

## Strengthening Strategic Stability with Russia

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As used in this Perspective, *strategic stability* refers to the probability of strategic nuclear exchange, although there have been other definitions—both broader and more narrow. Strategic stability between the United States and Russia is eroding, and the options for shoring it up are few.

Today's international security environment includes several nuclear-armed states. The strategic nuclear relationship between the United States and Russia, however, remains the most important; the two nuclear superpowers have the capacity to carry out large-scale, coordinated nuclear strikes that could devastate entire continents. The factors that have increased the likelihood of strategic nuclear exchange in recent years can be grouped into three categories: factors increasing the incidence of war involving the United States and Russia, factors increasing the risks of escalation during wars, and factors that reduce crisis stability.

Russian military forces and proxies continue to wage a simmering war in eastern Ukraine. The West sanctions Russia over this aggression and provides military training and other nonlethal aid to Ukraine. Meanwhile, Russian and U.S. air forces are both operating in Syria, and while both sides are striking Islamic State targets, Russian forces have also hit Western-backed rebels opposed to the Bashar al-Assad regime. The probability of such conflicts escalating to nuclear war is very low. However, if U.S.-Russian conflicts were to become more frequent or take place on a larger scale, or if anti-U.S. sentiments in Russia already pumped up by Kremlin propaganda were heightened, the risks of direct U.S.-Russian conflict could increase, and possibly even the risks of U.S.-Russian theater or strategic nuclear exchange.

Meanwhile, the escalatory risks of conflict between the United States and Russia are also increasing. The main reason for this is Russia's willingness to use nuclear weapons against a

conventional attack. Although the specifics of this policy remain uncertain, and the policy is likely designed to *prevent* escalation, it does so only by increasing the potential for escalation. Other factors, such as reliance on vulnerable space assets for warning and other purposes and the potential for both countries to conduct sophisticated cyber espionage and attacks, also increase uncertainty and generate potentially escalatory pressures in a crisis. Taken together, these concerns might make escalation to and across the nuclear threshold more difficult to control in the event of a direct conflict between the United States and Russia.

Crisis stability—meaning the incentive on either side to use nuclear weapons first—may also be decreasing. One reason for this, as Russian leaders emphasize, is the U.S. development of advanced conventional capabilities, especially missile defenses and hypersonic glide vehicles. These capabilities are not intended to and are not sufficient to prevent Russia from carrying out a large-scale, coordinated second strike, but Russian leaders continue to fear that these U.S. systems, especially if fielded in larger numbers, may become a greater threat to Russia's second strike capability. Whether Russian concerns run as deep as they claim or whether they are just positional negotiation is difficult to know. Nevertheless, insofar as these fears are real, they could create intense escalatory pressure in a future crisis situation. Escalatory pressures would intensify if Kremlin leaders came to believe the United States intended to overthrow the regime.

Under current conditions, the paths toward strengthening strategic stability with Russia will be challenging and require sacrifice on both sides:

- Achieving a new treaty to make further reductions in strategic offensive arms will be difficult. Unless Russia corrects its

violation of the Intermediate-Range Nuclear Forces (INF) Treaty, the U.S. Senate would not give assent to a new treaty. If negotiations were to involve further deep cuts, Russia or the United States may insist on bringing in other nuclear powers, such as China, France, and the United Kingdom. In addition, strategic stability could decrease as deployed strategic forces were reduced, especially if cuts or basing rules were to constrain survivable systems—although cuts could, of course, also increase stability.

- Political self-restraint on the part of the United States and the North Atlantic Treaty Organization (NATO) might mitigate Russia's underlying concern about the overall direction of U.S. policy, but there are no guarantees. The United States and European Union cannot abandon long-standing traditions of support for open covenants, international law, democracy, and human rights for an uncertain possibility that doing so might make Russia feel more secure and thus behave more predictably.
- Military self-restraint, such as reducing planned NATO missile defense deployments in Europe, which have little capacity against Russian strategic offensive forces targeted on the United States, would be highly controversial both in the United States and in parts of Europe. A credible commitment to restraint would require a significant investment of political capital to overcome the widespread support for such systems, due to their utility against a range of missile threats from countries other than Russia.
- Conventional arms control and confidence-building measures (CBMs) could reduce the prospect of inadvertent escalation

up to and across the nuclear threshold. Conventional arms control agreements focused on hotspots such as the Baltic region might be an option if they increase transparency and warning times and reduce the chances of an overpowering surprise attack. However, such accords would require flank limits of the kind which are neuralgic to Russia, based on the Conventional Armed Forces in Europe (CFE) treaty experience and considering the revanchist emphasis in Russia's current policy toward its neighbors. At a time when the Kremlin is engaged in military intimidation in the Baltic region, it would be unlikely to reverse course and slash its forces in western Russia to a degree sufficient to build confidence that the risks of a large-scale surprise attack have fallen. At a minimum, to be successful they would require a significant investment of capital on the part of the White House as well as, likely, a less noxious overall atmosphere in the bilateral relationship.

- Some small improvements in strategic stability might be achieved by strengthening crisis management and mitigation mechanisms. Mechanisms (such as hotlines) between the United States and Russia exist, but there is room for improvement. The NATO-Russia Council could be a forum for such an effort—for example, by focusing on establishing procedures to reduce the risks of a military accident when Russian and NATO forces are operating in proximity. The risk of such negotiations breaking down within the Council—or of Russia using the negotiations for counterproductive messaging—will, however, remain.

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Even if the United States seeks to move forward on these difficult issues, it can do so only while continuing to invest in the modernization of its nuclear deterrent. The P3 nations (the United States, the United Kingdom, and France) and NATO will also need to continue to coordinate and ensure their declaratory postures and signaling options are sufficiently robust. To this end it may eventually become necessary to exercise nuclear-capable systems more frequently in Europe. In addition, the United States should seek to establish clearer redlines to support robust cyber deterrence while reinforcing the fact that any use of nuclear weapons in a conflict would fundamentally alter the nature of that conflict, opening up a Pandora's box of unpredictable and potentially catastrophic consequences.

Over the medium and long terms, one can hope that current tensions will attenuate. It is also important to recall that some of the major breakthroughs of the Cold War took place in the face of growing tension, not relaxation in East-West relations. If for no reason other than that the stakes are so high, strategic stability must remain a focal point in future bilateral discussions.

## **Introduction**

Since the end of the Cold War, strategic stability has been on the defense and security agenda for U.S.-Russian bilateral relations.

Attention has largely been placed on reductions in the number of nuclear weapons deployed on each side, most notably in the New START treaty.<sup>1</sup> Overall, however, the role of nuclear weapons in the strategic relationship has receded in relation to other political, economic, and military issues. This is largely because for most of the first two decades after the fall of the Berlin Wall, Russian military capabilities were declining, and the overall political relationship between Russia, NATO, and the United States looked to be improving. In the last few years, however, Russian military capabilities have strengthened considerably, Russia's foreign policy has become more aggressive, and the overall political and diplomatic relationship has taken a serious turn for the worse. Russian aggression against Ukraine and Georgia, Russian intervention in Syria, and a buildup of NATO forces and Russian military activities in Europe have all increased tension between the former Cold War adversaries.

Although the world has eight recognized nuclear powers and at least a few aspirant or unrecognized nuclear powers, the U.S.-Russian strategic relationship retains special importance because the United States and Russia are peers when it comes to their strategic nuclear forces, which are roughly equal in numbers of delivery systems and warheads under the limits of the New START treaty. The United States and Russia are the only two powers—or dyad—in the international system with the assured capability to annihilate a significant portion of the world's population in an afternoon.<sup>2</sup> For moral and political—as well as security—reasons, both sides have an overarching shared, vital interest in ensuring that the risk of global thermonuclear war is minimized.

Attention to strategic stability, defined herein as the minimization of the risk of strategic nuclear exchange, should

therefore increase. It is an understatement to say that global thermonuclear war is a low-probability, high-impact event. Hence, even if the risks remain low, a closer look at how strategic stability may be changing is warranted. This research offers an initial take on the subject.

In keeping with most writing on this subject and the state of development of the field, this Perspective is a thinkpiece developed as part of a project that involved extensive secondary research in Russian and English sources; a series of formal and informal discussions, sponsored by the U.S. Department of Defense, that took place between 2014 and 2016 and that included U.S. senior officials; additional discussions with U.S. and foreign outside experts; and our own existing knowledge of the subject.

This report begins with a definition of *strategic stability*, a term that has been used in various ways. The report then offers an analysis of the state of strategic stability today and the factors tending to weaken it. The next section provides a summary of Russian views on the subject, drawing attention to the challenges created by differing U.S. and Russian definitions. The final section before the conclusion examines a range of potential strategies for strengthening strategic stability and identifies the opportunities and challenges involved with each one.

## Defining Strategic Stability

Definitions of *strategic stability* differ in academic and policy discussion.<sup>3</sup> Although the term was used in the second half of the Cold War,<sup>4</sup> it has largely come into vogue afterward, when *mutual assured destruction* seemed like an anachronism.<sup>5</sup> With the end of the Cold War, policymakers and analysts sought a new term that would offer a more positive framework for defining the strategic nuclear

relationship between the United States and Russia. From this came *mutual assured stability* and then *strategic stability*. Strategic stability has traditionally had two meanings. One definition emphasizes crisis stability, or the incentives to use nuclear weapons first. Another definition emphasizes arms race stability, or the incentives to build new nuclear weapons. We propose a definition close to the former, but somewhat broader in scope.

This definition arises from the observation that the real issue that we should be concerned about is (rather obviously) the overall risk of strategic nuclear exchange—and whether that is increasing or decreasing. On some level, of course, an infinite number of factors influence this risk. However, there are a few important enough to be singled out. One factor is clearly crisis stability. Because of the destructive capacity of strategic nuclear weapons and the difficulty of effective defense against large salvos of ballistic missiles, nuclear weapons can create severe offensive advantages and, hence, incentives for preemption. As long as second-strike forces and the associated systems are known to be secure, however, such incentives are greatly diminished. The chances of escalation across the nuclear threshold, especially at the strategic level, are reduced accordingly. No rational command authority would launch a nuclear strike against an adversary with the knowledge that doing so would inevitably mean the destruction of one's own forces and nation.<sup>6</sup> The assessment of crisis stability involves a wide range of military factors, both because strategic nuclear forces depend on a complex intelligence, command and control, and communications infrastructure, and because nonnuclear forces, such as long-range conventional strike and ballistic missile defenses, can also influence the security and usability of the strategic nuclear force. Factors such as the risk of accidents, mischief, inadvertent escalation,

miscalculation, arms races, and sudden or unexpected technological changes in military technology are also important.

Some definitions of strategic stability are limited solely to crisis stability.<sup>7</sup> But this is too narrow a definition to capture significant changes afoot in today's security environment that might influence the risk of strategic nuclear exchange. Were it possible to ensure military posture and safeguards that prevent the use of strategic nuclear weapons in the absolute, the impact of other contextual factors would be nil. But prevention is not absolute, so broader contextual factors also impact strategic stability. Defining strategic stability too broadly, however, would of course complicate or even stymie the discussion. Therefore, we recommend against including all factors that might affect the equation: The term should not be a synonym for world order, the balance of power, or other all-encompassing concepts, such as the overall strategic balance of the world political system.<sup>8</sup> (As discussed later, the official Russian definition of strategic stability is broadening in this manner.) Instead, strategic stability can be analyzed fruitfully as the product of three factors—incentives to escalate to strategic nuclear attack (crisis stability), general incentives to escalate (i.e., up to the nuclear threshold), and the overall prevalence of conflict between the nuclear powers. Crisis stability matters for the reasons previously discussed. Overall tendencies toward escalation also matter, however, because the greater the chances that a given conflict will escalate toward the nuclear threshold, the greater the chances of nuclear conflict itself. By a similar token, the greater the incidence of conflict between nuclear armed powers in the first place, the greater the overall chances of escalation, including to strategic nuclear exchange.

The next section thus examines all three dimensions—crisis stability, broader escalation issues, and the prevalence of war involving the nuclear powers.

## **Factors Influencing Strategic Stability Between the United States and Russia Today**

The factors weakening strategic stability can be grouped according to three categories: (1) factors increasing the overall incidence of war involving the United States and Russia, (2) factors tending to increase the potential for such wars to escalate to the strategic nuclear level, and (3) crisis stability.

### **Increased Incidence of War Involving U.S. and Russian Proxies**

The potential for conflict between the United States and Russia is growing largely due to the increased prevalence of limited war involving proxies of the nuclear superpowers. Russia has risked limited war against Georgia and Ukraine, countries aligned to varying degrees with the United States and NATO. The United States and Russia have also engaged in a limited but increasingly bloody war in Syria, on whose soil Russia maintains a military base.<sup>9</sup> Given the potential for accidents and miscalculation and the lack of a functioning forum for discussion and resolution of disputes, there are real, if limited, risks that conflict between proxies or allies of the United States and Russia might escalate to regional or general conflicts between the United States and Russia, which could eventually escalate to nuclear war.

Local conflicts, of course, need not escalate to general or nuclear war. Indeed, according to the *stability-instability paradox*, limited war involving allies or proxies of the nuclear superpowers

on opposing sides may be facilitated by relatively high confidence that such wars will not escalate to nuclear wars.<sup>10</sup> The occurrence of local wars, without escalation to direct confrontation between the superpowers, might thus mistakenly be viewed as evidence that there is little risk of nuclear escalation and, hence, that strategic stability is high. However, the prevalence of local war is evidence only that strategic stability is *judged to be high by those who engage in such wars*. This does not mean that strategic stability is *in fact* high, because the judgments of those who engage in such wars may be wrong. The prevalence of local war involving nuclear powers is thus at best an ancillary indicator of overall strategic stability.

### **Increased Risks of Escalation**

Even acknowledging the increased prevalence of conflict, the argument could be made that strategic stability is unchanged because most of the current points of tension between the United States and Russia are in the unconventional and conventional arenas. This would be a mistake, however, because the escalatory potential of contemporary conflict has increased due to developments in doctrine and technology since the 1990s. For one, increased ambiguity in Russian nuclear doctrine has generated escalatory pressures on the United States—contrary to the stated intention of that doctrine. In addition, the growing importance of space and, especially, cyber warfare generates additional escalatory pressures for several reasons. Finally, the erosion of knowledge about strategic nuclear weapons may also add to escalatory potential.

### **Ambiguity in Russian Nuclear Doctrine**

Russian leaders have made it clear that they view their nuclear arsenal as a guarantee of their security and continue to view it as an

equalizer that compensates for U.S. conventional overmatch. Russia reserves the right to use nuclear weapons in response to nuclear attacks against Russia or “when the state’s very existence has been threatened,” regardless of whether the threat is nuclear. It is worth quoting Russian doctrine more fully:

The Russian Federation shall reserve for itself the right to employ nuclear weapons in response to the use against it and/or its allies of nuclear and other kinds of weapons of mass destruction, as well as in the case of aggression against the Russian Federation with use of conventional weapons when the state’s very existence has been threatened.<sup>11</sup>

More specifically, Russian doctrine discusses the possibility of first nuclear use in response to a massed conventional attack on Russia.<sup>12</sup>

It is thus clear, according to Russia’s stated doctrine, that Russia is prepared to initiate the use of nuclear weapons if its vital interests are threatened. For example, nuclear use might begin with a high-altitude electromagnetic pulse (HEMP) detonation or limited tactical nuclear use against a military target for the purpose of signaling resolve and demonstrating stake, under circumstances when Russian conventional forces are judged to be overwhelmed and the existence of the Russian state is thus under threat. What is less clear is what else Russia might consider to be a vital interest important enough to justify nuclear first use (i.e., beyond the circumstances that are clear from its stated doctrine). Such imminences as a direct threat to the regime or the destruction or disabling of a major part of Russia’s military apparatus might, for example, fall into this category. Russia has chosen, however, to leave some ambiguity as to the size, extent, and geographical

location of the threat that it would consider a vital interest that calls for the use of nuclear weapons.

This ambiguity has raised U.S. and European concerns that the nuclear taboo may be weakening in Russian strategic thinking. The possibility that Russia might detonate a nuclear weapon to underscore its commitment and stake during an offensive conventional attack on NATO is very remote but, for these reasons, cannot be ruled out. The most widely discussed scenario involves a nonlethal Russian nuclear detonation at the outset of a conventional Russian attack on the Baltic States or possibly quickly after the Baltic States have been seized to deter a NATO response. In this case, the nuclear detonation would aim to cow European publics, divide NATO, and thus undermine U.S. will for a military rejoinder.

### **Risks of Escalation in the Cyber Domain**

The growing importance of space-based assets and introduction of cyber weapons has also added uncertainty to contemporary conflict. As discussed later, both domains are linked to crisis stability. Aside from that, cyber adds escalatory potential to any conflict.

Cyber weapons pose multiple types of escalatory risk. First, unknown effects; the timing and effects of cyber attacks can be difficult to predict. With any military strike, collateral damage is always possible. With most conventional attacks, however, methods of assessing and avoiding collateral damage are fairly highly developed. This is not the case with cyber weapons, where the risk of unintended damage is much higher. Clearly such weapons thus increase the risk of escalation.

Cyber weapons also create attribution risk effects. Unlike conventional attacks, cyber attacks can be difficult to attribute



with precision to specific actors. In the event of a significant cyber attack, pressure to respond either with commensurate cyber or other force will be immediate. Depending on circumstances, the decision may be made to retaliate without perfect knowledge of the origin of the attack. If the forensics on which the attribution is based turns out to be erroneous, then the retaliation will have constituted a significant escalation in the conflict.

There is also a principal-agent issue that arises in the way that some cyber weapons are developed. The use of surrogates for cyber operations adds a degree of unpredictability to conflict in the cyber domain. Russian cyber capabilities are, in particular, reputed to be linked to a loose group of cyber mercenaries and patriotic “hacktivists.” Russia’s ability to control the actions of these activists in the event of a conflict could prove limited. If this is the case, the mercenaries and activists could carry out attacks on their own initiative—and perhaps for their own reasons—that escalate the conflict.

Finally, since the ability to conduct cyber attacks depends on keeping cyber vulnerabilities secret, both sides may fear that their adversaries possess cyber capabilities that have far-reaching destructive potential. This fear, in turn, could increase incentives to escalate, as well as grounds for misperceiving certain activities in cyberspace as preludes to more far-reaching attacks that in fact are not in the works. In such circumstances, retaliation could again occur for the wrong reasons, unnecessarily escalating a conflict.

### **Atrophying Nuclear Expertise and New Nuclear Challenges**

Increasing political confrontation and the risk of conventional and subconventional conflict, linked with increasing indications of Russia’s lower threshold for nuclear use, translate into increasing risk

of an escalating nuclear exchange. Meanwhile, expertise in strategic nuclear dynamics has atrophied on both sides. In the United States, the overall role of nuclear weapons in U.S. defense policy has declined, and the focus within the community of nuclear experts has shifted away from the dynamics of conflict with peer adversaries to conflict with rogue states such as Iran and North Korea. Overall, general levels of concern with nuclear war have diminished, and attention to the possibility has declined in public debate.<sup>13</sup>

### **Crisis Stability**

Crisis stability is based upon the infallibility and resilience of command and control and delivery systems. The first challenge in this area is the development of advanced U.S. conventional capabilities, which Russia has claimed undermine its deterrent and are thus inherently destabilizing.

Changes in the international security environment have led the United States to develop conventional weapons that Russia may believe compromise its second strike capability. In the post–Cold War era, the advance of technology and fallibility of the international counterproliferation regime have allowed Iran, North Korea, Pakistan, and India to acquire or, in Iran’s case, approach the acquisition of nuclear weapons. In the 1990s, with the Soviet threat gone and the threat from Russia judged to be minimal for political as well as military reasons, the need to deter and defend the United States and its allies against Iran and North Korea in particular came to the fore. However, some questioned whether traditional nuclear deterrence could be effective when it came to dealing with an impoverished, authoritarian state like North Korea. Not only was the rationality of its leadership in question,



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but the credibility of the U.S. threat to use nuclear weapons against a country in which the vast majority of the citizenship was starving (not to mention subject to brutal dictatorship) could also be judged questionable. To avoid such problems and more broadly reduce the need for nuclear weapons, the United States developed missile defense and conventional strike capabilities (in particular conventionally armed hypersonic glide cruise missiles, sometimes called *prompt global strike*) that would allow it to defend itself while potentially disarming an emerging nuclear power with conventional forces.

Russia insists that these capabilities threaten its nuclear forces and has strongly objected to what it considers to be the emergence of a new U.S. “triad.”<sup>14</sup> In Russian thinking, this new triad—including missile defense, conventional hypersonic glide, and space-enabled capabilities—complements the existing U.S. nuclear triad. Russia worries that U.S. advances in missile defense could allow the United States to survive a Russian second strike at an “acceptable” level of damage,<sup>15</sup> just as hypersonic glide vehicles could allow the United States to conduct a “bolt out of the blue” disarming strike on Russian nuclear forces without the use of nuclear weapons.<sup>16</sup> Clearly, these concerns are overstated, and U.S. officials have frequently pointed this out on technological

and numerical grounds. Even Russian President Vladimir Putin publicly recognized in 2015 that U.S. ballistic missile defense and prompt global strike cannot *currently* undermine Russian strategic nuclear weapons. Nevertheless, he and other Russian leaders continue to voice concerns regarding the *future* trajectory of such systems.<sup>17</sup>

Russia is thus developing a variety of weapons to mitigate or degrade those U.S. conventional capabilities it believes threaten its nuclear deterrent. For example, Russia claims it is developing ultra-quiet attack and ballistic missile submarines, a “Status 6” trans-oceanic land attack nuclear torpedo, hypersonic glide vehicles, and missile penetration aides or decoys.<sup>18</sup> Russia is also fielding its own conventional precision strike capabilities to achieve strategic effects, such as modernized short-range ballistic missiles, extended-range air-launched cruise missiles, and hypersonic land-attack cruise missiles.<sup>19</sup> Russia has also made progress bolstering its strategic air defense network along its western and southern borders.

It is not hard to question the credibility of Russian statements regarding the threat that the new U.S. “triad” poses to its systems. Such statements often appear to be made for tactical negotiating purposes. Russia may be inflating or overstating its concerns to gain negotiating advantage, to impede the development of these U.S. capabilities, or to justify an aggressive buildup of its own. After all, Russian concerns about advanced U.S. conventional capabilities are clearly not limited to the impact these systems have on Russian strategic nuclear forces. Russia is also concerned that missile defense could more broadly shift the military balance in NATO’s favor in Europe, if missile defense interceptors were modified to serve as conventional cruise missiles, or by reducing the effectiveness of Russian tactical ballistic missiles, and depriving

Russia of coercive options that it may hope to gain from its current modernization program.<sup>20</sup>

The problem is that, in a crisis situation, Russia's beliefs about U.S. capabilities matter far more than what U.S. capabilities and intentions may actually be, and sufficient evidence exists to conclude that Russia is genuinely concerned by the cumulative effects of missile defense, prompt global strike, and other U.S. conventional capabilities for its nuclear deterrent—even if less than it says. Russian planners may also believe U.S. systems to be more capable than they in fact are. In short, if Russia believes that the United States has the ability, through conventional means, to destroy enough of its second strike capability, overall strategic stability is weakened.

In addition to these concerns, which tend to be foremost in discussions of strategic stability, developments in cyber and space also have implications for crisis stability. Just as cyber introduces potentially escalatory effects into contemporary conflict (as discussed earlier), it also creates potential problems when it comes to second strike capability. Cyber weapons might, theoretically at least, be used to disable critical nuclear-related command and control nodes. Clearly, if cyber attacks—purposefully or inadvertently—affect the systems on which strategic nuclear forces rely, or are perceived to have this effect, they can become highly escalatory during a nuclear crisis if a national command authority is led to believe that its second strike capability has been or might soon be compromised. Similarly, in space, many U.S. capabilities and operations depend on space assets, creating incentive to strike such assets.<sup>21</sup> Strikes on space-based assets for other military objectives could unintentionally damage critical strategic command and control, early warning, or other systems, thereby threatening

nuclear systems. Even if such attacks did not actually threaten such systems—for example, due to the existence of redundant systems—they could be interpreted as demonstrating a willingness to threaten such systems, and this could matter almost as much during a crisis.

### **Russian Concerns with Strategic Stability**

One major challenge in finding common ground on the question of strategic stability with Russia is that Russian leaders tend to prefer an all-encompassing definition of the issue, one that is difficult for their U.S. interlocutors to accept. Indeed, at a certain point, Russia's conception of strategic stability no longer implies mutual effort to avoid nuclear war, but rather becomes a kind of “diplomatic spackling paste” that covers all of Russia's security concerns, such that anything that Russia perceives to be detrimental to its security is characterized as destabilizing.<sup>22</sup>

In the Soviet era, Russian thinking about strategic stability roughly paralleled that of the United States in its focus on traditional deterrence concepts such as parity, mutual assured destruction, and the preservation of a second strike capability.<sup>23</sup> Later in the Soviet period, deterrence theories expanded to minimizing first strike incentives.<sup>24</sup> The Soviets believed that a combination of conventional and nuclear forces would achieve strategic balance between blocs, so that neither side could achieve a degree of superiority that might lead one side to gamble on war. In its essence, the core of current Russian thinking about strategic stability continues in this vein, with an emphasis on second strike stability as well as the overall balance of power. However, Russia now includes a much greater range of factors in its estimation of strategic balance.<sup>25</sup> Strategic stability in Russian discourse has, for

some Russian authors, become an abstract concept that implies a state of general equilibrium in the international order in which military, political, economic, and other factors are decreasing the overall level of military threat and conflict.<sup>26</sup> From this perspective, strategic stability becomes about reducing U.S. relative power in general—and as such is not an issue the United States will ever be inclined to discuss.

Russian analysts and officials often highlight two components of strategic stability—*military-strategic* and *military-political* stability. From the current Russian perspective, both of these components were thrown out of balance in the 1990s, creating instability in the former Soviet Union and Middle East. In Putin's view, because Russia was not militarily strong enough to deter hegemonic overreach on the part of the United States in the early 2000s, strategic stability was replaced with instability and military-political defeats for Russia.<sup>27</sup>

Political factors, however, are as important as military factors to current Russian thinking about strategic stability. Underpinning Russia's vision of strategic stability is a vision of military-political stability according to which global order is characterized by balanced, sovereign "poles" that come together to solve global crises through "mutually agreed upon plans,"<sup>28</sup> as opposed to a unilateral response. By this definition, strategic stability ultimately implies a multipolar state system in which major states each preserve their sphere of influence. Nuclear capable poles with mutually acceptable levels of conventional arms would balance each other's global ambitions, while each center of power would be free from outside interference in regional economic and political affairs.

Concern with military-political balance is why Russian leaders also view information security as important to strategic stability.

From their perspective, alleged U.S. information operations—and U.S. democracy promotion activities in particular—were root causes of the color revolutions in Ukraine and Georgia, which they revile, as well as catalysts for the overthrow of authoritarian rulers during the Arab Spring. According to this way of thinking, the information sphere is crucial to military-political stability. Without control over the information domain, Russian leaders fear they will never achieve political stability at home or in their neighborhood. Without political stability, they argue, conflict will be pervasive, and strategic stability is not possible.<sup>29</sup>

The Kremlin's desire to include the information domain as a key factor in strategic stability greatly broadens the scope of the issue beyond the nuclear while putting Russian official thinking about strategic stability at odds with long-standing U.S. support to democratic movements and freedom of information. This seriously complicates discussions on strategic stability.

## **Possibilities for Strengthening Strategic Stability**

In the face of these challenges to strategic stability and despite the fact that Russian and U.S. definitions of strategic stability differ, the United States and Russia still share a deep interest in avoiding nuclear war. This should be grounds for continued efforts to strengthen strategic stability over the near and medium terms. The way ahead is challenging, however, and meaningful progress will require courage and sacrifices on both sides. This section assesses some possible vectors ahead.

### **Further Numerical Reductions in Nuclear Forces**

One vector might be to pursue further numerical reductions in nuclear forces, including reduction to zero, as once proposed by the

Obama administration. Advocates of this approach highlight the U.S. commitment to disarmament in the Nuclear Nonproliferation Treaty (NPT), past U.S. policy statements, the potential for accidents and miscalculation, the financial costs, and the moral imperative to rid the world of weapons that kill in such huge numbers.<sup>30</sup> Strategic stability would clearly be strengthened infinitely were the objectives of the “global zero” nuclear disarmament movement to be achieved. Without nuclear weapons the risks of nuclear war are, de facto, nil. Further, to the extent that larger arsenals increase the risk of accidents and miscalculation, disarmament may also reduce the risk of nuclear use and improve strategic stability.

However, further nuclear disarmament and especially achieving “global zero” will be a huge challenge. One issue is that at levels significantly lower than those prescribed in the New START treaty, such negotiations must be multilateralized. Otherwise, China could gain an advantage over the United States and Russia. However, the prospects of such multilateral negotiations will be significantly more complicated given likely U.S. and Russian demands for continued superior nuclear arsenals and the consequent challenge of codifying inequality in a multilateral arms control agreement.<sup>31</sup>

An additional challenge is that strategic stability could actually decrease temporarily as the number of nuclear weapons is reduced—although it could also increase stability if the agreement is structured correctly. From the Russian perspective, reductions in the nuclear realm with no reductions or counterbalances in the conventional realm could make second strike capabilities more vulnerable, especially if there is limited adaptation to make the strategic forces more survivable.<sup>32</sup> Indeed, according to a Russian source, in 2016 Russia rejected a proposal by the United States to reduce strategic weapons below the levels of New START for

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*A U.S. decision to reduce or not to pursue capabilities that Russia believes may be used to target Russian strategic systems would probably reduce concern within Russia about the security of its second strike, and hence improve strategic stability.*

several reasons, including (1) the need for agreement by the other nuclear states, (2) growing U.S. capabilities for ballistic missile defense, (3) the potential for long-range conventional precision strike to threaten the Russian nuclear deterrent, and (4) the U.S. militarization of space.<sup>33</sup> Hence, even though a global nuclear reduction is a stated Russian policy goal,<sup>34</sup> as long as Russia remains concerned that growing U.S. conventional capabilities threaten its strategic nuclear forces, it is unlikely to agree to any further limitation on those nuclear forces.<sup>35</sup>

Third, moving toward disarmament will also require reductions in tactical nuclear weapons, and this will also be challenging for Russia. The United States has sought reductions of and transparency on Russia’s large tactical nuclear weapon arsenal, which includes a wide range of weapons that can be deployed on short- and intermediate-range systems. Russia has rejected such demands, in part because tactical nuclear weapons are a key part of its strategy for addressing its conventional inferiority to the United States, NATO, and China.<sup>36</sup>

Finally, unless Russia corrects its violation of the INF Treaty, the U.S. Senate is almost certain to deny its assent to a

new strategic arms treaty. Given these challenges, uni-, bi-, and multilateral numerical reductions significantly below the New START levels, including to zero,<sup>37</sup> are unlikely in the near and the medium terms. This does not preclude making such reductions a long-term objective of U.S. policy, but disarmament will be a difficult path toward shoring up the recent degradation in strategic stability.

### **Political Self-Restraint**

Theoretically, the political conflicts undermining strategic stability could be mitigated if the United States were to cede to Russia the “sphere of influence” that Putin claims for it, for example by reducing democracy promotion activities in the non-NATO post-Soviet space and closing the door to further enlargement of NATO (and the European Union) in the region. Accommodation of this kind might signal to Russia that the United States has no intention of regime change in Moscow, a fact that many Russian leaders seem to doubt. Accommodation could improve strategic stability by reducing the risk of military conflict in politically contested areas, such as Ukraine or the Baltic states, and reducing the incidence of conflict, including proxy conflict.

Such a policy, however, is clearly fraught, because it is so clearly out of line with long-standing U.S. foreign policy traditions seeking to protect individual freedoms and support democratic forces worldwide. Additionally, it is not at all clear that accommodating Russia, for example, in Ukraine would satiate the Kremlin’s desire for security. Even with accommodation in former Soviet countries, the potential for military conflict would remain. U.S. strategy must also account for the possibility that Russian ambitions will not be limited to those countries claimed as part of its sphere of influence,

and that Russia could be emboldened by U.S. accommodation to make further claims and pursue more-aggressive foreign policies. Moreover, the United States would be challenged to make a credible commitment to such a policy, and Russian leaders might fear a reversal of course at a later date.

### **Military Self-Restraint**

The United States has it within its power to self-limit the development and deployment of those systems that Russia believes to be detrimental to its retaliatory nuclear capability and thus possibly strengthen strategic stability. For example, the United States might unilaterally announce a limitation or reversal of its missile defense plans for Europe. Alternatively, the United States might theoretically cease development of conventional prompt global strike, or unilaterally declare an intention to somehow limit the system it deploys once prompt global strike has been developed. A U.S. decision to reduce or not to pursue capabilities that Russia believes may be used to target Russian strategic systems would probably reduce concern within Russia about the security of its second strike, and hence improve strategic stability.

Unilateral limitations on missile defense deployments in Europe, however, would be difficult for both alliance and domestic political reasons in the United States. Missile defense and prompt global strike have crucial applications beyond Russia, as discussed previously. Given the growing concern about conventional conflict with Russia in Europe, some ballistic missile defenses in Europe may be needed to address the threat of Russian conventional ballistic missile attack, and such deployments may be feasible without threatening Russian strategic systems.<sup>38</sup> Indeed, Moscow at times seems unaware that its aggression in Ukraine and elsewhere

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*If the prevalence and escalatory potential of local wars degrade strategic stability today, measures to limit or prevent local wars clearly strengthen it.*

only tends to strengthen the case for the deployment of the conventional systems it objects to the most. U.S. allies, such as Romania and Poland, where ballistic missile defenses are currently deployed, would strongly oppose any compromise of U.S. missile defense and, in fact, may seek greater capabilities in the region.

Self-limitations on the overall or deployed numbers of future prompt global strike weapons may be somewhat more feasible if only because those systems have yet to be fully developed and deployed. There are concerns about the cost of such systems, and the numbers required for their stated purposes may be low enough so as not to factor into crisis stability in the ways that Russia fears they will. The benefits of self-restraint in this area could be limited if Russia were unable to verify to its satisfaction that the United States was in fact abiding by its self-imposed limits, but there may be ways to overcome this problem.

In considering military self-restraint, it is also worth considering that a range of other U.S. systems may be problematic from the Russian perspective. Russian analysts note that long-range precision strikes from a variety of air, ground, and naval platforms could threaten Russian strategic nuclear forces or command and control in the same way as prompt global strike, though in practice it may be difficult for conventional cruise missiles to penetrate hardened targets. Even if the United States were to limit

the acquisition of prompt global strike, Russia may still perceive a threat to its strategic forces from other conventional systems in the future, or leverage claims that it sees such a threat to gain advantage in negotiations.<sup>39</sup>

It is highly unlikely that the United States would self-limit without making reciprocal or parallel demands on Russia.

### **Conventional Arms Control and Confidence-Building Measures**

If the prevalence and escalatory potential of local wars degrade strategic stability today, measures to limit or prevent local wars clearly strengthen it. Such measures might be achieved through conventional confidence-building measures or arms control agreements. CBMs, such as joint monitoring of exercises, can reduce uncertain and inadvertent escalation from large-scale exercises and other military deployments. The 2011 Vienna Document (V-Doc), for example, provides a framework for notification and joint monitoring of some military activities under the Organisation for Security and Co-operation in Europe, and there are ongoing discussions about updating the V-Doc to provide enhanced information-sharing.<sup>40</sup> Another possibility is the development of an update to the CFE treaty, which would create limits on the deployment of forces around key potential flashpoints such as the Baltic States, Black Sea, Caucasus, and other areas.<sup>41</sup>

One particularly attractive possibility in this area would be conventional arms control at the subregional level. NATO might even use the evolving changes in its force structure in the Baltic Region as a basis for future discussions with Russia about subregional arms control to the overall benefit of regional stability—and, by extension, strategic stability.<sup>42</sup> Efforts to establish



CBMs and especially subregional arms control arrangements should remain on the table in bilateral discussions.

The challenge in this area will be that the United States and Russia have very different goals for, and perspectives about, the potential for conventional arms control and CBMs. Russia also does not currently participate in the CFE treaty and has violated the INF treaty by testing a ground-launched cruise missile to intermediate range.<sup>43</sup> Moreover, so long as Russia remains in violation of INF, any additional arms control agreement with Russia is bound to run up against resistance in the Senate.<sup>44</sup>

For their part, Russians have argued that NATO undermined the CFE treaty by failing to accommodate its interests in Georgia, Ukraine, and other states along its borders, and that NATO's reinforcement of its force posture in the Baltics is threatening. Further, Russia has argued that the United States has violated the INF treaty by using intermediate-range ballistic missiles in its missile defense tests, by deploying armed unmanned aerial vehicles of intermediate range, and by building ballistic missile defense interceptor launcher systems in Romania and Poland that it claims could be used to launch banned cruise or ballistic missiles of intermediate range.<sup>45</sup>

Recent efforts to develop improved transparency measures have also failed. During the 2010–2011 “reset” of U.S.-Russia relations, the United States proposed developing a U.S.-Russia missile defense cooperation capability that would have allowed Russia insight into the disposition of U.S. missile defense assets in Europe. Similarly, in 2013, the United States proposed the annual exchange of information about key missile defense capabilities, including number of interceptors and launchers.<sup>46</sup> The aim of these proposals was a significant increase in the transparency of U.S. and

NATO missile defense plans that would demonstrate the truth in U.S. claims that the system was focused on threats from Iran and other nonstate actors and without capability against Russia's nuclear deterrent. But despite the fact that greater transparency of U.S. missile defense capabilities is a stated Russian goal, these proposals ultimately proved unachievable. Russia insisted that any such agreement be enshrined in a “legally binding treaty,” a request that was known by all to be impossible due to strong objections from Senate Republicans. The U.S. offer of an executive agreement was deemed by Russia insufficient. It is possible that Russia may be unable to sign or uninterested in signing an agreement to build confidence on missile defense or other contested issues absent overall Western accommodation of its political interests.

These challenges notwithstanding, both sides have an interest in pursuing CBMs, for example, around the Baltic region. Russia may now judge that it has less of an interest than the United States due to the geographical advantages it enjoys there, but as U.S. force posture becomes more robust, Russian leaders may come to see a greater practical benefit in CBMs there and elsewhere.

### **Measures to Strengthen Crisis Management and Mitigation**

During a crisis, the need for effective communication between and among multiple capitals could be a critical factor in ensuring that intentions are effectively communicated and, therefore, for deescalation. Potential crises could arise from the current conflicts in Ukraine, Syria, or Georgia. An error at sea or in the air could similarly trigger inadvertent escalation of a dangerous kind. The tendency toward escalation within the Russian military may be particularly high due to a culture in which the admission of fault is strongly discouraged. In 2015, the increase in air incidents in



Northern Europe was a reminder of the potential for such accidents, as was the shootdown of a Russian Su-24 by a Turkish F-16 in November 2015. Continued military operations in Syria by the United States, Russia, and other countries could also lead to escalatory accidents.

One candidate for strengthening crisis management is the NATO-Russia Council (NRC). Since its inception in 2002, the NRC has focused primarily on political discussion and high-level strategic issues. In 2010, a number of working groups were established to pursue more-concrete forms of cooperation—for example, in counterpiracy, counterterrorism, and other subjects judged to be of mutual interest to NATO and Russia. The deterioration of the relationship between Russia and NATO since 2014, however, has brought the constructive work of the NRC to a halt. More recently, some observers have raised the idea of the NRC developing new crisis-management functions, for example by opening a new line of communication between NATO and Russia. This would enable individual NATO members to have a platform to communicate with Russia in the event of a crisis outside of bilateral channels. Alternatively, the council might take up the issue of how NATO and Russia might establish procedures to reduce the chances of an accident when NATO and Russian aircraft are operating in proximity—although it is uncertain what Russia’s attitude toward such an effort might be. Ensuring strong bilateral channels of communication may therefore be the best crisis management option available. NATO officials question the feasibility of greater cooperation within the NRC, in particular noting that there is high risk of negotiations within the NRC breaking down and undermining the overall potential for productive discussions between the United States and Russia.

## Conclusion

There are serious challenges ahead for the United States and Russia when it comes to strengthening strategic stability. The overall negative tenor of U.S.-Russia relations—including the challenge of an agreement on Syria, the INF treaty, and disagreement about Ukraine—will make it difficult to find a way forward. Nuclear deterrence will thus continue to be a core part of the U.S. security policy when it comes to Russia. This requires continued investment in nuclear modernization and effective messaging both in the United States and around the world that nuclear weapons remain a vital part of the U.S. military arsenal; and that the United States remains militarily, politically, and psychologically prepared to employ nuclear weapons in the defense of vital U.S. interests.

Especially given indications that Russia may have a lower threshold for nuclear use, particularly of nonstrategic nuclear weapons, Washington should make clear to Moscow in diplomatic channels and publicly that it would consider any use of a nuclear weapon—no matter how small or discriminate—as crossing a threshold that has not been breached for more than 70 years, and that nuclear use would dramatically change the situation, opening a Pandora’s box of unpredictable and potentially catastrophic consequences. The goal would be to raise the prospect in the minds of the Russian leadership that Russian first use would almost certainly trigger an American nuclear response and thereby help deter the Kremlin from first use.<sup>47</sup>

Washington should also develop and articulate a clear policy regarding cyber deterrence. That policy should clarify the kinds of cyberattacks against the United States, U.S. allies, or U.S. forces

that would be considered unacceptable and likely to draw a U.S. response. Such redlines would help to strengthen strategic stability. Certainly, attribution could be a challenge, but it is in the U.S. interest and in the interest of strategic stability to try to deter certain types of cyberattacks.<sup>48</sup>

Conventional deterrence measures to reduce the prevalence of small wars will also be needed. For example, the deployment of U.S. and NATO forces at appropriate levels in central Europe is important to reducing the risk of conflict with Russia in the Baltic States. Similarly, efforts to strengthen the political, economic, and military capabilities of non-NATO allies susceptible to Russian interference, if well handled, should also help to reduce incentives for Russian aggression and, thereby, the incidence of small wars along Russia's periphery.

This noted, the challenges ahead for strengthening strategic stability via arms control and other measures do not mean such discussions should be abandoned—indeed, such negotiations offer

a means of transparency and confidence-building on their own and leave open the possibility of a more productive relationship with Russia in the future. Some of the key stabilizing agreements of the Cold War developed as a result of some of the moments of greatest tension. The Cuban Missile Crisis contributed to the Strategic Arms Limitation Talks of the 1970s, just as the Soviet-American tensions engendered during the early Reagan administration eventually contributed to the signing of the INF treaty.<sup>49</sup>

Achieving a truly stable balance will not be easy. It is a paradox that some risk of nuclear war may be necessary to sustain U.S. power and the role of the United States in ensuring predictability in today's international security environment. Nevertheless, persistent vigilance about trends in strategic stability is crucial. The United States and Russia both share an interest in strengthening strategic stability and should continue to seek ways to engage constructively on the issue.

## Notes

<sup>1</sup> For a brief history, see Brad Roberts, *The Case for U.S. Nuclear Weapons in the 21st Century*, Stanford, Calif.: Stanford University Press, 2016, pp. 106–117.

<sup>2</sup> Other dyads, of course, exist, notably India-Pakistan, where the balance may be less stable but the consequences of a conflict are not quite as catastrophic as in the U.S.-Russia case, even if they are potentially world altering.

<sup>3</sup> For some of the competing definitions, see Elbridge A. Colby and Michael Gerson, eds., *Strategic Stability: Competing Interpretations*, Strategic Studies Institute and U.S. Army War College Press, February 2013.

<sup>4</sup> For example, see Paul Nitze, “Assuring Strategic Stability in an Era of Détente,” *Foreign Affairs*, Vol. 54, No. 2, January 1976, pp. 207–232; and Colin S. Gray, “Strategic Stability Reconsidered,” *Daedalus*, Vol. 109, No. 4, Fall 1980, pp. 135–154.

<sup>5</sup> See Celeste Wallander, “Mutually Assured Stability: Establishing U.S.-Russia Security Relations for a New Century,” *Strategic Analysis*, Atlantic Council, July 2013.

<sup>6</sup> We cannot reproduce the extensive literature on the dynamics of mutual assured destruction or nuclear weapons more generally in this paper. Key works include Thomas Schelling, *Arms and Influence*, Westport, Conn.: Praeger, 1977; Thomas Schelling, *Strategy of Conflict*, New York: Oxford University Press, 1960; and Herman Kahn, *On Thermonuclear War*, Princeton, N.J.: Princeton University Press, 1960.

<sup>7</sup> For example, see Glenn A. Kent and David E. Thaler, “First-Strike Stability: A Methodology for Evaluating Strategic Forces,” Santa Monica, Calif.: RAND Corporation, R-3765-AF, 1989.

<sup>8</sup> For example, see C. Dale Walton and Colin S. Gray, “The Geopolitics of Strategic Stability: Looking Beyond Cold Warriors and Nuclear Weapons,” in Colby and Gerson, 2013, pp. 85–115.

<sup>9</sup> See Robert E. Berls and Leon Ratz, “Rising Nuclear Dangers: Assessing the Risk of Nuclear Use in the Euro-Atlantic Region,” Nuclear Threat Initiative paper, October 2015. On the Baltics in particular, see David A. Shlapak and Michael W. Johnson, *Reinforcing Deterrence on NATO’s Eastern Flank: Wargaming the Defense of the Baltics*, Santa Monica, Calif.: RAND Corporation, RR-1253-A, 2016.

<sup>10</sup> For the classic statement of this stability-instability paradox, see Glenn Snyder, “The Balance of Terror and the Balance of Power,” in Paul Seabury, ed., *The Balance of Power*, San Francisco, Calif.: Chandler, 1965, pp. 184–201.

<sup>11</sup> Russian Federation Ministry of Defense, “The Military Doctrine of the Russian Federation,” 2014.

<sup>12</sup> Dmitry Adamsky, “If War Comes Tomorrow: Russian Thinking About ‘Regional Nuclear Deterrence,’” *Journal of Slavic Military Studies*, Vol. 27, No. 1, pp. 163–188; Matthew Kroenig, “The Renewed Russian Nuclear Threat and NATO Nuclear Deterrence Posture,” Washington, D.C.: Atlantic Council, February 3, 2016; Olga Oliker, “Russia’s Nuclear Doctrine: What We Know, What We Don’t, and What That Means,” Washington, D.C.: Center for Strategic and International Studies, May 5, 2016.

<sup>13</sup> Nationwide polls conducted by the Pew Research Center found that in 2007, 55 percent of Americans agreed that they “often worry about the chances of nuclear war,” compared with 62 percent in 1987 and 61 percent in 1988 (Pew Research Center, “Trends in Political Values and Core Attitudes: 1987–2007,” March 22, 2007, p. 93); usage of the term “nuclear war” within presidential documents, archived by the American Presidency Project, declined from 224 mentions in 1980–1989 to 146 mentions from 2000 to 2016 (American Presidency Project, “Presidential Documents Archive,” web page, updated 2016). Similarly, usage of “nuclear war” within articles in the *New York Times* has declined from 3,104 mentions in 1980–1989 to just 815 mentions from 2000 to 2016 (Search: “Nuclear War,” *New York Times*, online search page, 2016).

<sup>14</sup> V. I. Lumpov and V. V. Karpov, “The American Strategic Deterrence Concept,” *Military Thought*, Vol. 3, July–September 2012b; V. I. Lumpov and V. V. Karpov, “On the U.S. New Strategic Triad,” *Military Thought*, Vol. 1, January–March 2012a.

<sup>15</sup> In evaluating U.S. capabilities, Russian analysts focus on numerical force requirements to calculate the necessary minimum size for a nuclear deterrent—in other words, “how much is enough.” These calculations are based on an assumption of the minimal amount of damage to the United States necessary to deter American aggression, the number of warheads that would survive a U.S. first strike, and the percentage of warheads that would pass through U.S. missile defenses. According to such a formula, any U.S. progress with missile defense or other increased capabilities to neutralize Russian weapons before they launch necessitates a commensurate increase either in the overall size of the Russian strategic force or its survivability, or through asymmetric strategies. See Andrei Kokoshin, “Ensuring Strategic Stability in the Past and Present: Theoretical and Applied Questions,” paper, Harvard Kennedy School, Belfer Center for Science and International Affairs, June 2011, Chapter 3.

<sup>16</sup> “Rossiya Est’ Chem Orvetit’ na Razmeshchenie Elementov PRO na Alyaske [Russia Has Something With Which to Respond to the Deployment of Missile Defense Elements in Alaska],” *Vzglyad*, May 23, 2015; discussion with Russian

think tank analysts, October 14, 2016. Senior Russian officials have stated their fears that the United States is working on creating a “Global Missile Defense” system that, in combination with conventional intercontinental ballistic missiles and space weapons, will threaten the survivability of a large portion of Russia’s nuclear deterrent. Russian analysts also highlight the concern that conventional cruise missiles could be effective against Russian strategic nuclear weapons. President Vladimir Putin said in 2015, “References to an Iranian or North Korean nuclear missile threat are just used to conceal the true plans—their real goal is to neutralise the strategic nuclear potential of other nuclear states . . . above all, of course, Russia” (“Russia Reveals Giant Nuclear Torpedo in State TV ‘Leak,’” BBC News, November 12, 2015). The head of the Russian Ministry of Foreign Affairs, Sergey Lavrov said, “In general I see no threats from the east except one, U.S. global missile defence, which is being created on U.S. territory, the European continent and in Northeast Asia and just happens to hug the perimeter of Russia’s borders” (Sergey Lavrov, Russian foreign minister, transcript of live radio interview, Sputnik News, Ekho Moskvy, Govorit Moskva, April 22, 2015).

<sup>17</sup> Vladimir Putin, “Rossiya i Menyayushchiysya Mir [Russia and the Changing World],” *Moskovskie Novosti*, February 27, 2012; Vladimir Dvorkin, “Kart-Blansh. Novyj Dogovor ili Prodlenie SNV-3 [Carte Blanche: A New Treaty or the Extension of New START],” *Nezavisimaya Gazeta*, August 23, 2016.

<sup>18</sup> “Doletet do Nyu-Yorka za 40 Minut: Na Chto Sposoben Sverkhsekretnyj Glayder Yu-71 [Fly to New York in 40 Minutes: What the Top Secret Yu-71 Glider is Capable Of],” *Zvezda*, November 9, 2015.

<sup>19</sup> See, for example, Ilya Novitskiy, “Tsirkon: Russia’s Hypersonic Missile,” [politru.com](http://politru.com), translation by J. Hawk, *South Front*, February 16, 2016.

<sup>20</sup> “5 Reasons Why US Antimissiles in Europe Threaten Russia,” RT, May 12, 2016.

<sup>21</sup> Walter Pincus, “Hearings Show Our Dependence on Military Space Technology,” *Washington Post*, March 30, 2012.

<sup>22</sup> James M. Acton, “Reclaiming Strategic Stability,” in Colby and Gerson, 2013, p. 118. See also Matthew Rojansky, “Russia and Strategic Stability,” in Colby and Gerson, 2013, p. 313.

<sup>23</sup> David E. Hoffman, *The Dead Hand: The Untold Story of the Cold War Arms Race and Its Dangerous Legacy*, New York: Doubleday, 2009, pp. 152–154; “Chto Takoe Sistema ‘Perimetr’ i kak ona Taboeta? [What Is the ‘Perimetr’ System and How Does It Work?],” *Argumenty i Fakty*, March 17, 2014.

<sup>24</sup> O. Aksyonov, Y. N. Tretyakov, and E. N. Filin, “Strategicheskie Oboronitelnye Sistemy kak Faktor Sderzhivaniya Vooruzhennoy Agressii [Strategic Defense Sys-

tems as a Factor of Deterrence of Armed Aggression],” *Military Thought*, Vol. 24, No. 6, 2015, pp. 15–22; Russian Federation Ministry of Defense, “Military Strategic Stability,” Encyclopedic Dictionary entry, undated; Wallander, 2013.

<sup>25</sup> Yuriy Baluyevsky, “Novye Smysly Voennoy Doktriny: Net Neobkhodimosti Reanimirovat’ Polozhenie o Preventivnom Primenenii Yadernogo Oruzhiya [New Meanings of Military Doctrine: There Is No Need to Resuscitate the Provision on Preventive Use of Nuclear Weapons],” *Voyenno-Promyshlennyy Kuryer*, November 12, 2014; Alexei Arbatov, Vladimir Dvorkin, Alexander Pikaev, and Sergey Oznobishchev, “Strategic Stability After the Cold War,” Institute of World Economy and International Relations, Russian Academy of Sciences (IMEMO RAN), Moscow: IMEMO, 2010, p. 6.

<sup>26</sup> Russian Federation Ministry of Defense, undated. See also Arbatov et al., 2010, p. 8. Russia now believes that advancements in conventional weapons technology can achieve “strategic effects” on par with nuclear weapons and can even threaten Russia’s strategic nuclear deterrent (Conventional Prompt Global Strike and Ballistic Missile Defense in particular, from Russia’s view) (Baluyevsky, 2014).

<sup>27</sup> President Putin speaking at the 2014 Valdai Conference: “I am convinced that [after the Cold War] it was essential to preserve this mechanism of restraints and counterbalance that took shape over the course of decades and was at times painful to maintain, and that it would have been imprudent to destroy it without creating something in its place. Otherwise there would have been no other instruments [of control] other than raw power. . . . However, the United States, declaring itself the victor of the Cold War, arrogantly, in my opinion, thought that there was no need to [adapt the system]. And instead of establishing a new balance of power, which is a necessary condition of order and stability, it took steps that led to an even greater imbalance.”

<sup>28</sup> Russian Federation Ministry of Defense, undated: “Military-political stability can only be achieved through mutually agreed upon plans to create positive conditions for peaceful progress and to expand friendly relations and cooperation among peoples.”

<sup>29</sup> Accordingly, Russia’s 2015 National Security Strategy lists “the formation of a system of international information security” as a key to strategic stability (“Russian National Security Strategy,” Russian Federation, approved December 31, 2015).

<sup>30</sup> Roberts, 2016, pp. 37–40; Bruce Blair, Victor Esin, Matthew McKinzie and Valery Yarynich, “Smaller and Safer: A New Plan for Nuclear Postures,” *Foreign Affairs*, September/October 2010.

<sup>31</sup> Roberts, 2016, pp. 156–157; Arbatov et al., 2010, p. 40; Steven Pifer, “The Future of U.S.-Russian Arms Control,” Washington, D.C.: Brookings Institution, February 26, 2016.

<sup>32</sup> A 2010 report by a number of senior Russian analysts highlights that if the United States and Russia were to undertake reductions below the level of 1,000 warheads, strategic stability could be seriously put at risk by the deployment of U.S. space and conventional capabilities and would require Russia to develop significantly more survivable systems. Arbatov et al., 2010, p. 30.

<sup>33</sup> However, it also appears that Russia has raised a similar set of concerns to justify nonparticipation in any number of discussions. Dvorkin, 2016; discussion with U.S. officials, September 26, 2016.

<sup>34</sup> “Edict of the Russian Federation President: On the Russian Federation’s National Security Strategy,” President of the Russian Federation, the Kremlin, Moscow, Presidential Edict 683, December 31, 2015. Section 104 states, “Russia is prepared for further discussion of a reduction of nuclear potentials based on bilateral accords and in multilateral formats and also contributes to the creation of fitting conditions permitting a reduction in nuclear arms without detriment to international security and strategic stability.” Section 100: “Conditions conducive to the steady development of the Russian Federation for the long term are formed by ensuring strategic stability, including by phased progress toward a world free of nuclear weapons.”

<sup>35</sup> Among Russian analysts, Vladimir Dvorkin, for example, warned in August 2016 that the end of New START would lead to the end of the information-sharing regime and “the erosion of strategic stability.” In particular: “[T]he absence of information in general on the state of the belligerent parties’ armed forces most frequently results in the exaggeration of the opponent’s quantitative and qualitative indicators and to the buildup of one’s own capabilities to that state, which guarantees adequate countermeasures. And this—is the direct path to an uncontrolled arms race.” Further, Dvorkin highlights the value in developing monitoring regimes similar to New START for Great Britain, France, and China (Dvorkin, 2016).

<sup>36</sup> Katarzyna Kubiak, “NATO and Russia Experiences with Nuclear Transparency and Confidence-Building Measures,” Working Paper, Stiftung Wissenschaft und Politik, German Institute for International and Security Affairs, April 2014.

<sup>37</sup> In addition, even if further quantitative reductions were possible, the achievement of nuclear zero would also require the development of a binding international regime to prevent rival states from acquiring nuclear weapons in the future. See Roberts, 2016, pp. 38–40, 47–50.

<sup>38</sup> Roberts, 2016, p. 193.

<sup>39</sup> Pifer, 2016.

<sup>40</sup> “Vienna Document 2011: Negotiations on Confidence- and Security-Building Measures,” Organization for Security and Co-operation in Europe, December 22, 2011.

<sup>41</sup> *Back to Diplomacy: Final Report and Recommendations of the Panel of Eminent Persons on European Security as a Common Project*, Organization for Security and Co-operation in Europe, November 2015.

<sup>42</sup> Elbridge Colby, “Step Up to Stand Down: The United States, NATO, and Detering Russian Aggression,” *Foreign Affairs*, August 13, 2015.

<sup>43</sup> Mike Eckel, “NATO Chief: Russia Tested Missile Last Month in Violation of INF Treaty,” Radio Free Europe/Radio Liberty, October 31, 2015; discussions with U.S. officials and analysts, September–October 2016.

<sup>44</sup> Discussions with U.S. officials and analysts, September–October 2016.

<sup>45</sup> Pifer, 2016.

<sup>46</sup> Pifer, 2016.

<sup>47</sup> Thanks to Steve Pifer for helping us make this important point as clearly as possible.

<sup>48</sup> With thanks again to Steve Pifer for specific help on this wording. See also Christopher S. Chivvis, “How to Deter Foreign Cyber-Attacks on U.S. Elections,” United Press International, January 5, 2017.

<sup>49</sup> See Jeremi Suri, “Explaining the End of the Cold War: A New Historical Consensus?” *Journal of Cold War Studies*, Vol. 4, No. 4, Fall 2002, pp. 60–92.

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## About This Perspective

Renewed tension in U.S.-Russian relations has raised concern about *strategic stability*—defined herein as the overall risk of strategic nuclear exchange. This paper identifies key factors contributing to an overall decline in strategic stability, examines Russian views on the subject, and offers an initial assessment of prospects for ensuring that strategic stability does not erode further. Although the risk of strategic exchange between the United States and Russia remains low, it may be increasing. Unfortunately, the means of reversing the decline in strategic stability appear limited at present. Both the United States and Russia need to take the issue seriously.

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