

ISSUE BRIEF
JANUARY 2019

The INF Quandary: Preventing a Nuclear Arms Race in Europe

Perspectives from the U.S., Russia and Germany

William Tobey

Pavel S. Zolotarev

Ulrich Kühn

Russia Matters

THE U.S.-RUSSIA
INITIATIVE TO PREVENT
NUCLEAR TERRORISM



Russia Matters

Belfer Center for Science and International Affairs
Harvard Kennedy School
79 JFK Street
Cambridge, MA 02138

www.russiamatters.org

Statements and views expressed in this issue brief are solely those of the authors and do not imply endorsement by Harvard University, the Harvard Kennedy School, or the Belfer Center for Science and International Affairs.

Layout by Angelina Flood.

Cover photo: A Soviet SS-20 Saber missile and a U.S. Pershing II missile at the U.S. National Air and Space Museum. Credit: Flickr user Cliff.

Copyright 2019, President and Fellows of Harvard College
Printed in the United States of America

The INF Quandary: Preventing a Nuclear Arms Race in Europe

Perspectives from the U.S., Russia and Germany

William Tobey

Pavel S. Zolotarev

Ulrich Kühn

This issue brief is a joint product of the Russia Matters project and the U.S.-Russia Initiative to Prevent Nuclear Terrorism (IPNT). Introduction and conclusion by IPNT director William Tobey.

Russia Matters

**THE U.S.-RUSSIA
INITIATIVE TO PREVENT
NUCLEAR TERRORISM**

About Russia Matters

Russia Matters is a project launched in 2016 by Harvard Kennedy School's Belfer Center for Science and International Affairs and made possible with support from Carnegie Corporation of New York.

The project's main aim is to improve the understanding of Russia and the U.S.-Russian relationship among America's policymakers and concerned public. It does so by showcasing the best expertise on Russia and its relationships with the rest of the world by providing top-notch analysis, relevant factual data and related digests of news and analysis. Initially, the project's contributors and institutional partners will be primarily U.S.-based and its main platform for pursuing its goals will be this website.

The specific aims of Russia Matters are to help:

- U.S. policymakers and the general public gain a better understanding of why and how Russia matters to the United States now and in the foreseeable future and what drivers propel the two countries' policies in areas of mutual concern;
- Ensure that U.S. policies toward Russia are conducive to the advancement of long-term U.S. vital national interests, but that they also improve cooperation in areas where interests converge and mitigate friction in areas of divergence;
- Foster a new generation of Russia experts.

Russia Matters likewise endeavors to build bridges between academe and the policymaking community.

It is our sincere hope that this endeavor will help advance a viable, analytically rigorous U.S. policy on Russia guided by realism, verifiable facts and national interests without sacrificing opportunities for bilateral cooperation.

About the US-Russia Initiative to Prevent Nuclear Terrorism

The U.S.-Russia Initiative to Prevent Nuclear Terrorism seeks to increase awareness and a sense of urgency concerning the threat from terrorists conducting a nuclear attack. Recognizing the leading roles that Russia and the U.S. play in producing and securing nuclear materials and weapons, the initiative combines the efforts of U.S. and Russian institutes and experts in the fields of terrorism, security, nuclear, intelligence and energy. The initiative links governmental and nongovernmental organizations in order to facilitate U.S.-Russian cooperation across all these fields. Building on the many efforts already begun to improve security of nuclear weapons and materials, the initiative focuses on identifying the additional steps Russia and the U.S. could take to lead global efforts in preventing nuclear terrorism.

Initiative Goal: Contribute to improved joint U.S.-Russian assessment of the threat of nuclear terrorism and concepts, strategy and actions to prevent a successful nuclear attack by terrorists.

Strategy:

- Increase awareness of the threat from nuclear terrorism.
- Create a sense of urgency within U.S. and Russian governments to cooperate in preventing nuclear terrorism.
- Help sustain the major investment made in Russian nuclear security.

About the Authors

William Tobey is a senior fellow at Harvard's Belfer Center for Science and International Affairs and the director of the center's U.S.-Russia Initiative to Prevent Nuclear Terrorism. He was deputy administrator for defense nuclear nonproliferation at the National Nuclear Security Administration from 2006-2009. He also served on the National Security Council staff under three U.S. presidents, where his responsibilities for a time included INF Treaty compliance and implementation.

Pavel S. Zolotarev is a supervisor of military and political studies at the Institute for U.S. and Canadian Studies of the Russian Academy of Sciences. He is a retired major general and holds a candidate's degree (akin to a PhD in the West) in technical sciences. In 1996, he headed the information and analytical center of the Russian Defense Ministry and in 1998 resigned from his position as head of department at the Office of the Defense Council of the Russian Federation.

Ulrich Kühn is deputy head for arms control and emerging technologies at the Institute for Peace Research and Security Policy at the University of Hamburg and a nonresident scholar in the Nuclear Policy Program at the Carnegie Endowment for International Peace. Previously, he was a senior research associate at the Vienna Center for Disarmament and Non-Proliferation/the James Martin Center for Nonproliferation Studies.

Table of Contents

About Russia Matters	ii
About the U.S.-Russia Initiative to Prevent Nuclear Terrorism ...	iii
About the Authors.....	iv
Introduction.....	1
U.S. Perspective.....	3
Russian Perspective.....	8
European Perspective	16
Conclusion	21
Endnotes	22



Cover Image

A Soviet SS-20 Saber missile and a U.S. Pershing II missile at the U.S. National Air and Space Museum. Credit: Flickr user Cliff.

I. Introduction

The Intermediate-Range Nuclear Forces, or INF, Treaty, signed by U.S. President Ronald Reagan and Soviet Communist Party General Secretary Mikhail Gorbachev in 1987, was a profound achievement. It was the first bilateral nuclear arms control treaty to ban an entire class of weapons. It contained verification innovations such as continuous perimeter-portal monitoring.¹ The diplomatic and technical experience gained from the treaty made possible the first Strategic Arms Reduction Treaty (START I) and the Treaty on Conventional Armed Forces in Europe, or CFE. Most importantly, the INF Treaty reversed dangerous military trends in Europe that had left both sides less secure than they had been before such systems were deployed.

Now the treaty—formally called the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles—faces an existential threat posed by compliance issues that have prompted a U.S. decision to withdraw from it unless its concerns are allayed. Arms-control-treaty compliance problems are intrinsically important because they can corrode both trust and strategic stability. Moreover, if the INF Treaty falls apart, it will have a profound impact on the U.S.-Russian strategic relationship, with implications for all of Europe and likely beyond. It will affect how both sides analyze decisions on extending the New START Treaty, which is due to expire in 2021. It will likely foreclose for the foreseeable future any possibility that another nuclear arms control treaty could be ratified by the U.S. Senate. It will likely prompt deployment of new military systems, and consequent responses. It will spark controversy both in the U.S. Congress and between the United States and its allies. Finally, it would constitute decisive evidence that the United States and Russia have returned to a nuclear competition that was in abeyance for over two decades.

Thus, the fate of the INF Treaty is of surpassing importance in Europe, Russia and the United States. The stakes for the parties to the treaty are obvious. Europe too would be affected as dissolution of the treaty

could lead to a new arms race with intermediate-range missiles targeting the entire continent. Below, three authors representing each of these perspectives consider the likely future of the treaty, how it might be saved and what its demise might mean. The specific questions we set out to try to answer when this issue brief was conceived late last fall are:

- A. What last-minute efforts are possible to save the INF Treaty?
- B. If the INF Treaty cannot be saved, what does that mean for your country/region in the coming years?
- C. Could there be some sort of INF follow-on? What could a future arms control framework look like?

II. U.S. Perspective

By William Tobey

A. Saving the Treaty: Compliance, Compliance, Compliance

While the issues that divide Moscow and Washington on compliance with the INF Treaty are serious and longstanding, the decisions that have threatened the treaty's immediate future are political, and can easily be reversed or deferred. The treaty is of indefinite duration; therefore, absent a decision by either of the parties to withdraw from the pact, it will remain in force.

Although Moscow has alleged U.S. violations of the INF Treaty, the proximate danger to the agreement is the U.S. intention to withdraw from it unless Russia returns to compliance. The United States first detected prohibited Russian activity under the INF Treaty in 2008, during the George W. Bush administration. Starting in 2014, the Obama administration publicly charged that Moscow had violated the treaty with ground-launched cruise missile testing to a prohibited range and later by deployment of that system.² On Dec. 4, 2018, U.S. Secretary of State Michael Pompeo announced that “the United States today declares it has found Russia in material breach of the treaty and will suspend our obligations as a remedy effective in 60 days unless Russia returns to full and verifiable compliance.”³ At the end of that 60-day period, which reportedly expires on Feb. 2,⁴ the United States would also provide notice of intent to withdraw from the treaty after the six-month period specified under its terms.⁵ Thus, in theory, the sides have about six months to resolve the issues until the treaty would become defunct, and more if they agreed not to take precipitous action while negotiations are proceeding constructively.

The first question is, thus, are the sides *willing* to make the efforts necessary to save the treaty? During the George W. Bush administration, Russian Defense Minister Sergei Ivanov suggested joint withdrawal from the treaty, to enable both countries to meet perceived threats in Asia.⁶ The United States demurred, and Russia apparently went forward with covert testing and deployment. Thus, Moscow's actions appear to be driven by its perceived military requirements. It is likely, therefore, that only an assessment

by the Kremlin that the benefits of such systems will be outweighed by the costs of dissolving the INF Treaty would cause a reversal of course. After the Trump administration announced its decision to suspend the treaty, Russian President Vladimir Putin called the decision “ill-considered”⁷ and Russia later introduced a resolution in the United Nations General Assembly supporting the treaty,⁸ but it is unclear whether this reflects a newfound commitment to the agreement or an attempt to position Russia as the victim of U.S. withdrawal.

On the U.S. side, having first raised the issue with Moscow nearly six years ago, and having received no satisfaction under both the Obama and Trump administrations, Washington feels little room for flexibility. With the declaration of the treaty’s material breach, there is less still. In late November 2018, the U.S. Director of National Intelligence Dan Coats laid out a relatively detailed case for assessing a system designated by the Russians as 9M729 as violating the treaty’s ban on ground-launched cruise missiles with ranges between 500 and 5,000 kilometers. INF Treaty verification is premised on the fact that verifying missile test ranges by national technical means is relatively objective, reliable and accurate. The consistency of the U.S. charges across two administrations of different parties evinces U.S. confidence in the judgment of material breach, and once such a charge is made, the violation cannot be long tolerated without a response. If arms control is to mean anything, parties must insist on scrupulous compliance. (A Jan. 15 meeting between U.S. and Russian diplomats in Geneva failed to make progress on the matter, but the two sides agreed to hold more talks⁹ on the issue in Beijing on Jan. 30-31.¹⁰) Like former Defense Minister Ivanov, U.S. policymakers may also favor dissolution of the treaty for politico-military reasons. Before taking office, U.S. National Security Advisor John Bolton advocated abandoning the treaty to free the United States to “upgrade its military capabilities to match its global responsibilities.”¹¹

If, contrary to the apparent current motivations of both sides, there is a desire to preserve the treaty, the mechanism would be relatively straightforward: Announce an agreement to work constructively and expeditiously to resolve both parties’ outstanding compliance concerns and not to take actions affecting the viability of the treaty until those concerns have been resolved or it becomes clear that the negotiations have failed. The Special

Verification Commission created by the treaty to resolve compliance concerns is an appropriate mechanism for technical discussions, although given the statements already on record by both presidents Trump and Putin, Cabinet-level attention to the matter will also be required in both countries.

Substantively, the United States and Russia should engage in detailed technical discussions to resolve the question of whether or not the Russian system in question is capable of flying to a prohibited range. Given that range-payload calculations are a matter of physics, not politics, this issue is susceptible to technical resolution, perhaps including inspection of the system at issue. If the system falls within the prohibited range limits, all such weapons would need to be verifiably destroyed. If not, the United States should withdraw its complaint.

Russia too has made charges of U.S. noncompliance, alleging that targets for antiballistic missile tests, long-range armed drones and the Aegis Ashore missile defense launcher violate the treaty. The first two complaints are specious. The treaty has explicit provisions excepting antiballistic missile test targets, and the United States has complied with them. Russia too has long-range armed drones, which are discernable as different from cruise missiles, and therefore not limited by the treaty. The third Russian complaint, however, has more merit.

In deploying missile defenses in Europe, the United States chose a system (Aegis Ashore) that was originally sea-based and capable of launching both cruise missiles and antiballistic missile systems. Washington told Moscow that software modifications make it impossible for Aegis Ashore to launch cruise missiles. There is, however, no way for Russia to verify this independently. Thus, from Russia's perspective, the United States deployed a launcher prohibited by the treaty. Were the shoe on the other foot, the United States would be deeply suspicious, and rightfully so. One possible fix would be introducing functionally related observable differences, which would make clear that the Aegis Ashore system, unlike its sea-going cousin, is incapable of launching cruise missiles. Alternatively, the United States could develop and deploy a new, purpose-built launcher for the European sites. While this would be moderately expensive, it would be far

cheaper than the new weapons deployments likely to follow dissolution of the INF Treaty. A new missile defense launcher that had never test fired a cruise missile to a prohibited range would be permitted under the treaty.

B. If Treaty Dies, Adversarial US-Russian Relationship Could Get Much Uglier

If the INF Treaty cannot be saved, it will effectively end prospects for new bilateral arms control treaties with Russia for the foreseeable future. Arms control treaty ratification is always difficult, requiring two-thirds of the U.S. Senate to back an inevitably complex and controversial agreement. A lingering Russian compliance problem would fatally weaken support for any such treaty. Moreover, the New START Treaty will expire in February 2021, unless extended until 2026. The Trump administration's appetite for extension will be soured by the failure of the INF Treaty.

If U.S.-Russian bilateral arms control ends, it will have two direct effects: eliminating useful verification means that supplement national technical means; and undermining the predictability and perhaps the stability of the nuclear balance. To be sure, in making decisions about nuclear force structure, states will always be guided by their perceived self-interest rather than legal strictures. Arms control treaties have tended to codify the parties' intentions rather than constrain their ambitions. Failure to negotiate viable arms control treaties would be a symptom of renewed U.S.-Russian competition, not a cause of it. Nonetheless, the dissolution of the INF Treaty could herald a much more adversarial relationship between Washington and Moscow in the coming years, with military deployments to match.

C. An INF Follow-On? Compliance, Again, Must Be Starting Point

As noted above, if the INF Treaty fails, it will cause profound damage to the viability of bilateral U.S.-Russian arms control. Moreover, the INF Treaty is not the only arms control treaty or agreement Russia is violating.ⁱ A

ⁱ Others include: the Helsinki Declaration; the Budapest Memorandum; the Istanbul Accord; the Presidential Nuclear Initiatives signed between George H.W. Bush and Gorbachev and then Bush and Yeltsin; the Vienna Document; the Open Skies Treaty. See Frank Miller: <https://www.scowcroft.com/news-announcements/frank-miller-responds-basic-and-elns-report-changing-nuclear-weapons-policy-trump>

follow-on agreement would neither be possible nor desirable absent successful resolution of compliance issues.

The imperatives of managing relations between the two largest nuclear weapons powers will, however, remain compelling. Both sides have an interest in avoiding strategic surprise and minimizing destabilizing incentives in the strategic balance. Unlike the last 30 years, those interests might be undermined by deployment of new technologies that could reduce warning and decision times. All of this might well be further complicated by the rise of China's nuclear weapons capabilities.

If compliance issues can eventually be successfully resolved, some form of new understanding would be useful. In addition to dealing with the forces banned or constrained under the INF and New START treaties, the new framework will likely need to address non-strategic nuclear forces, where Russia has a large advantage, hypersonic and exotic nuclear weapons systems, where the sides are jockeying for advantage, and the appropriate balance between strategic offensive and defensive forces, where the United States has the edge, but Russia is making progress. All of these are complex and difficult issues, and they will take time to resolve. That may be another compelling reason to extend New START.

III. Russian Perspective

By Pavel S. Zolotarev

A. How to Save the INF Treaty? Political Will and Transparency

The INF Treaty can only be saved if both Russia and the United States exercise the political will to do so. The likelihood of this happening, however, is extremely low. From a military standpoint, in my view, no convincing arguments exist in favor of withdrawing from the INF Treaty, and yet the probability that a sensible decision will be made is negligible.

From a military-technical standpoint, the treaty can be saved through some relatively simple and obvious steps that its two signatories would need to take:

- Russia could provide American technical experts with a demonstration of the technologies believed by the U.S. government to be in violation of the INF Treaty (including the relevant technical documentation, such as information on the testing of missiles' ranges).ⁱⁱ
- The U.S. could organize a demonstration of the missile defense base in Romania for Russian technical specialists, including explanations of possible technical solutions for precluding the use of the Mark 41 Vertical Launching System for launches of attack missiles.

The remaining issues, such as the use of medium-range missiles as targets for testing U.S. missile defenses and the problem of attack UAVs, can be resolved at a later stage.

ii The Russian Defense Ministry demonstrated what it said was the missile that the U.S. maintains violates the INF at an event for journalists on Jan. 23, asserting that the Novator 9M729 missile complies with the treaty. <https://www.reuters.com/article/us-usa-nuclear-russia/russia-takes-wraps-off-new-missile-to-try-to-save-us-nuclear-pact-idUSKCN1PH15A>

B. If INF Treaty Collapses, Russia Will Have to Rely on Nuclear Deterrence

The consequences of a withdrawal from the INF Treaty will be determined not so much by military and technical factors as by the state of U.S.-Russian relations. A past example of this lies in Russia's reaction to the U.S. withdrawal from the 1972 Anti-Ballistic Missile Treaty.ⁱⁱⁱ While Russia expressed regret over the treaty's demise, this did not hinder the signing of the U.S.-Russian Treaty on Strategic Offensive Reductions¹² in 2002. The spirit of that agreement, also known as the Moscow Treaty, corresponded to the state of U.S.-Russian relations at the time and the mutual trust that existed then.

By that time, of the three main components of the containment policy applied to the Soviet Union (limiting its sphere of influence, nuclear deterrence and informational warfare), only one persisted in U.S.-Russian relations: nuclear deterrence. But the reasons for this were merely technical, not dictated by political necessity.

This was a period when Vladimir Putin entertained the prospect of such close rapprochement with the West that he even suggested Russia could possibly accede to NATO. After Moscow's unilateral steps in the mid-1990s to demilitarize Europe, Russia had the right to expect similar, reciprocal steps; instead, what it got is the decision to expand NATO.

The most experienced and authoritative American policy thinkers were able to immediately assess the consequences of that decision. In particular, it is appropriate to recall the forecast made at the time by George Kennan. In a 1997 New York Times op-ed¹³ he wrote: "The view, bluntly stated, is that expanding NATO would be the most fateful error of American policy in the entire post-cold-war era. Such a decision may be expected to inflame the nationalistic, anti-Western and militaristic tendencies in Russian opinion; to have an adverse effect on the development of Russian democracy; to restore the atmosphere of the cold war to East-West relations, and to impel Russian foreign policy in directions decidedly not to our liking."¹⁴

iii Formally the "Treaty Between The United States of America and The Union of Soviet Socialist Republics on The Limitation of Anti-Ballistic Missile Systems."

Kennan's forecast has proved accurate.

The process of NATO expansion limited Russia's sphere of influence, first in Eastern Europe, and then in the post-Soviet space.

Then came the coup d'état in Ukraine in February 2014—described by authoritative American expert George Friedman as the most blatant coup in history.¹⁵

One can agree with the proposition that not all aspects of Russia's reaction to that event were appropriate. But Moscow's decision about Crimea rested on a popular referendum of the peninsula's residents and, in my view, was more legitimate than the decision to grant independence to Kosovo. From a geopolitical standpoint, Russia stood to lose its navy's access to the Black Sea, which it had fought for for centuries.

As a result, Russia now faces a full-fledged revival of all three major components of the containment policy Western countries once conducted vis-a-vis the Soviet Union, and the state of Russian-American relations now draws analogies with the period of the Cold War.

Under these conditions, the reaction to a withdrawal from the INF Treaty will also be quite different from what it was when the United States pulled out of the ABM Treaty in 2002.

A U.S. withdrawal from the INF Treaty would create an opportunity for the deployment of intermediate-range missiles in European countries. A similar situation existed in Europe in the mid-1980s. It would have taken Pershing II missiles, which were deployed in Europe at the time, less than 10 minutes to reach the main command points of the Soviet leadership. That created the conditions for a decapitating strike. It was these conditions that forced the Soviet Union to sign the INF Treaty, providing for the destruction of a significantly larger number of Soviet missiles than American ones (2 1/2 times more).

The current situation is dramatically worse for Russia than in the mid-1980s. Missiles deployed on the territory of newer NATO members could

reach Russia's main command points in less than five minutes. The high accuracy of modern missiles and the potential of high-precision weapons as a whole create the prerequisites for a decapitating strike against Russia and the destruction of its critical infrastructure without the use of nuclear warheads, i.e., in the course of a non-nuclear war.

During the Cold War analysts compared the military potentials of NATO and the Warsaw Pact countries. It is notable that NATO's military leadership concluded then that the Warsaw Pact forces were superior and, therefore, it was necessary for the alliance to exercise nuclear deterrence in Europe. Moreover, analysis of possible scenarios of a military conflict between the two blocs led them to conclude that nuclear weapons would inevitably be used in the early stages of such a conflict. This, in turn, led to the development of a treaty that would not allow either side to enjoy a significant superiority in conventional forces—namely, the Treaty on Conventional Armed Forces in Europe, or CFE. By the time this treaty came into force, the Warsaw Pact and the Soviet Union had ceased to exist; however, the CFE Treaty was still actively used to limit Russia's sphere of influence in the post-Soviet space.

Today, it is absurd to raise the issue of achieving a balance of conventional forces between NATO and Russia. This goal is unattainable. Yet NATO has declared Russia a de facto adversary, consigning the NATO-Russia Founding Act to oblivion. Russia, in spite of everything, has not changed the provisions of its military doctrine, which does not classify NATO as an adversary.

Nevertheless, the prospect of U.S. withdrawal from the INF puts Russia in a situation in which it is compelled to rely on nuclear deterrence under conditions much worse than those that once forced NATO to resort to nuclear deterrence in Europe.

NATO's actions against Yugoslavia in 1998 served as an example of a modern military conflict in which use of high-precision weapons made it possible to achieve a political goal by striking critical elements of that Balkan country's infrastructure while avoiding direct contact with the Yugoslavian armed forces.

The collapse of the INF will create conditions for the implementation of a similar scenario against Russia. At the same time, Russia's nuclear-deterrence potential is under threat of a decapitating strike. This latter possibility, in both its nuclear and conventional versions, will inevitably force the Russian military-political leadership to develop plans for a preemptive non-nuclear strike on areas of European NATO member-states where missiles are deployed. Such strikes would be conducted at the early stages of a military conflict. Russia will also need to develop a plan for conducting a preemptive nuclear strike on nuclear weapons facilities in these European countries in the event that the Russian military-political leadership concludes that a conventional conflict may escalate into a nuclear war. Obviously, this planning would have to include responses to a decapitating strike because the Russian leadership cannot rule out the possibility of such a strike. As a result, each time the military-political situation is aggravated, Russia's leadership will be compelled to transfer the Perimeter, or Dead Hand, system to a readiness mode that provides for automatic generation of an order for launching a nuclear counter-strike.

In the end, withdrawal from the INF Treaty can lead to a significant increase in the risk of nuclear war. Moreover, this risk will grow in spite of the fact that Russia and the United States are in serious disagreement, in my view, over only one issue—influence in the post-Soviet space. There are no significant disagreements between Russia and European countries.

C. In INF's Wake Focus Must Be 'Mutual Assured Security' and Missile Restrictions in Europe

If the INF Treaty cannot be preserved, then it would be advisable to focus, first and foremost, on preventing the deployment of short- and intermediate-range missiles in Europe. To this end, it would be most sensible for the Russian leadership to declare a moratorium on the development and deployment of this class of missiles in the European part of the country until such missiles are developed and deployed on the territory of other European states.

Following such a moratorium, the sides could sign a legally binding document about deploying such missiles—or, at least, nuclear-equipped missiles—at distances that do not create mutual threats.

It would be logical for the Russian leadership to refrain from extending such a moratorium to the eastern part of the country. This would be expedient not out of any need to demonstrate to the United States the possibility of posing a threat to the U.S. homeland with medium-range missiles, but because it would have an impact on China. The prospect of simultaneous deployment of American and Russian medium- and short-range missiles in the region would cause concern in Beijing, which, in turn, could create conditions for drawing China into negotiations on limiting this class of missiles. However, these prospects can become realistic only if Russian-American relations improve. Besides, this tripartite format can only give the initial impetus to such negotiations, which would lack prospects for success without the participation of India and Pakistan, both of which are developing medium-range missiles, among others.

In general, I believe it is necessary to make the following points when considering the prospects for arms control:

- First, strategic stability, as it was mutually and officially agreed upon by the USSR and U.S., is based on maintaining a state of mutual assured destruction. This approach precludes the use of this particular concept of strategic stability outside the bilateral U.S.-Russian framework.
- Second, bilateral Russian-U.S. reductions of strategic nuclear weapons have almost reached their limit (although a reduction to 1,000 warheads assigned to strategic delivery systems on each side is still possible).
- Third, the main threat posed now by nuclear weapons is not that they will be deliberately used, but rather that the end of the Cold War was followed by a proliferation of such weapons and by a subsequent increase in the risk that they could be used under a variety of accidental circumstances.

Given these points and in the interest of adapting arms control to the new conditions, it would be appropriate to:

- Base strategic stability on the condition of mutual assured security instead of mutual assured destruction;
- Define the main indicator of mutual assured security as attaining the minimal level of risk of accidental use of nuclear weapons.

It is unrealistic to expect a transition from a bilateral nuclear arms reduction process to a multilateral one in the near future. However, there is a chance to involve other states that possess nuclear weapons in minimizing the risk of unintended use of these weapons. The inadmissibility of the use of nuclear weapons is sufficiently obvious, but, at the same time, states aspire to use the potential of nuclear deterrence for political purposes. This potential proved its effectiveness during the Cold War. Reducing the risk of inadvertent use of nuclear weapons could be a common goal for states, while also allowing them to preserve nuclear deterrence potential. Such an approach to strategic stability would make it possible to involve all the states that have nuclear weapons in the negotiations process.

Specific actions to reduce the risk of inadvertent use of nuclear weapons constitute a separate task, but some proposals can be outlined in that sphere too. It would still be useful to revive the idea of creating a joint Russian-U.S. center for the exchange of data from early warning systems, but to do so in a multilateral format and equip this center with advanced functions. For example, it would be logical to exchange data from systems that are monitoring outer space in the interests of ensuring the safety of orbital space groupings that are involved in nuclear command and control.

At the same time, applying the proposed approach to strategic stability would require the continuation of a policy aiming to reduce the role of nuclear weapons through the development of non-nuclear deterrence—a policy first declared by the U.S. and then by Russia. The implementation of this course needs to be reflected in U.S. and Russian doctrinal provisions in the field of nuclear weapons. For example, the U.S. Nuclear Posture Review adopted in January 2017 focuses on regional nuclear deterrence and that focus runs counter to the policy of reducing the role of nuclear

weapons. The provisions of the Russian military doctrine are also based on exercising nuclear deterrence in situations when the existence of the state is threatened. At the same time, the current state of Russian-NATO relations forces Russia to continue relying on nuclear deterrence until these relations change; the U.S. does not face a comparable threat. Nonetheless, it is Russia and the United States that need to lead in launching the process of abandoning reliance on nuclear deterrence for ensuring their security. At this stage, in my view, in order to keep implementing the 1970 Treaty on the Non-Proliferation of Nuclear Weapons, or NPT, Russia and the U.S. must both commit, at the doctrinal level, to refrain from using nuclear weapons first.

More generally, we need an active dialogue on strategic stability, taking into account the new conditions, and, of course, with a transition to a multilateral format.

IV. European Perspective

By Ulrich Kühn

The end of the INF Treaty creates a number of serious problems for Europe and its political heavyweight, Germany, in particular. At the time of this writing, it was still not too late to save the treaty; nonetheless, Europeans must start preparing for a world without a ban on ground-launched intermediate-range missiles. In this world, new U.S. missiles with a range of 500-5,500 kilometers might soon become a daunting reality and, with them, so too will the question of their deployment. While being tough on Russia over its INF violations should be one line for Germans to pursue—not their strongest suit in the past—they must also carefully balance their aversion to a new deployment debate with their desire to keep NATO unified. One way out of the quagmire could be a serious new push for arms control that hinges on transparency and realistically assesses and addresses the concerns of all affected parties.

A. Saving What Cannot Be Saved?

With Chancellor Angela Merkel's last-ditch effort to delay formal notice of U.S. withdrawal from the treaty, diplomacy has gained a final window of opportunity that will close in February. Historically, Germany has been one of the strongest supporters of the INF and also one of its biggest beneficiaries. After all, it was this treaty, signed in 1987 by Mikhail Gorbachev and Ronald Reagan, that lifted the most imminent missile threat to Europe at the end of the Cold War. Surprisingly, when the first signs that Russia was dissatisfied with the INF surfaced in the mid-2000s,^{iv} and even more so once the Obama administration made public its claim that Moscow was violating the treaty, Berlin's diplomatic efforts to save the INF remained lukewarm. Perhaps German leaders thought for too long that America and Russia cannot or will not go without a treaty that has often been described as the bedrock of European security. As it now turns out, Germany was

iv For an excellent overview of the more recent history of the INF, see Amy F. Woolf, "Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress," Congressional Research Service, Washington, DC, updated Oct. 29, 2018, <https://fas.org/sgp/crs/nuke/R43832.pdf>.

wrong. Though it is still too early to predict whether the sides will use Merkel's intervention as a last chance, not much points in that direction.

That said, all diplomatic options have certainly not been exhausted. Various non-governmental experts, including a group of high-ranking Germans, Russians and Americans known as the Deep Cuts Commission, have suggested boosting transparency instead of trading accusations. The idea: mutual transparency visits in order to clarify compliance concerns.¹⁶ Moscow would invite U.S. inspectors, demonstrating the allegedly treaty-busting Novator 9M729 missile (NATO designation SSC-8, "Screwdriver") and its fuel tank capacity;^v Washington, in turn, would invite Russian officials to the Deveselu site in Romania hosting Aegis Ashore missile-defense installations with MK-41 launch tubes, which Russia suspects may be used to launch cruise missiles for offensive purposes.

Exactly this proposal—mutual transparency visits—was informally suggested by the German, the Dutch and perhaps other European governments to the United States in 2018, but to no avail. That the proposal is still viable was demonstrated by Russian Foreign Ministry official Vladimir Yermakov. "If the United States really wants to come to some kind of agreement with us, then we need to sit down at the negotiating table in an inter-agency format and agree on everything in detail. We are ready for this,"¹⁷ Yermakov said in December 2018. But he also categorically ruled out inspections of Russian facilities on a unilateral basis. Accordingly, any serious actions on arms control "are only possible on the basis of mutually legally binding inter-government agreements." It seems unlikely that Washington will accept this conditional offer. After all, why would the U.S. administration turn down a proposal by some of its allies only to agree to the same proposal coming from Moscow? It very much looks as if the Trump administration wants to get out of the treaty no matter what. If that is the case, any European effort to save the INF is already doomed to fail.

v After the Jan. 15, 2019, Geneva meeting about the INF between Russian and U.S. officials, U.S. Under Secretary of State Andrea Thompson said the Russian side did offer the U.S. to look at the missile in question, but only in a so-called static display, which she said would not verify the true range of its warheads. Robin Emmott, "Russia, US fail to save missile treaty, Washington to pull out," *Reuters*, Jan. 16, 2019, <https://www.reuters.com/article/us-usa-nuclear/no-breakthrough-with-russia-on-missile-treaty-u-s-set-to-start-withdrawal-idUSKCN1PA2C3>

B. If INF Collapses, Europe Will Be Caught in the Middle

With the looming end of the INF Treaty, Europe will be confronted with pressures from both Moscow and Washington. It took the German government quite a while to come up with an official position on the INF that acknowledges the Russian violation; only shortly after Trump's announcement did Merkel finally say "we know" that Russia has not been complying with the INF and have known "for some time."¹⁸ At the same time, her Cabinet colleague, Foreign Minister Heiko Maas, made it abundantly clear that Berlin is still "working to persuade the United States not to hastily withdraw from the INF Treaty. We don't want Europe to become the scene of a debate on a nuclear arms build-up."¹⁹ While the German public is still rather unaware of the crisis and German media are only slowly picking up the story, Russia might soon have a free hand to produce and deploy even more 9M729 missiles in the years ahead once Washington opts out of the treaty. As a result, at some point, Europeans will have to ask themselves how many more missiles targeting Europe they want to accept. For some European governments the violation itself is already reason enough to think about drastic military countermeasures. Poland's President Andrzej Duda went as far as to announce that should the INF be terminated Poland would be prepared to station new U.S. medium-range missiles on its soil.²⁰ Others, such as Germany, are more cautious, urging the prevention of a possible new missile arms race "at all costs."²¹ In any case, the Trump administration will likely step up the pressure—first domestically and then internationally—to produce and deploy new INF-range missiles. The Pentagon's ongoing research and development program for a new ground-launched cruise missile (GLCM) is only the first step.²² The second would be convincing Congress to fund production of a new GLCM—and the more news that surfaces about a growing Russian missile buildup, the greater the pressure on lawmakers to rubber-stamp such legislation. The third step would be convincing allies to host a new GLCM with INF ranges.

U.S. allies such as Germany will seek to find alternatives to that extreme option in order to prevent both domestic turmoil and a debate with the potential to damage NATO. To be honest, there are not many things European allies could do to prevent a heated deployment debate. Additional

financial and economic sanctions against Russia would be one option. Particularly Germany with its comparably strong economic ties to Russia would be in the spotlight. Prestigious projects such as the already controversial²³ Nord Stream 2 gas pipeline, connecting Russia and Germany through the Baltic Sea, would be plunged deeper into question, particularly since the project has generated disagreement even among the German foreign policy elite.²⁴ Aside from that, military countermeasures below the threshold of new GLCMs are already under discussion at NATO headquarters.²⁵ Whatever the options available—be they so-called point defenses at NATO’s vital reinforcement hubs (e.g., Ramstein and Bremerhaven in Germany), additional U.S. sea-based deterrence trips to European waters or the rotational deployment of U.S. bombers equipped with conventional long-range standoff missiles to Western Europe—none of them would come without risks to arms-race and crisis stability.

Another, quite different option would be to publicly oppose any deployment plans from the very beginning and to forge a “coalition of the unwilling.” But such a strategy would be problematic. First, it would make Washington, and not Moscow, look like the bad guy. Second and quite likely, it would undermine NATO. Third and perhaps most important, it may prove futile were the Trump administration to offer new GLCMs to deployment supporters such as Poland on a bilateral basis, thereby circumventing NATO.

C. The Way Out: Arms Control

In order to avoid both a significantly weakened NATO and a new arms race, Europeans, and in particular Germany, should invest in a new arms control offer to Russia. Indeed, any such offer would have to be accompanied by a European-led effort to increase the pressure on the Kremlin to eliminate all 9M729 missiles. Whether that pressure is of a political, economic or military nature (or some combination thereof), Europeans must convincingly demonstrate to the Kremlin that they will not simply go along with Russia’s growing INF arsenal. But they will also have to convincingly demonstrate to Washington that they are doing enough to make any debate about new U.S. GLCMs superfluous.

In order to balance this approach with Europe's genuine interest in easing tensions with Russia, and to provide a face-saving solution to Moscow, a new arms control approach would have to address the interests of all parties affected. For Europeans and for America that means the elimination of all 9M729 missiles (but not necessarily of the tainted Iskander launcher that Russia used to test the missile). For Moscow that might mean the inclusion of additional systems not covered by the old INF Treaty, such as certain missile defenses and their application, as well as drones, as these figure prominently in Russia's accusations about U.S. violations²⁶ of the INF. Yermakov's remarks about reciprocity should be seen as an encouraging sign in that regard. Such an approach would require accepting the shortcoming of not (yet) addressing China's INF-range capabilities—obviously a major reason for the Trump administration's desire to withdraw from the INF. Over the long term, an inclusion of China into the historically bipolar arms control dialogue would be desirable.²⁷ But for the time being it seems too much of a stretch and politically questionable as a means to prevent another arms race in Europe.

In any case, Germany, a long-time advocate of arms control, should step up intellectual work on a modern arms control framework—one that addresses the challenges and risks of the 21st century. The latest announcements by Foreign Minister Maas already point in the right direction. Maas advocated for a new strategic dialogue, for a comprehensive transparency regime on missiles and cruise missiles, for the inclusion of Beijing and for novel multilateral instruments addressing new weapons and emerging technologies.²⁸ At the same time, Berlin must make it abundantly clear to the White House that the quality to lead entails both strength and the will to cooperate. Rediscovering the instruments of diplomacy, America must again invest in arms control instead of only scrapping it.

V. Conclusion

Two threads weave through the perspectives of all three authors. First, the question of whether or not the INF Treaty will survive is a matter of political will. While the specific concerns that threaten the treaty are years old, they do not appear to have been the subject of productive or detailed discussions between Washington and Moscow. All three of us envision ways in which the problems that threaten the treaty might be resolved. The question is whether or not the parties are sufficiently motivated to pursue them to preserve the treaty. Second, all three of us agree on the importance of the issue, and that preservation of a viable INF Treaty would advance international security. Therefore, Washington and Moscow would do well to consider alternatives that would correct their current course toward the INF Treaty's destruction. With U.S. withdrawal from the pact looming on Feb. 2, 2019, only six months would then remain to resolve the dispute.

- 1 Committee on International Security and Arms Control, Monitoring Nuclear Weapons and Nuclear Explosive Materials, Washington: National Academy of Sciences, 2005, <https://books.google.com/books?id=HLedDzcHdV4C&pg=PA69&lpg=PA69&dq=perimeter+and+portal+continuous+monitoring&source=bl&ots=XUf7YpC3Ah&sig=ACfU3U2LATkSOA2L-Nxx5wdUvSI5W5VTXCQ&hl=en&sa=X&ved=2ahUKEwj4j7f3rYLgAhUNT98KHU-SgA5wQ6AEwAAnoECAEQAQ#v=onepage&q=perimeter%20and%20portal%20continuous%20monitoring&f=false>
- 2 “Russian Compliance with the Intermediate Nuclear Forces Treaty: Background and Issues for Congress,” (Washington, DC: Congressional Research Service, Dec. 7, 2018), pp. 3-4.
- 3 Michael R. Pompeo, Press Availability at NATO Headquarters, Dec. 4, 2018, <https://www.state.gov/secretary/remarks/2018/12/287873.htm>
- 4 Julian Borger, “US to begin nuclear treaty pullout next month after Russia missile talks fail,” *The Guardian*, Jan. 16, 2019, <https://www.theguardian.com/world/2019/jan/16/us-russia-inf-treaty-nuclear-missile>
- 5 Congressional Research Service, p. 1.
- 6 Fred Kaplan, “Trump’s Missile Misfire,” *Slate*, Oct. 22, 2018, <https://slate.com/news-and-politics/2018/10/inf-treaty-trump-withdrawal-putin-john-bolton.html>
- 7 “Putin: U.S. Withdrawal from INF is ‘Ill-considered,’ Russia will Arm Itself,” *Radio Free Europe/Radio Liberty*, Dec. 5, 2018, <https://www.rferl.org/a/russia-officially-notified-of-u-s-intent-to-withdraw-from-inf-treaty/29638750.html>
- 8 Radina Gigova and Madeleine Holcombe, “Russia Proposes UN Resolution to Preserve the INF Treaty,” *CNN*, Dec. 15, 2018, <https://www.cnn.com/2018/12/15/us/russia-resolution-inf-treaty/index.html>
- 9 “Russian, US senior diplomats to attend Beijing-hosted meeting of five key nuclear powers,” *TASS*, Jan. 23, 2019, <http://tass.com/world/1041416>
- 10 Robin Emmott, “Russia, U.S. fail to save missile treaty, Washington to pull out,” *Reuters*, Jan. 16, 2019, <https://www.reuters.com/article/us-usa-nuclear/russia-us-fail-to-save-missile-treaty-washington-to-pull-out-idUSKCN1PA2C3>.
- 11 John Bolton and John Yoo, “An Obsolete Treaty Even Before Russia Cheated,” *Wall Street Journal*, September 9, 2014, accessed January 9, 2019 at <https://www.wsj.com/articles/john-bolton-and-john-yoo-an-obsolete-nuclear-treaty-even-before-russia-cheated-1410304847>
- 12 “Treaty Between the United States of America and the Russian Federation On Strategic Offensive Reductions (The Moscow Treaty),” U.S. State Department, May 24, 2002, <https://www.state.gov/t/isn/10527.htm>
- 13 George Kennan, “A Fateful Error,” *New York Times*, Feb. 5, 1997, <https://www.nytimes.com/1997/02/05/opinion/a-fateful-error.html>
- 14 George Kennan, “A Fateful Error,” *New York Times*, Feb. 5, 1997, <https://www.nytimes.com/1997/02/05/opinion/a-fateful-error.html>.
- 15 “‘Interesy RF i SShA v otnoshenii Ukrainy nesovmestimy drug s drugom’: Glava Stratfor Dzhordzh Fridman o pervoprichinakh ukrainskogo krizisa” (“‘The Interests of the Russian Federation and the United States with Respect to Ukraine are Incompatible with Each Other’: Stratfor Head George Friedman on the Sources of the Ukraine Crisis”), *Kommersant*, Dec. 19, 2014, <https://www.kommersant.ru/doc/2636177>.
- 16 Greg Thielmann and Andrei Zagorski, “INF Treaty Compliance: A Challenge and an Opportunity,” *Deep Cuts Working Paper No. 9*, Feb. 2017, http://deepcuts.org/images/PDF/DeepCuts_WP9_ThielmannZagorski.pdf.
- 17 “Russia ready to discuss inspections with U.S. on arms treaty: RIA,” *Reuters*, Dec. 14, 2018, <https://af.reuters.com/article/worldNews/idAFKBN1ODOQA>.
- 18 “Pressestatements von Bundeskanzlerin Merkel und dem dänischen Ministerpräsidenten Rasmussen,” Nov. 20, 2018, <https://www.bundeskanzlerin.de/bkin-de/aktuelles/pressestatements-von-bundeskanzlerin-merkel-und-dem-daenischen-ministerpraesidenten-rasmussen-1552136>.
- 19 Speech by Foreign Minister Maas at the budget debate in the German Bundestag, Nov. 21, 2018, <https://www.auswaertiges-amt.de/en/newsroom/news/maas-budget-debate-bundestag/2163800>.
- 20 Monika Sieradzka, “Poland supports US withdrawal from INF,” *Deutsche Welle*, Oct. 25, 2018, <https://www.dw.com/en/poland-supports-us-withdrawal-from-inf/a-46049028>.
- 21 Quote by Merkel’s party colleague Roderich Kiesewetter, special represen-

- tative for foreign affairs of the German Bundestag's Committee on Foreign Affairs, "Bruch des Abrüstungsvertrags. USA legen Nato-Partnern Beweise gegen Russland vor," *Spiegel Online*, Nov. 30, 2018, <http://www.spiegel.de/politik/ausland/usa-legen-nato-partnern-beweise-fuer-inf-vertragsbruch-durch-russland-vor-a-1241330.html>.
- 22 115th Congress, 1st Session, House of Representatives, Report 115-404, <https://www.congress.gov/congressional-report/115th-congress/house-report/404/1>.
- 23 H.T., "Why Nord Stream 2 is the world's most controversial energy project," *The Economist*, Aug. 7, 2018, <https://www.economist.com/the-economist-explains/2018/08/07/why-nord-stream-2-is-the-worlds-most-controversial-energy-project>
- 24 Klaus Stratmann, Moritz Koch, and Eva Fischer, "Nord Stream 2 spaltet Europa – Jetzt wächst auch in Berlin der Widerstand," *Handelsblatt*, Dec. 16, 2018, <https://www.handelsblatt.com/politik/deutschland/ostseepipeline-nord-stream-2-spaltet-europa-jetzt-waechst-auch-in-berlin-der-widerstand/23761566.html?ticket=ST-200904-SEeq3Xha3TILVVYTFdoD-ap4>.
- 25 Matthias Gebauer, "Nato-Chef Jens Stoltenberg: Wir brauchen eine glaubhafte Abschreckung," *Spiegel Online*, Dec. 11, 2018, <http://www.spiegel.de/politik/ausland/inf-vertrag-nato-generalsekretaer-jens-stoltenberg-fordert-glaubhafte-abschreckung-a-1243018.html>.
- 26 Kevin Ryan, "After the INF Treaty: An Objective Look at US and Russian Compliance, Plus a New Arms Control Regime," *Russia Matters*, Dec. 7, 2017, <https://www.russiamatters.org/analysis/after-inf-treaty-objective-look-us-and-russian-compliance-plus-new-arms-control-regime>
- 27 Eiji Furukawa, "Russia woos China to join nuclear framework with US," *Nikkei Asian Review*, Dec. 14, 2018, <https://asia.nikkei.com/Politics/International-Relations/Russia-woos-China-to-join-nuclear-framework-with-US>
- 28 Heiko Maas, "We need to talk about disarmament," Nov. 6, 2018, <https://www.auswaertiges-amt.de/en/newsroom/news/maas-disarmament/2157994>.



Russia Matters

Belfer Center for Science and International Affairs
Harvard Kennedy School
79 John F. Kennedy Street
Cambridge, MA 02138

www.russiamatters.org

