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## Feature Report

***“Revitalizing Nuclear Security in an Era of Uncertainty”***. By Matthew Bunn, Nickolas Roth, and William H. Tobey. Published by the Belfer Center for Science and International Affairs, Harvard Kennedy School; January 2019

<https://www.belfercenter.org/publication/revitalizing-nuclear-security-era-uncertainty>

### **From the Executive Summary**

Few tasks could be more important than keeping nuclear weapons and their essential ingredients out of terrorist hands. The world community has made substantial progress in improving security for such stocks since the early 1990s, including through the nuclear security summits in 2010-2016.

Since the 2016 Nuclear Security Summit, countries have continued to take measurable steps to improve nuclear security, from requiring protections against cyber attacks to launching programs to strengthen security culture in nuclear organizations. But momentum is slowing, raising serious doubts as to whether national leaders are fulfilling their commitment to continue to make nuclear security a priority. High-level political attention to nuclear security and overcoming obstacles has largely faded, international mechanisms for fostering nuclear security action and cooperation have not managed to fill the gap created by the absence of nuclear security summits, and political disputes continue to impede efforts to sustain or expand cooperation in crucial areas. At the same time, stockpiles of nuclear weapons and materials in unstable regions continue to grow and to shift in directions that increase risks. Terrorist threats and important nuclear security weaknesses exist that must be addressed. Additionally, rapidly evolving technologies such as cyber and drones could increase adversary threats to nuclear facilities and stocks in the years to come. If nuclear security improvements do not keep pace, the risk of nuclear terrorism is likely to grow.

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# NUCLEAR WEAPONS

Defense News (Washington, D.C.)

## **Here's How Many Billions the US Will Spend on Nuclear Weapons over the Next Decade**

By Aaron Mehta

Jan. 24, 2019

WASHINGTON — If the U.S. carries out all of its plans for modernizing and maintaining the nuclear arsenal, it will cost \$494 billion over the next decade, an average of just less than \$50 billion per year, a new government estimate has found.

The number, part of a biannual estimate put out by the Congressional Budget Office, is 23 percent over the previous estimate of \$400 billion released in 2017. That 2017 figure was a 15 percent increase over the 2015 number.

The number will likely grab attention in Congress, especially on the House Armed Services Committee, where new Chairman Rep. Adam Smith, D-Wash., has made it clear he's looking for ways to save money by cutting nuclear costs.

Told of the new estimate, ranking member Rep. Mac Thornberry, R-Texas, acknowledged the topic as a possible partisan friction point and defended nuclear modernization as worth the cost.

"What I believe all the previous estimates have been is that at no point does it take more than 7 percent of the defense budget — and from my standpoint, it's upon which most of our defense efforts are based," Thornberry said. "I have no doubt it will be a topic we discuss this year."

Just more than half of that increase, however, is based on a technicality, driven by the fact that this projection covers two years later than the 2017 projection did, and a number of modernization programs will be further along — and hence costlier. Overall, the \$494 billion figure represents roughly 6 percent of overall projected defense spending during that time period.

Three notable changes featured in the Nuclear Posture Review — the development of a low-yield submarine-launched ballistic missile, development of a new sea-launched cruise missile and increased plutonium pit production — result in an estimated \$17 billion increase over the time period above what the number would have been without them. That number could increase should the administration follow through on plans in the NPR to keep the B83 nuclear bomb in service longer than intended, or if it develops a land-based nuclear cruise missile following an expected U.S. exit from the Intermediate-Range Nuclear Forces Treaty.

However, it is unclear whether those programs will move forward and at what levels, leaving that estimate "very uncertain."

Overall, the Pentagon and the Department of Energy are preparing to spend the money in the following way:

\$234 billion on strategic nuclear delivery systems and weapons, including submarines (an estimated \$107 billion over this time period), intercontinental ballistic missiles (\$61 billion) and long-range bombers (\$49 billion, less than the full projected cost of the dual-use bomber fleet); the nuclear warheads for use from those systems; and DOE's funding of nuclear reactors for the submarine fleet.

\$15 billion on tactical nuclear delivery systems and weapons, including tactical aircraft for delivering weapons; management of the warheads for those tactical aircraft; and funding for the new submarine-launched cruise missile.

\$106 billion for DOE's nuclear weapons laboratories and production facilities, where America's stockpile of nuclear warheads are maintained and developed. The department has a longstanding backlog on maintenance and upgrades for its locations.

\$77 billion on nuclear command, control, communications and early warning systems, used to coordinate any nuclear-related issues. While not as flashy as the weapons themselves, Pentagon officials over the last two years have sounded the alarm that nuclear command and control is at risk of being outdated without major investments.

The remaining \$62 billion in projected costs come from "CBO's estimate of additional costs that would be incurred over the 2019–2028 period if the costs of nuclear programs exceeded planned amounts at roughly the same rates at which costs for similar programs have grown in the past."

When all that is factored in, CBO's estimated annual cost rises from \$33.6 billion in 2019 to about \$63 billion in 2028, a roughly 90 percent increase over that period.

Joe Gould in Washington, D.C., contributed to this report.

<https://www.defensenews.com/space/2019/01/24/heres-how-many-billions-the-us-will-spend-on-nuclear-weapons-over-the-next-decade/>

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The Hill (Washington, D.C.)

## **Dems Introduce Bill Barring US from Using Nuclear Weapons First**

By Rebecca Kheel

Jan. 30, 2019

A pair of top Democrats in the House and Senate on Wednesday reintroduced a bill to make it U.S. policy not to use nuclear weapons first.

The bill was introduced by Sen. Elizabeth Warren (D-Mass.), a Senate Armed Services Committee member who is running for president in 2020, and House Armed Services Committee Chairman Adam Smith (D-Wash.).

"Our current nuclear strategy is not just outdated—it is dangerous," Smith and Warren said in a joint statement Wednesday. "By making clear that deterrence is the sole purpose of our arsenal, this bill would reduce the chances of a nuclear miscalculation and help us maintain our moral and diplomatic leadership in the world."

The bill, titled the "No First Use Act," simply says, "It is the policy of the United States to not use nuclear weapons first."

Smith previously introduced the same bill in November 2017.

A Wednesday press release from Smith's office argued the bill would improve U.S. national security by reducing the risk of a miscalculation, clarifying U.S. policy and preserving the ability to conduct a nuclear strike after a nuclear attack on the United States or its allies.

It has long been the policy of the United States that the country reserves the right to launch a preemptive nuclear strike.



Former President Obama reportedly weighed changing the policy before leaving office, but ultimately did not after advisers argued doing so could embolden adversaries.

Since President Trump has been in office, Democrats have introduced several bills intended to limit his ability to launch a preemptive nuclear strike.

On Tuesday, a separate pair of Democrats in the House and Senate reintroduced their bill to limit Trump's nuclear powers.

The bill from Rep. Ted Lieu (D-Calif.) and Sen. Ed Markey (D-Mass.) would require congressional approval for Trump to launch a nuclear first strike.

<https://thehill.com/policy/defense/427649-warren-smith-introduce-bill-to-set-us-policy-against-nuclear-first-strike>

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## US COUNTER-WMD

Defense News (Washington, D.C.)

### **The Next Six Months Could Define America's Missile Defense for a Generation**

By Aaron Mehta

Jan. 28, 2019

WASHINGTON — When the Missile Defense Review was rolled out Jan. 17, it represented the culmination of almost two years' worth of work.

So some experts were left scratching their head when they opened up the document and found a significant number of items that still need reviewed or hashed out, the majority of which involve a six-month study period.

"I was surprised that the MDR was not more decisive on some of these issues considering how long they worked on it and that Congress asked specifically for this document to address them," said Laura Grego of the Union of Concerned Scientists. "I would have expected the Pentagon to do this analysis first and use it to inform U.S. strategy and prioritize these different missions."

All told, the review — expected by some to be a definitive layout of America's direction in missile defense — calls for 11 different follow-ups to be completed within six months. They are:

Designating a service or defense agency with acquisition authority — by using the existing requirements-generation process — to find ways to defend the homeland against offensive cruise missiles.

The Army, the Joint Chiefs of Staff and the Missile Defense Agency will prepare a report that assesses the number of Terminal High Altitude Area Defense (THAAD) battery requirements needed to support worldwide deployments.

The Navy and MDA must deliver a report on how the entire fleet of Aegis destroyers can be converted to become fully capable against incoming missiles, including ballistic missiles, within 10 years.

MDA and Northern Command must prepare a plan to “accelerate efforts to enhance missile defense tracking and discrimination sensors, to include addressing advanced missile threats,” particularly focused on the homeland.

The Air Force and MDA are on the hook for a joint report on how best to integrate the F-35 Joint Strike Fighter, including its sensor suite, into America’s missile defense networks for both regional and homeland defense. The MDR posits that the F-35 could eventually be used to take out ballistic missiles during their boost phase, which experts have said is unlikely to be technically feasible.

The Department of Defense is looking at the potential to operationalize the Aegis Ashore Missile Defense Test Center location in Hawaii into a full-up missile defense site to counter potential missile launches from North Korea. MDA and the Navy will evaluate the option and develop a plan that could operationalize the location within 30 days, if needed.

MDA will study development and fielding of a space-based missile intercept layer capable of boost-phase defense, including the most promising technologies, estimated schedules, cost and personnel requirements.

A big point of emphasis from officials talking about the MDR is that they believe the acquisition and development of new technologies can and will go faster. To that end, the review calls for reviews of the current Warfighter Involvement Process, which determines missile defense requirements, in order to make sure commanders who will use the systems are involved early in the process of developing the systems and requirements.

While the Pentagon divides the world into regional areas of responsibility, the nations capable of threatening American assets or allies with missiles do not necessarily. The chairman of the Joint Chiefs as well as the head of U.S. Strategic Command are therefore ordered to come up with a plan for “optimal roles, responsibilities, and authorities for achieving greater transregional missile defense integration.”

Another requirement from the 2017 National Defense Authorization Act is for the designation of an office with acquisition authority specific to pre-launch attack operations — that is, someone who leads procurement of new technologies designed to destroy an enemy missile before it can take off. That agency must be identified within six months; after that happens, a larger review will begin to examine roles and responsibilities for updating operational doctrine in terms of left-of-launch strikes.

And for a change of pace, the Pentagon will have nine months to research improvements for timely warnings on hypersonic and advanced cruise missiles launched at the U.S. homeland. At the completion of the study, the Office of Cost Assessment and Program Evaluation will initiate an analysis of alternatives for materiel solutions to provide early warning and attack assessment against these advanced threats, and their integration into the nuclear command-and-control architecture.

Asked why the six-month studies were necessary after the length of the review, John Rood, undersecretary of defense for policy, said the issue isn’t seeing if the technology is viable, but rather “the application of that technology to a specific mission, consistent with the vision put forward from the Missile Defense Review.”

“When you’re dealing with large organizations that are composed of a series of other large organizations, coordinating the efforts of the team, if you will, around objectives, and getting them to work together to do those examinations is a substantial part of” the challenge, he added.

Delays on decisions

The decision to insert these reviews into a document that spent this long in the oven may be a sign there are internal disagreements within the building, but that planners did not want to hold up the document any longer, said Tom Karako, a missile defense expert with the Center for Strategic and International Studies.

Kingston Reif, an expert with the Arms Control Association, agrees the additional requirements are likely a sign of disagreement within the building. He pointed to the Nuclear Posture Review, which called for two new nuclear weapon designs, as a comparison.

“One would think that the review process could have led to a determination on the required number of THAAD batteries. And MDA and the Navy have been talking about operationalizing the Aegis Ashore test site for at least a couple years, and I believe Congress mandated a study of doing so,” Reif noted. “That this Pentagon is punting on space-based interceptors goes to show how rightly controversial they are. DoD had a year to study this and couldn’t come to an agreement on whether to proceed.”

Both Reif and Grego consider the call for six months more of studies on space-based interceptors as odd, given the decades of studies that have gone into that particular technology. Grego cited a National Academies study from 2012 that concluded such a technology would require hundreds of billions of dollars.

“While space launch might get a little cheaper and some components get a little lighter, it doesn’t change the basic fact that space-based missile defense would be enormously expensive and wouldn’t provide an effective defense,” Grego said. “Another study is not going to change that reality. It’s really time to close the door on that idea and move on.”

Rebecca Heinrichs, an analyst with the Hudson Institute, also downplayed the chances of new findings in these studies, but for a different reason.

“The MDR and the budget are going to be more significant than any of the other reports that come out, and a lot of this information exists already — it’s just a matter of getting it in the right format and getting it cleared and up to Congress,” she said. “It’s not like they need to sit down and figure out how many THAAD batteries they need. Someone already knows the answer to that question.”

Still, Karako argues that the need for more studies “raises the question to what extent any of these things will have programming in the 2020 budget,” which could be a problem down the road.

“This will be the Trump administration’s third budget. For those things that are most pressing, like the space sensor layer or counter-hypersonic capabilities, we better hope that they appear in the ‘20 budget,” he said. “Because ‘21 is an eternity away in terms of politics and everything else.”

That reality appears to have set in for the men in charge of guiding the MDR forward. Michael Griffin, the Pentagon’s undersecretary for research and engineering, put it bluntly while rolling out the review:

“Those of us at a high level in the department are really here only for a limited period of time, and we want to see some action. So stay tuned.”

Updated 1/28/19 to clarify Karako’s comment on the number of Trump administration budgets.

<https://www.defensenews.com/space/2019/01/28/the-next-six-months-could-define-americas-missile-defense-for-a-generation/>

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Homeland Preparedness News (Washington, D.C.)

## **Federal Government Resources Available to Support First Responders during Fourth Generation Agent Incident**

By Kim Riley

Jan. 28, 2019

A federal interagency working group convened by the White House National Security Council last week released new resources to help first responders prepare for and respond to an emergency incident involving fourth generation agents — also known as chemical warfare agents.

“These resources were developed as part of ongoing preparedness efforts for all hazards,” a spokesperson from the U.S. Department of Health and Human Services’ (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) said last week. “These resources are intended for use by first responders and medical providers.”

The spokesperson told Homeland Preparedness News in a Jan. 25 email that the federal interagency working group specifically developed the new resources following an incident last year in the United Kingdom that involved a fourth generation agent (FGA).

FGAs are chemical warfare agents that are more persistent than other toxic nerve agents, according to the ASPR-produced Chemical Hazards Emergency Medical Management (CHEMM) website, where the new federal interagency resources are located.

“While fourth generation agents share similar characteristics with other nerve agents, fourth generation agents also pose several unique challenges in terms of toxicity, detection, persistence, and potential for delayed onset of symptoms,” according to CHEMM.

The federal interagency working group that devised the resources is comprised of experts in medicine, science, public health, law enforcement, fire, EMS, HAZMAT, and occupational safety and health from the U.S. Departments of Defense (DOD), HHS, Transportation, and Homeland Security, as well as those from the Federal Bureau of Investigation, Occupational Safety and Health Administration, and the Environmental Protection Agency.

The newly available resources on CHEMM are:

Safety Awareness for First On-Scene Responders Bulletin – Designed to assist departments and agencies in developing specific guidance and training that will enhance overall preparedness efforts.

Reference Guide – Designed to assist HAZMAT response teams in developing specific guidance and training to enhance overall preparedness efforts.

Medical Management Guidelines – Designed for those who medically treat patients exposed or potentially exposed to a fourth generation agent during pre-hospital care and in-hospital care.

“The resources meet the needs of U.S. emergency response professionals who sought to learn more about the agent used in the U.K. and how to protect themselves and respond if such incidents ever occur in their communities and can be incorporated into existing plans as part of ongoing preparedness for all hazards,” the ASPR spokesperson wrote.

While nerve agents are extremely toxic chemical warfare agents, they’re generally categorized as either volatile or low-volatility chemicals, according to the Medical Management Guidelines resource, which says that sarin is an example of a volatile nerve agent, whereas VX is a low-volatility agent.

The Reference Guide, meanwhile, says that FGAs specifically are low-volatility nerve agents, meaning they're highly persistent; pose a significant cross-contamination hazard; don't easily evaporate; aren't likely to present a vapor hazard; and are most likely to be encountered as a liquid.

"Early recognition may be extremely challenging due to the possibility of delayed onset of symptoms for up to 3 days post exposure," according to the Reference Guide. "The most likely route of exposure is skin contact, but FGAs can also be absorbed into the body by mucous membrane contact (eyes, nose, mouth), inhalation, or ingestion. FGAs may cause rapid or delayed onset of symptoms, depending on the specific agent, dose, and route of exposure."

The Reference Guide also says that entry by first responders into an area with known or suspected FGA contamination should be limited to lifesaving activities.

Currently, according to the Medical Management Guidelines resource, no illicit use or manufacture of an FGA or other nerve agent is known to have occurred in the United States thus far, and there's also no known threat of any nerve agent use in the United States.

However, because FGAs are more persistent than and at least as potent as other nerve agents, medical management of FGAs may require more aggressive supportive care, greater amounts of medication, and a longer duration of treatment, according to the resources.

For example, along with supportive care and patient decontamination, the mainstays of managing nerve agent toxicity, including FGA toxicity, are anticholinergics (including atropine), oxime AChE reactivators (such as pralidoxime chloride), and anticonvulsants.

Another option is Reactive Skin Decontamination Lotion (RSDL), a medical device for the decontamination of skin exposed to chemical warfare agents such as sulfur mustard, VX, and certain biological toxins, among others, according to CHEMM's countermeasures database.

If it's available, RSDL is recommended for spot decontamination by the Medical Management Guidelines resource.

However, the guidelines recommend that first responders "not delay decontamination awaiting specialized products such as soap or RSDL."

"Disrobing carefully and washing with soap and water using standard protocols are effective in decontaminating skin from FGAs. While RSDL also is effective in decontaminating skin from FGAs and other chemical agents, RSDL is meant for spot decontamination and is not practical for whole body decontamination," the ASPR spokesperson told Homeland Preparedness News. "The best general approach is to have plans, equipment and trained personnel prepared to decontaminate people using soap and water. If RSDL is available, it can be used to complement standard patient decontamination."

The patient decontamination section of the Medical Management Guidelines also notes that FGAs are not readily degraded by water; thus, first responders are advised to avoid direct contact with water runoff. In addition, the containment section of the Reference Guide states that "FGAs can persist for extremely long periods of time on materials and effluent liquids such as water, so treat waste materials as hazardous and extremely toxic."

Emergent BioSolutions Inc. produces the Reactive Skin Decontamination Lotion (RSDL) Kit, which is intended to remove or neutralize chemical warfare agents and T-2 Toxin from the skin. The product is military grade, lightweight, approved by the U.S. Food and Drug Administration, and starts working in 2 minutes, according to Emergent BioSolutions.

And while the ASPR spokesperson didn't address questions from Homeland Preparedness News regarding whether the federal government should congressionally mandate the use of RSDL, the Emergent product remains in high demand by the United States government.

In fact, the Gaithersburg, Md.-based company in September 2017 was awarded a five-year follow-on contract valued at up to approximately \$171 million by DOD to supply its RSDL Kit for use by all branches of the U.S. military.

"With this guidance, Emergent looks forward to continuing to work with the U.S. government at the federal, state and local levels, and with allied governments at the regional and national levels, to develop and provide medical countermeasures such as Reactive Skin Decontamination Lotion or RSDL that protect first responders and civilians alike," said Doug White, senior vice president and head of the Devices Business Unit at Emergent BioSolutions.

White told Homeland Preparedness News last week that Emergent is pleased to be part of the solution and stands "at the ready to supply RSDL to the emergency response community."

"With our successful 20-year track record of partnering with governments, we are committed to leveraging our products and services to support the U.S. and allied governments' preparedness efforts and national security plans," he said.

White also applauded the U.S. government for developing the new CHEMM resources.

"These resources address the safety of first responders and hospital staff during a potential chemical attack. At the onset of an incident, oftentimes chaos, panic, and confusion ensue, and whether the cause is known or unknown, it is imperative that responders who are first to the scene do so with adequate protection," he said.

Additionally, White said that the new guidelines provide a clear and standardized way of responding to chemical attacks before they even happen.

In turn, the safety of the nation's first responders is put first "so they can carry out their duties with peace of mind and confidence," White added.

Furthermore, White said that the guidelines also offer a comprehensive response that will benefit civilians and property within the immediate vicinity and along the route to medical care through containment and decontamination procedures.

<https://homelandprepnews.com/first-responders/32268-federal-government-resources-available-to-support-first-responders-during-fourth-generation-agent-incident/>

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# US ARMS CONTROL

National Defense (Arlington, Va.)

## **JUST IN: State Dept. Official Sees No Progress in Missile Treaty Talks**

By Connie Lee

Jan. 24, 2019

Recent discussions indicate that Russia is still unwilling to give in to the Trump administration's demands to comply with the Intermediate-Range Nuclear Forces Treaty, potentially opening the door to U.S. development of new offensive missiles, according to a top State Department official.

The INF Treaty, signed in 1987, bars Russia and the United States from developing ground-launched ballistic and cruise missiles with ranges of between 500 kilometers and 5,500 kilometers.

Russia has been accused of violating the agreement with the development of its Novator 9M729 intermediate-range cruise missile, spurring the Trump administration to announce its intention to withdraw from the treaty altogether. Secretary of State Mike Pompeo said in December the United States would cease to adhere to the agreement if Russia did not get into compliance within 60 days. The deadline is Feb. 2.

Current discussions with Moscow are centered around what it can do to reverse its current course, Andrea Thompson, undersecretary of state for arms control and international security affairs, said Jan. 24 at a meeting with defense reporters in Washington, D.C.

Thompson said she met with Russian Deputy Foreign Minister Sergei Ryabkov and others last week, but the talks did not lead to progress on the issue. The Russians acknowledged the existence of the Novator 9M729 system, but continued to deny that it violated the INF Treaty despite evidence presented by the United States, she said.

"It was professional dialogue. It wasn't the normal bluster, propaganda" from the Russians that sometimes occurs in these types of meetings, she said. However, the talks "didn't break any new ground. There was no new information," she added.

Although Russian officials did not address why they developed the missile, they said the United States has violated the treaty with multiple weapons, including its Aegis Ashore ballistic missile defense system, Thompson noted.

"They've raised it before and my DoD counterparts went through again, by the numbers of each of those [U.S.] systems" to explain how they were in compliance with the INF Treaty, she said.

Thompson noted the Novator 9M729 has already been deployed to multiple Russian military battalions.

"This isn't research and development, this isn't a prototype, this isn't a 'We had a few systems in a testing lab or down in an arsenal,'" she said. "It's soldiers in uniform manning this system."

Russia has offered the United States an opportunity to view the technology to show that it does not violate the terms of the treaty. However, Thompson said such a display would not provide trustworthy, "verifiable" results.

"They would have controlled the environment," she noted. "When you go and you select the missile and you select the fuels, if you control all of those parameters ... you're controlling the outcome of the test."

The United States plans to take six months to end its obligations to the INF treaty following the Feb. 2 deadline. Thompson said the Trump administration would be willing to revive the agreement should the Russians change their minds and decide to comply during this period.

The Defense Department has already stated its intention to conduct research and development for previously prohibited missiles should the treaty dissolve. Analysts previously told National Defense that the United States' withdrawal could open up new business opportunities for U.S. missile makers.

<http://www.nationaldefensemagazine.org/articles/2019/1/24/us-official-says-russia-still-denies-inf-treaty-violation>

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The Hill (Washington, D.C.)

## **Top Intel Chiefs Contradict Trump on Iran, North Korea Nuclear Developments**

By Olivia Beavers

Jan. 29, 2019

Top leaders of the intelligence community on Tuesday directly contradicted President Trump's claims about North Korea and Iran in a new assessment about nuclear developments in the two countries.

Director of National Intelligence Dan Coats threw cold water on the idea that North Korea will fully get rid of nuclear weapon stockpiles, stating that the hermit nation views these capabilities as key to its survival.

"We currently assess that North Korea will seek to retain its [weapons of mass destruction] capabilities," Coats told members of the Senate Intelligence Committee during the panel's worldwide threats hearing.

The country is "unlikely to completely give up its nuclear weapons and production capabilities because its leaders ultimately view nuclear weapons as critical to regime survival," he continued.

The intelligence assessment appears to dismiss the possibility that the Trump administration can reach its stated goal to denuclearize the Korean Peninsula.

Speaking on behalf of the other officials at the hearing, Coats said the intelligence community also found that Iran is not currently seeking to develop its nuclear weapons capabilities.

"We continue to assess that Iran is not currently undertaking the key nuclear weapons-development activities we judge necessary to produce a nuclear device," their assessment reads.

The assessment warns that Iranian officials are threatening to begin building up the country's nuclear capabilities if Tehran "does not gain the tangible trade and investment benefits it expected" from the Joint Comprehensive Plan of Action (JCPOA), an Obama-era deal that Trump withdrew the U.S. from last year.

"However, Iranian officials have publicly threatened to reverse some of Iran's Joint Comprehensive Plan of Action (JCPOA) commitments — and resume nuclear activities that the JCPOA limits — if Iran does not gain the tangible trade and investment benefits it expected from the deal," the assessment reads.



The president, who bashed the agreement as “the worst deal ever” and “defective at its core,” claimed that if the deal remained in place, Iran “will be on the cusp of acquiring the world’s most dangerous weapons.”

CIA Director Gina Haspel, when pressed on the matter Tuesday by Sen. Angus King (I-Maine), said Iran is “making some preparations that would increase their ability to take a step back” from the agreement since they are not receiving the benefits from the deal that they had hoped.

“Technically, they are in compliance but we do see them debating among themselves,” she added.

Despite Trump’s withdrawal, JCPOA remains intact as a result of ongoing support from European countries who were part of the deal.

The remarks about Iran and North Korea mark a stunning departure from public claims Trump has made about the two nations’ actions and intentions.

Coats’s remarks about North Korea come shortly after the White House announced that Trump and leader Kim Jong Un will meet for a second time in February.

It will mark the first time Trump and Kim will meet face-to-face after their landmark summit last June in Singapore. There, the two leaders issued a joint declaration that stated that they would work toward the “complete denuclearization of the Korean Peninsula” in exchange for unspecified security guarantees for the rogue nation.

Trump at the time boasted that “there is no longer a Nuclear Threat from North Korea.”

Coats did note, however, that North Korea is showing signs that it wants better relations.

“North Korea has not conducted any nuclear-capable missile tests in more than a year and it has dismantled some of its nuclear infrastructure. As well, Kim Jong Un continues to demonstrate openness to the denuclearization of the Korean Peninsula,” Coats said.

He noted that while the U.S. continues to place economic pressure on North Korea, Pyongyang has continued to try to dodge sanctions.

“While we assess that sanctions on exports have been effective and largely maintained, North Korea seeks to mitigate the effects of the U.S.-led pressure campaign through diplomatic engagement, counter-pressure against the sanctions regime, and direct sanctions evasion,” Coats said.

Coats, who spoke about North Korea in his opening remarks before the committee, said he was speaking on behalf of the entire panel of intelligence officials at the hearing, including Haspel, FBI Director Christopher Wray and others.

<https://thehill.com/policy/national-security/427427-intel-chief-says-north-korea-unlikely-to-give-up-its-nuclear-weapons>

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# COMMENTARY

Defense One (Washington, D.C.)

## **The INF Treaty is Doomed. We Need a New Arms-Control Framework**

By Eugene Rumer

Jan. 25, 2019

Neither the Trump administration nor the Russian government appears the least bit interested in saving the Intermediate-Range Nuclear Forces Treaty. Both have their reasons, and the arms-control community would do well to drop its appeals on behalf of the INF and take a hard look at what has changed.

U.S. accusations of Russian INF violations first became known publicly in 2014. In the past few weeks, the Trump administration released a dossier detailing the intelligence behind its claims. Since 2014, the Russian government has repeatedly denied the accusations and countered that the United States itself was in violation of the treaty. However, the majority of governments on both sides of the Atlantic and independent arms control experts agree that Russia has violated the treaty. Most also find the Russian counter-claim to be dubious.

Since the Obama administration first charged that Russia violated the treaty by testing the banned missile the Kremlin has proceeded to actually deploying it. Russian actions have made it clear that the initial violation was no mere oversight, but a deliberate move.

The Kremlin has always had the option of withdrawing from the treaty, as the United States did with the Anti-Ballistic Missile Treaty in 2002. But that would have triggered widespread international criticism. Instead, the Kremlin left it to the United States to make the first move. The Trump administration obliged, handing Mr. Putin a major public relations victory. Instead of mounting an effective public relations campaign focused on Russian INF violations, the United States has painted itself as the offender.

Mr. Pompeo's Dec. 4 ultimatum to the Kremlin is intended to kill, rather than save the treaty. There is zero chance that the Kremlin will back down under U.S. pressure from the course it embarked on years ago. The Trump administration's reasons for killing the treaty—aside from the fact that in the four years since Russian violations were first made public Russia has proceeded from testing the missile to deploying it—are obvious. President Trump doesn't like treaties that he did not negotiate. NAFTA, the Trans-Pacific Partnership, even the North Atlantic Treaty are in his view deeply flawed and do not serve American interests. The INF Treaty is important to U.S. European allies, in particular Germany, which has been a frequent target of Trump's ire. That is probably one more strike against the treaty in the President's eyes. His National Security Advisor John Bolton is a long-time critic of arms control and has argued consistently for getting the United States out of the web of treaties that he says deny it the freedom to provide for its own defense. Finally, some U.S. defense experts claim, the United States needs intermediate-range missiles to counter China.

The Kremlin too has its reasons for disliking the INF Treaty, which bans land-based, but not air- or sea-based intermediate-range missiles. Russian defense planners have always viewed the former as an essential part of their arsenal, while NATO and the United States in particular have had a clear advantage in the latter systems. The dissolution of the Warsaw Pact and the break-up of the Soviet Union along with the expansion of NATO have fundamentally changed the geography of Russian threat perceptions. Successive rounds of NATO enlargement have pushed the NATO-Russia

boundary much further to the east and removed the strategic depth that for centuries has been essential to Russian defense planning.

Without the buffer of the Warsaw Pact and the western republics of the USSR, the Russian heartland is now within a few minutes' flying time of U.S. air- and sea-based weapons, which are allowed under the INF Treaty. Absent their land-based intermediate-range missile arsenal, Russian defense planners think they have few means to counter that threat. Top Russian officials, including Putin, have complained about the INF Treaty for years. Trump's announcement of his decision to withdraw from it was a gift to them, shifting the blame on the United States as the offender.

With this confluence of interests between the Kremlin and the White House, the INF Treaty is doomed. The carrot-and-stick approach advocated by some experts—boosting NATO's missile defenses, threatening Russia with conventional air- and sea-based offensive systems, while also offering it assurances about U.S. systems it claims violate the INF Treaty—will not be enough. Threatening Russia with air- and sea-based offensive systems will further demonstrate to the Russians that the treaty favors the United States. U.S. assurances that its systems that Russia claims violate the INF Treaty in fact do not, will fall far short of what Russian defense planners want—the ability to deter or defend against NATO's threat to the Russian heartland.

It is impossible to separate the fate of the INF Treaty from the geography of the NATO-Russia standoff. NATO expansion has provided a robust security guarantee to the countries of Eastern and Central Europe—a guarantee they wanted as a hedge against precisely the kind of Russia they are dealing with today. But Russia rejects the European security order with NATO at its core, and the alliance's expansion has resulted in a new climate of insecurity along its eastern edge. The asymmetry of the INF Treaty, which allows some intermediate-range systems, but not others, has doomed it in the eyes of Russian defense planners confronted with the new map of NATO and ever-improving U.S. offensive capabilities.

The fate of the INF Treaty is a wake-up call to arms controllers and strategists on both sides of the East-West divide. The arms control framework built during the Cold War is growing obsolete. It does not keep up with the rapid pace of technological change and the new geography of threats. It can still perform a useful function and serve as a platform from which to expand the conversation about managing the arms race in the new century. But in and of itself that framework is no panacea and could even distract from what is urgently needed—a conversation about strategic stability in an environment that both sides are ill-prepared to handle.

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<https://www.defenseone.com/ideas/2019/01/inf-treaty-doomed-we-need-new-arms-control-framework/154428/>

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The Hill (Washington, D.C.)

## **Second Trump-Kim Summit Risks US Credibility**

By Lawrence J. Haas

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President Trump hopes to use a second summit with North Korea's Kim Jong-un in the coming weeks to jumpstart progress on dismantling the North's nuclear program, but Kim's recent statements and Pyongyang's clandestine work on its program raise serious questions about the President's approach.

To be sure, Kim has maintained his freeze on nuclear or ballistic missile testing that set the stage for the first Trump-Kim summit of last June in Singapore, and he has tamed the fiery rhetoric that marked his previous pronouncements about the United States and a potential military confrontation with it.

But, when it comes to its nuclear capacity, Pyongyang hasn't sat still since June. Quite the contrary, the "hermit kingdom" has made significant progress in expanding its nuclear arsenal — which, of course, is precisely the opposite of what Trump hopes to accomplish through personal diplomacy.

While maintaining the freeze on nuclear and ballistic missile testing that he started in November of 2017, Kim claims that he has followed through on pledges to dismantle a satellite launch facility and destroy tunnels at a former nuclear weapons site. But even if true, many experts downplay the significance of such measures because Pyongyang could reverse them quickly and, more to the point, because North Korea has a nuclear infrastructure that extends across multiple sites.

Of greater importance is what the North is doing quietly in other parts of its nuclear program. Just a month after the June summit, Secretary of State Mike Pompeo acknowledged to the Senate Foreign Relations Committee that Pyongyang is continuing to "produce fissile material." Asked for more information, Pompeo replied that he'd like to give it the committee in a private session.

Pyongyang's progress, however, is an open secret to nuclear experts. As the Straits Times reported in recent weeks, "satellite-imagery analysis and leaked American intelligence" show that North Korea is producing rockets and warheads as quickly as ever. Specifically, the Singapore-based newspaper wrote, the North has added several intercontinental ballistic missiles and enough fissile materials for six more nuclear bombs, giving Kim's regime a total of more than 20 bombs.

In essence, Kim is capitalizing on the North's prior nuclear advancements to make more progress quietly. That is, its program has reached the stage at which it doesn't need much if any more testing. With such an advanced program, the North can work clandestinely to bolster its nuclear and ballistic weapons.

None of this is particularly surprising in light of what Kim himself said recently. With all necessary testing completed, Kim declared in his annual New Year's Day address to his nation, "the nuclear weapons research sector and the rocket industry should mass-produce nuclear weapons and ballistic missiles." If so, Robert Litwak, a Senior Vice President at the Woodrow Wilson International Center for Scholars, told NBC News, the North could have 100 nuclear warheads by 2020.

Where do we go from here?

Kim is demanding more from the United States. In that New Year's Day speech, North Korea's strongman said that Washington must first lift sanctions before he will do anything else. Longer term, he wants (among other things) an end to U.S. sanctions and to its nuclear weapons in the region.

To this point, Trump has demanded North Korea's "complete, verifiable, and irreversible denuclearization" before he would lift sanctions. Easing that stance now would undermine his credibility at home and abroad and also subject him to the same criticism that President Obama faced when he back-tracked on numerous demands in order to secure the 2015 nuclear agreement with Iran.

The President, however, has offered unilateral concessions before. After the first summit, he canceled military exercises between the United States and South Korea without securing anything of tangible value in return.

Who will blink first?

At the moment, Trump seems more eager for a deal than Kim. He has reportedly chafed in recent months as progress in the aftermath of Singapore has stalled, and he surely would like the kind of agreement with North Korea that eluded his predecessors and would validate his negotiation skills.

As for Kim, U.S. and global sanctions aren't preventing Pyongyang from making progress on its nuclear program, which the regime has long considered its insurance policy against a U.S. or other external attack. Moreover, despite the continued suffering of North Korea's people under his brutal authoritarian rule, the young leader faces no serious, discernable internal threats to his rule.

So, will Trump convince Kim, in exchange for reduced U.S.-North Korean tensions and economic sweeteners, to dismantle the program that the Kim dynasty worked so hard to develop in order to protect itself?

Color me skeptical.

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<https://thehill.com/opinion/international/427582-second-trump-kim-summit-risks-us-credibility>

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## ABOUT THE USAF CSDS

The USAF Counterproliferation Center (CPC) was established in 1998 at the direction of the Chief of Staff of the Air Force. Located at Maxwell AFB, this Center capitalizes on the resident expertise of Air University — while extending its reach far beyond — and influences a wide audience of leaders and policy makers. A memorandum of agreement between the Air Staff's Director for Nuclear and Counterproliferation (then AF/XON) and Air War College commandant established the initial personnel and responsibilities of the Center. This included integrating counterproliferation awareness into the curriculum and ongoing research at the Air University; establishing an information repository to promote research on counterproliferation and nonproliferation issues; and directing research on the various topics associated with counterproliferation and nonproliferation.

In 2008, the Secretary of Defense's Task Force on Nuclear Weapons Management recommended "Air Force personnel connected to the nuclear mission be required to take a professional military education (PME) course on national, defense, and Air Force concepts for deterrence and defense." This led to the addition of three teaching positions to the CPC in 2011 to enhance nuclear PME efforts. At the same time, the Air Force Nuclear Weapons Center, in coordination with the AF/A10 and Air Force Global Strike Command, established a series of courses at Kirtland AFB to provide professional continuing education (PCE) through the careers of those Air Force personnel working in or supporting the nuclear enterprise. This mission was transferred to the CPC in 2012, broadening its mandate to providing education and research on not just countering WMD but also nuclear operations issues. In April 2016, the nuclear PCE courses were transferred from the Air War College to the U.S. Air Force Institute for Technology.

In February 2014, the Center's name was changed to the Center for Unconventional Weapons Studies (CUWS) to reflect its broad coverage of unconventional weapons issues, both offensive and defensive, across the six joint operating concepts (deterrence operations, cooperative security, major combat operations, irregular warfare, stability operations, and homeland security). The term "unconventional weapons," currently defined as nuclear, biological, and chemical weapons, also includes the improvised use of chemical, biological, and radiological hazards. In May 2018, the name changed again to the Center for Strategic Deterrence Studies (CSDS) in recognition of senior Air Force interest in focusing on this vital national security topic.

The Center's military insignia displays the symbols of nuclear, biological, and chemical hazards. The arrows above the hazards represent the four aspects of counterproliferation — counterforce, active defense, passive defense, and consequence management. The Latin inscription "Armis Bella Venenis Geri" stands for "weapons of war involving poisons."

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