Advances in North Korea’s Missile Program and What Comes Next
By Melissa Hanham and Seiyeon Ji

The Nuclear Weapons Prohibition Treaty: Negotiations and Beyond
By Gaukhar Mukhatzhanova

NEWS & ANALYSIS
Republicans Seek to Produce Banned Missile
Trump Signals Iran Deal Showdown
U.S., North Korea Jockey Over Missile Tests
Moon Reverses THAAD Decision
States Hesitate to Sign Nuclear Weapons Ban Treaty

NPT at 50
Roland Timerbaev: The Nuclear Nonproliferation Treaty Has Largely Achieved Its Goals
Remarks
Europe’s Push to Preserve the Iran Nuclear Deal
Arms Control App

THE SOURCE ON NONPROLIFERATION AND GLOBAL SECURITY

NEW DESIGN!

More intuitive interface

Easy-to-read issues of Arms Control Today

Breaking news and expert analysis

One-of-a-kind fact sheets and resources

bit.ly/ArmsControlApp
Features

6 Advances in North Korea’s Missile Program and What Comes Next
By Melissa Hanham and Seiyeon Ji
As leader Kim Jong Un builds his nuclear arsenal, the risks are significant, and the time available for diplomacy may be limited.

12 The Nuclear Weapons Prohibition Treaty: Negotiations and Beyond
By Gaukhar Mukhatzhanova
The landmark treaty, which opens for signature this month at the United Nations, challenges the legitimacy of nuclear deterrence policies. Its practical implications in the near term are uncertain.

39 NPT at 50
Roland Timerbaev: The Nuclear Nonproliferation Treaty Has Largely Achieved Its Goals
One of the founding fathers of the treaty recalls how it was drafted and assesses its performance as the “cornerstone of the global nuclear order.”

Focus
Don’t Abandon the Iran Nuclear Deal
By Daryl G. Kimball

In Brief
Notable Quotable
By the Numbers
15 Years Ago
On the Calendar

Fact File
The Treaty on the Prohibition of Nuclear Weapons

Reports of Note

Remarks
Europe’s Push to Preserve the Iran Nuclear Deal
By Ellie Geranmayeh
The deal is not just about Iran policy. It is also about the idea of protecting international norms and the capacity of multilateral diplomacy to deliver.
News & Analysis

22 Disputes Cloud U.S.-Russian Arms Talks
The two sides have yet to set a time for proposed strategic stability talks as arms control matters take back seat to disputes.

24 Republicans Aim to Produce Banned Missile
Legislation follows U.S. charges that Russia is violating the Intermediate-Range Nuclear Forces Treaty.

25 Trump Signals Iran Deal Showdown
What happens if the U.S. president decides to withhold certification of Iran’s compliance, as he threatens to do?

28 U.S., North Korea Jockey Over Missile Tests
Can Washington and Pyongyang find a diplomatic off-ramp to avoid potential catastrophic conflict?

30 Moon Reverses THAAD Decision
North Korea’s latest missile tests prompt shift by South Korea’s new leader.

31 States Hesitate to Sign Nuclear Weapons Ban Treaty
Some countries see problems due to possible treaty conflicts, anticipated pressure from nuclear-armed states, and concern with the implications of some provisions.

33 Seven Vie for OPCW Director-General
The organization’s next leader will need to shift priorities from chemical weapons destruction, a mission largely accomplished.

34 Australia Ships Uranium to India
Export plans remain controversial amid criticism of India’s safeguards provisions.

36 News In Brief
Court Dismisses Marshall Island Case
China Advances Ballistic Missile Defense
India, Japan Nuclear Deal Implemented
OPCW-UN Investigating Team Visits Syria
Nigeria Sale Proposed Despite Concerns
Anti-Nuclear Campaigner Tony de Brum Dies
Don’t Abandon the Iran Nuclear Deal

Although his administration is already struggling with one major nonproliferation challenge—North Korea’s advancing nuclear and missile capabilities—President Donald Trump soon may initiate steps that could unravel the highly successful 2015 Iran nuclear deal, thereby creating a second major nonproliferation crisis.

Blowing up the 2015 agreement between Iran and six world powers and the European Union, known as the Joint Comprehensive Plan of Action, would be irrational and counterproductive, but it can be prevented.

First, Trump is clearly pushing his advisers to find a reason to deny certification that Iran is in compliance with the agreement under the terms of the Iran Nuclear Agreement Review Act. Under that law, the administration must certify every 90 days that Iran is fully implementing the nuclear deal and that suspension of sanctions is “appropriate and proportionate” to the measures taken by Iran. Failure to issue the certification would open the door for Congress, under expedited procedures, to introduce legislation to reimpose nuclear sanctions.

In July, Trump said that “if it was up to me, I should have had [Iran] noncompliant 180 days ago.” He said he would be “surprised” if Iran was in compliance at the next certification deadline in mid-October.

Thus far, however, reporting from the U.S. intelligence community, the International Atomic Energy Agency (IAEA), and the other parties to the agreement make it clear that Iran is meeting its many commitments. But given that the certification involves subjective judgments outside the four corners of the nuclear deal, Trump may choose, for political reasons, not to make the certification.

Before enabling any Trump move to undermine the nuclear deal by advancing legislation to reimpose sanctions, Congress must demand to see the evidence behind any allegation of Iranian noncompliance, consider whether the intelligence community concurs, and, if there is a true compliance dispute, call on the White House to use the eight-member body known as the Joint Commission to exhaust all options to resolve the matter quickly.

If Trump cannot produce solid evidence of an Iranian violation, Congress does not have to and should not vote to reimpose nuclear sanctions.

Even if Congress takes the bait, the other parties should continue to abide by their commitments under the agreement. On Aug. 27, the head of the Atomic Energy Organization of Iran, Ali Akbar Salehi, said if Washington withdraws but the five other parties remain committed, Tehran would remain committed.

European entities, which would be subject to secondary U.S. sanctions, can and should take precautions to insulate their commercial and financial dealings from such U.S. penalties.

Second, the United States is pressing the IAEA to demand inspections at sensitive sites in the hope of provoking a refusal that would justify a finding of noncompliance. U.S. Ambassador to the United Nations Nikki Haley is already insinuating that because the IAEA has not inspected “numerous undeclared sites,” we cannot be sure Iran is not already violating the agreement.

Under the agreement, the IAEA can request access to any site if there is a specific concern about illicit or undeclared materials and activities. If the IAEA requests information or access and remains unsatisfied with Iran’s response, five of the eight members of the Joint Commission can vote on actions to resolve the concern, including authorizing access that Iran would be required to provide.

It is essential that the IAEA continue to be vigilant, and Iran should cooperate fully with all IAEA requests for information and access in a timely manner. But given Trump’s stated opposition to the agreement, the new push by Washington for the agency to seek access to undeclared sites should be treated with special caution.

The Iran nuclear deal is a clear net plus for U.S. and global security. It has dramatically reduced the proliferation risk posed by Iran’s nuclear program and mandates unprecedented monitoring and transparency measures to deter and promptly detect any violation. It promises to block Iran’s pathways to development of nuclear weapons for a decade or more. There is no realistic option for scrapping the agreement and negotiating a “better deal.”

The smarter approach would be to continue to implement and vigorously enforce the multilateral nuclear deal and seek to build global support for the widespread adoption of its most innovative verification and nonproliferation measures.
**InBRIEF**

**Notable/Quotable**

“I worry about, frankly, the access to the nuclear codes. [If] in a fit of pique, he decides to do something about Kim Jong Un, there’s actually very little to stop him. The whole system is built to ensure a rapid response if necessary. So, there’s very little in the way of controls over exercising a nuclear option, which is pretty damn scary.”

—James Clapper, former director of national intelligence, on Aug. 23 on CNN on his concerns about President Donald Trump’s fitness for office

---

**Projected Nuclear Weapons Costs**

**BY THE NUMBERS**

Departments of Defense and Energy Fiscal Year 2017 10-Year Estimates for Sustaining and Modernizing the U.S. Nuclear Deterrent

- **$341.8 billion** Nuclear Delivery Systems
- **$40.5 billion** Nuclear Command, Control and Communications System
- **$107.8 billion** Nuclear Stockpile and Nuclear Security Enterprise
- **$193.5 billion** Nuclear Delivery Systems

Department of Defense’s 5-Year and 10-Year Estimates for the Sustainment and Modernization of Nuclear Delivery Systems

<table>
<thead>
<tr>
<th>DELIVERY SYSTEM</th>
<th>FISCAL YEARS 2017-2026 (10-YEAR TOTAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy bombers</td>
<td></td>
</tr>
<tr>
<td>B-2 and B-52</td>
<td>26.8</td>
</tr>
<tr>
<td>B-21 (formerly long-range strike bomber)*</td>
<td>38.5</td>
</tr>
<tr>
<td>B61-12 gravity bomb tail kit assembly</td>
<td>0.8</td>
</tr>
<tr>
<td>Cruise missiles</td>
<td></td>
</tr>
<tr>
<td>Air-launched cruise missile</td>
<td>0.7</td>
</tr>
<tr>
<td>Long-range standoff missile</td>
<td>5.6</td>
</tr>
<tr>
<td>Intercontinental ballistic missiles (ICBM)</td>
<td></td>
</tr>
<tr>
<td>Minuteman III</td>
<td>13.6</td>
</tr>
<tr>
<td>Ground Based Strategic Deterrent</td>
<td>13.2</td>
</tr>
<tr>
<td>UH-1N Helicopter (ICBM Security)</td>
<td>2.7</td>
</tr>
<tr>
<td>Dual-capable aircraft*</td>
<td>4.2</td>
</tr>
<tr>
<td>Fleet ballistic missile submarines</td>
<td></td>
</tr>
<tr>
<td>Ohio-class submarine</td>
<td>17.7</td>
</tr>
<tr>
<td>Columbia-class submarine program</td>
<td>43.7</td>
</tr>
<tr>
<td>Columbia-class submarine program reactor design</td>
<td>0.9</td>
</tr>
<tr>
<td>(National Nuclear Security Administration)</td>
<td></td>
</tr>
<tr>
<td>Submarine-launched ballistic missile (Trident II)</td>
<td>25.1</td>
</tr>
<tr>
<td><strong>TOTAL</strong>*</td>
<td>193.5</td>
</tr>
</tbody>
</table>

Data as of August 2016.

*The B-21 bomber is expected to perform both conventional and nuclear deterrent missions.

*Dual-capable aircraft are fighter aircraft capable of delivering nuclear weapons.

*Amounts shown may include costs for integrating nuclear command and control systems, which are also included in nuclear command, control, and communications (NC3) amounts.
Disarming Iraq: Nonmilitary Strategies and Options

"Concerned that Baghdad is rebuilding its programs to produce nuclear, biological, and chemical weapons, the Bush administration has strengthened its call for regime change in Iraq and spurred an increasingly vocal debate about the possibility of forcibly overthrowing the Iraqi dictator. Whatever the merits of regime change in Iraq, discourse in Washington has focused on military options...without due consideration for the progress that UN weapons inspectors could make if they were readmitted to the country."

—David Cortright and George A. Lopez, September 2002
Advances in North Korea’s Missile Program and What Comes Next

North Korea in July test-launched two intercontinental ballistic missiles (ICBMs) capable of reaching the U.S. mainland. Such long-range capability, coupled with nuclear warhead advances, has been considered a U.S. redline that could draw a U.S. military response.

A spectrum of diplomatic and military options is available to the United States and allies South Korea and Japan. The risks are significant, and the time available for diplomacy may be limited. In response to the August missile tests, the United States made a show of force, flying nuclear-capable aircraft over South Korea, and President Donald Trump on Aug. 8 threatened North Korea with “fire and fury like the world has never seen” if it continues to make threats against the United States. A hawkish minority in South Korea has renewed arguments for returning U.S. tactical nuclear weapons to their country or even for building South Korea’s own nuclear deterrent. North Korea responded to Trump’s statements by stating that leader Kim Jong Un would consider testing the Hwasong-12 intermediate-range missile toward the U.S. territory of Guam. It appears that this plan is tabled pending a favorable response from the United States.

Overwhelmingly, military and weapons of mass destruction (WMD) experts agree that there is no way to engage North Korea in a limited war that would not escalate and result in the loss of tens if not hundreds of thousands of lives on the peninsula, including American ones. “If this goes to a military solution, it’s going to be tragic on an unbelievable scale,” Secretary of Defense Jim Mattis said at a Pentagon news conference May 19, before the latest escalation in tensions. “So our effort is to work with the UN, work with China, work with Japan, work with South Korea to try to find a way out of this situation.”

North Korea’s rapidly advancing nuclear and missile programs pose a growing threat to the region and now the United States mainland, but the threat has not changed dramatically for South Korea, Japan, and U.S. forces based in the region. North Korea already maintains short- and intermediate-range missiles capable of carrying weapons of mass destruction or conventional high explosives, in addition to their conventional artillery and other forces. Yet, growing North Korean capabilities increase the stakes for military confrontation and reduce the time frame for diplomatic options.

**North Korea’s ICBMs**
On July 5 and July 29 (local time), North Korea flight-tested a Hwasong-14 ICBM. This missile is a powerful two-stage rocket that was tested at a “lofted” trajectory,

---

Melissa Hanham is a senior research associate at the James Martin Center for Nonproliferation Studies and the Mixed-Methods Evaluation, Training and Analysis (META) Lab of the Middlebury Institute of International Studies. Seiyeon Ji is a research assistant at the James Martin Center for Nonproliferation Studies.
meaning it went nearly four times higher than across the earth.³ The benefit of this trajectory is that the missile did not overfly Japan. If this type of missile were launched at a more gradual trajectory toward the United States, one calculation places it as likely having a range of approximately 10,400 kilometers (6,500 miles), putting cities such as Chicago at risk. Taking account of the Earth’s rotation, the range may extend to Boston and New York depending on various factors, including the weight of the missile payload.⁴

North Korea’s official Korean Central News Agency (KCNA) has asserted that the Hwasong-14 could carry a “large-size heavy nuclear warhead.”⁵ North Korea possibly is developing an even larger and heavier warhead than was previously claimed, such as a thermonuclear warhead. KCNA has made repeated claims that North Korea desires this technology, even claiming the January 2016 nuclear weapons test explosion was thermonuclear.

In addition to the Hwasong-14, at least two other ICBMs may be under development. In April, North Korea paraded several missiles systems that were purported ICBMs, including two canisterized systems. Very little can be determined about these systems through open sources because not even the missiles were visible. Although it is possible to dismiss them, these are likely design concepts that are intended for development in the future. In 2012, for example, North Korea revealed a version of the KN-08 ICBM with poor welding and other design flaws that some analysts found suspect,⁶ until the design became more apparent in subsequent parades.

North Korea intends to use its ICBMs to deter the United States from coming to the aid of defense treaty allies South Korea or Japan in a confrontation. Kim is gambling that the United States would not be willing to risk a major homeland city for the sake of its allies in the region. In this way, North Korea is trying to compensate for its naturally asymmetric position.⁷

Solid-Fueled Missiles

In February, North Korea tested a new land-based missile with a solid-fueled motor. This missile, known as the Pukguksong-2, is nearly identical to the submarine-launched ballistic missile (SLBM) known as the Pukguksong. It is carried in a canister to maintain an optimal environment for the rocket. A solid-fueled motor offers several advantages over many North Korean missiles with liquid-fueled engines.

North Korea rotates its many road-mobile missiles constantly around its territory and in and out of caves, tunnels, and warehouses to make them difficult for adversaries to locate and track. In 2011, U.S. Secretary of Defense Robert Gates said, “North Korea now constitutes a direct threat to the United States. They are developing a road-mobile ICBM. I never would have dreamed they would go to a road-mobile [missile] before
testing a static ICBM. It's a huge problem. As we've found out in a lot of places, finding mobile missiles is very tough.8 To track road-mobile missiles, military satellites typically track a configuration of known vehicles that travel in convoys. A solid-fueled missile likely needs a smaller convoy because it can travel prefueled without risking the same level of corrosion as a liquid-fueled one. In addition, a prefueled rocket will shave minutes off its launch time, making them faster to use in a conflict.

North Korea revealed a new kind of transporter truck with the Pukguksong-2. This caterpillar-treaded truck is likely made at the tank factory near the launch site. This strange-looking vehicle likely appeared because North Korea can no longer procure wheeled chassis even illicitly. The treaded vehicles will present a different visual signature to the satellites tracking them. They likely are shorter range or need to be moved by rail, and they have a tighter turning radius and more difficulty on steep grades. Nonetheless, more launchers means more missiles, and they will add a dimension of difficulty to continually tracking road-mobile missiles, be they solid or liquid fueled.

North Korea's SLBM is also solid fueled. After several disastrous explosions and even some rather ingenious fakery,9 North Korea finally had a series of successes in 2016. Like the land-based version, North Korean SLBMs are meant to increase survivability by frequently rotating. They drive up resources needed for tracking the submarines.

**Warhead and Re-entry Vehicle**

In March 2016, North Korea showed off what it claimed was a nuclear warhead. Set alongside an untested KN-08 missile, the message was clear: North Korea is building an ICBM to deliver a nuclear warhead to the U.S. mainland. It is not possible to confirm that the round, silver object in front of Kim in a photograph was indeed a nuclear warhead. Some features seem credible while others seem baffling. The displayed object would certainly fit on a number of North Korean missiles from short range to long range. If this is indeed a warhead, it could mean that South Korea and Japan already face a nuclear threat from North Korea. On Aug. 8, sources in the U.S. intelligence community relayed their belief that North Korea has developed a warhead capable of fitting on a missile and may have as many as 60 of them.10

Unfortunately, the only way for North Korea to prove its capability is by inviting experts to examine the weapon or by testing it on a missile in a demonstration similar to China's 1966 CHIC-4 warhead test on a Dongfeng-2 missile. At such a tense time, no one is encouraging that option.

While many continue to question North Korea's ability to build a re-entry vehicle (RV), it is likely they have already produced and tested one. In March 2016, Pyongyang distributed photographs of a re-entry simulation in Rodong Sinmun, the official newspaper of the ruling party. Much as is the case with the warhead, it is impossible to prove that the simulation was effective with photographs alone, although the method was the same that the United States used in the 1970s. Since the test of the intermediate-range Musudan ballistic missile in 2016, North Korea has been using a lofted trajectory to test its missiles. The purpose of this testing method may say a great deal about the crowded geography of Northeast Asia, but it also means that North Korea has been breaching the troposphere with its missiles for several months. The angle at which the missile descends is much sharper than if the missile were targeting the United States.

Therefore, the re-entry vehicle is not being tested under realistic conditions. Nonetheless, the re-entry vehicle is not one of the more complicated parts of the rocket. Its goal is to protect the warhead through the heat, pressure, and vibrations of the atmosphere. On Aug. 12, sources stated that the CIA and the U.S. Department of Defense's National Air and Space Intelligence Center assessed that the Hwasong-14's re-entry vehicle would likely be sufficient for a trajectory that targeted the U.S. mainland.11

**The Military Option**

Along the spectrum of U.S. options, a military attack on North Korea is the most dangerous. Any aggressive military strategies confirm deep-rooted North Korean suspicions and will trigger a counterreaction endangering the lives of tens of thousands, if not hundreds of thousands, of South Koreans and the approximately 23,000 U.S. troops stationed there.12 Even putting aside
weapons of mass destruction, North Korea is capable of using conventional artillery to shell Seoul, which is only 35 miles from the demilitarized zone. As Mattis said on May 28,

A conflict in North Korea would be probably the worst kind of fighting in most people’s lifetimes…. The North Korean regime has hundreds of artillery cannons and rocket launchers within range of one of the most densely populated cities on Earth…. This regime is a threat to the region, to Japan and South Korea and in the event of war they would bring danger to China and to Russia as well. But the bottom line is it would be a catastrophic war if this turns into…combat if we’re not able to resolve this situation through diplomatic means.13

A preventative strike by U.S. forces, intended to be limited or not, likely would mean all-out war. North Korea knows that it has a limited number of missiles and they need to use them or lose them. Their Scud and Nodong missile drills since 2015 hint at an offensive doctrine, in which nuclear weapons must be used early in a conflict before the Kim regime or its missile and WMD sites can be destroyed.14

In 1994, when U.S. President Bill Clinton contemplated the use of force to conduct a first strike on North Korea’s Yongbyon nuclear reactor, the Pentagon concluded that a war on the peninsula would result in 1 million dead and nearly $1 trillion in economic damage.15 This estimation was made well before North Korea possessed nuclear weapons and ICRMs capable of hitting the U.S. mainland.

The human costs of any military conflict will only increase when taking into account Japanese and U.S. citizens, including U.S. soldiers and their families stationed in Japan and Guam. Within North Korea, internal displacement resulting from violence and instability means that a vast proportion of North Koreans will lack access to basic necessities and will be difficult for humanitarian agencies to reach.16 Furthermore, a Bank of Korea study predicts that 3 million refugees will attempt to cross into the South in a North Korean collapse scenario.17 A still greater number may cross the Chinese border.

Negotiating With an Enemy

On the other end of the spectrum is diplomatic engagement, which has suffered repeated failure in the past. The 1994 Agreed Framework between the United States and North Korea sought to limit Pyongyang’s nuclear activities, but broke down in 2002 due to U.S. intelligence about covert uranium-enrichment activities and the George W. Bush administration’s opposition to the accord. The subsequent six-party talks’ attempt to build a permanent peace regime in 2007 was a positive development, resulting in a

### North Korean Ballistic Missile Tests

<table>
<thead>
<tr>
<th>Reagan</th>
<th>Bush</th>
<th>Clinton</th>
<th>Bush</th>
<th>Obama</th>
<th>Trump</th>
</tr>
</thead>
</table>

**KEY**

- 4: number of tests
- □: failed test
- 7: success unknown
- ◯: successful test

*Through Aug. 30, 2017.*

Source: The James Martin Center for Nonproliferation Studies at the Middlebury Institute of International Studies for the Nuclear Threat Initiative


---

9 ARMS CONTROL TODAY September 2017
denuclearization plan involving a 60-day deadline for Pyongyang to freeze its nuclear program in exchange for aid.18 Unfortunately, by the end of 2008, the North Korean regime had restarted its program and barred nuclear inspectors.19 The United States, South Korea, and Japan remain extremely skeptical of negotiating with Kim, who has been consolidating power and fortifying his

North Korea frequently demands an end to U.S.-South Korean military exercises and international sanctions, in addition to recognition that it is a nuclear-weapon state.20 North Korea would likely call for an end to the Korean War, with a peace agreement supplanting the armistice, and for additional security guarantees and aid. The United States and South Korea have largely spurned these demands, with new South Korean President Moon Jae-in repeatedly stating that reducing the joint military exercises is not an option for now and that North Korea’s nuclear freeze and a reduction of the joint military exercises cannot be linked.21

North Korea wants recognition and legitimacy in the international community that may include such things as routine diplomatic relations with the United States. Previously, there have been diplomatic exchanges between the United States and its allies and North Korea, but the United States historically has placed preconditions for talks with North Korea. For example, in 2001, the George W. Bush administration maintained that any negotiation and dialogue with North Korea would have to be preceded by “complete verification of the terms of a potential agreement.”22 The Obama administration insisted on North Korea’s commitment to denuclearization conducted in close alliance with Seoul and other members of the six-party talks.23

An additional challenge is that North Korea has no intention of giving up its nuclear weapons capabilities in the near term. North Korea’s nuclear policy has been influenced at least partially by its understanding of events in countries such as Iraq and Libya. A North Korean statement cites them as examples of “U.S. schemes to overthrow independent countries” by “weakening their military self-defense capabilities.”24 In official statements, North Korea makes clear that it will not “fall victim to the same tragic destiny” by abandoning its access to nuclear weapons.25

If North Korea will not immediately denuclearize and the United States will not accept a growing nuclear threat, the
cult of personality since the December 2011 death of his father, Kim Jong Il. In addition to being a reprehensible regime with profound human right violations, North Korea long has been a spoiler, holding negotiations hostage for petty reasons and failing to meet their commitments as a member of the United Nations. Yet, misunderstandings and offense have been made and received on all sides.

Although prospects for negotiations may seem dim, U.S. Secretary of State Rex Tillerson said in August that the United States could be open to talks if North Korea halts missile testing. If the United States and its allies get to negotiations, North Korea would likely seek political, economic, and security guarantees. North Korea has left one small window open. Following the first Hwasong-14 missile test, KCNA reported that Kim “stressed that [North Korea] would neither put its nukes and ballistic rockets on the table of negotiations in any case nor flinch even an inch from the road of bolstering the nuclear force chosen by itself unless the U.S. hostile policy and nuclear threat to [North Korea] are definitely terminated.”26 Even North Korea’s August statement about launching intermediate-range missiles to splash down off the coast of Guam was left open-ended based on the behavior of the United States.

Although prospects for negotiations may seem dim, U.S. Secretary of State Rex Tillerson said in August that the United States could be open to talks if North Korea halts missile testing.

These are very tall asks for North Korea, South Korea, Japan, and the United States, and the prospects for securing what everyone wants are low. The task at hand is to incrementally find those low-hanging and, if necessary, reversible agreements that will gradually build trust. The United States was able to negotiate with the Soviet Union under much tougher circumstances.

The stakes for all sides are high, but the time for negotiation, however problematic, is now. The longer the wait, the greater North Korea’s technological capabilities will become, making diplomacy and war more difficult and dangerous.

ENDNOTES


An medium-range Pukguksong-2 ballistic missile is shown being test-launched Feb. 12 in a photograph from North Korea’s official Korean Central News Agency.


19. Ibid.


The Nuclear Weapons Prohibition Treaty: Negotiations and Beyond

The Treaty on the Prohibition of Nuclear Weapons has been hailed by supporters as a historic achievement that they hope will be, in the words of the Hiroshima atomic bombing survivor Setsuko Thurlow, “the beginning of the end of nuclear weapons.”

The treaty is the first international agreement that prohibits the use, possession, deployment, and stationing of nuclear weapons for all states-parties and challenges the legitimacy of nuclear deterrence policies. It opens for signature at the UN General Assembly in New York on September 20 and enters into force 90 days after the deposit of the 50th instrument of ratification.

Dismissed by the nuclear-armed states and their allies, the impact of the treaty will become evident only over time. The treaty’s negotiators do not have illusions that the new instrument will produce immediate results in reducing nuclear risks or nuclear weapons. Instead, the aim is to delegitimize nuclear weapons and make it more difficult for states to continue to rely on nuclear weapons as part of their military and foreign policy strategies.

Borne of a movement focused on the humanitarian impact of nuclear weapons use, the treaty commits its states-parties to conduct environmental remediation and provide assistance to victims of nuclear weapons use or testing under their jurisdiction and establishes the responsibility of states that use or test nuclear weapons to provide assistance to other affected parties. Further, the treaty mandates the destruction of nuclear arsenals, with a view that the details of nuclear weapons elimination would be negotiated at a later date.

Negotiations of the prohibition treaty, mandated by UN General Assembly Resolution 71/258, took place at a difficult time and in peculiar circumstances. North Korea had accelerated its nuclear weapons program, conducting its fourth and fifth nuclear tests in January and September 2016 and demonstrating growing missile capabilities in recent months. Russian leadership in recent years had made cavalier pronouncements on the use of nuclear weapons. And statements by the new U.S. president, Donald Trump, raised concerns about increased possibility of nuclear weapons use as he demonstrated little knowledge of nuclear weapons issues combined with a proclivity for bombastic statements and threats.

For the proponents of the ban, these developments underscored the urgency of negotiating a treaty to prohibit the use and possession of nuclear weapons. For the opponents, these issues only added to the list of problems the prohibition treaty cannot solve.

Although the prohibition treaty was negotiated by mostly like-minded states, the deliberations did not escape some of the familiar problems and...
disagreements plaguing the debates at nuclear Nonproliferation Treaty (NPT) and International Atomic Energy Agency (IAEA) meetings, which affected some of the treaty’s provisions. A short negotiation time frame and the lack of a preparatory process, along with the absence of a number of states traditionally active in disarmament and nonproliferation forums, also influenced the process and substance of the talks.

This article provides an overview of how the negotiators arrived at the final text of the prohibition treaty and discusses some of the substantive issues that generated the most debate.

**The Process**

Given the apparently unbridgeable divide between the two sides of the debate on the desirability and timeliness of prohibiting nuclear weapons, the treaty was negotiated without the nuclear-weapon states and against their vocal opposition. Most European states were also absent, which was unusual for negotiations on a humanitarian treaty or indeed any UN-mandated process. On the other hand, civil society representatives from about 100 nongovernmental organizations actively participated and contributed to the process, which is unprecedented for nuclear weapons-related negotiations.

The negotiations were complicated by severe time constraints and the fact that the negotiators could not benefit from the work of preparatory committees or specially designated expert groups. The need for additional technical expertise, for example, was evident during the work on safeguards and nuclear weapons elimination provisions. Although some states, including Egypt, questioned whether it was necessary to conclude the treaty this year, the core group of Austria, Brazil, Ireland, Mexico, and South Africa pressed early for a “lean” treaty that could be adopted without the need to ask the UN General Assembly for a negotiating mandate extension into 2018.

With the uncertainty surrounding the Trump administration’s pending Nuclear Posture Review, the stalemate in U.S.-Russian arms control, growing tensions in East Asia, and continued nuclear-weapon-state opposition to the prohibition treaty, the political window for the negotiations seemed to be closing faster than could have been expected in October 2016. The longer the negotiations continued, the greater disagreements could become, and the greater potential for the prohibition negotiations and the periodic NPT review process to affect each other negatively.

Negotiations, chaired by Ambassador Elayne Whyte Gómez of Costa Rica and titled “Conference to Negotiate a Legally Binding Instrument Prohibiting Nuclear Weapons, Leading Towards Their Total Elimination,” consisted of two parts: a one-week session in March and a three-week session in the summer. During the first session on March 27–31, participating states, as well as civil society representatives, presented their positions on what the future treaty
provisions should contain, particularly the preamble, core prohibitions, and institutional arrangements. States and civil society also expressed views on such issues as victim assistance, verification, and provisions for the elimination of nuclear arsenals.6

The March session was remarkable for its positive, business-like atmosphere. By the end of the week, most states’ positions converged around negotiating a short treaty establishing a strong prohibition on the use and possession of nuclear weapons. Some states, particularly Cuba, Egypt, Iran, and Venezuela, tried to broaden the scope of the future instrument, arguing for the inclusion of a time-bound disarmament program along with comprehensive prohibitions, but their views did not gain much traction.

Most if not all delegations emphasized the importance of the NPT as the cornerstone of the international nonproliferation regime and argued that the new treaty should build on and strengthen the NPT rather than replace it. On the basis of the first week’s statements, as well as the states’ working papers and written products submitted directly to the president’s team, Whyte Gómez prepared the first draft of the treaty, which she distributed on May 22, a week after the 2017 NPT preparatory committee meeting concluded in Vienna. The timing was of some significance, as Whyte Gómez chose not to attend that meeting in an apparent attempt to keep the discussion of the draft treaty out of the preparatory committee as much as possible.

The main negotiations on the text of the ban took place during the second session of the conference from June 15 to July 7. The first seven working days of the second session were spent reviewing the draft treaty paragraph by paragraph in the plenary. At the end of that period, it became evident that small-group negotiations would be necessary to address specific issues and resolve disagreements, even though such methods were not Whyte Gómez’s original preference.

On June 29–30, four groups, led by Whyte Gómez and the facilitators she had appointed, convened in parallel and addressed the following: main prohibitions and obligations (Article 1), verification and accession of nuclear-armed states (Articles 2–4), victim assistance and environmental rehabilitation (Articles 5–7), and all other issues, including withdrawal provisions and institutional arrangements (Articles 8–20). The facilitators submitted their respective texts to Whyte Gómez as the products of their groups’ “best effort.” On July 3, at the beginning of the last week of the negotiations, Whyte Gómez released the draft final text based on the group submissions and additional consultations. States then had a little more than 24 hours until Wednesday, July 5, to review the draft final text and consult their respective capitals.

The expectation among many delegations was that they would be able to amend the draft text further on the basis of their review and instructions from the capitals. Whyte Gómez, however, indicated that the final draft would have to be submitted to the delegations at least 24 hours before its expected adoption, that is, the final text had to be ready by the morning of July 6. This left little if any time for negotiations on any additional substantive changes, which led to confusion and tension on July 5 when she resisted making any amendments to the draft. Several delegations questioned the reasoning behind having a plenary meeting to discuss the draft text if their comments were not going to be taken into account. At the same time, there was sufficient recognition in the room that reopening any part of the text for further negotiations could mean unraveling the whole draft. The prevailing desire among the states to adopt the treaty on July 7 was such that almost all the delegations, including those that had concerns with the text and with the process in the final days, ultimately supported the July 3 draft, with minor amendments.7

Following the UN General Assembly’s rules of procedure meant that the conference needed only a two-thirds majority to adopt the text of the treaty, but it came closer to a consensus outcome than generally expected. On July 7, an impressive 122 states voted in favor, one against, and one state abstained.

The Netherlands, the only NATO member to participate in the negotiations, consistently stated that it would not be in a position to support a treaty if the provisions were inconsistent with the country’s alliance obligations. Unsurprisingly, the Netherlands asked for a vote on the text of the treaty and voted against it. Singapore abstained, citing the extremely limited time available for the negotiations and the failure to include in the final text Singapore’s proposal regarding transit. After Sweden
and Switzerland expressed concerns about some of the provisions, such as the inclusion of testing in the prohibitions, relatively weak safeguards requirements, and the relationship between the prohibition treaty and the NPT, there were questions as to whether they would abstain on the final text. Both states, however, judged that the treaty overall was an important step forward and voted in favor.

**Issues and Actors**
The treaty prohibiting nuclear weapons is a highly controversial subject in the NPT context, with NPT states-parties sharply divided on its benefits, dangers, and expected long-term impact. The ban negotiations themselves, however, were not especially contentious in large part due to the absence of the nuclear-weapon states and most of their allies, and the collective drive to adopt a treaty by July 7 was at times almost palpable. After the first week in March, one could observe broad agreement among states on the treaty’s core prohibitions, such as the use, possession, production, stationing, and deployment of nuclear weapons, as well as assistance in prohibited activities. Still, a number of issues proved difficult for the delegations to conclude, including the prohibition on the threat of use of nuclear weapons and on testing and transit, verification, provisions for the accession of nuclear-armed states, withdrawal, and the relationship of the prohibition treaty with other instruments.

**Threat of Use.** From the beginning of the negotiating conference, many states included the threat of use in the list of prohibitions that the treaty should contain. This was to be expected, considering that the negotiation of a legally binding instrument on the assurances against the use and threat of use of nuclear weapons against non-nuclear-weapon states is a longstanding demand of the Non-Aligned Movement. Furthermore, protocols to the nuclear-weapon-free-zone treaties also commit the nuclear-weapon states not to use or threaten to use nuclear weapons against the nuclear-weapon-free-zone parties. Less expected was the objection from several states, including Mexico, Sweden, and Switzerland, that the threat of use was already covered by the general prohibition on the threat of use of force in the UN Charter.8 Having a specific prohibition on the threat of use in the new treaty would then not only be unnecessary but also risk undermining the general prohibition in the UN Charter.9

The key difference appears to be in the interpretation of the nature of the threat that ought to be prohibited. The UN Charter prohibition seems to apply to a more immediate threat to use nuclear weapons against a particular state or states under specific circumstances. Those that argued for the inclusion of the threat of use in the prohibition treaty, however, were targeting nuclear deterrence policies more broadly because a general threat to use nuclear weapons in retaliation is at the core of nuclear deterrence. The latter logic ultimately prevailed, and the negotiators agreed to include “threaten to use” in the activities prohibited under Article 1 of the treaty.

**Testing.** The disagreement over nuclear testing centered around the issue of whether its inclusion in the treaty’s prohibitions under Article 1 would be redundant because of the existence of the Comprehensive Test Ban Treaty (CTBT) and, more importantly, would undermine the efforts to bring the CTBT into force, which requires ratification by eight key states. Many states spoke in favor of including testing in the new prohibition treaty, arguing that this would strengthen rather than weaken the norm against nuclear tests, and a majority supported the reaffirmation of the CTBT’s importance in the preamble.

Mexico, the Netherlands, Sweden, and Switzerland expressed concerns about harming the CTBT. In an attempt to mitigate potential damage, Switzerland, supported by the Netherlands and Sweden, suggested adding “in accordance with the CTBT” to the text on testing, although this proposal was not taken up.10 At the other end of the spectrum, Algeria, Cuba, and Iran, among others, tried to broaden the scope of the testing prohibition, apparently to “fix” perceived loopholes in the CTBT. They argued for a specific reference to subcritical tests and computer simulations and objected to the use of the CTBT formulation prohibiting “any nuclear test explosion or any other nuclear explosion.” Furthermore, Egypt and Iran opposed any mention of the CTBT’s importance in the preamble of the prohibition treaty.11

The uneasy compromise devised by Whyte Gómez was to include “test” among the core prohibitions under Article 1(a), so that states-parties to the prohibition treaty would undertake “never under any circumstances to... test... nuclear weapons or other nuclear explosive devices.” This broad formulation did not fully satisfy either side of the debate. States such as Cuba, Iran, and Nigeria announced that they would interpret the text as encompassing “all forms” of nuclear testing, including subcritical, although that does not...
Transit constitutes one of the most sensitive points with regard to the relationship between the prohibition treaty and the nuclear-weapon-state policies.

states are not joining the prohibition treaty in the foreseeable future. Yet, it could exacerbate the criticism that the new treaty reinterprets or otherwise undermines existing instruments.

Transit. Some of the most protracted debates at the conference involved transit. A number of countries, including Cuba, Ecuador, Guatemala, Indonesia, Kazakhstan, and Peru, called for an explicit prohibition on transit of nuclear weapons. Others, Austria and Mexico among them, argued against on the grounds that such a prohibition would be difficult to implement and verify. Transit constitutes one of the most sensitive points with regard to the relationship between the prohibition treaty and the nuclear-weapon-state policies. A direct prohibition on transit would have affected primarily the United States because its strategic nuclear submarines routinely patrol the Atlantic and Pacific oceans and would have benefitted the Russian position. Outside observers also saw the potential prohibition on transit as an indicator of a particularly anti-NATO, or anti-U.S., focus of the new treaty. Along with questions of implementation and verification, this consideration also must have weighed on the states urging caution with regard to banning transit.

The issue also split the nuclear-weapon-free-zone parties. None of the existing nuclear-weapon-free zones prohibit transit: the Latin American and the Caribbean treaty does not mention transit at all, while others leave it to the individual states-parties to decide whether to allow transit, overflight, and visitation by vessels and aircraft carrying nuclear weapons. The subject is currently particularly controversial in the context of the Bangkok Treaty, where Singapore refuses to accept Russia’s proposed reservation that it would not be bound by the protocol to the Southeast Asian nuclear-weapon-free zone if a state-party allows transit of nuclear weapons. At the prohibition negotiations, Singapore proposed the inclusion of language based on the traditional nuclear-weapon-free-zone transit formulation (Article 7 in the case of Bangkok Treaty) and subsequently cited the rejection of this proposal among the reasons for abstaining on the treaty as a whole.

Whyte Gómez ultimately decided that there was not sufficient agreement in the room to include transit in the treaty text. Speaking at the July 5 plenary, Cuba, Ecuador, and Peru indicated that they would interpret the prohibition on assistance under Article 1 as including transit. As is the case with testing, however, this should not be taken as an agreed interpretation of the negotiators as a whole.

Safeguards. One of the major concerns of the critics of the idea of a nuclear weapons ban has been that the treaty would undermine the NPT and nonproliferation efforts by creating an alternative instrument lacking the verification system associated with the NPT. States such as Iran, the argument goes, would then be able to “forum shop,” joining the prohibition treaty and leaving the NPT and its safeguards, claiming continued adherence to the commitment not to acquire nuclear weapons.

At the March session of the ban negotiations, several states raised the need for a verification regime and suggested that, for the verification of most prohibitions, the new treaty should rely on the existing IAEA safeguards system. Sweden and Switzerland, along with Chile, Liechtenstein, Netherlands, New Zealand, Thailand, and others, further argued that the treaty should adopt the highest available verification standard, which at present is the combination of comprehensive safeguards (INFCIRC/153) and the Model Additional Protocol (INFCIRC/540).

Negotiations of the safeguards provisions, along with the articles on the accession of nuclear-armed states, were the most complex due to their technical nature and the pronounced political disagreement on the role and necessity of an additional protocol. An additional protocol to a country’s safeguards agreement provides the IAEA with additional tools to verify the absence of undeclared nuclear material and activities in a state along with the nondisavowal of declared material. The measure was adopted as voluntary two decades ago, but more and more NPT states-parties have come to view it as an integral part of the verification standard for the non-nuclear-weapon states. Yet, attempts to recognize an additional protocol as part of the safeguards requirement under the NPT have failed due to strong opposition led by Argentina, Brazil, Egypt, and Iran.

The prohibition treaty logically could have required states-parties to accept comprehensive safeguards and an additional protocol because the treaty’s prohibitions go beyond those in the NPT and the treaty was meant to strengthen the existing regime. At the same time, one could not realistically expect such an outcome, given the absence from the negotiations of many of the leading proponents of additional protocols and because this debate has not been settled.
States arguing for a higher verification standard in the prohibition treaty were cognizant of this reality and did not make the issue their redline for accepting the final draft.

During the negotiations, Argentina, Brazil, and Egypt in particular opposed any attempts to broaden the safeguards requirements for states that never had nuclear weapons beyond INFCIRC/153. To avoid lowering the standard for those who already have an additional protocol in force, it was agreed, based on Ireland’s proposal, to require that states-parties at a minimum maintain the IAEA safeguards obligations they had at the time of the prohibition treaty’s entry into force. Aspirational language regarding possible future adoption of a higher verification standard also did not survive the opposition and was replaced with a reference to “any additional relevant instruments” that a state-party may adopt in the future.

The prohibition treaty has already come under criticism for insufficiently robust safeguards provisions, and this will likely continue to be a point of contention when the treaty is discussed in other forums, such as the NPT review process. The problem is further exacerbated by the fact that (former) nuclear-armed states joining the prohibition treaty would be required, after eliminating their nuclear arsenals, to accept IAEA safeguards “sufficient to provide credible assurance” of the nondiversion of declared nuclear material and the absence of undeclared materials and activities, which essentially means comprehensive safeguards together with an additional protocol. Thus, the treaty establishes different safeguards requirements for different kinds of states in perpetuity, and it is difficult to imagine that the current nuclear-weapon states would want to accept such an arrangement.15

Nuclear-Armed States’ Accession and Elimination of Nuclear Weapons. A key idea underlying the calls for negotiating a prohibition treaty had been that it would establish a strong normative prohibition against possession and use, leaving the details on verifiable elimination of nuclear weapons to be negotiated at a later date, with the participation of nuclear-armed states. At the same time, UN General Assembly Resolution 71/258 mandated the negotiators to indicate some kind of a path toward the complete elimination of nuclear weapons. Furthermore, at the March session, many states and civil society representatives spoke of the need to include provisions obligating the nuclear-armed states, should they join the treaty, to eliminate their nuclear arsenals. These provisions proved particularly difficult to negotiate and underwent the most changes from the first draft to the final text.

States decided to include in the treaty the “disarm and join” (the South African model) and “join then disarm” options for nuclear-armed states’ accession, but the latter approach in particular raised a range of serious issues.16 Those concerned verification, compatibility of Article 1 prohibitions with the accession of a state still in possession of nuclear weapons, and the timeline and procedure for agreeing to an elimination plan.

The negotiators tried to balance the fact that none of the disarmament timelines and verification details could be agreed in the absence of nuclear possessors with the need to ensure that a nuclear-armed state joining the treaty could not retain its arsenal indefinitely while claiming to be in compliance. A nuclear-armed state-party would have to submit its proposed disarmament plan within 60 days of joining the treaty, to be negotiated with an authority designated by the states-parties. The states-parties would also

Civil society representatives from about 100 nongovernmental organizations, including hibakusha leaders such as Setsuko Thurlow (center), participated and contributed to the process, which is unprecedented for nuclear weapons-related negotiations.
designate a competent authority to carry out disarmament verification. The two authorities do not have to be the same, and the treaty leaves open the choice of what kind of a body it may be (e.g., an existing international organization, a new specially created organization, or a subsidiary body of the Meeting of States-Parties).

Withdrawal. Since North Korea declared it would no longer be part of the NPT in 2003, the debate has been ongoing about the need to tighten the withdrawal provisions and ensure that any state that decides to withdraw from the NPT in the future bears serious consequences. That debate has not led to any concrete results in the NPT context, but the North Korean experience and concerns about states leaving the future prohibition treaty informed the deliberations about withdrawal provisions during the ban negotiations. In addition to extending the withdrawal notice period to 12 months versus the NPT’s three months, Article 17 of the prohibition treaty stipulates that if the withdrawing party is engaged in an armed conflict at the end of that 12-month period, the state would continue to be bound by the terms of the treaty. This provision aims to discourage states from withdrawing from the treaty to pursue nuclear weapons development because of a conflict. Yet, the article envisions no enforcement measures, and the treaty provides no role for the UN Security Council in case of withdrawal.

Although it is unusual for treaties not to have withdrawal provisions altogether, a number of delegations argued that the very nature of the prohibition treaty is such that withdrawal should not be an option. It was also suggested that Article 17 should be deleted to allow the Vienna Convention on the Law of Treaties to apply in case of withdrawal. That convention stipulates that if a treaty does not have a specific withdrawal clause, leaving such treaty would be possible only if it was “established that the parties intended to admit the possibility of denunciation or withdrawal” or withdrawal is implied “by the nature of the treaty.”17 If one of those conditions is satisfied, a state would have to give at least a 12-month notice of withdrawal. The record that some of the negotiators expressed the view that withdrawal should not be allowed at all could have led to serious disagreements over the interpretation and application of the convention in case of future withdrawal.

At the July 5 plenary, the conference appeared to remain evenly split between those in favor and against deleting Article 17. Whyte Gómez ultimately judged that there was not sufficient will in the room to eliminate the withdrawal provisions.

Implications and Conclusions
It is remarkable that a treaty prohibiting nuclear weapons was concluded less than a year after the Open-Ended Working Group on Taking Forward Multilateral Disarmament Negotiations adopted a report recommending the commencement of negotiations. That 122 states voted in favor of the treaty’s final text sends a powerful message about the rejection of nuclear weapons as a legitimate instrument of national and international security. There is an extremely long way to go for the treaty to become customary international law,18 but if the number of states joining the ban grows steadily, so would the pressure on other countries to disavow nuclear weapons.

Practical implications of the treaty in the near term remain uncertain. The prohibition treaty will not change the policies of nuclear-armed states overnight, much less make them disarm. In the short term, the most visible impact of the ban might be exacerbated acrimony in the NPT and other forums. France, the United Kingdom, and the United States met the adoption of the ban treaty with condemnation and a promise to never join it,19 and the nuclear-weapons states have reportedly discussed "the dangerous flaws" in the treaty.20 There is a real danger that the

---

Alexis Lamek, deputy UN permanent representative of France, speaks to journalists March 27 at the United Nations on behalf of member states opposed to the conference to negotiate a legally-binding instrument to prohibit nuclear weapons. He is flanked by U.S. Ambassador Nikki Haley (left) and Matthew Rycroft, UN permanent representative of the United Kingdom.
rest of the 2020 NPT review cycle will be consumed by the bitter disagreement and mutual accusations.

It would be wrong to simply blame a controversial 2020 NPT review cycle on the Treaty on the Prohibition on Nuclear Weapons, given the crisis in U.S.-Russian nuclear arms control, North Korea’s demonstration of advanced nuclear and missile capabilities, anxiety about the developing new U.S. nuclear policy, arsenal modernization in all nuclear-weapon states, and no progress on the Middle Eastern zone free of nuclear and other weapons of mass destruction. Even without the ban, this would have been a difficult review cycle, but the treaty is likely to get most of the spotlight.

There is no denying the profound divide among NPT states-parties on the value and legitimacy of nuclear weapons, but both sides could try to reduce tensions by shifting the attention elsewhere. States would have to acknowledge their disagreement and somehow put it aside, focusing instead on other issues, such as implementation of the 2010 action plan.

Yet, it would require the nuclear-weapon states to put forth concrete proposals on disarmament measures they are planning to implement, and so far, there is little reason to believe this will happen in the near future. Both sides proclaim commitment to the NPT and bear the responsibility to try to continue working together, but the onus is on the nuclear-weapon states to put on the table a forward-looking agenda to back up their NPT nuclear disarmament commitments and obligations.

ENDNOTES


7. One substantive amendment to the July 3 draft that the president had to make was reintroducing the text into Article 7, previously agreed in the small group, on the responsibility of states using and testing nuclear weapons to provide assistance to affected states. It remains unclear why the text was missing from the July 3 draft.

8. UN Charter, art. 2(4).


The Treaty on the Prohibition of Nuclear Weapons

Preamble
The treaty has a 24-paragraph preamble acknowledging the catastrophic humanitarian consequences of nuclear weapons use and the value of existing international disarmament agreements, including the nuclear Nonproliferation Treaty (NPT), the Comprehensive Test Ban Treaty (CTBT), and nuclear-weapon-free-zone agreements, as well as the “right” of states-parties to peaceful uses of nuclear energy.

Prohibitions (Article 1)
States-parties are prohibited to use, threaten to use, develop, produce, manufacture, acquire, possess, stockpile, transfer, station, or install nuclear weapons or assist with any prohibited activities.

Declarations (Article 2)
A state-party must declare, when joining the treaty, whether it has eliminated a previous nuclear weapons program, currently has nuclear weapons, or holds another country’s nuclear weapons on its territory. If a state has another country’s nuclear weapons on its territory when it signs the treaty, it must remove them. If it has its own nuclear weapons, it must eliminate them.

Safeguards (Article 3)
Non-nuclear-weapon states are required to have, at a minimum, a comprehensive safeguards agreement with the International Atomic Energy Agency (IAEA) “without prejudice” to any future additional agreements.

NUCLEAR-WEAPON STATES ACCESSION (ARTICLE 4)
There are two ways for a nuclear-weapon state to accede to the treaty and eliminate its nuclear weapons: it can join the treaty and then destroy its nuclear weapons or destroy its nuclear weapons and then join the treaty. States that “destroy and join” must cooperate with a “competent international authority” designated by the treaty to verify dismantlement. States that “join and destroy” must immediately remove nuclear weapons from operational status and submit a time-bound plan for their destruction within 60 days of joining the treaty.

The treaty does not specify which “competent international authority or authorities” would be suited to verify irreversible disarmament of a nuclear-armed state that decides to join the treaty, but the treaty allows for an appropriate authority to be designated at a later date. The treaty requires any current or former nuclear-weapon state that seeks to join the prohibition treaty to conclude a safeguards agreement with the IAEA to verify that nuclear materials are not diverted from peaceful to weapons purposes.

POSITIVE OBLIGATIONS (ARTICLES 6 AND 7)
The treaty obligates states-parties to provide victim assistance and environmental remediation to those affected by nuclear weapon use and testing.

MEETINGS OF STATES-PARTIES, SIGNATURE, RATIFICATION, AND ENTRY INTO FORCE (ARTICLES 8, 13, 14, AND 15)
Biennial meetings of states-parties will address implementation and other measures. Review conferences will be held every six years. The treaty, open for signature on September 20, 2017, enters into force 90 days after the 50th state ratifies it.

BACKGROUND
The initiative to negotiate a “legally binding instrument” to prohibit nuclear weapons is the result of a years-long process that grew out of a renewed recognition of the catastrophic humanitarian consequences of nuclear weapons use, the rising risk of accidental or intentional nuclear use, and a growing sense of frustration that key nuclear disarmament commitments made by the nuclear-weapon states were not being fulfilled.

The 2010 NPT Review Conference unanimously “express[e]d its deep concern at the continued risk for humanity represented by the possibility that these weapons could be used and the catastrophic humanitarian consequences that would result from the use of nuclear weapons.”

These concerns motivated a group of states, including Austria, Mexico, and Norway, to organize a series of three conferences in 2013 and 2014 on the humanitarian consequences of nuclear weapon use.

Following the conclusion of the 2015 NPT Review Conference, these and other states agreed to set up an open-ended working group in 2016 on advancing multilateral disarmament negotiations. The working group led to the formulation of a resolution in the UN General Assembly to start negotiations in 2017 on a treaty prohibiting nuclear weapons. The resolution passed the UN General Assembly First Committee by a vote of 123–38 with 16 abstentions in November 2016 and was subsequently adopted by the General Assembly as a whole.

The first negotiating session was held at the UN in New York on March 27–31 with participants from some 130 governments and dozens of civil society organizations. The president of the negotiations, Ambassador Elayne Whyte Gómez of Costa Rica, incorporated elements of that discussion into a draft convention on the prohibition of nuclear weapons, issued on May 22 in
Geneva. The second and final round of negotiations took place on June 15–July 7 in New York, with participants adopting the Treaty on the Prohibition of Nuclear Weapons by a vote of 122–1–1. The Netherlands voted against adoption, and Singapore abstained.

**REACTIONS FROM THE NUCLEAR-ARMED STATES**

Nuclear-weapon states and many NATO members have opposed the initiative from the beginning. Although the United States and the United Kingdom participated in the 2014 Conference on the Humanitarian Impacts of Nuclear Weapons in Vienna, leaders from Washington and the other nuclear-weapon states boycotted the working group sessions and the 2017 treaty negotiations.

These states contend that the treaty will distract attention from other disarmament and nonproliferation initiatives, such as negotiating a fissile material cutoff treaty or ratifying the CTBT. They have expressed concern that the nuclear prohibition treaty could undermine NPT and the extensive safeguard provisions included therein by giving states the option to “forum shop,” or choose between the two treaties.

**ARGUMENTS FOR THE TREATY FROM PROPONENT STATES**

Supporters of the nuclear prohibition treaty argue that it will close a “legal gap” that exists regarding nuclear weapons, which are not expressly outlawed by the NPT even though their use would be contrary to the rules of international law applicable in armed conflict. They argue that the treaty reinforces the NPT and its Article VI requirement for nuclear disarmament and that it can reduce the salience of nuclear weapons and help prompt more urgent action to reduce nuclear risk and promote disarmament.

---

**Timeline**

**2010**

**May 3–28:** The final document of the 2010 review conference for the nuclear Nonproliferation Treaty (NPT) acknowledges the humanitarian consequences of nuclear weapons use.

**2013**

**March 4–5:** The first conference on the humanitarian impact of nuclear weapons use takes place in Oslo.

**2014**

**February 13–14:** The second conference on the humanitarian consequences of nuclear weapons use takes place in Nayarit, Mexico.

**December 8–9:** The final conference on the humanitarian consequences of nuclear weapons use takes place in Vienna.

**December 9:** One hundred twenty-seven states endorse the Humanitarian Pledge, calling on all NPT states-parties to renew their commitment to Article VI of the NPT and to take interim steps to reduce the risk of nuclear use.

**2015**

October 29: The UN General Assembly First Committee votes 135–12 with 33 abstentions on a resolution to create an open-ended working group to advance multilateral nuclear disarmament negotiations.

**2016**

**February 22–26:** The first working group to advance multilateral nuclear disarmament negotiations meets in Geneva, Switzerland.

**2017**

**March 27–31:** The first round of negotiations on a treaty prohibiting nuclear weapons takes place at the United Nations in New York.

**May 2–4 and 9–13:** The second working group to advance multilateral nuclear disarmament negotiations meets in Geneva, Switzerland.

**August 16–19:** The third working group to advance multilateral nuclear disarmament negotiations meets in Geneva, Switzerland, approving a final report by a vote of 68–22 with 13 abstentions.

**October 27:** The First Committee adopts a resolution to begin negotiations in 2017 on a nuclear prohibition treaty by a vote of 123–38 with 16 abstentions.

**December 23:** The General Assembly approves the resolution to begin negotiations on a nuclear prohibition treaty adopted by the First Committee by a vote of 113–35 and 13 abstentions.

**May 22:** President Elayne Whyte Gómez presents the first draft text of the treaty at the United Nations in Geneva.

**June 15–July 7:** The second round of negotiations on a treaty to prohibit nuclear weapons takes place at the United Nations in New York.

**July 7:** The treaty prohibiting nuclear weapons is adopted by a vote of 122–1–1. The Netherlands voted against the treaty, and Singapore abstained.

—ALICIA SANDERS-ZAKRE
Disputes Cloud U.S.-Russian Arms Talks

The United States and Russia are preparing to resume talks on strategic stability amid deep divisions on a host of bilateral issues, including arms control, and in the wake of new congressionally imposed sanctions on Moscow that U.S. President Donald Trump grudgingly signed into law last month.

U.S. Secretary of State Rex Tillerson and Russian Foreign Minister Sergey Lavrov reached an agreement in principle at their May meeting in Washington to resume dialogue on nuclear and related issues. Such talks would provide an important venue for discussions between Washington and Moscow at a difficult time in the relationship on steps to reduce the risks of nuclear weapons use and to reinforce and build on existing arms control mechanisms.

But the two sides have yet to agree on when the talks will begin and who will attend. There is no indication that Trump and Russian President Vladimir Putin discussed nuclear weapons issues during their July 7 bilateral meeting on the sidelines of the Group of 20 summit meeting in Hamburg, Germany.

“We have agreed in principle to hold a bilateral, interagency exchange on a number of issues related to maintaining strategic stability between Russia and the United States,” a State Department official wrote in an Aug. 23 email to Arms Control Today. “We do not have any scheduled meetings to announce at this time.”

Russia wants talks on arms control, nonproliferation issues, “and, accordingly, strategic stability,” Russian Deputy Foreign Minister Sergey Ryabkov said in an interview with Kommersant published Aug. 8. “Unfortunately, so far under the new administration, a dialogue on this topic is extremely slow,” he said. “But we expect that in the near future the relevant contacts will resume.”

The Obama administration had sought to begin talks with Russia on strategic stability last year, but Russia demurred, preferring to await the new U.S. administration.

Trump Seeks Better Relations

Before and after taking office, Trump stated repeatedly that he would like to improve relations with Moscow. Reflecting that sentiment, Tillerson said on May 14 on "Meet the Press" that the United States needs to “improve the relationship between the two greatest nuclear powers in the world.”

“I think it’s largely viewed that it is not healthy for the world, it’s certainly not healthy for us... for this relationship to remain at this low level,” Tillerson added.

Still, tensions between the two countries remain due to disagreements over a growing list of issues that, from the U.S. viewpoint, include Russia’s alleged interference in the U.S. presidential election, continuing involvement in the war in
Ukraine, alleged violation of the Intermediate-Range Nuclear Forces (INF) Treaty, and support for Syria's Assad regime. Russia has complaints of its own, including U.S. sanctions, construction of missile defense systems in Europe, and NATO defensive activities described by Moscow as threatening.

As long as the cloud of the continued congressional and FBI investigations into the Trump campaign's conduct prior to and after the 2016 election hangs over the administration, there will be significant domestic political constraints on its ability to seek a grand bargain with Moscow, including on significant nuclear arms control measures.

For example, the House and Senate voted overwhelmingly in July to increase sanctions on Russia over its actions in Ukraine and Syria, as well as allegations that it interfered in the 2016 U.S. elections. Notably, the bill gives Congress the power to block the president from making any changes to sanctions policy on Russia.

Trump signed the bill Aug. 2, but in a statement said the law was “significantly flawed” and “included a number of clearly unconstitutional provisions.” The next day, Trump tweeted that Congress, not Russia, is to blame for the bilateral relationship being “at an all-time & very dangerous low.”

**Challenges to Arms Control**

Key pillars of the U.S.-Russian arms control architecture, like the bilateral relationship more broadly, are under siege.

Although some meaningful arms control cooperation continues, such as adherence to the 2010 New Strategic Arms Reduction Treaty (New START) and implementation of the 2015 Iran nuclear deal, there is no ongoing dialogue on further nuclear risk reduction steps.

Putin rebuffed President Barack Obama’s June 2013 proposal to reduce U.S. and Russian strategic nuclear stockpiles by one-third below the ceilings set by New START, which caps the deployed strategic nuclear arsenal of each country at 1,550 accountable warheads and 700 deployed delivery vehicles. Progress was stymied due in part to disagreement between the two sides about non-nuclear issues that could impact the strategic balance, such as missile defense and advanced conventional weapons.

To make matters worse, the United States has accused Russia of testing and deploying ground-launched cruise missiles (GLCMs) in violation of the 1987 INF Treaty. Moscow denies it is violating the agreement and instead has accused Washington of breaching the accord. Ryabkov said that the INF Treaty is a “very important and stabilizing factor” and that Russia remains committed to the accord.

Meanwhile, some Republican members of Congress are seeking to escalate the dispute by requiring the Pentagon to begin research and development on a U.S. GLCM to counter Russia’s violation. Furthermore, U.S. and NATO officials have expressed concern that Russia is developing new nuclear weapons and lowering the threshold for when it might consider using them.

It remains to be seen how the Trump administration will approach the arms control relationship with Russia. The administration is conducting a Nuclear Posture Review that is examining U.S. nuclear policy and strategy. (See ACT, March 2017.) The review is scheduled to be completed by the end of the year.

The president has said that global nuclear weapons inventories should be significantly reduced, but he also has pledged to strengthen and expand U.S. nuclear capabilities, denounced New START, and reportedly responded negatively to Putin’s suggestion in a January phone call to extend the treaty.

**An Agenda for Talks**

Christopher Ford, special assistant to the president and senior director for weapons of mass destruction and counterproliferation, told the Arms Control Association annual meeting on June 2 that the Trump administration is “working very hard to try to re-engage” with Russia “on matters that relate to strategic stability.”

Ford said this engagement includes “broader questions…of how various pieces of our security postures fit together and either are conducive to or detrimental to broader questions of global peace and security.”

This would suggest a wide-ranging agenda for talks, including the growing number of factors that influence U.S. and Russian thinking about nuclear force policy, including missile defense, third-country nuclear forces, advanced conventional weapons, the cyber domain, and more.

An early focus of discussion could be forging a better common understanding of strategic stability and how it can be bolstered by arms control and more frequent dialogue.

Another early deliverable from the talks could be agreement on an extension of New START and its verifications provisions by five years until 2026, as allowed by the treaty.

In a July 18 interview with Kommersant, Ryabkov reiterated Russia’s offer to begin talks with the United States on extending the treaty. He said the United States has been “too slow,” particularly in hiring senior personnel empowered to discuss New START implementation and a possible extension.

If the treaty is allowed to lapse with nothing to replace it, there would be no limits on Russia’s strategic nuclear forces.

Strategic stability discussions also would provide a high-level forum to discuss preservation of the INF Treaty and ways to resolve the compliance dispute. A prerequisite for progress would likely require that each side acknowledge the other’s concerns.

The collapse of the treaty could unleash a costly new arms race in intermediate-range missiles, which would undermine security in Europe and Asia, and make continued strategic arms control measures practically impossible.—KINGSTON REIF
Republicans Aim to Produce Banned Missile

Republicans in Congress are advancing legislation to have the United States develop a cruise missile prohibited by the 1987 Intermediate-Range Nuclear Forces (INF) Treaty, an action that would escalate a dispute with Russia over alleged violations of the only treaty to successfully eliminate an entire class of nuclear weapons.

House and Senate versions of the National Defense Authorization Act (NDAA) for fiscal year 2018 each contain provisions that threaten the integrity of the INF Treaty by establishing research and development programs for a ground-launched cruise missile (GLCM) with a range prohibited by the treaty. The treaty required the two countries to eliminate permanently their nuclear and conventional ground-launched ballistic and cruise missiles with ranges of 500 to 5,500 kilometers. It does not prohibit activities related to research and development of this category of weapons.

Since 2014, the United States has accused Russia of violating its INF Treaty commitment “not to possess, produce, or flight-test” an intermediate-range GLCM. Those accusations expanded this year after the United States determined that Russia is fielding the noncompliant system. Moscow denies the allegations.

The House and Senate bills authorize programs and funding for research and development of a road-mobile GLCM with a range of 500 to 5,500 kilometers. The House version provides $25 million to develop a conventional system, while the Senate version would provide $65 million for a nuclear-capable system.

The House version, which passed on July 14 by a vote of 344–81, also requires the president to submit a report on Russian INF Treaty compliance within 15 months of enactment. According to the bill, if the president’s report finds that Russia is still violating the treaty, then the United States will no longer be bound by it.


“The only way to save the INF Treaty is to show the Russians that we will walk away from it if they don’t come back into compliance,” Cotton said July 17 at the Center for Strategic and International Studies in Washington.

Yet, Cotton questioned whether to remain a party to the treaty even if Moscow does return to compliance. Specifically, Cotton expressed concern about China’s “complete freedom to deploy intermediate-range missiles” because it is not party to the INF Treaty. The United States needs a ground-based intermediate-range missile system given an “increasingly aggressive China with more than 90 percent of its missile forces falling into the intermediate range,” he said.

Many Democrats and experts in the arms control community say that the legislation puts at risk bipartisan nuclear cooperation and the security of European allies. Steven Pifer, nonresident senior fellow in the Arms Control and Non-Proliferation Initiative at the Brookings Institution, wrote in an April 26 blog post, “U.S. allies and other countries in Europe and Asia would find themselves under threat from an unlimited number of Russian intermediate-range ground-launched cruise missiles.” Furthermore, Pifer warns that an end to the INF Treaty would “virtually ensure that no new U.S.-Russia arms control treaty could secure the Senate votes needed for consent to ratification.”

In a July 11 statement on the House legislation, the White House criticized the congressional initiative, saying it “unhelpfully ties the administration to a specific missile system, which would limit potential military response options” and “would also raise concerns among NATO allies.”

Christopher Ford, senior director for weapons of mass destruction and counterproliferation on the National Security Council staff, has stated that the Trump administration is discussing with allies a “very broad” range of measures to pressure Russia into compliance. Further, lawmakers in Congress do not appear to have considered the question of whether European allies, given public opinion, would be willing to host U.S. nuclear-capable intermediate-range GLCMs were they produced.

The House bill may exceed congressional authority by declaring that the United States would no longer bound by the treaty if Russia does not return to compliance after 15 months. Cotton’s office did not return a request for comment.

Top U.S. military officials say there is not a specific military need for such a GLCM. Responding to Cotton’s comment that U.S. treaty obligations
create an “offensive imbalance” with Russia and China, Air Force Gen. Paul Selva, vice chairman of the Joint Chiefs of Staff, told the Senate Armed Services Committee that the United States under the treaty is “not restricted from fielding ballistic missile or cruise missile systems that could be launched from ships or airplanes.”

In Moscow, Mikhail Ulyanov, director of the nonproliferation and arms control department in the Russian Ministry of Foreign Affairs, described the INF Treaty-related measures as “provocative” in comments to the Russian newspaper Kommersant on Aug. 5. He dismissed “the strange fuss on Capitol Hill” on this issue as having “more to do with PR than real politics.”

“I would like to hope that after consideration of the bill in the Senate and connection to this process by the U.S. administration, the final version of the document will become more reasonable and acceptable,” Ulyanov said.

Russian Deputy Foreign Minister Sergey Ryabkov told Kommersant on July 18 that Russia has “no reason to question the viability” of the INF Treaty and “we are very worried by the attempts of the American side, under far-fetched pretexts, under the charge of accusing Russia of alleged deviations from the requirements of the treaty, to question the expediency of its preservation.”

The House legislation ties funding for an extension of the New Strategic Arms Reduction Treaty (New START) to Russian INF Treaty compliance. Cotton said on July 17 that by threatening New START and the Open Skies Treaty, two accords that Russia hopes to preserve, the United States demonstrates a “firm and unyielding response” to Russian noncompliance.

Democratic lawmakers say that linking INF Treaty compliance to cooperation on other key treaties jeopardizes U.S. national security and further strains the bilateral arms control relationship, especially because Moscow has expressed a commitment to discussing a New START extension.

In an email to Arms Control Today, Sen. Patrick Leahy (D-VT) wrote, “Tying a treaty limiting strategic weapons designed to decimate all life to compliance with a treaty that governs short- and medium-range weapons with serious, though limited, regional impacts is reckless.” —MAGGIE TENNIS

Soviet inspectors and their American escorts stand January 14, 1989 among several dismantled U.S. Pershing II missiles as they view the destruction of other missile components. The missiles are being destroyed in accordance with the Intermediate-Range Nuclear Forces (INF) Treaty.

U.S. President Donald Trump has set the stage for actions, starting as early as next month, that could unravel the Iran nuclear deal, a development that would jolt U.S. relations not only with Tehran but also with Russia, China, and major allies in Europe who helped negotiate the deal.

Trump signaled that he might not issue a certification to Congress tied to the nuclear deal at the next 90-day deadline, irrespective of Tehran’s compliance with the accord. In a July 25 interview with The Wall Street Journal, Trump said he would be “surprised” if he could issue the certification to Congress at that deadline in mid-October. “If it was up to me, I should have had [Iran] noncompliant 180 days ago,” he said.

Failure to issue the certification triggers a process that allows Congress to reimpose on an expedited schedule sanctions waived under the nuclear accord. Such moves, absent strong evidence of Iran’s failure to comply, would violate U.S. commitments and could enable Iran to cite the U.S. breach as justification for restarting currently prohibited nuclear activities. Further, European allies are unlikely to support U.S. sanctions if Trump is seen as acting in bad faith, reducing the economic impact on Iran while adding a new source of transatlantic tensions.

The 90-day certification requirement, as well as the expedited process for reimposing sanctions, are laid out in the 2015 Iran Nuclear Agreement Review Act, which allowed Congress the option to vote to approve or disapprove the nuclear deal after it was finalized in 2015. (See ACT, November 2015.) It is not a requirement of the multilateral nuclear deal, known as the Joint Comprehensive Plan of Action (JCPOA), negotiated between Iran and P5+1 countries (China, France, Germany, Russia, the United Kingdom, and the United States).

The certification, however, is broader in scope than the nuclear deal. In addition to determinations that Iran is complying with the nuclear deal and has not taken steps to advance a nuclear
weapons program, it includes more subjective assessments, such as certifying that continued implementation of the agreement is in the U.S. national security interest and that the sanctions relief Iran is receiving is proportional to the limits on the country’s nuclear activities.

As a result, Trump could withhold the certification even if Iran is meeting all of its commitments under the JCPOA.

At the last certification deadline, on July 17, Trump was reportedly persuaded to issue the certification by members of his cabinet, including Defense Secretary Jim Mattis, Secretary of State Rex Tillerson, and national security adviser H.R. McMaster. The State Department’s statement on July 18 on the certification said that Iran’s “continued malign activities outside of the nuclear issue undermine the positive contributions to regional and international peace and security that the deal was supposed to provide.”

It is unclear from Trump’s remarks in his interview with The Wall Street Journal whether his threat to withhold certification at the next deadline would be based on an allegation that Iran is not complying with its commitments or a determination that the nuclear deal is no longer in U.S. national security interest.

Unless circumstances around Iran’s implementation change prior to Oct. 15, it would be difficult for the Trump administration to make a compelling case that Iran is failing to meet its nuclear deal commitments. In July, the U.S. intelligence community and Washington’s P5+1 partners assessed that Iran was meeting its commitments.

U.S. Air Force Gen. Paul Selva, vice chairman of the Joint Chiefs of Staff, told the Senate Armed Services Committee on July 18 that “based on the evidence that’s been presented to the intelligence community, it appears that Iran is in compliance with the rules that were laid out in the JCPOA.” Federica Mogherini, EU foreign policy chief and lead negotiator for the P5+1, said on July 14 that six reports from the International Atomic Energy Agency (IAEA) confirm that Iran is meeting its commitments.

Regardless of whether Trump chooses to withhold certification over allegations of Iranian noncompliance or on U.S. national security grounds, a 60-day window would begin for Congress to introduce legislation reimposing sanctions on Iran that were waived under the nuclear deal.

Separately, Congress in July passed new sanctions that include measures targeting Iran for its ballistic missile program, support for terrorism, and human rights violations. The sanctions legislation, which Trump signed into law Aug. 2, does not violate the nuclear deal, although Iran characterized the measures as a violation of the “spirit” of the agreement.

Yet, if Congress were to reimpose nuclear-related sanctions waived as part of the nuclear deal, Iran is likely to accuse the United States of violating the agreement and could take its own steps to modify or abandon the constraints on its nuclear program. The text of the deal states that Iran will treat such a reintroduction or reimposition of the sanctions waived as “grounds to cease preforming its commitments” in whole or in part.

Iranian officials have stated that Tehran will continue implementing the agreement regardless of U.S. actions. But Iranian President Hassan Rouhani said that if U.S. officials want to “return” to the negotiating table for a new deal, as Trump has advocated, within “hours and days,” Iran will “return to a much
more advanced situation” than at the time negotiations on the nuclear deal began.

Iran passed legislation in 2015 that could require Tehran to resume enrichment of uranium up to 20 percent uranium-235, which is closer to weapons grade than the 3.67 percent limit under the nuclear deal, if another party violates the agreement. Iran produced uranium enriched to 20 percent prior to the conclusion of the nuclear deal. The interim agreement reached in November 2014 halted enrichment to that level of any additional amounts and neutralized Iran’s existing stock of 20 percent enriched uranium.

Ali Akhbar Salehi, head of the Atomic Energy Organization of Iran, reiterated on Aug. 22 that Iran has options to resume nuclear activities if the United States leaves the deal. He said Iran could start enrichment to 20 percent uranium-235 in four to five days.

Given the benefits of the deal and the speed at which Iran could resume some of its nuclear activities, an official from one of the European countries that participated in the negotiations said in an Aug. 21 interview with Arms Control Today that it would be “foolhardy” for the United States to withhold certification for any reason other than in the case of a significant act of nonperformance by Iran. Even then, the nuclear deal has a mechanism for resolving disputes and implementation issues, the Joint Commission, which has “demonstrated its ability to address concerns,” he said.

The Joint Commission is comprised of the P5+1 countries that negotiated the nuclear deal, the EU, and Iran. Any of the parties can raise a compliance concern and use the dispute resolution mechanism to seek to resolve the issue. If the Trump administration has compliance concerns, the Joint Commission should try and resolve the issue “before a rush by Congress to reimpose sanctions,” the European official said.

The official also said that Washington should not assume that the European Union will “go along with putting the sanctions back” and may even take steps to protect European businesses from any reimposed measures that would threaten contracts and future business opportunities with Iran.—KELSEY DAVENPORT

---

**Iran Tests Simorgh Rocket**

Iran marked the opening of its Imam Khomeini National Space Center on July 27 with the first launch of its Simorgh satellite-carrying rocket. Iranian state media claimed the launch was successful, while U.S. intelligence agencies concluded that it was a failure and the Iranian success claims were propaganda.

France, Germany, the United Kingdom, and the United States condemned the launch as “a threatening and provocative step” in a joint letter to the United Nations on Aug. 2. Further, the four nations asserted that the launch was “inconsistent” with a UN Security Council resolution intended to curtail Iran’s ballistic missile program.

The launch does not violate the terms of the nuclear deal between Iran and six world powers, which focused on curtailing Iran’s nuclear activities. After negotiators reached that agreement in July 2015, the Security Council adopted Resolution 2231 backing up the accord with the international imprimatur of the UN.

The resolution included additional matters, with language that “called” on Iran to refrain from activity involving ballistic missiles “designed to be capable of delivering nuclear weapons.” That softened restrictions imposed in 2010 by Security Council Resolution 1929, which states that Iran “shall not undertake any activity related to ballistic missiles capable of delivering nuclear weapons, including launches using ballistic missile technology.”

The United States and its allies deemed the Simorgh launch “inconsistent” with Resolution 2231 due to long-held concerns with the overlap between Iran’s satellite launch and ballistic missile programs. “The technologies necessary for the conception, the fabrication and the launch of space-launch vehicles are closely related to those of ballistic missiles, in particular to those of an intercontinental ballistic missile [ICBM],” they wrote.

U.S. intelligence has warned that the Simorgh could provide a foundation for the development of ICBM technologies, but multiple challenges would complicate repurposing the Simorgh as an ICBM. Additional development and testing would be needed to improve accuracy and ensure a warhead could survive re-entry into the atmosphere. Further, although U.S. intelligence previously warned that “Iran could develop and test an ICBM capable of reaching the United States by 2015,” the evidence suggests Tehran instead has been focused on improving the quality of its existing missiles.

In its letter to the UN, the United States and its allies called on Iran not to conduct any further ballistic missile launches and related activities. Washington went one step further, imposing sanctions on six entities involved in Iran’s ballistic missile program.

Iranian Foreign Minister Javad Zarif, responding on Twitter, maintained that Iran’s missiles were not designed to deliver nuclear weapons.—TYLER RODGERS
In the early days of August, the United States and North Korea seemed to be slipping toward the unthinkable, a war on the Korean peninsula that could kill hundreds of thousands of people or more within the initial hours.

President Donald Trump declared in unscripted remarks on Aug. 8 that North Korea will be met with “fire and fury” and “power the likes of which this world has never seen before” if Pyongyang makes further threats against the United States.

His vague and escalatory comments quickly drew a response from Pyongyang that its military leaders would draw up plans giving leader Kim Jong Un a confrontational option of launching four ballistic missiles that would overfly Japan and splashdown in international waters near the U.S. territory of Guam in the western Pacific Ocean.

Yet, there were signs that a better course could be found. Despite provocative missile tests by North Korea in July and threatening rhetoric from Trump, Pyongyang seemed to signal that it is willing to engage in talks with the United States, and that has not gone unnoticed in Washington. U.S. Secretary of State Rex Tillerson said at an Aug. 22 news conference that diplomacy may be possible in the “near future,” noting that North Korea had demonstrated “some level of restraint that we have not seen in the past.” Trump pulled back a bit later the same day. “Maybe, probably not, but maybe, something positive can come about,” Trump said in impromptu remarks during a free-wheeling, campaign-style speech Aug. 22 in Phoenix.

Those comments offered some basis for hope that the two sides can find a diplomatic off-ramp before a conflict is triggered intentionally or by accident. Just how tentative that prospect remains, however, was demonstrated Aug. 29 (Korean time) as tensions flared anew following a North Korean missile test that overflew Japan.

North Korea has issued statements reiterating that it will not negotiate as long as the United States maintains a “hostile policy and nuclear threat.” Yet, it appeared to keep the door open for diplomacy even as tensions escalated after The Washington Post reported on Aug. 8 on a U.S. Defense Intelligence Agency assessment that North Korea has miniaturized nuclear warheads for use atop its ballistic missiles, including missiles capable of reaching much of the U.S. mainland. The assessment followed North Korea’s first two launches of intercontinental ballistic missiles (ICBMs) in July, both of which were successful. (See ACT, July/August 2017.)

North Korea has threatened Guam in the past because U.S. military bases there are used by B-1B strategic bombers that conduct flyovers of the Korean peninsula, but until this year, Pyongyang had not successfully tested a ballistic missile capable of reaching the island. Although the bombers are not nuclear capable, North Korea views the flyovers as aggressive.

North Korea’s statement was widely perceived as a threat and an escalation of rhetoric, but some North Korea experts such as Robert Carlin, a former CIA and State Department analyst who took part in past negotiations, read Pyongyang’s statement about developing a “plan” to fire missiles toward Guam as a signal that North Korea was moving to de-escalate tensions.

Carlin, a visiting scholar at the Center for International Security and Cooperation at Stanford, said that Pyongyang’s subsequent decision to wait and gauge Washington’s response before launching missiles toward Guam was a positive sign. In an Aug. 15 piece for the blog 38 North, Carlin wrote that this is “exactly how the North moves back from the edge of a cliff.”

Having broken the tension, it would “not be unusual for North Korea to pivot to diplomacy,” he wrote.

Tillerson also noted in his Aug. 22 news conference that Pyongyang had not conducted a missile launch or provocative act since the UN Security Council adopted a resolution imposing addition sanctions on the country—an observation that was overtaken by events a week later. The resolution, adopted unanimously Aug. 5, was a response to North Korea’s ICBM tests. The resolution contained new restrictions, such as an export ban for North Korean coal, iron, seafood and lead, particularly affecting vital trade with China and Russia.

Ahead of Tillerson’s Aug. 22 news conference, the U.S. Treasury Department imposed sanctions on Russian and...
South Korea Seeks to Extend Missile Range

South Korea raised the possibility of extending the permitted range of its ballistic missiles during the June summit between South Korean President Moon Jae-in and U.S. President Donald Trump in Washington.

A South Korean official, speaking to Arms Control Today on Aug. 16, explained that the United States had reached an agreement with the United States to extend the range of its ballistic missiles to 800 kilometers with a 500-kiloton payload, an increase both countries said was necessary to counter the growing threat posed by North Korea's ballistic missiles. (See ACT, November 2012.)

South Korea is currently testing a ballistic missile, the Hyunmoo-2, capable of traveling 800 kilometers, but has not deployed the system. After a June test, officials said a few more tests are required before the missile will be ready. When deployed, South Korea will be able to target any site in North Korea from anywhere in its own territory, so the rationale for an additional range extension is unclear.

Prior to the 2012 agreement, South Korea was limited by a 2001 agreement that restricted its missiles to a 300-kilometer range with a 500-kiloton payload. That was an increase from the 180-kilometer limit that South Korea initially accepted in a 1979 missile technology accord with the United States. –KELSEY DAVENPORT

Contributed to North Korea's decision to conduct the Aug. 29 launch. On Aug. 17, North Korea had called on Washington to refrain from “extremely dangerous actions around the Korean peninsula” and deploying “huge nuclear strategic equipment.”

The United States and South Korea began joint military exercises Aug. 22. The United States does not have nuclear weapons stationed on South Korean soil, but nuclear-capable bombers have participated in past exercises. Pyongyang views so-called decapitation drills, which are military training for targeting North Korea’s leadership, as particularly confrontational.

North Korea has said it would agree to a moratorium on nuclear and missile testing if the United States suspends joint military exercises with South Korea. The United States may not be able to front-load the agenda with discussions of denuclearization, which North Korea publicly rejects because it views nuclear weapons as ensuring the survival of its regime. Still, halting additional progress on missiles and nuclear warheads through a test moratorium would be a positive step to prevent qualitative improvements derived through testing.

Putting a suspension or roll-back of joint U.S.-South Korean military exercises on the table in exchange does not undermine U.S. commitments to its allies and can be quickly ramped back up if North Korea abandons the moratorium. There also is precedent for this type of deal. Washington scaled back exercises in the 1990s and successfully negotiated a deal with North Korea that halted the country’s production of plutonium for nuclear weapons for nearly a decade.

If both sides are able to stick to a “freeze for freeze” deal, that could open up space to talk about a more comprehensive agreement that includes additional limits and a roll-back of North Korea’s nuclear program. –KELSEY DAVENPORT

Chinese entities for supporting North Korea’s nuclear and ballistic missile programs. Treasury Secretary Steven Mnuchin said it is “unacceptable for individuals and companies in China, Russia, and elsewhere” to enable North Korea to generate income for its nuclear and missile programs. Additional designations targeted foreign entities that use North Korean workers, which is a source of income for Pyongyang.

Tillerson’s approach of pairing sanctions pressure with diplomatic overtures seems to have support from key cabinet officials, such as U.S. Defense Secretary Jim Mattis, and South Korean President Moon Jae-in. In a joint op-ed in The Wall Street Journal on Aug. 13, Tillerson and Mattis wrote that “diplomacy is our preferred means of changing North Korea’s course of action” but those efforts are backed by military options.

The military option, particularly the viability of preventive strikes targeting North Korea’s nuclear and missile activities, is increasingly dismissed as ineffective and likely to lead to a larger conflict with catastrophic consequences. Retired Gen. Wesley Clark, former supreme allied commander of NATO, wrote in a commentary for CNBC on Aug. 10 that to eliminate North Korea’s nuclear and missile program, there is “no military option short of general warfare in Korea,” which would likely result in millions of casualties.

That is known within the White House, as Trump’s former chief strategist Steve Bannon said in an indiscreet Aug. 16 interview with the editor of The American Prospect magazine. “There’s no military solution [to North Korea’s nuclear threats], forget it,” he was quoted as saying. “Until somebody solves the part of the equation that shows me that 10 million people in Seoul don’t die in the first 30 minutes from conventional weapons, I don’t know what you’re talking about, there’s no military solution here, they got us.”

Alongside Tillerson’s diplomatic overtures, the United States is likely to continue pressuring North Korea with additional sanctions.

The U.S.-South Korean joint military exercises underway tested North Korea’s nascent restraint and may have contributed to North Korea’s decision to conduct the Aug. 29 launch. On Aug. 17, North Korea had called on Washington to refrain from “extremely dangerous actions around the Korean peninsula” and deploying “huge nuclear strategic equipment.”

The United States and South Korea began joint military exercises Aug. 22. The United States does not have nuclear weapons stationed on South Korean soil, but nuclear-capable bombers have participated in past exercises. Pyongyang views so-called decapitation drills, which are military training for targeting North Korea’s leadership, as particularly confrontational.

North Korea has said it would agree to a moratorium on nuclear and missile testing if the United States suspends joint military exercises with South Korea. The United States may not be able to front-load the agenda with discussions of denuclearization, which North Korea publicly rejects because it views nuclear weapons as ensuring the survival of its regime. Still, halting additional progress on missiles and nuclear warheads through a test moratorium would be a positive step to prevent qualitative improvements derived through testing.

Putting a suspension or roll-back of joint U.S.-South Korean military exercises on the table in exchange does not undermine U.S. commitments to its allies and can be quickly ramped back up if North Korea abandons the moratorium. There also is precedent for this type of deal. Washington scaled back exercises in the 1990s and successfully negotiated a deal with North Korea that halted the country’s production of plutonium for nuclear weapons for nearly a decade.

If both sides are able to stick to a “freeze for freeze” deal, that could open up space to talk about a more comprehensive agreement that includes additional limits and a roll-back of North Korea’s nuclear program. –KELSEY DAVENPORT
South Korean President Moon Jae-in called for temporarily installing additional elements of a controversial missile defense system following North Korea’s second long-range missile test on July 28, reversing his prior decision to suspend deployment pending a thorough environmental review.

“President Moon sees North Korea’s missile threat with that much urgency,” a senior South Korean official told reporters on July 29 when asked about Moon’s decision to proceed with the deployment of four additional U.S. Terminal High Altitude Area Defense (THAAD) launchers. “We’re trying to seek procedural legitimacy through the environmental impact assessment, yet feel the need to act fast on the situation that’s unfolding.”

China, which has long objected to the deployment of the THAAD system in South Korea, expressed concern about Moon’s reversal. Chinese Foreign Minister Wang Yi called the decision “regrettable” following a meeting with his South Korean counterpart on Aug. 6.

South Korea decided to deploy the anti-missile system in July 2016 under President Park Geun-hye to enhance the country’s defenses against North Korea. (See ACT, September 2016.) Moon was elected president in May following a corruption scandal that led to Park’s impeachment in late 2016.

The U.S. military declared the system in South Korea operational in early May, just days before the South Korean election. The initial deployment consisted of two launchers and an associated radar. Four other launchers were also brought to South Korea, but were not made operational.

The mobile, ground-based THAAD system is designed to defend against short-, medium-, and intermediate-range ballistic missiles during their terminal, or end, phase of flight. A THAAD battery typically consists of six launchers, 48 to 72 interceptor missiles, a radar, a fire control and communications system, and other support equipment.

After taking office May 10, Moon said he had not been informed of the presence of the additional four launchers on South Korean soil for weeks and ordered an investigation into why the South Korean Defense Ministry withheld this information. During his election campaign, Moon had been critical of his predecessor’s decision to accept the THAAD system without parliamentary approval, arguing that the decision on whether to deploy should be made by the incoming administration after public discussion and debate. (See ACT, July/August 2017.)

Following his election, Moon stressed that he did not intend to reverse the deployment of the two launchers and radar, but said he would make a final decision about the fate of the system after the comprehensive environmental review. Many South Korean analysts viewed the review as an attempt by Moon to buy time to persuade China and vocal domestic opposition to the THAAD system in South Korea to accept the deployment.

But North Korea conducted its second successful test of an intercontinental ballistic missile (ICBM), designated the Hwasong-14, on July 28, prompting Moon to complete the installation of the additional launchers.

Separately, the THAAD system successfully intercepted and destroyed a mock target having the range of an intermediate-range ballistic missile for the first time in a test July 11. In the test, a THAAD system located at Pacific Spaceport Complex in Alaska detected, tracked, and intercepted a ballistic missile target air-launched by a U.S. Air Force C-17 transport aircraft.

The THAAD system has completed successfully all of the 15 flight and interception tests conducted since 2006, according to the U.S. Missile Defense Agency.

Although the THAAD battery deployed in South Korea is designed to protect the country against North Korean short- and medium-range ballistic missiles, the Defense Department deployed a battery to Guam in 2013 to protect the U.S. territory, home to a major U.S. Air Force bomber base, against intermediate-range missile threats.

In an Aug. 10 statement released through the state-run Korean Central News Agency (KCNA), North Korea said that it was completing plans to test four Hwasong-12 intermediate-range missiles that would “hit the waters 30 to 40 kilometers away from Guam.”

KCNA announced on Aug. 15 that North Korean leader Kim
Defense Secretary Jim Mattis said at a Aug. 17 press briefing in Washington that if North Korea fires a missile toward “the territory of Japan, Guam, [the] United States, [or] Korea, we would take immediate, specific actions to take it down.” — KINGSTON REIF

Jong Un had reviewed the plan and would “watch a little more” the behavior of the United States before deciding whether to proceed with the launch.

The United States warned that any North Korean missile launched at U.S. territory could result in war between the two countries.

Many countries that voted in favor of the new Treaty on the Prohibition of Nuclear Weapons are expected to sign it when it opens for signature on Sept. 20, but several key supporters may not do so.

The treaty was supported by 122 countries when it was adopted July 7 at the United Nations. Among the parties to the negotiations, only the Netherlands voted against, and Singapore abstained. (See ACT, July/August 2017.)

The large number of states supporting the landmark treaty was hailed as remarkable, particularly given the short period of negotiation.

Some states, however, may be unable or unwilling to sign the treaty in September or subsequently, due to possible treaty conflicts, anticipated pressure from nuclear-armed states opposed to the treaty, and concern with the implications of some treaty provisions. They include the Marshall Islands, Sweden, and Switzerland.

The Marshall Islands, the site of 67 U.S. nuclear test explosions and a staunch supporter of nuclear disarmament, may be unable to sign and ratify the nuclear prohibition treaty due in part to its defense agreement with the United States.

The Pacific island nation participated actively in the negotiations, but later clarified that its vote for the treaty “is not to be mistaken for the domestic process to consider joining this treaty.”

Amatlain Elizabeth Kabua, Marshall Islands permanent representative to the UN, explained after voting that her country would “carefully consider this treaty for ratification, taking into account our deep national experience regarding the use of nuclear weapons as well as implications upon the respective provision of our Compact of Free Association with the United States of America, including the defense and security provision” in Title III.

Although the Marshall Islands gained independence in 1986, the United States maintains full responsibility for the defense of the Marshall Islands under its 2003 Amended Compact of Free Association with the United States. In turn, the Marshall Islands cannot take any action that the United States decides is “incompatible with its authority and responsibility for security and defense matters in or relating to the Republic of the Marshall Islands,” as stated in Title III of accord.

Securing approval from the United States may be challenging, given its adamant opposition to the treaty. France, the United Kingdom, and the United States asserted in a joint statement after the treaty’s adoption that it “will not enhance any country’s security” and that it would have the opposite effect. Robert Wood, U.S. ambassador to the Conference on Disarmament (CD), has said on Twitter that the treaty has “dangerous flaws” and is “bad for international peace and security.”

Civil society groups favoring the treaty anticipate that the nuclear-armed states will lobby governments not to sign, just as they encouraged states not to participate in negotiations. “The strongest impediment to states signing the treaty is going to be pressure from the nuclear-armed states, or other nuclear-supportive allies,” Ray Acheson, director of Reaching Critical Will, told Arms Control Today in an Aug. 17 email.

Even without U.S. opposition, the Marshall Islands may still be unable to sign and ratify the treaty because of a possible conflict with its provisions. As James Acton, co-director of the Nuclear Policy Program at the Carnegie Endowment for International Peace, noted on July 6 on Twitter, the Marshall Islands leases to the United States 11 islands in the Kwajalein Atoll, where the Minuteman III and Trident D5 missiles are tested.

The Marshall Islands receives $18 million annually from the U.S. Army for use of the Kwajalein Atoll, from where the United States on May 30 launched an intercontinental ballistic missile (ICBM).
The new treaty prohibits states-parties from assisting any state with banned activities, which includes testing “nuclear weapons or other nuclear explosive devices.” If a nuclear-capable missile were to be interpreted as a nuclear weapon or a nuclear explosive device, then the Marshall Islands would be in violation, were it to have signed and ratified the treaty. If not, Acton wrote, it would only be in compliance through a loophole “big enough to fly an ICBM through.”

Sweden and Switzerland also expressed hesitation about the treaty after voting for it. For those two countries and perhaps others, the short negotiating period may lead to a longer review period before political leaders can sign.

“Despite the complexity of the matter, and the unprecedentedly limited time at our disposal, Sweden has voted in favor of the adoption of this treaty…. At the same time, we recognize that there are crucial elements of this treaty that do not meet what my delegation was aiming for,” Eva Walder, Swedish ambassador for disarmament, said in a statement after the vote.

There were just more than four weeks of negotiations before the treaty’s adoption. The president of the negotiating conference, Ambassador Elye Whyte Gómez of Costa Rica, released the third and penultimate draft of the treaty four days before its anticipated adoption, which diplomats sent back to their capitals for comments. Yet, Whyte Gómez did not accept any substantive changes to that draft, frustrating many diplomats who had expected to resolve their governments’ concerns.

In an Aug. 14 email to Arms Control Today, Walder stated that Swedish political leaders have not decided whether they will sign the treaty in September.

Sweden also voted for the treaty, but explained it would not sign it on Sept. 20 in order to conduct a comprehensive review of the text. “Switzerland is committed to the goal of a world free of nuclear weapons, but also sees risks that this treaty may weaken existing norms and agreements and create parallel processes and structures which may further contribute to polarization rather than reduce it,” Sabrina Dallafior, Swiss permanent representative to the CD, said after the vote.

Sweden and Switzerland had advocated for the treaty to require all states to agree to negotiate an additional protocol with the International Atomic Energy Agency in addition to a comprehensive safeguards agreement required by the nuclear Nonproliferation Treaty (NPT). Instead, the ban treaty calls for all states that have never possessed nuclear weapons to maintain their current level of safeguards, bringing into force a comprehensive safeguards agreement if they have not already done so.

“Switzerland therefore does not plan to sign the treaty” on Sept. 20, when it will open for signature, said Michael Siegrist, a legal officer for the Swiss Federal Department for Foreign Affairs in an Aug. 14 email to Arms Control Today. “This decision is without prejudice to a later decision following the assessment.” — ALICIA SANDERS-ZAKRE

ISODARCO
INTERNATIONAL SCHOOL ON DISARMAMENT AND RESEARCH ON CONFLICTS
31st Winter Course

THE EVOLVING NUCLEAR ORDER:
NEW TECHNOLOGY AND NUCLEAR RISK

ANDALO (Trento, Italy) 7-14 JANUARY 2018

With support from the Carnegie Corporation of New York

- Director of the School: Carlo Schaerf (ISODARCO)
- Directors of the Course: Francesca Giovannini (Committee on International Security Studies, American Academy of Arts and Sciences, Cambridge, USA) and Steven Miller (Belfer Center, Harvard University, Cambridge, USA)
- Lecturers: William Alberque, NATO; Alexei Arbatov, IMEMO; Nadia Arbatova, IMEMO; Martin Malin, Harvard Kennedy School; George Nacouzi, RAND Corporation; Benoit Pelopidas, Paris; Lora Saalman, SIPRI; Scott Smitsom, CENTCOM; Behnam Taebi, Delft University of Technology; Tong Zhao, Beijing; Beyza Unal, Chatham House; Tristan Volpe, Naval Postgraduate School, Monterey

Confirmations are expected from other eminent scholars

Information on the school and application form: www.isodarco.it
Seven Vie for OPCW Director-General

The Organisation for the Prohibition of Chemical Weapons (OPCW) Executive Council plans by October to pick from among seven candidates to succeed Director-General Ahmet Üzümcü, who steps down in July.

The OPCW, founded in 1997 to implement the Chemical Weapons Convention (CWC), faces formidable challenges in the coming years, including the recurring use of chemical weapons in Syria.

Several former representatives to the OPCW are vying for the job, as well as two well-known figures in the arms control field: Tibor Tóth, former executive secretary of the Comprehensive Test Ban Treaty Organization, and Kim Won-soo, former UN undersecretary-general and high representative for disarmament affairs.

Selection Process

At the OPCW Executive Council meeting in July, each nominee gave a 10-minute presentation on priorities, challenges, and the management of the secretariat, followed by questions from the five regional groups.

Sheikh Mohammed Belal of Bangladesh, the council chairman overseeing the process, plans to use “consultations, ‘confessional meetings,’ and, when appropriate, straw polls” to narrow the field of candidates before the next council meeting on Oct. 10-13, according to an Aug. 17 email to Arms Control Today. The council plans to conduct the first straw poll on Sept. 13.

If multiple candidates remain in the race by the October meeting, the council will vote. Subsequently, the full OPCW conference of states-parties, which meets Nov. 27-Dec. 1, must approve the council’s recommendation, which it has always done.

The first candidate is Abdouraman Bary, a chemistry professor from Burkino Faso currently serving as the Waste Regional Coordinator for the Africa Region at the UN Environment Programme. He previously headed Burkina Faso’s CWC National Authority. He is the only candidate with scientific and practical expertise although he lacks many of the other candidates’ diplomatic experience.

The second candidate is Saywan Sabir Barzani, an Iraqi diplomat currently serving as Iraq’s permanent representative to the OPCW and ambassador to the Netherlands. Previously, Barzani was Iraq’s permanent representative to the UN Food and Agriculture Organization.

The third candidate is Fernando Arias Gonzalez, currently Spain’s permanent representative to the OPCW and previously Spain’s permanent UN representative.

Candidate Tóth of Hungary was executive secretary of the Comprehensive Test Ban Treaty Organization (CTBTO) for eight years. He also served as Hungary’s permanent representative to the Conference on Disarmament and the CTBTO and was involved in the negotiation of the CWC. He chaired an ad-hoc group that tried to add a verification protocol to the Biological Weapons Convention.

The fifth candidate is Jesper Vahr, a Danish diplomat currently serving as ambassador to Israel who has served as ambassador to Turkey and Azerbaijan and director of the private office of NATO Secretary-General Anders Fogh Rasmussen.

The sixth candidate is Vaidotas Verba, currently the project coordinator in Ukraine for the Organization for Security and Co-operation in Europe (OSCE) and previously Lithuania’s permanent representative to the OPCW.

The final candidate is Kim, who just finished a two-year term in December 2016 as UN undersecretary-general and high representative for disarmament affairs. In this role, he oversaw the work of the UN-OPCW Joint Investigative Mechanism (JIM) in Syria.

Üzümcü’s Legacy

During Üzümcü’s two terms as director-general, he implemented institutional reforms and guided the organization through unprecedented challenges.

Üzümcü previously served as Turkey’s representative to NATO and held several posts within the Turkish Ministry of Foreign Affairs. When a candidate for OPCW director-general in 2009, Üzümcü stressed the importance of the OPCW’s multilateralism.

Under Üzümcü’s leadership, the OPCW’s work became more publicly accessible when it developed a larger online presence and a publicity strategy. “Üzümcü deserves much credit for supporting a much more open, transparent, and inclusive process for the CWC and states-parties, even against the reluctance of several states-parties,” Paul Walker, director of Green Cross International’s environmental security and sustainability program, told Arms Control Today in an Aug. 16 email.
The organization’s public image grew after becoming a recipient of the Nobel Peace Prize in 2013. During Üzümcü’s tenure, the OPCW met daunting challenges, including the use of chemical weapons by a state-party, Syria, for the first time in the organization’s history and the growing instances of chemical weapons use by nonstate actors. Üzümcü established the JIM and the Declaration Assessment Team to investigate Syria’s chemical weapons declaration and alleged instances of use.

The organization completed the removal of chemical weapons from Libya during 2012–2016 and began to eliminate Syrian chemical weapons in 2013, the first time the OPCW undertook a demilitarization operation in an active war zone.

“Never in the history of our organization have we been called on to verify a destruction program within such short time frames and in an ongoing conflict,” Üzümcü said of his organization’s work in Syria when receiving the Nobel prize.

Challenges Ahead
The next director-general will also have a challenging portfolio, which includes addressing current chemical weapons use in Syria and shifting future institutional priorities as the organization nears completion of most states’ chemical weapons stockpiles destruction.

“Ensuring institutional impartiality and credibility on the Syria file has been (and continues to be) the biggest challenge” of the current director-general, John Hart, head of the Chemical and Biological Security Project at the Stockholm International Peace Research Institute told Arms Control Today in an Aug. 15 email.

In addition, the next director-general will be tasked with working to include the four countries not yet party to the treaty—Egypt, Israel, North Korea, and South Sudan—while strengthening current states-parties’ national implementation.

Still, as the OPCW celebrates its 20th anniversary this year, 95 percent of the world’s declared chemical weapons stockpiles have been destroyed. Looking ahead, the new OPCW leader will need to shift the organization’s priorities from chemical weapons destruction to preventing chemical weapons acquisition.

“[T]he next director-general would need to make the OPCW, with the support of the states-parties, a vanguard against the threat of the re-emergence of chemical weapons and the use of chemical weapons by ‘rouge’ states and non-state actors,” Belal said in an Aug. 17 email to Arms Control Today. –ALICIA SANDERS-ZAKRE

Australia Ships Uranium to India

Nearly three years after India signed a controversial civil nuclear cooperation deal with Australia, New Delhi received its first shipment of uranium.

Australian Foreign Minister Julie Bishop said in a July 15 statement that a small sample of uranium was shipped to India for testing as part of “ongoing commercial negotiations” to export uranium to India for civil nuclear power generation.

Australia and India finalized their nuclear cooperation agreement in September 2014, after India ratified its additional protocol. The Australian parliament passed the final legislation required to allow the export in December 2016. (See ACT, October 2014.) Prior to commencing negotiations with India, the then-Australian Prime Minister Julia Gillard spearheaded an effort in 2011 to lift Australia’s ban on uranium sales to India. (See ACT, January/February 2012.)

Australia is one of the world’s largest exporters of uranium ore, but exports to India were banned because the country is not party to the nuclear Nonproliferation Treaty (NPT) and developed nuclear weapons. As a party to the 1986 Treaty of Rarotonga, which established a nuclear-weapon-free zone in the South Pacific, Australia is obligated to ensure that nuclear technology and materials are exported only to countries subject to safeguards required by the NPT.

The Nuclear Suppliers Group (NSG), of which Australia is a member, also generally prohibits nuclear exports to countries outside of the NPT. The NSG is a voluntary group of 48 states that agreed to a set of guidelines for nuclear-related exports to help control proliferation. Despite not being a part of the NPT, India received an exemption from the NSG in 2008, which allows member states to export nuclear materials and technologies to India.
India did negotiate a limited safeguards agreement with the International Atomic Energy Agency (IAEA) in 2008 and ratified an additional protocol to enhance its safeguards agreement in 2014. These steps, which India agreed to take to enhance its bid for an NSG exemption, mean that the IAEA has access to some but not all of India’s nuclear facilities.

Despite India’s safeguards and the Australian parliament’s approval of the civil nuclear pact in 2014, the decision to sell uranium to India remains controversial. Concerns remain that the uranium exported to India could be used for its nuclear weapons program.

Aiden Warren, senior lecturer in international relations at RMIT University in Melbourne, said in an Aug. 15 email to Arms Control Today that the uranium-supply deal with India, which is Australia’s first with a state that is not an NPT member, “poses some very distinct ramifications in undermining Australia’s very own NPT obligations” and has the potential to “broadly weaken nonproliferation norms.”

When the Australian-Indian nuclear cooperation agreement was finalized, the Australian government said that the conditions for sale were consistent with Australia’s international obligations and standards for safeguarding and accounting for transferred nuclear materials.

Bishop has argued that India has “adhered to its non-proliferation assurances” and then-Australian Prime Minister Tony Abbott made a similar point in 2014 when the agreement with India was finalized. Abbott said that India has an “impeccable” nonproliferation record and was committed to use Australian uranium only for civilian purposes.

Warren said that conservative Australian governments have attempted to “placate concerns by reassuring the international domestic community that the deal is ‘safe’ and a reliable long-term opportunity” for contributing to India’s expanding energy needs. He noted that, during the 2014 parliamentary hearings over ratification of the deal with India, the IAEA expressed trepidation about India’s safeguards.

When India finalized its additional protocol, the document was broadly criticized as weak and setting a bad precedent. It omits many of the key provisions found in the IAEA Model Additional Protocol. It also does not include complementary access provisions for IAEA inspectors, which allow visits to undeclared sites under certain conditions. (See ACT, April 2009.)

Warren said it is imperative that Australia “reassesses the ramifications of exporting uranium to India.” Given Australia’s long history in “meeting and adhering to its non-proliferation obligations,” the agreement with India is a “watershed for the Australian state and clearly undermines non-proliferation norms—if not logistically, then definitely in spirit,” he said.

He also raised concerns that the uranium sales to India could increase tensions and destabilize the region, given regional animosity between India and Pakistan. —KELSEY DAVENPORT
Court Dismisses Marshall Island Case

U.S. courts cannot find the United States in breach of the 1968 nuclear Nonproliferation Treaty (NPT), the 9th U.S. Circuit Court of Appeals ruled in a 3–0 decision dismissing a case filed by the Marshall Islands. The Pacific island country filed suit in 2014, alleging that the United States failed to fulfill obligations under Article VI of the NPT to pursue negotiations in good faith toward nuclear disarmament. The appeals court, upholding the federal district court’s original February 2015 dismissal, found that the NPT is not “judicially enforceable.” Judge Margaret McKeown wrote, “Asking the federal court to order the United States to negotiate in ‘good faith’ on ‘effective measures’ for nuclear disarmament puts the judiciary in the role of nanny to the executive.”

Laurie Ashton, lead lawyer for the Marshall Islands, called the decision “very disappointing,” arguing that “there has never been a more critical time” to enforce the treaty. The United States conducted 67 nuclear test explosions in the Marshall Islands from 1946 to 1958. The Marshall Islands filed similar cases against the nuclear-armed states at the International Court of Justice, all of which were dismissed last fall on procedural grounds. (See ACT, November 2016.)—ALICIA SANDERS-ZAKRE

China Advances Ballistic Missile Defense

China is advancing a new ballistic missile interceptor, the HQ-19, according to an annual U.S. Defense Department report, in a development that may indicate progress toward a deployed missile defense system. As of May 2016, the missile was still undergoing testing to intercept ballistic missiles having a range of 3,000 kilometers. An operational HQ-19 interceptor would be armed with a kinetic kill vehicle and be able to target ballistic missiles and satellites in lower-earth orbit. The HQ-19 is a significantly updated variant of the HQ-9, a long-range surface-to-air missile that has a limited capacity to hit short-range ballistic missiles up to 500 kilometers in range.

China has successfully intercepted ballistic missiles with ground-based interceptors in tests in 2010 and 2013, but experts remain uncertain whether China intends to deploy a missile defense system. If so, China would likely deploy a limited number of point-based missile interceptors to protect key strategic targets, such as its intercontinental ballistic missiles, according to 2013 blog post by Li Bin, senior fellow at the Nuclear Policy Program at the Carnegie Endowment for International Peace. —ALICIA SANDERS-ZAKRE

India, Japan Nuclear Deal Implemented

A civil nuclear partnership deal between India and Japan entered into force July 20 following an exchange of diplomatic notes. The agreement had been announced at a joint press conference Nov. 11 by Indian Prime Minister Narendra Modi and Japanese Prime Minister Shinzo Abe after six years of negotiations. (See ACT, December 2016.) The deal paves the way for an ambitious expansion of India’s civilian nuclear power program through purchases of material and technologies from Japan. New Delhi plans to nearly double its current nuclear energy capacity by 2022. “The agreement seeks to promote full cooperation...in the development and uses of nuclear energy for peaceful purposes,” according to a spokesperson at the Indian External Affairs Ministry.

The deal marks the first agreement between Japan and a state that has not ratified the nuclear Nonproliferation Treaty (NPT). Although not an NPT member, India received a waiver from the Nuclear Suppliers Group in 2008 allowing it to conduct nuclear commerce for peaceful purposes. (See ACT, October 2008.) Multiple measures have been put in place under the deal to ensure nuclear transfers are channeled to peaceful purposes. New Delhi’s nuclear material and technology purchases will be subject to International Atomic Energy Agency safeguards, and the deal can be nullified if India were to conduct a nuclear test. Further, in the event of such a test, Tokyo can require that any material or technology sales resulting from the deal be returned.—TYLER RODGERS

OPCW-UN Investigating Team Visits Syria

The Organisation for the Prohibition of Chemical Weapons (OPCW)-UN Joint Investigative Mechanism (JIM) visited Syria in late August as part of its ongoing investigation to determine the group responsible for the April 4 chemical weapons attack in Khan Sheikhoun. U.S. intelligence agencies allege that Syrian government forces carried out the attack, while Syrian President Bashar al-Assad called the incident a “fabrication” shortly after it occurred and has since denied responsibility. “We will offer [the JIM] all facilitations needed for the investigation and to help it arrive to the place where the alleged chemical attack took place,” Syrian Deputy Foreign Minister Faisal Mekdad was quoted as saying in an Aug. 12 report in The Washington Post.

An OPCW fact-finding mission confirmed the Khan Sheikhoun attack and identified the weapon used as sarin gas in a June 29 report, but it did not assign blame, which is the JIM’s task. German media reported an increase in chemical weapons attacks in Syria in July after a brief respite in May and June. Local groups
documented at least seven chemical weapons attacks in and around Damascus in July.—ALICIA SANDERS-ZAKRE

Nigeria Sale Proposed Despite Concerns

The U.S. Defense Security Cooperation Agency notified Congress on Aug. 2 of a proposed $593 million foreign military sale to Nigeria of up to 12 A-29 Super Tucano light attack aircraft, along with associated weapons, training, and spare parts. The sale is intended to bolster Nigerian troops in their fight against Boko Haram and Islamic State group extremists. President Barack Obama had blocked this sale in the final days of his administration in response to the January bombing of a displaced persons camp by the Nigerian military that reportedly resulted in about 236 deaths. In June, U.S. Sens. Cory Booker (D-N.J.) and Rand Paul (R-Ky.) wrote a letter to Secretary of State Rex Tillerson urging the State Department to withhold approval of the sale until Nigeria implements measures to ensure it observes international human rights and humanitarian law.

The notification said the sale includes “special training on the law of armed conflict and humanitarian rights, and air-to-ground integration to minimize civilian harm in air operations.” Still, former State Department official Dan Mahanty, a senior adviser at the Center for Civilians in Conflict, said in an Aug. 11 email to Arms Control Today that “training is a necessary but rarely sufficient step in avoiding civilian harm. It’s a promising sign that the Defense Department has committed to training in air-to-ground integration. Training has to be reinforced by leadership, policy, doctrine, and most importantly, accountability. It’s also important that the Defense and State departments focus more attention on the way weapons are used, and the consequences of use, as a part of end-use monitoring.”

This sale notification follows the potential sale of precision-guided missiles to Saudi Arabia, a deal that was also blocked by Obama over humanitarian concerns and then approved by the Trump administration.—SARA SCHMITT

Anti-Nuclear Campaigner Tony de Brum Dies

Tony de Brum, the three-time foreign minister of the Marshall Islands and lifelong advocate for nuclear disarmament, died Aug. 22 at his home in Majuro at age 72.

At age nine, while fishing with his father, he witnessed the massive 1954 “Castle Bravo” test explosion of a hydrogen bomb on Bikini Atoll, which unleashed 1,000 times more destructive force than the atomic bomb dropped on Hiroshima. The United States conducted 67 nuclear test explosions over the Marshall Islands from 1946 to 1958.

“I have seen with my very own eyes nuclear devastation and know, with conviction, that nuclear weapons must never again be visited upon humanity,” de Brum said while accepting the 2015 Right Livelihood Award. De Brum and the Marshall Islands also were recognized with the 2016 Arms Control Person(s) of the Year Award, and he was nominated for the Nobel Peace Prize in 2016.

“The Marshall Islands lost a national hero today,” Marshall Islands President Hilda Heine said in an Aug. 22 statement citing de Brum’s contributions to the nation’s independence, nuclear disarmament, and climate justice.

Under de Brum’s leadership in 2014, the Marshall Islands launched two legal cases to push nuclear-weapon states to fulfill legal obligations under the 1968 nuclear Nonproliferation Treaty to pursue nuclear disarmament, one within U.S. courts and another at the International Court of Justice.

Although both courts declined on technical grounds to rule on the cases, John Burroughs, executive director of the Lawyers Committee on Nuclear Policy and a member of the Marshall Islands legal team, said at the Arms Control Association annual meeting June 2 that “simply bringing the cases raised to world attention the failure of the nuclear powers to fulfill the obligation to negotiate and reach a global elimination of nuclear weapons.”

De Brum also played a key role in the Paris climate negotiations, forging a coalition of about 100 diverse nations, the “high-ambition coalition,” which successfully pushed for a global warming limit of 1.5 degrees Celsius.—ALICIA SANDERS-ZAKRE

A Syrian man prays July 12 at a cemetery in Khan Sheikhoun, a rebel-held town in Idlib province, 100 days after the alleged sarin nerve-gas attack by Syrian government forces that was reported to have killed more than 90 people, including women and children.

Giff Johnson/AFP/Getty Images

Tony de Brum in 2013

Omar Haj Kadour/AFP/Getty Images
The Ramification of Rouhani’s Re-election: A Public Opinion Study

Nancy Gallagher, Ebrahim Mohseni, and Clay Ramsay, Center for International and Security Studies at Maryland (CISSM), July 2017

This study of public opinion within Iran finds popular support for the nuclear deal known as the Joint Comprehensive Plan of Action (JCPOA). Two-thirds of those surveyed expressed support, and 79 percent attribute President Hassan Rouhani’s re-election in May to widespread approval of the 2015 deal. The findings provide a cautionary note for U.S. President Donald Trump, who has spoken of his desire to abrogate the deal. According to a June poll in Iran, 55 percent of respondents believed Tehran should restart “aspects of its nuclear program” if the United States “takes measures against Iran that are in violation of the JCPOA.” Further, there is little appetite among Iranians for renegotiating the terms of the deal, a course which Trump has suggested he might pursue. Sixty-two percent of respondents were opposed to extending the duration of the restrictions placed on Iran’s nuclear program.—TYLER RODGERS

Trends in Nuclear Explosion Monitoring Research and Development—A Physics Perspective

Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Naval Research Laboratory, Pacific Northwest National Laboratory, Sandia National Laboratories, June 2017

This report, led by 13 scientists at the Department of Energy’s national laboratories, look at the significant technological and scientific revolutions made in the science related to remote detection of nuclear test explosions since the start in 1993 of serious negotiations on the Comprehensive Test Ban Treaty. The report covers more than 40 different trends in subsurface nuclear test monitoring science in analyzing the advances in verification technology. The authors observe that as the science has advanced, the threshold level for detecting a nuclear test explosion has become lower. Scientists can now detect nuclear tests at lower magnitudes of explosive power than ever. As the detection threshold declines, however, there is a significant increase in background-signals noise that must be distinguished from a possible low-level nuclear test explosion. Fortunately, rapid advances in digital computing, microprocessor technology, and data analysis have allowed for scientific study of digitally modeled explosions in ways “that were simply not possible until very recently,” the report notes.—SHERVIN TAHERAN
Roland Timerbaev: The Nuclear Nonproliferation Treaty Has Largely Achieved Its Goals

The nuclear Nonproliferation Treaty (NPT), which will be 50 years old next year, has proven to be the “cornerstone of the global nuclear order,” says retired diplomat Roland Timerbaev, who played a key role in the treaty negotiations as a member of the Soviet delegation.

The durable multilateral accord, the result of U.S.-Soviet cooperation during the Cold War years, has prevented what many at the time feared would be the rapid spread of nuclear weapons to many more countries, he said in an interview. It was the 1962 Cuban missile crisis that, he says, shifted the thinking of leaders in Moscow and Washington about the urgency of nuclear arms control, including steps to prevent the proliferation of nuclear weapons.

“Humankind was faced with a crisis that could end in a global catastrophe,” he recalls. “It is after that crisis the negotiations on the nuclear weapons problem began in earnest.”

To strengthen the global nonproliferation regime in the years ahead, Timerbaev calls for extension of the New Strategic Arms Reduction Treaty (New START), with further numerical reductions from the current ceilings in the treaty, and for active engagement of China into the dialogue on key nuclear issues.

In addition to his role in the original NPT negotiations, Timerbaev, who turns 90 this month, participated in six NPT review conferences. He was a member of the Soviet/Russian diplomatic service for 43 years, with his final posting as permanent representative of the Soviet Union/Russia to international organizations in Vienna from 1988 to 1992. He also participated in negotiations on the 1972 Anti-Ballistic Missile Treaty, the 1973 Agreement on the Prevention of Nuclear War, the 1974 Treaty on the Limitation of Underground Nuclear Weapon Tests, and the 1976 Peaceful Nuclear Explosions Treaty.

This interview, translated from Russian and edited for clarity, was conducted by Anton V. Khlopkov, director of the Center for Energy and Security Studies (CENESS), a nongovernmental research group based in Moscow. Anastasia (Asya) Shavrova assisted in this project.

An interview with former U.S. NPT negotiator Lawrence Weiler is available online and will run in a subsequent issue of Arms Control Today, as well as in Russian in the CENESS journal Yaderny Klub (Nuclear Club). The two interviews, the result of a cooperative effort by CENESS and ACT, were conducted to collect an oral history of the NPT as it approaches its 50th anniversary.

**ACT: Ambassador Timerbaev, what did you believe were the main goals of the NPT? Fifty years on, do you think those goals have been achieved?**

**Timerbaev:** The main goal of the treaty is stated in its name: it is to prevent the proliferation of nuclear weapons. On the whole, that goal has been achieved. When the NPT was opened for signature [on July 1, 1968], Soviet and U.S. specialists thought that 20 to 25 new states could acquire nuclear weapons in the foreseeable future. Such a scenario has been averted largely thanks to the NPT. As you know, only eight countries currently possess such weapons [the five official nuclear-weapon states plus India, Israel, and Pakistan]. North Korea has also declared itself a nuclear power.

In this context, it would be useful to recall several historical events. First, South Africa has voluntarily relinquished its nuclear arsenal, as confirmed by the International Atomic Energy Agency (IAEA). Second, after the breakup of the Soviet Union, Ukraine attempted to claim nuclear power status because a large part of the Soviet nuclear arsenal was located on Ukrainian territory. It took a lot of effort to persuade Kiev to relinquish its nuclear ambitions, return all nuclear warheads to Russia, and join the NPT as a non-nuclear-weapon state. The third case I would like to cite is Iran. On the basis of a deal adopted in 2015, Iran has undertaken to limit the scale and scope of its nuclear program. At the same time, Iranian scientists continue their nuclear research in accordance with the right of every NPT member to peaceful use of nuclear energy, as stipulated in Article IV of the NPT.

The NPT’s Article VI sets the objective of launching the process of nuclear disarmament. The nuclear-weapon states have undertaken a commitment to that effect by joining the NPT. According to the latest assessments, over the past 25 years the combined nuclear arsenals...
of the nuclear-weapon states, mainly Russia and the United States, have been reduced by a factor of five or six compared to the peak Cold War levels. However, the situation with Article VI is not free of contention. I believe that the topic of nuclear disarmament is extremely important in the context of discussing the future of the NPT and the entire global nuclear order, so I would like to return to it later on.

Certain vulnerabilities of the NPT have come to light over the almost five decades since its opening for signature, I mean, first and foremost, the withdrawal of [North Korea] from the treaty. I visited Pyongyang in the early 1980s to persuade the North Korean diplomats of the need for their country to join the NPT. In 1985, North Korea joined the treaty, but 18 years later it announced its final withdrawal. It then stepped up its nuclear program and has since conducted five nuclear tests.

**Have you identified any other vulnerabilities of the NPT? What is the nature of those vulnerabilities? Are they inherent to the nature of the treaty itself, which was drawn up in the geopolitical circumstances that existed at the time, or do they manifest only in the absence of political will to force certain states to abide strictly by their NPT commitments?**

I would say there are two other vulnerabilities, both lying within the text of the treaty itself. Early efforts to draft the NPT began in New York in 1966 in a bilateral format between the Soviet Union and the United States. At the time, the Committee of Disarmament, or the Eighteen-Nation Committee [on Disarmament] as it was known at the time, was not involved in [the] negotiations process in any form. In New York, we managed to agree on the wording of Articles I and II. But we never planned to incorporate Articles IV and VI in their current shape into the treaty, and I believe these two articles to be the weakest of all.

Under Article VI, states are obliged to pursue disarmament negotiations “in good faith.” The initial draft of that article was proposed by Egypt, or rather by the entity then known as the United Arab Republic. Later on, other non-nuclear-weapon states joined in. There was another draft introduced by Mexico, listing practical measures that were not limited to disarmament. It was proposed, for example, to include [a] nuclear test ban and prohibition of the production of nuclear materials in the scope of the treaty. Using the Mexican draft as a starting point, the Soviet Union and the United States then presented an alternative version of Article VI.

There were people in Moscow, such as Foreign Minister Andrei Gromyko and his first deputy, Vasily Kuznetsov, who argued that at least some of the practical measures proposed by the non-nuclear-weapon states should be added in the final text of the NPT. But the United States, namely U.S. Ambassador to the UN Arthur Goldberg, insisted that these details should be left out of Article VI, and eventually they prevailed.

Starting from the 1960s, a series of bilateral and multilateral documents that had to do with nuclear disarmament and nuclear threat reduction were signed. They were aimed, one way or another, at facilitating the implementation of Article VI. Of course, there were also several pauses in that process, but up until 2010, negotiations were fairly regular, and a lot of work had been done on reducing nuclear arsenals. But seven years ago, that process ground to a halt. It is quite telling that, during the latest meeting between the Russian and U.S. presidents at the [Group of Twenty] summit on July 7, 2017, these issues were not even discussed, to the best of my knowledge. Regular dialogue between our two countries on nuclear disarmament issues should be resumed, and other nuclear-weapon states should also become involved. The current state of affairs and the discussions on the nuclear disarmament issue have, in many ways, become hostage to the wording used in Article VI.

Article IV, the one on peaceful use of nuclear energy, was one of the key incentives for signing the NPT for many non-nuclear-weapon states. Its main shortcoming is that it does not say exactly how parties to the treaty should facilitate peaceful use of nuclear energy in other counties. So the question is, What is meant by “facilitate”? Take, for example, exports of uranium-enrichment equipment, including gas centrifuges. Should such equipment be supplied to non-nuclear-weapon states? Since Article IV is not specific in that regard, there are different interpretations of its text, especially since drawing a clear distinction between peaceful and military use of nuclear technologies is an impossible task.

Incidentally, recently declassified British archives contain documents showing that, during the NPT negotiations, the British tried to get the U.S. delegation to raise the enrichment issue. In particular, they argued that it would be very dangerous to leave a
window of opportunity for supplying such equipment, and they wanted this to be somehow reflected in the treaty. But the U.S. delegation was confident at the time that the non-nuclear-weapon states would never manage to develop such an advanced technology, so they decided not to complicate the negotiations by this additional matter. Frankly, I am not at all sure how the Soviet delegation would react if the British or the Americans were to approach us with the proposal to include a clause in the NPT to the effect that assistance to third countries can be provided only in “nonsensitive” areas.

Speaking of the current situation in the nuclear industry, we cannot ignore the fact that global attitudes toward nuclear power are changing. The latest example is France, where nuclear power accounts for over 70 percent of all electricity generation. The French are gradually beginning to reduce the share of nuclear in their energy mix. They are aiming for 50 percent. Germany is going to abandon nuclear energy completely in the coming years; it will keep only several nuclear research facilities to continue the production of medical isotopes. Other countries may well follow suit. That is another factor that will affect the global nuclear order in the longer term.

Was the signing of the NPT inevitable? What prompted the beginning of the NPT talks in earnest?

I think that the change of attitude toward nuclear weapons and the idea of signing the NPT had much to do with the 1962 Cuban missile crisis. Up until that moment, the only senior politician who had raised the nuclear nonproliferation issue on the international stage was the then-foreign minister of Ireland, Frank Aiken. In 1958, four years before the Cuban missile crisis, he introduced a draft resolution to that effect at the First Committee of the UN General Assembly.1 On the whole, the initiative earned some support, but no practical steps were taken to implement it. Incidentally, Minister Aiken later visited Moscow in 1968 for the NPT signing ceremony.

But the 1962 crisis was the trigger that prompted a widespread change with regard to this issue. Humankind was faced with a crisis that could end in a global catastrophe. It is after that crisis the negotiations on the nuclear weapons problem began in earnest. In the summer of 1963, a few months after the Cuban missile crisis was resolved, U.S. President John Kennedy gave a speech in which he outlined the importance of Moscow and Washington working together to prevent “the further spread of nuclear arms.”2 Fairly quickly, in about a month’s time, Soviet leader Nikita Khrushchev and the Soviet government gave their own backing to the idea; and in another four or six weeks, on August 5, 1963, the parties signed the Partial Nuclear Test Ban Treaty. Then came the turn for the NPT.
What do you think was the point of no return during the talks, the event after which the signing of the treaty became just a matter of time? I think that point came when the United States and the Soviet Union reached an agreement in New York in 1966 on Articles I and II. These articles were the constants around which the entire architecture of the treaty revolved. They became part of the NPT in their original form agreed in New York.

You have already mentioned that the NPT talks began in a bilateral Soviet-U.S. format. Who do you think played the key role in Moscow and Washington in making the treaty happen?

I believe they were, first and foremost, U.S. President Lyndon Johnson and Soviet Foreign Minister Gromyko. I once found in Johnson’s archives his correspondence with his aides who were in charge of the NPT talks at the White House. I was amazed at how closely and personally involved the U.S. president was in the details of the talks and by the degree of consensus on this issue among the key White House staff. At the same time, U.S. Secretary of State Dean Rusk opposed the NPT, but Johnson had his way in the end.

Meanwhile, Gromyko did his best to persuade the Politburo. The negotiating process was happening simultaneously with the NATO initiatives on establishing the MLNF and ANF. NATO had also established the so-called Nuclear Planning Committee (the McNamara Committee). The Soviet Foreign Ministry and the minister himself therefore had to work very hard to secure Soviet interagency support for the NPT.

Incidentally, the body responsible for making NATO nuclear policy decisions, which is now called the Nuclear Planning Group, de facto continues to exist.

Looking back at the 50-year history of the treaty, how resilient has it been in various nuclear nonproliferation crises? The NPT is the cornerstone of the global nuclear order. The examples of South Africa and Iran demonstrate that the treaty can successfully overcome various crises. At the beginning of our conversation, I mentioned that the settlement of those particular crises was achieved on the basis of the principles and provisions of the NPT. I hope this will continue to be the case in the future.

Considering the 1995 NPT Review and Extension Conference and the agreements that enabled an indefinite extension of the treaty, do you believe those agreements have been fulfilled? What issues do you think could be the source of new NPT crises in the foreseeable future?

To answer this question, one cannot avoid the Middle East issue. I think it was a great error for the United States to allow Israel to become an unofficial nuclear-weapon state. U.S. President Richard Nixon and Israeli Prime Minister Golda Meir had a one-on-one conversation in September 1969. There was virtually no one else in the room, so the meeting notes were taken by Nixon himself. These notes will probably never be made available to the general public. But as I understand it, the gist of the conversation was that the Americans agreed to Israel developing its own nuclear weapons on the condition that Tel Aviv would always officially deny its possession of such weapons in the international arena. In the end, that is exactly how it happened. Apparently, the Americans would not have been able to secure a ratification of the NPT if they had not agreed to this. The situation with the Israeli nuclear arsenal hinders...
nonproliferation progress in the Middle East. It also remains the most problematic issue in terms of the decisions taken by the 1995 NPT Review and Extension Conference; no progress has been made at all on that front.

Another ongoing crisis in terms of the NPT is the North Korean situation. It cannot be ruled out that the Iranian problem will come back a few years down the line. How events unfold in each case will depend on the political situation in the respective countries, in the wider region, and in the international arena in general.

What do you think the NPT states-parties must do to make sure that the NPT remains a viable and effective part of the international security architecture for another 50 years?

I believe the time has come to think in earnest about a new format for the dialogue on key nuclear issues. The previous bilateral Russian-U.S. format no longer reflects the international reality. China must become actively engaged in this process, and I am not just talking about disarmament. China needs to play a more active role in order to reinforce positive NPT-related trends.

What role do you see the new Treaty on the Prohibition of Nuclear Weapons playing in the global system of nuclear governance?

If all states were to join this treaty, including all those who possess nuclear weapons, then it would supersede the entire existing system of nuclear relations. So, eventually, the new treaty would also supersede the NPT. In essence, it would signal the arrival of a new global nuclear order. However, we will be able to reach that point only when all states without exception have fulfilled their commitments under the NPT because disarmament issues cannot be discussed in isolation from all the other clauses of the NPT. The time of the ban treaty has not yet arrived, but we should think about how to make progress in that direction.

Creating a special committee to study the dangers posed by further proliferation of nuclear weapons. The resolution was not passed at that meeting, but in 1959 a resolution was passed on establishing the Ten-Nation Committee on Disarmament.

The previous bilateral Russian-U.S. format no longer reflects the international reality... China needs to play a more active role in order to reinforce positive NPT-related trends.
Europe’s Push to Preserve the Iran Nuclear Deal

Over the summer, there has been a re-energized push from the EU high representative for foreign affairs, Federica Mogherini, and the E3, that is, France, Germany, and the United Kingdom, urging the Trump administration to stay on board with the Iran nuclear deal, known as the Joint Comprehensive Plan of Action (JCPOA). This is a clear, immediate priority.

The effort comes against the backdrop of not only the two years since the deal’s signing but also the four years of gradual rapprochement between Europe and Iran since 2013 when the nuclear talks intensified under Iran’s president, Hassan Rouhani. There has been a gradual normalization between the two sides from political and economic perspectives. Almost all if not all foreign ministers from the 28 members of the European Union have visited Tehran. Mogherini has been to Tehran on several occasions, taking along all of her commissioners to discuss issues from energy to economics to regional conflicts.

There is a broad convergence between the United States and key European countries regarding threat perceptions on Iran. But the real difference with the Trump administration is, first of all, on what the end goal is with respect to Iran’s behavior. Is it a change in regime behavior, or is it effecting regime change completely? What is the process by which we go about dealing with Iran? With Rouhani winning a second term, there is a government in place that has a constructive attitude toward engaging in diplomacy on areas of difference.

The region right now is very different from 2012, when the Europeans placed their harshest sanctions on Iran’s energy sector. There have been the failures of the Arab Spring, the surge of Islamic State and other extremist groups, and the increasing tension with some traditional regional allies, such as Saudi Arabia. The understanding in Europe is that although there is deep disagreement and deep distrust with Iran, it is no longer possible to ignore the country or to exclude it from discussions. This is a very stark difference from what we see coming out of the Trump administration, most notably at the Riyadh summit where President Donald Trump called on all nations of conscience to isolate Iran.

In the coming months, there is likely to be an uptick in activity by the Europeans on transatlantic coordination on Iran policy. This will include outreach on Capitol Hill and to the White House, the State Department, and the Pentagon to outline the European position, to reiterate the consequences of unraveling the deal, and, probably in private, to advise that the Europeans may look to contingency plans and fallback options if the United States unreasonably undermines the deal. There might also be much more coordination than we have seen between the Europeans, the Chinese, and the Russians.

In Washington, there is a lot of talk about co-opting or forcing Europeans to take the same position as the United States. I caution against underestimating the capacity of the Europeans to push back. This is not just about Iran policy. It is also about the idea of protecting international norms, international institutions, and the capacity of multilateral diplomacy to deliver.

This is not just about Iran policy. It is also about the idea of protecting international norms, international institutions, and the capacity of multilateral diplomacy to deliver.

Ellie Geranmayeh is a senior policy fellow for the Middle East and North Africa program at the European Council on Foreign Relations. This piece is adapted from remarks she made during a July 28 press briefing held by the group J Street.
Arms Control and Nonproliferation Restraints Are at Risk

Here are some ways you can help:

Make a contribution. Tax-deductible donations, at whatever level you can give, whether it’s $25, $50, $500, or $1,000, enable the Arms Control Association to advocate for sensible arms control solutions to today’s toughest weapons-related challenges.

Join or renew your membership. Our memberships, which start at $25 annually, give you access to Arms Control Today, our e-newsletter, and more!

Get your institution to subscribe. Beginning at $50 for digital access, Arms Control Today is also available at the “Professional Subscription” level for institutions or individuals who don’t want a membership to the Association but still want a subscription.

Give a gift membership or subscription. Buy a friend a subscription to the Arms Control Association’s monthly journal, Arms Control Today.

Consider planned giving. Talk with our staff to find out how you can make a bequest of charitable assets to the Association. We can be reached via email at aca@armscontrol.org, or by phone, 202-463-8270.

Visit www.armscontrol.org/supportaca to get started.

Thanks!