordinate; my job is done.”

The ONC was uniquely TOCDF’s; it was the only style with 17 bolts that had to be manually fastened and unfastened. Now that they are no longer needed at the TOCDF, and since no other chem demil or commercial sites are interested in utilizing them, TOCDF is looking into recycling all 45 of the large stainless steel vessels.

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*End of an Era*

On May 16, five days after the last ONC delivery, the last mustard agent filled TC was punched, drained and thermally decontaminated at the TOCDF, marking the destruction of the last scheduled munition through the disposal facility.

“I am proud to have been here on that first day of destruction operations on August 22, 1996, and even more proud to be able to report today that the TOCDF has safely processed its last bulk container of chemical agent,” said Ted Ryba, TOCDF site project manager.

During the past 15 years, the TOCDF has destroyed the vast majority of DCD’s stockpile, which was originally the single-largest, most diverse stockpile in the nation, consisting of more than 1.3 million munitions and more than 13,600 tons of chemical agent.

“We have successfully destroyed multiple types of chemical munitions – including rockets, bombs, spray tanks, mines, projectiles and TCs,” reflected Gary McCloskey, vice president and general manager of URS, the systems contractor that operates the TOCDF. “We have faced countless challenges along the way, but it has been our commitment to safety and our dedication to destroying these aging chemical munitions that has persevered.”

*Destruction of the Remaining Stockpile*

While TOCDF now undergoes closure work – decontamination, dismantling and demolition – two separate facilities located within the depot’s Area 10 storage yard will wrap up DCD’s disposal efforts. Approximately 330 mustard projectiles and mortars will be destroyed in a detonation chamber known as the DAVINCH (detonation of ammunition in a vacuum integrated chamber). These munitions have leaked or are badly deteriorated, and are now safely stored in overpack containers. The DAVINCH can destroy munitions while they are inside their overpack containers, minimizing worker contact with the munitions.

The depot’s small stockpile of GA nerve and Lewisite blister agents, which is stored in TCs, will be destroyed by the Area 10 liquid incinerator (ATLIC), a small-scale liquid incinerator similar to those used at TOCDF.

Both the ATLIC and the DAVINCH are on pace to safely complete disposal operations by early 2012.

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## Russia Says Chemical Arms Destruction Effort to End in Late 2015

*Global Security Newswire, 03 June 2011; www.globalsecuritynewswire.org*

A top Russian lawmaker on Thursday announced the government had pushed back to the end of 2015 the date for completion of chemical weapons disarmament operations, RIA Novosti reported.

Russian State Duma international affairs committee head Konstantin Kosachyov said Moscow set December 31, 2015, as the date of elimination for the nation's entire arsenal of chemical warfare agents, which originally weighed in at roughly 40,000 metric tons.

The Chemical Weapons Convention requires that Russia destroy its chemical arsenal by April 2012. Moscow late last year formally declared that operations would be completed at an unidentified point in 2015.

"The implementation of the [chemical weapons destruction] program has been hampered by the global financial crisis, which threw it back two to three years," Kosachyov explained.

He said Moscow would not be penalized with international sanctions for missing the CWC cutoff date. The lawmaker pointed out that the United States has also announced it would miss the convention deadline.

"The second largest holder of chemical weapons stockpiles – the United States – has extended its deadline until 2021 after destroying about 90 percent of its arsenal," Kosachyov said.

Moscow has budgeted nearly $7.2 billion for chemical weapons disarmament work and has constructed six disposal factories, RIA Novosti reported. The government this week announced that it had eliminated slightly more than half of its original chemical stockpile.

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## GPS Stations Can Detect Clandestine Nuclear Tests

*PHYSORG.com, 07 June 2011, www.physorg.com*

At the Comprehensive Nuclear Test-Ban Treaty Organization (CTBTO) meeting this week, American researchers are unveiling a new tool for detecting illegal nuclear explosions: the Earth's global positioning system (GPS).

Even underground nuclear tests leave their mark on the part of the upper atmosphere known as the ionosphere, the researchers discovered, when they examined GPS data recorded the same day as a North Korean nuclear test in 2009. Within minutes on that day, GPS stations in nearby countries registered a change in ionospheric electron density, as a bubble of disturbed particles spread out from the test site and across the planet.

"It's as if the shockwave from the underground explosion caused the earth to 'punch up' into the atmosphere, creating another shockwave that pushed the air away from ground zero," said Ralph von Frese, professor of earth sciences at Ohio State University and senior author on the study.

Jihye Park, a doctoral student in geodetic science at the university, is presenting the results of the study this Wednesday, Thursday, and Friday in a poster session at the CTBTO meeting in Vienna, Austria.

International authorities already possess several methods for detecting illegal nuclear tests, Park said. Seismic detectors pick up shockwaves through land, and acoustic sensors monitor for shockwaves through water and the air for [nuclear] tests that happen above ground. Chemical sensors detect airborne radioactive gas and dust as definitive evidence of a nuclear explosion. However, these particles may be lacking if the explosion is contained deeply below ground.

"GPS is a complement to these other methods, and can help confirm that a nuclear test has taken place – especially when the test was underground, so that its effect in the air is very subtle, and otherwise nearly impossible to detect," she said.

While GPS was designed for location purposes, the technology has always been especially sensitive to atmospheric disturbances, said Dorota Grejner-Brzezinska, a professor of geodetic science at Ohio State and Park's advisor.

"GPS signals must pass from transmitters on satellites high above the planet down to ground-based receivers," Grejner-Brzezinska explained. "Air molecules – more specifically, the

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electrons and other charged particles in the ionosphere – interfere with the signal, generating a position error. Part of our research concerns how to compensate for that vulnerability and make GPS work better. Jihye found a way to take that vulnerability and turn it into something useful."

Park wrote computer algorithms that search GPS signals for patterns indicating a sudden fluctuation in atmospheric electron density in specific locations, which is what happens when a shockwave pushes a bubble of air through the atmosphere. As the GPS signal passes through the edge of the bubble, the change in electron density disturbs the signal in a noticeable way.

Park was able to utilize data collected from GPS receivers that the International GNSS Service (IGS) has planted around the globe for research purposes. Five of the IGS receivers scattered in Eastern Asia provided data for this study, as did six receivers belonging to the South Korean GPS network.

When Park analyzed the data from the 11 GPS stations, she detected a sudden spike in atmospheric electron density after the May 25, 2009 underground test, which is believed to have happened just before 1:00 a.m. Coordinated Universal Time that day.

Within 25 minutes, the shockwave had traveled 225 miles to the nearest GPS station in the study, which was located in Inje County, in Gangwon Province, South Korea. That means that it was traveling through the air at 9 miles per minute, or 540 miles per hour. Within that first hour, it had reached all 11 stations.

Based on the timing of the shockwave, the researchers traced the origin of the explosion back to P'unggye, in Hamyong Province, North Korea. This finding agrees with seismic data from the event, which was collected by the CTBTO and the U.S. Geological Survey.

The researchers will continue this work as Park earns her PhD, and they are seeking funding and partnerships to expand it further. In the meantime, they have submitted a paper on the discovery to the journal Geophysical Research Letters.

*Provided by the Ohio State University*

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## Banning Nuclear Explosions: A Test-Ban Treaty Primer [Interview with Tibor Tóth]

*TIME: Battleland Blogs, 08 June 2011, battleland.blogs.time.com*

When it was passed by the [United Nations] UN in 1996, the Comprehensive [Nuclear] Test-Ban Treaty (CTBT) was seen as a crucial step for nuclear arms control and nonproliferation. Adding to the Partial Test-Ban Treaty of 1963 that banned testing in the atmosphere, underwater or outer space, the CTBT prohibits all nuclear explosions in all environments. The thinking was simple: if states can't test nuclear weapons, they are less likely to develop them. The politics, however, turned out to be complicated.

The 44 countries that hold nuclear technology must sign and ratify the treaty before it can enter into force. Nine are still missing: China, Egypt, India, Indonesia, Iran, Israel, North Korea, Pakistan and the United States, which signed the Treaty in 1996 but has not yet ratified. That might change soon, however, as the Obama administration makes a push for Congress to sign up. This week in Vienna, the Comprehensive [Nuclear] Test-Ban Treaty Organization (CTBTO), which runs the monitoring and verification regime for the treaty, will hold a scientific meeting.

Battleland caught up with Tibor Tóth, the Hungarian head of the CTBTO, who offered a primer on the treaty.

**TIME:** This is a crucial time for the CTBT. In 2009, Hillary Clinton told a CTBT conference that "It has been a long time since our government was represented as this conference. We are glad to be back." What needs to happen now for the treaty it to come into force? How important is U.S. ratification?

**Tóth:** Although not yet in force, the CTBT is already a success. More than 2,000 nuclear tests were conducted before the treaty opened for signature in 1996. Since then there have been just six (two each by India, Pakistan and North Korea), all unanimously condemned by the UN Security Council. U.S. ratification of the CTBT is vital. It would be leading by example, and going a long way towards building international support and cooperation for nuclear non-proliferation. Experience from other arms control treaties has shown us that U.S. ratification prompts other key states to follow suit, and many analysts believe China and Israel would do so in the case of the CTBT.

**TIME:** One of the arguments many Republicans in the U.S. have had against the CTBT is that the technology is insufficient to properly monitor other nations. Can you explain how monitoring and enforcement works? And how confident are you that verification is no longer an issue?

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**Tóth:** When the U.S. Senate first considered ratification in 1999, the CTBTO had existed for just two years and only a handful of stations were in place. Today we have 281 monitoring facilities around the globe: that's more than 80 percent of the final 337 we are aiming for. Four different technologies monitor the planet in synergy around the clock for the slightest sign of a nuclear explosion: seismic stations probe the ground for shockwaves, infrasound and hydroacoustic sensors listen for sound waves in the atmosphere and the oceans, and radionuclide stations sniff the air. The latter need just a few radioactive atoms to raise alarm bells.

For example, although not fully established at the time, our monitoring system detected the North Korean nuclear tests in 2006 and 2009 quickly and accurately. Less than two hours after the tests were conducted, member states received preliminary information on time, location, depth and magnitude of the tests. Meanwhile, sensor technology and data analysis have improved immeasurably since the system was designed in the 1990s. That's why I'm fully confident that the CTBT can and will be verified. And I'm not alone. Just recently former U.S. Secretary of State George Shultz said: "[My] fellow U.S. Republicans may have been right to vote down the nuclear test-ban treaty a decade ago, but they'd be wrong to scuttle it again as President Barack Obama pushes for Senate ratification."

**TIME:** The CTBT has other applications, too, such as the detecting volcanic ash cloud and radiation leaks from nuclear plant accidents. Can you tell me a little bit about that? Did the Fukushima disaster teach you anything about the CTBT's monitoring sensitivity? Does it provide further evidence that verification would be assured?

**Tóth:** To start with the last question – indeed it does. Most of our 63 radionuclide stations picked up minute traces of radioactive emissions from Fukushima as they first spread eastward, then lingered in the northern hemisphere and finally dispersed around the entire globe. Our radionuclide stations are designed to register minute amounts of radioactive particles and noble gases – down to just a few atoms. The system's sensitivity is second-to-none: it can detect a concentration of 0.1 g of radioactive Xenon evenly distributed within the entire atmosphere of the Earth. Another example: a rooftop detector at the CTBTO's headquarters in Vienna still picks up traces of emissions from the 1986 Chernobyl disaster.

Our International Monitoring System [IMS] is already being used for tsunami warning purposes. Eight tsunami warning centers, mainly in the Indo-Pacific region, currently receive real-time data on earthquakes and ensuing tsunamis, enabling them to issue warnings much quicker than before. The other potential applications are multi-fold – as well as providing crucial information on nuclear accidents and warning air traffic of volcano eruptions, they include studies on the

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Earth's crust, research on ocean processes and marine life, monitoring ice shelf break-up and meteorite impacts, and even aiding plane crash investigation.

**TIME:** In the past, India and Pakistan have argued that the CTBT merely formalizes nuclear discrimination, allowing the big five to maintain modern weapons but preventing others from developing an adequate nuclear deterrent. What are the chances of getting South Asia to sign up?

**Tóth:** India and Pakistan have moved in the direction of increased cooperation with the international community. Just like the 182 countries that are already members of the CTBT, I am optimistic that India and Pakistan will come to the conclusion that the CTBT is in their national and collective security interest. It was, after all, India that gave birth to the idea of a test-ban when, in 1954, President Jawaharlal Nehru proposed a "standstill agreement" on nuclear testing. Both India and Pakistan have observed their moratoria on nuclear testing for 13 years now. A CTBT in force would freeze the global status quo in qualitative nuclear weapons development. The CTBT is a non-discriminatory treaty. It imposes exactly the same obligations on all states, regardless of whether they possess nuclear weapons or not, or whether they are parties to the NPT or not. The norm it imposes is simple, straightforward and the same for all: No nuclear testing. Nowhere. By no one.

**TIME:** What about the argument that disarmament requires the United States and Russia to modernize its weapons in order to go to smaller forces, which requires testing. Is that an obstacle to ratification?

**Tóth:** Common sense, as well as historical examples from the Cold War, tells us that a return to nuclear testing by either Russia or the United States would seriously damage the nuclear arms control regime and almost certainly set off a new arms race and an increase in the numbers of nuclear weapons. Most countries, including Russia and the United States, subscribe to the argument that deep reductions in nuclear arsenals and a total ban on nuclear testing go hand in hand. On many occasions, the directors of the national laboratories in the United States responsible for the stewardship of the nuclear arsenal (LANL, LLNL, SNL) have testified before Congress and submitted reports to the effect that no further nuclear testing is needed. They say that advances in simulation technologies and other techniques are enough to ensure that a safe, secure and reliable nuclear arsenal can be maintained well into the future. As for Russia, it joined the CTBT more than ten years ago, in 2000. Both the United States and Russia have been abiding by their unilaterally declared moratoria for almost 20 years now.

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## Statement of the United States to the CTBTO Preparatory Commission

*U.S. Department of State, 14 June 2011, www.state.gov*
*Remarks by Rose Gottemoeller, Assistant Secretary, Bureau of Arms Control, Verification and Compliance in Vienna, Austria*

As I begin my remarks, I would like to congratulate this organization for the Science and Technology Conference, held June 8-10 at the Hofburg in Vienna. I have heard both in Washington and here in Vienna how useful it was.

Before addressing some of the programmatic and budgetary issues before this Commission, I would like to assure you of President Obama's unshakeable commitment to ratification of the CTBT by the United States and its entry into force at the earliest possible date. Entry into force of the CTBT is an essential step toward the peace and security of a world without nuclear weapons, a vision articulated by the President when he spoke in Prague in 2009. Secretary Clinton reaffirmed our commitment to the CTBT at both the Conference on Facilitating Entry into Force of the CTBT in September 2009 and at the Nuclear Non-Proliferation Treaty Review Conference in May 2010. More recently, the President's National Security Advisor, Thomas Donilon, said in March that "We are committed to working with members of both parties in the Senate to ratify the CTBT, just as we did for New START," a commitment that was echoed last month by Under Secretary of State Ellen Tauscher at the annual meeting of the Arms Control Association in Washington.

Our recent experience working with the U.S. Senate to gain their advice and consent to ratification of the New Strategic Arms Reduction Treaty – New START – with the Russian Federation has prepared us for what is expected to be an equally thorough and robust debate over the CTBT. We do not expect it will be easy or happen quickly, but we will work hard to make it happen.

In anticipation of the ratification effort, the Administration commissioned a number of reports, including an updated National Intelligence Estimate and an independent National Academy of Sciences (NAS) report to assess the ability of the United States to monitor compliance with the Treaty and the ability of the United States to maintain, in the absence of nuclear explosive testing, a safe, secure and effective nuclear arsenal so long as these weapons exist. A public version of the NAS report is expected to be released soon. These authoritative reports, together with others, will give the U.S. Senate a wealth of information to assist them in making a determination on the merits of ratification of the CTBT.

In addition, we have begun a process of engaging the Senate and the American public on the national security benefits of the CTBT. While we have no date in mind for a ratification vote, we

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will work to engage members of the Senate on the national security rationale behind our support for the CTBT.

Mr. Chairman, as you are well aware, the U.S. Senate declined to provide its consent to ratification of the CTBT in 1999. At that time, the Senate expressed concerns about whether the Treaty could be effectively verified. Today, we have a much stronger case in that regard. It is thanks to the hard work of this Commission, its member States, and the staff of the Provisional Technical Secretariat that great progress toward establishing the treaty's verification regime has been made in the last decade.

In 1999, the International Monitoring System (IMS) existed only on paper. Today, the IMS is roughly 85 percent complete and, when completed, there will be IMS facilities in 89 countries spanning the globe. At entry into force of the treaty, the full body of technical data gathered via the IMS will be available to all States Parties. This will enable us to fulfill our shared obligation to enforce the global ban on nuclear explosive testing, a nonproliferation goal we all seek. Even now, very useful data is available to States Signatories and those states hosting IMS facilities.

As the Administration engages the U.S. Senate the United States has increased its participation in all of the Preparatory Commission's activities in preparation for the entry into force of the CTBT, especially with respect to the effective implementation of the treaty's verification regime. U.S. technical experts are working closely with their counterparts from the Provisional Technical Secretariat and with other experts from many Signatory States represented here today in collaborative efforts to improve the capabilities of the global International Monitoring System and the International Data Center.

After an eight-year absence, U.S. experts since 2009 have been fully engaged in further developing the On-Site Inspection element of the verification regime, both from policy and technical perspectives. The United States has also continued to bear the full costs of operating, maintaining, and sustaining the 31 stations of the International Monitoring System assigned by the Treaty to the United States. These actions tangibly demonstrate the commitment of the United States to prepare for the entry into force of this treaty.

While much has been accomplished, more hard work lies ahead. We need to maintain the momentum towards completion and maintenance of a fully functioning verification system. Such a system, meeting the requirements established by the PrepCom, serves as a strong deterrent for any State Party contemplating a nuclear test. Demonstrating that the Treaty can be verified also supports the argument that it should be ratified, and helps build further momentum for the treaty's entry into force.

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Turning from political issues to more practical ones, I would like to express our gratitude to the Provisional Technical Secretariat for preparing the initial draft 2012 Program and Budget, and I would like now to share with you our views on it.

The United States supports realistic and program-driven budgets. In the current budget climate, we must be judicious in differentiating between essential tasks and ones we would undertake under ideal conditions, but which are not exigent. Assessments as to which efforts to fund should be made by the Commission based on clear information from the Provisional Technical Secretariat (PTS) about the resources needed to carry out those tasks.

We well understand and appreciate that budget strictures have sharpened the need to identify savings and limit budget growth, but we frankly do not believe a zero-real-growth budget is a tenable option. We cannot effectively maintain existing IMS facilities and continue the build-out of additional stations within the constraints of a zero-real-growth budget. There is a point at which seeking ever greater cost efficiencies from the PTS becomes counter-productive to the health of the organization and the verification regime.

In addition, we are skeptical about the proposed shift of resources from the International Data Center (IDC) and International Monitoring System Divisions to the On-Site Inspection [OSI] Division as a long-term approach to funding the OSI regime. As affirmed in previous statements by the PrepCom and Working Group B, development of the OSI regime represents a core activity of the PTS. The OSI Division should be supported in its own right – out of the regular budget – without taking away resources from the IDC and the IMS Divisions.

The United States is frankly disappointed that the initial draft 2012 Program and Budget provides no regular budget funding for the two core Directed Exercises in the approved OSI Action Plan, or for the Integrated Field Exercise scheduled for 2014 (IFE14). These exercises are necessary for the further development and refinement of the On-Site Inspection regime preparatory to entry into force. Like the rest of the OSI Division's activities, IFE14 and the build-up exercises should be viewed as part of the essential work of the Provisional Technical Secretariat, and should accordingly be funded out of the regular budget, not out of supplementary appropriations.

Consistent with the views expressed by a number of States Signatories at both the May 5 briefing on IFE funding and the recent meeting of Working Group A, the United States would urge the PTS to identify alternative funding modalities, including the incorporation of some costs for the build-up exercises and IFE14 into the regular budget. By including some of the IFE14 costs in the regular budget, a more accurate picture of the CTBTO’s funding needs will be

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presented, affording States Signatories a better sense of the trade-offs between competing requirements.

Before concluding, I would like to comment on two personnel appointments, that is, the new Director of Administration for the PTS, and the new Director of the International Monitoring System Division. I would like to note that for the United States of America, attention to gender balance in professional and technical personnel appointments is of utmost importance. And I know that if my boss, Secretary of State Hillary Clinton, was here, she would strongly underscore that message.

Mr. Chairman, I wish to thank you for your work in leading the efforts of the Commission. The United States wishes you, the members of the Commission, and the staff of the Provisional Technical Secretariat success in the days and months ahead.

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## U.S. Formally Asks Three Nuclear Export Control Regimes to Induct India as Full Member

*The Indian Express Online, 10 June 2011, www.indianexpress.com*

Last week, the United States formally approached three export control regimes, the Nuclear Suppliers Group (NSG), the Missile Technology Control Regime (MTCR) and the Australia Group, to induct India as a full member of these groups. This comes alongside India's efforts to do its own bidding with these regimes.

It's learnt that Washington has begun the process by circulating a non-paper among member countries, which makes a strong case for India's membership. More importantly, it seeks a specific exception for India so as to foreclose any assumption of creating a set of fresh criteria for future members. This was important because China has been backing the criteria-based system rather than a country-specific decision.

According to reliable sources, this only showed that the process is "moving further" and that both India and the U.S. were involved in "parallel processes to achieve the same objective of full membership for India in these regimes". But insiders also added that "no early decision was expected".

The United States has conveyed to other member countries that India's induction will be consistent with the core principles of these regimes. While India is already eligible for membership of the Australia Group and the Wassenaar Arrangement, the main hurdles are in the NSG and the MTCR. Both these regimes have conditions which are drawn from the Non-Proliferation Treaty [NPT]. In other words, a member of these groupings ought to be NPT-compliant even though that is specifically not stated.

The template for Delhi is the formulation both sides reached in the joint statement issued last November during U.S. President Barack Obama's visit to India. This states: "The United States intends to support India's full membership in the four multilateral export control regimes (Nuclear Suppliers Group, Missile Technology Control Regime, Australia Group, and Wassenaar Arrangement) in a phased manner, and to consult with regime members to encourage the evolution of regime membership criteria, consistent with maintaining the core principles of these regimes."

Over the last few months, India has held outreach talks with the NSG, MTCR and Australia Group. Foreign Secretary Nirupama Rao discussed India's case with the NSG troika at The Hague last month. India came back with the assurance that the NSG would discuss this during its next plenary this month.

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At the same time, the U.S. non-paper means a member has sought for a discussion on this issue and that would automatically raise the seriousness levels. The NSG, it may be noted, was formed as a response to India's first nuclear test in 1974 when it was suspected that New Delhi had diverted nuclear material meant for peaceful purposes to start a military program.

With the Indo-U.S. civil nuclear initiative having taken off, the issues that are now on the table are totally different. Given the quantity of nuclear commerce headed India's way over the next decade, sources said, it is better for India to be part of these regimes than be out of it.

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## Iran Kicks Off Second Nuclear Disarmament Conference

*Xinhua, 12 June 2011, www.xinhuanet.com/english2010*

The second International Nuclear Disarmament Conference kicked off in the Iranian capital of Tehran on Sunday. […]

Iran's Deputy Foreign Minister Mohammad-Mahdi Akhoundzadeh said in the ceremony that the use of nuclear weapons is a crime against humanity.

The disarmament conference in Tehran is seeking to voice the public opinion of the world for "a world free from nuclear weapons ", [Iranian Foreign Minister Ali-Akbar Salehi] said.

Tehran's two-day conference brings together delegates from forty different nations across the world, including the United States, ambassadors and representatives from international bodies such as the [United Nations] UN and the International Atomic Energy Agency (IAEA).

Akhoundzadeh told reporters on Saturday that the event comprises three specialized panels which will discuss the doctrines of nuclear powers, will take practical measures to have a world free of weapons of mass destruction and will review regional as well as international disarmament commitments.

The conference will also shed light on Israel's policy of deliberate ambiguity on nuclear weapons, he said, adding that the United States and its allies continue to put pressure on non-nuclear weapon states such as Iran, while ignoring Israel's growing nuclear threat to the Middle East.

Last year, Iran hosted the first Nuclear Disarmament Conference with the theme of "Nuclear Energy for All, Nuclear Weapon for None."

According to local satellite Press TV, Iran plans to hold the third International Nuclear Disarmament Conference at ministerial level, where the country will once again promote its message that all nations are entitled to peaceful nuclear energy.

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## U.S. Nuclear Risk Reduction Center

*U.S. Department of State, 01 June 2011, www.state.gov*

An interagency team led by the Director of the Department of State's Nuclear Risk Reduction Center has returned from consultations held in Moscow, Russia, between the Center and its counterpart in the Russian Federation. During the consultations in Moscow, the delegations discussed technical issues related to information exchanges and other operational issues.

The Centers are responsible for transmitting and receiving time-sensitive communications required by arms control treaties and security agreements, including the New START Treaty, the OSCE Vienna Document and, other bilateral and multilateral agreements. Since 1987, watch officers have staffed the Centers around the clock, receiving, translating, and disseminating those communications.

NRRC consultations are a regular feature of cooperation between the United States and the Russian Federation.

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## Air Force Officials Fund Future ICBM Studies

*U.S. Air Force, 08 June 2011, www.af.mil*

The first of several studies to determine the best options for maintaining or replacing the nation's 450 Minuteman III Intercontinental Ballistic Missile weapons systems after 2030 is underway, Air Force officials said here recently.

"The Air Force is strongly committed to the ground-based leg of the nation's nuclear triad and we're taking all actions appropriate – the analysis, the assessment, the planning – for this capability, in 2030 and beyond," said Maj. Gen. William A. Chambers, the assistant chief of staff for strategic deterrence and nuclear integration.

As part of that commitment, the Air Force is making a $28 billion investment in nuclear deterrence operations across the Future Years Defense Program, the general said in statements provided to the House and Senate Armed Services Committee's Strategic Forces Subcommittees April 5 and 6.

That investment and planned studies will ensure that the Air Force retains or procures systems and capabilities that are best for our nation's strategic deterrence, he said. Options for a new GBSD capability, he added, range from upgrading the current ICBM force to the possibility of a new system.

"Although a decision on a follow-on ICBM is not needed for several years, the Nuclear Posture Review recognized the need for studies to inform a decision on ground-based strategic deterrence beyond 2030," he said, explaining that the results of these studies will inform and help clarify the costs and benefits of a follow-on ground-based strategic deterrent capability.

Lt. Gen. James M. Kowalski, the commander of Air Force Global Strike Command, told the Senate Armed Services Committee April 6 that the command is working with headquarters Air Force on the capabilities-based assessment of a ground based strategic deterrent. The $1 million initial study, internally funded by AFGSC, is expected to be complete by July 2011 and will establish the requirements baseline for the missile's desired speed, range, payload capacity and other requirements.

During FY12, Air Force officials are planning to internally source funds in the amount of $4.6 million to develop the Analysis of Alternatives study guidance and use the guidance to build the AOA study plan, officials said. This funding will also fund initial pre-AOA concept characterization and technical descriptions.

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These efforts will produce a recommendation regarding the best ICBM follow-on options from a broad range of alternatives – from full replacement to sustainment of the current ICBM beyond 2030.

Approximately $26 million will be required, in total, during FY12-14 to complete the entire Materiel Solutions Analysis phase, which includes the AOA and other activities leading to the initial acquisition milestone and a Program of Record.

While Air Force officials are conducting these studies, the Minuteman III ICBM, first deployed in the 1960s continues to undergo Life Extension Programs to ensure the weapon system is viable through 2030 as mandated by Congress.

Minuteman III ICBMs are located at missile wings headquartered at F.E. Warren Air Force Base, Wyoming, Malmstrom AFB, Montana and Minot AFB, North Dakota.

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## Medvedev Approves Russian-U.S. Plutonium Disposal Deal

*RIA Novosti, 07 June 2011, en.rian.ru/russia*

Russian President Dmitry Medvedev has approved amendments to an agreement with the United States to dispose of excess weapon-grade plutonium, the Rossiiskaya Gazeta government daily said on Tuesday.

Russian Foreign Minister Sergei Lavrov and U.S. Secretary of State Hillary Clinton signed in April 2010 a protocol to amend the U.S.-Russian 2000 agreement on eliminating excess weapon-grade plutonium from defense programs.

Under the agreement, Russia and the United States will each dispose of 34 metric tons of excess plutonium, which is enough to create several thousand nuclear weapons. The program is to be launched before 2018.

Russia intends to spend up to $3.5 billion on its program, and the United States some $400 million.

The agreement is a continuation of Medvedev and U.S. President Barack Obama's nuclear disarmament efforts launched in April 2010, when they signed the New START treaty replacing the expired START 1 agreement. The document slashes the Russian and U.S. nuclear arsenals to a maximum of 1,550 nuclear warheads, down from the current ceiling of 2,200.

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