U.S.-Russian Nuclear Arms Control: Crisis and Collapse or Crossroads?

Annotated Bibliography

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Annotated Bibliography for Workshop:

U.S.-Russian Nuclear Arms Control: Crisis and Collapse or Crossroads?

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Lesley Kucharski, Rafael Loss, Andrew Reddie

Key questions posed for the workshop:

1. Is there an opportunity to renew the bilateral arms control framework in a manner acceptable to both sides and supporting mutually beneficial objectives? If not at present, can one be created? How?
2. What, if anything, does President Putin want out of a re-constructed arms control approach?
3. What new agreements or processes would serve the interests of the United States and its allies and partners?
4. What might be the benefits and risks of a new U.S. proposal for a follow-on to New START?
5. What if traditional arms control collapses? Are there any less formal, other approaches to achieve U.S. objectives? Russian objectives?

Approach: CGSR is hosting eight panels over two days at Lawrence Livermore National Laboratory.

Panel 1: President Putin’s Arms Control Agenda
Panel 2: Possible Russian Incentives for Arms Control Renewal
Panel 3: Nuclear Arms Control in the Context of U.S. Competitive Strategies
Panel 4: Possible U.S. Incentives for Arms Control Renewal
Panel 5: Steady as She Goes on New START
Panel 6: Meeting Russia at Least Halfway in the Strategic Space
Panel 7: Addressing Challenges to European Nuclear Stability
Panel 8: The Monty Python Panel

The list of readings below provides some overview and background for the topics covered in the workshop. While some references are to books or materials not available online, where possible references include links to accessible versions of articles.
Panel 1: President Putin’s Arms Control Agenda

Key questions:
- What role does arms control play in Russian foreign policy and security strategy?
- What criticisms have been directed against the existing arms control framework?
- What claims have been made about preferred alternative future approaches?
- Is military modernization, including the nuclear portion, proceeding for its own sake or is it also plausibly in part about building bargaining chips?


Arbatov emphasizes the value of arms control regimes and military and civilian dialogue in maintaining a platform, which has eroded in the current political climate, for discussing strategic stability. He observes and analyzes a correlation between arms control negotiations and U.S. and Russian strategic thought, arguing that arms control has historically shaped Russian strategic thinking, despite strong resistance from the military community, to a greater degree than U.S. strategic thinking. Now, however, the views of the Russian political leadership are more aligned with those of the military leadership insofar as it perceives further reductions in the Russian nuclear arsenal as diminishing Russian security and prestige. In such an environment, Arbatov urges the U.S. and Russia to come together to develop at least an updated mutual understanding of strategic stability.


Building upon his previous work on the divergences in U.S.-Russian thinking on strategic stability, Arbatov explores and analyzes the divergences in U.S.-Russian threat perceptions, ranging from general to strategic, focusing on the evolution of Russian perceptions since 2014. He observes that while Russian military doctrine and strategy outline a role for arms control, they fail to envision pathways forward. This lack of creativity is further reflected by non- and quasi-official Russian views, the majority of which are increasingly hostile to arms control.


In this assessment of the 2018 U.S. arms control compliance report, the Russian Ministry of Foreign Affairs responds to U.S. non-compliance claims against Russia and puts forth
its criticisms against the existing arms control framework. The assessment includes an outline of the Russian position on U.S. missile defense systems, the INF Treaty, and New START. A recurrent emphasis is placed on the relationship between strategic offensive and defensive arms and the negative impact new weapons systems, including hypersonic weapons and drones, have on that relationship.


In his annual address, President Putin discussed the development of six new strategic weapon systems designed to counter U.S. ballistic missile defenses developed and deployed globally since the U.S. withdrawal from the ABM Treaty, which Russia perceived as the “cornerstone of the international security system.”

Panel 2: Possible Russian Incentives for Arms Control Renewal

Key questions:
- What problems in the bilateral strategic military relationship might Russian leaders wish to address with arms control tools?
- How much value does the Russian leadership attach to continued nuclear transparency by the United States and verification of U.S. limitations?
- How much value does the Russian leadership attach to continued constraints on U.S. upload potential?
- What other developments in the U.S. strategic military toolkit do Russian leaders wish to constrain?
- Do they perceive significant emerging crisis instabilities in the new warfighting domains and might they be receptive to some joint approach to norms and/or restraint?
- How does Russia perceive its leverage over the U.S. in arms control talks? Improving with time?
- Does the historic Russian interest in the Nuclear Non-Proliferation Treaty (NPT) provide an incentive to avoid the complete breakdown of arms control just after the 2020 NPT Review Conference?


Acton explores the nature of Russian concerns about strategic conventional weapons, specifically non-nuclear, high-precision, standoff weapons which are envisioned within the U.S. Conventional Prompt Global Strike (CPGS) program, arguing that there are at least six differences in Russian concerns and U.S. perceptions of the effects of CPGS on strategic stability. Notably, he argues that “Russian strategists appear to believe that conventional weapons are now approaching nuclear weapons in their effectiveness.” This perception, coupled with concerns that Russia lags behind the U.S. in the development of such capabilities, challenges the credibility of Russian nuclear deterrence. U.S. ballistic
missile defense systems add another dimension to the problem, as the two capabilities generate concern that the U.S. may attempt a disarming first strike without crossing the nuclear threshold.


Arbatov expands upon his previous analysis on the growing divide in U.S.-Russian thinking about strategic stability. He expresses concern that the U.S. and Russian understanding of strategic stability as jointly defined in 1990 has since diverged along the three principles of that framework: improving survivability; removing incentives for a nuclear first strike; and implementing an appropriate relationship between strategic offensive and defensive weapons. He identifies and explores specific challenges to these principles posed by developments in ballistic missile defense systems, long-range precision-guided systems, space-based systems, cyber capabilities, third countries, as well as the disintegration of arms control regimes, taking into account the weapons introduced by President Putin during his March 1 address to the Federal Assembly. Arbatov concludes with suggestions for updating the principles of the 1990 U.S.-Russian strategic stability framework to account for these challenges.


In the first chapter of this study, Arbatov, Dvorkin and Topychkanov elaborate on the threats posed by emerging non-nuclear strategic technologies and anti-space weapons to nuclear weapons and their C3I systems, arguing that the “entanglement” of these systems increases the risk of escalation across the nuclear threshold, particularly against the backdrop of the current political climate and “exotic” strategic concepts. The analysis devotes special attention to the role of “air-space weapons” in Russian strategic thinking and the effect on this thinking of Russia’s decision to merge the Air-Space Defense Force and the Air Force into the Air-Space Forces in 2015. The authors conclude with suggestions for reducing escalation risks stemming from “entanglement.”


Green and Long suggest that even in an allegedly deep-MAD environment, where warheads numbered in the tens of thousands, Soviet leaders remained seriously concerned about the nuclear balance and uncertain that they could indefinitely maintain a secure second strike despite strenuous efforts. The reason for these discrepancies, they argue, is that the nuclear balance is more malleable than commonly admitted. The
possibility that MAD might one day be escaped meant that U.S. attempts to manipulate the nuclear balance by enhancing its counterforce capabilities during the latter part of the Cold War could carry political weight, even while MAD was still possible.


Oliker contributes to the discussion on the role of arms control in Russian foreign policy and security strategy by arguing that Russia’s restraint from withdrawing from arms control arrangements suggests that Russia still values the overarching framework which makes arms control treaties interdependent, despite its compliance issues and concerns with individual treaties within that framework. She then evaluates the pros and cons of New START and the INF Treaty from the Russian perspective and discusses pathways for future arms control efforts. Among other things, she posits that the current Russian modernization program, while potentially signaling an anticipation of the demise of New START, might instead indicate that Russia seeks to gain upload potential under the current framework as well as leverage for future negotiations.


By the expiration of New START, Russia will face the prospect of losing insight into the U.S. nuclear arsenal, the symbolic value of a legally-binding treaty that enshrines parity with the United States, and a venue for it to showcase its nuclear weapons and portray itself as a great power. Accordingly, Williams argues that Russia needs arms control more than the United States. Thus, it is not only conceivable but quite likely that Russia will be more open to further arms control well before New START verification expires.

**Panel 3: Nuclear Arms Control in the Context of U.S. Competitive Strategies**

Key questions:
- How has the Trump administration defined the U.S. strategy for long-term strategic military competition with Russia?
- How has it thought about the challenges and opportunities of arms racing with Russia?
- What is its theory of success in long-term competitions? How might arms control fit into that theory?


Kofman provides a critical assessment of the 2018 National Defense Strategy, describing the document as nostalgic when addressing the problem of renewed great power competition: “the only discernible theory of victory is restoring America’s eroding
military advantages.” According to Kofman, it “overstates the military challenge” where Russian leaders discuss non-military means of competition and fails to appreciate genuine differences between the challenges Russia and China pose, folding both into the category of “revisionist powers.”


In this pioneering 1972 report, Marshall develops a framework for analysis of the long-term strategic arms competition between the United States and the Soviet Union. He concludes that it is insufficient and likely self-defeating to try to outspend the Soviets in the endless military-economic-political competition. Instead, he proposes to “steer the competition in ways that reduce the efficiency with which Soviet resources are used, or to steer the competition into areas of U.S. comparative advantage,” building on overarching, long-term U.S. interests and goals as to how the competition should evolve—its pace, scope, degree of stability, and ultimate outcome—and to craft strategy and apply tools of statecraft accordingly.


Maurer describes how, from the 1940s onwards, American leaders pursued a holistic offset strategy by racing the Soviets in military technologies where the United States was perceived to enjoy significant advantages while simultaneously entangling the Soviet Union in an arms control regime that would limit areas of Soviet strength.


In this edited volume by Thomas Mahnken, the authors examine the theory and practice of peacetime great-power strategic competition and derive recommendations for the U.S. to adopt a long-term strategy for dealing with China, one that includes but is not limited to military means and that includes U.S. allies in the region. In his chapter, Stephen Rosen reviews the logic of the competitive strategies approach as developed and applied by the U.S. Department of Defense from 1973 to 2010 to specify how it can inform future strategy development.


Rovner outlines four “reasons to resist the temptation”—the lack of reliable assessments of the adversary, Russia’s already existing capacity for self-defeating military campaigns,
the reinforcing of Putin’s domestic narrative, and the vague goal and often unintended consequences of a competitive strategy—of applying a competitive strategies approach to current U.S.-Russian competition, which could potentially raise the risk of otherwise avoidable conflict.


Ryan outlines what recent U.S. security documents and the Washington policy-making process reveal about U.S. policy toward Russia. He summarizes U.S. strategic priorities and regional goals, Department of Defense objectives and force planning, as well as the Trump administration’s views on nuclear policy, missile defense and arms control as they relate to Russia. He concludes that there is little reason to expect any one leader or event to significantly alter the current competitive nature of U.S.-Russian relations.


here the State Department refutes concerns raised by Russia regarding U.S. compliance with INF Treaty obligations on three issues: The Aegis Ashore Ballistic Missile Defense system; ballistic target missiles; and armed unmanned aerial vehicles (UAVs).


The 2017 National Security Strategy refocuses U.S. security and defense policy away from counterterrorism and nation-building toward renewed competition among great powers, namely with Russia and China. It asserts that “[s]ince the 1990s, the United States displayed a great degree of strategic complacency” and that to address the challenges it faces now it must renew and expand its military capabilities, defense industrial base, and nuclear forces as well as space, cyberspace and intelligence capabilities.

Panel 4: Possible U.S. Incentives for Arms Control Renewal

Key Questions:
- What problems in the bilateral strategic military relationship might U.S. leaders wish to address with arms control tools?
- How much value should the United States attach to continued transparency and verification?
- How important are continued constraints on Russian upload potential?
- What other developments in the Russian toolkit might we wish to constrain?
- How important are the new generators of crisis instability and are they receptive to arms control approaches?
• To what extent are U.S. arms control preferences limited by the constraints of technology?
• Is U.S. negotiating leverage rising or falling?
• Does the historic U.S. interest in a robust NPT provide a comparable incentive to that of Russia to avoid a complete breakdown of the bilateral arms control process?


While the U.S. is right to revitalize its nuclear deterrent and sustain the current consensus for modernization of its nuclear forces and support for defenses and other actions to protect against the nuclear dangers it faces, Dunn argues that neither the United States nor Russia would benefit from the replacement of over 50 years of cooperative management of their strategic relationship by a new unfettered strategic unilateralism. Dunn goes on to argue that partly to sustain a robust NPT regime, the United States should also “articulate and pursue a redefined […] nuclear disarmament agenda as part of a more comprehensive response to nuclear challenges and dangers.” He proposes a strategy of “looking long and throwing short”: gradually putting in place the building blocks, through arms control, to eliminate nuclear weapons as means of statecraft by 2045.


This May 2018 piece in The Economist provides an overview of arms control and outlines the contemporary challenges for both bilateral and multilateral arms control frameworks.

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Gallagher compares two logics for arms control as narrow, technical constraints on military capabilities or behavior that potential adversaries can devise to reduce the risks and costs of competition, with current perspectives on strategic stability in which flexibility and freedom of action are preferable to predictability and arms control. She subsequently proposes an approach which conceives of arms control as dependent upon beliefs about inherently political issues, ranging from the utility of nuclear weapons and missile defense to the nature of international relations as more suitable for the 21st century.

This NIPP study chaired by Keith Payne and John Foster was conducted with the goal of assisting the production of and informing the Trump administration’s 2018 Nuclear Posture Review. The chapter on arms control reaffirms that arms control policy should support the deterrence of war, assurance of allies, and U.S. defensive goals, and be made in close consultation with allies and partners. Though the study is generally supportive of arms control efforts, it is skeptical of prospects for further nuclear reductions given Russian and Chinese opposition.


Pifer offers three reasons why arms control might interest then-president-elect Trump: “It could help him improve the U.S. relationship with Russia, free up money to buy more ships and soldiers, and let him conclude a big deal.” On the first point, while Russia’s activities in Syria and Ukraine are unlikely to produce U.S.-Russian rapprochement, Pifer argues that arms control could help bridge the differences and lead to closer cooperation on other issues.


Rumer discusses the future of U.S.-Russian arms control within its historical context, tracing its evolution from the first U.S.-Soviet arms control arrangements to the current situation. He argues that the 2018 NPR's focus on great power competition reveals a shift away from the Bush administration's ideas about strategic decoupling between Russia and the United States. Rumer also posits that the Trump administration's “America First” policy could indicate the rejection of MAD as the guiding principle for the U.S.-Russian strategic relationship.

Panel 5: Steady as She Goes on the START Pathway

Key Questions:
- Is New START extension in the U.S. interest? Is it in Russia’s interest?
- Which side has the stronger interest in NST extension?
- Are there any gaps in NST that can be exploited by Russia if the treaty is extended?
- Is an additional one-third reduction still desirable? Under what conditions?
- Is continuation but with a mutually agreed lower cap on forces feasible? Desirable?

While Brooks is pessimistic about the revival of U.S.-Russian arms control negotiations toward a follow-on treaty to New START—even a five-year extension, which is possible under the current treaty, would only buy time—he outlines three measures that could mitigate the consequences of New START’s lapse: 1) Continue exchanging periodic data on strategic forces as a confidence building measure; 2) come to an informal agreement that neither side would expand above New START levels provided the other side showed comparable restraint; and 3) intensify cooperation under the Global Initiative to Counter Nuclear Terrorism.


Diakov, Kimball and Pifer discuss the uncertain future of New START, taking into account the 2018 NPR, Russian noncompliance with the INF Treaty, and U.S. and Russian modernization programs. They also explore the implications of three possible future scenarios: collapse of the treaty; extension of the treaty; and negotiation of a supplementary treaty. The brief concludes with a recommendation to extend New START with a commitment to begin discussing issues for future negotiations.


This editorial reflects the views of a former U.S. Ambassador and Senator. In it, they argue that the U.S. government should seek to extend New START given Russian compliance and existing successes in limiting numbers of strategic arms.


Krepon discusses the options that the new administration has on nuclear arms control, which include pursuing bilateral or unilateral stockpile reductions. He notes that both of these pathways have benefits and risks, which must be considered in the prevailing international security environment. Under current conditions, unilateral reductions would not contribute to U.S. policy goals and may even be counterproductive. Instead, formal bilateral reductions with Russia following New START could prove to be more effective and achieve the goals of lower strategic force levels, involvement of other nuclear weapons states, and overall reduced nuclear risks.

Kristensen explains that after seven years under the New START treaty, Russia and the United States have met the limits for strategic nuclear forces. Using self-reported data from each country, Kristensen provides a graph of each country’s strategic arsenal. He goes on to note that despite the relations between the two countries being at low ebb, the achievement of their treaty commitments suggests that the current treaty regime works. Moreover, he notes that “neither can afford to abandon the only strategic limitations treaty and its verification regime.”


In this issue brief, Schneider assesses Russian strategic forces 18 months prior to the conclusion of New START’s seven-year reduction period and concludes that Russia has been adding to its number of strategic warheads in spite of its treaty commitments.


Woolf examines the key provisions of the New START Treaty. The piece, importantly, includes detailed information concerning the monitoring and verification regime and outlines key differences between New START and START I. The brief also outlines issues left out of the agreement—specifically, missile defense.

Panel 6: Meeting Russia at Least Half Way in the Strategic Space

Key Questions:

• Is it possible to agree that offense and defense are more broadly linked than before?
• Are some limits on both offense (nuclear and non-nuclear?) and defense (both kinetic and non-kinetic?) plausible for the United States? Under what conditions, if any?
• What lessons about Russia’s interest in striking a deal can be drawn from past U.S. efforts across multiple administrations to find a way to address Russia’s stated concerns on missile defenses?
• How would a broader agreement be implemented?
In this concluding chapter of a multinational study, Acton argues that Washington should take serious expressions of Russian and Chinese concerns about U.S. conventional strikes against their nuclear deterrents, particularly since Moscow and Beijing seem to disregard inadvertent conflict escalation, making them believe of any U.S. strike against such targets as deliberate escalation. He concludes that “cooperative confidence building and even formal arms control [concerning advanced conventional weapons and space-based nuclear C3I assets] could play an important role in risk mitigation.”


Anichkina, Péczeli and Roth argue that maintenance and expansion of the contemporary arms control regime is a strategic necessity. Additionally, the authors consider a number of pathways to achieving future cooperation such as Track II programs, summits to “identifying fields of mutual interest” as well as pointing to the opportunity of transparency, and negotiation concerning modernization plans of both countries.


Blank’s article places arms control in the context of developments in Europe’s relationship with Russia following events in Crimea, broader security competition between the United States and Russia, and the modernization of Russian strategic forces.


Pifer proposes elements of a compromise between NATO and Russia on missile defense cooperation, arguing that it is in their mutual interest to develop a solution to this divisive issue. Elements of a possible compromise include Russian agreement to drop its requirement for a legal guarantee that its strategic forces will not be the target of U.S. missile defenses in exchange for a political commitment as well as greater transparency and flexibility by the U.S. regarding its current and future missile defense capabilities.


Both pieces from Pifer—one brief and another more in-depth—point to arguments for maintaining the current arms control regime and enhancing it moving forward to reduce the risks of miscalculation and miscommunication. He also usefully outlines areas of future arms control concerns such as modernization, missile defense, and precision-guided conventional strike as well as cyber and space domain issues that both the United States and Russia will have to address in the near term.

**Panel 7: Addressing Challenges to European (Nuclear) Stability**

Key questions:

- How does the disparity in non-strategic nuclear weapons capabilities affect overall strategic stability? Does it matter?
- How does and will the INF Treaty violation affect regional nuclear stability?
- Why have the attempts of the U.S. and NATO to seek agreement with Russia on reciprocal reductions and greater transparency failed in the past decade?
- Are there approaches to nuclear arms control in Europe that are in the interests of both Russia and the West?
- What alternative approaches can be considered? And how likely are unilateral Western approaches to generate desired responses by Russia?


Anthony argues that the impact of losing the INF treaty is primarily felt in Europe, rather than in Russia or the United States. He emphasizes the consequences of INF noncompliance upon NATO and European force planning as well as the impact of the ailing regime upon third-party states such as Ukraine that would no longer be constrained by the treaty should it fail completely. Anthony also points to the deleterious effect of the INF regime’s failure upon prospects for broader arms control agreements.


Barrie discusses the implications of Russia’s alleged deployment of INF Treaty-breaching ground-launched cruise missiles for the European security environment. Maintaining the INF Treaty remains important for the US and its European allies.
Accordingly, he writes that responses to Moscow should be calibrated with this goal in mind; not for purposes of pure punishment.


Durkalec notes the pressing security challenges facing Europe following the violation of the INF Treaty by Russia and questions surrounding the future of New START. Importantly, Durkalec considers both the benefits and the costs of future agreements between the U.S. and Russia arguing that, “[c]oncessions undermining U.S. credibility as a guarantor of security and stability in Europe would cause more harm than the lack of treaty-based constraints on Russia’s strategic arsenal.”


Kubiak examines the state of play and recommends measures to overcome the INF crisis, with special emphasis on the role that European states can play. If Washington and Moscow are truly interested in maintaining the INF Treaty, she writes, they need to hasten the speed in finding a diplomatic solution to either preserve the Treaty or manage its collapse.


Kühn, Shetty and Sinovets point to the central strategic challenge facing NATO: balancing deterrence and assurance measures to its easternmost allies without entering a new arms race. The authors go on to propose that NATO step up its efforts to foster talks with Russia on current military threats and arms control. They also suggest that steps be taken to address the freedom and sovereignty of states to seek alliance membership and the Russian interest of maintaining a sphere of influence in its “near abroad.” They propose a conference “akin to the 1975 Helsinki Summit” to address these issues.


This article details the findings of a conference held by the European Leadership Network in 2017 regarding the impact of arms control in Europe. The report details the findings and recommendations of participants and outlines a series of specific recommendations to manage arms control moving forward. These recommendations include establishing a structured dialogue between Russia and European states, building cooperative frameworks to address hazardous military incidents, examining the possibility of limitations to certain types of military exercises, saving the INF Treaty, and establishing a dialogue to address new military technologies.


Like his editorial in the *Bulletin of the Atomic Scientists*, Adam Mount’s *Deep Cuts* Working Paper proposes a series of steps to re-invigorate the arms control frameworks between the United States and Russia. Beyond the existing New START framework, Mount suggests that new agreements should consider limits to not only existing arsenals but also the modernization programs of both countries—despite the challenge posed by asymmetrical modernization schedules in each country. He goes on to suggest that such new arms control regimes offer stability-enhancing opportunities such as verifiable limits to emerging security challenges as well as including China.


Osgood recounts the circumstances and developments that led to the deployment of Soviet SS-20 missiles and American Pershing II and ground-launched cruise missiles in the European theater in the late 1970s, examining them using several criteria—secure and effective deterrence, enhanced defensive performance, preservation of political stability, and responsiveness to arms control.


Richter argues that the extant CFE-based bloc-to-bloc arms limitation regime is obsolete. As an answer to this obsolescence, he proposes that conventional arms control discussions that include European states and Russia provide a path forward. While noting the necessity of such a regime, he usefully outlines the challenges posed by recent developments in military technology, including precise long-range strike systems, advanced command, control, communication, surveillance and guidance systems, and extended operational capabilities that may make future agreements more difficult to achieve.


Sokolsky makes a tripartite argument concerning NATO’s perception of Russian military developments. First, he notes that a military reform and modernization program launched in 2008, combined with significant increases in defense spending over the past several years, has improved the capabilities of Russia’s armed forces. Second, in the past decade,
Russia has demonstrated an unprecedented willingness to use force as an instrument of its foreign policy as well as an improved capacity to project military power beyond its immediate post-Soviet periphery. Third, the Kremlin has been conducting a far more aggressive, anti-Western foreign policy, significantly ratcheting up provocative military maneuvers near NATO members’ borders with Russia, intimating nuclear threats, and deploying nuclear-capable missiles in the Russian exclave of Kaliningrad. As a result, he suggests that there is a growing perception in the West that Russia has reemerged as a revanchist, neo-imperialist, expansionist, and hostile power bent on dismantling the post–Cold War European security architecture and dividing the continent into spheres of influence. He concludes that the relationship between Europe and Russia moving forward is likely to be increasingly unstable with the potential for serious miscalculation.


Weitz details developments in arms control following events in Ukraine. The article pays particular attention to the challenge posed by strategic defense and provides useful background information concerning the INF Treaty’s negotiation.

Panel 8: The Monty Python Panel (“And now for something completely different”)

Key questions:
• What mix-and-match approaches might be feasible?
• What less formal, non-treaty based approaches and mechanisms might be useful?
• Might U.S. and allied interests be adequately served by a new mechanism that makes no reductions but sustains and adapts transparency and verification mechanisms?
• If Russia is not prepared to move ahead with treaty-based arms control, will it be any more prepared to support non-treaty based approaches?
• Should such approaches be viewed as an interim step or a long-term measure?
• What else should be considered?


After reviewing the disappointing progress in U.S.-Soviet arms control efforts until the mid-1980s, Adelman proposes to abandon comprehensive treaty negotiations and adopt “individual, parallel restraint,” “i.e., arms control without agreements (treaties, in particular),” to ensure strategic stability going forward. He proposes that each side take measures to enhance stability and reduce nuclear weapons in consultation with each other, but not necessarily in a formalized, signed agreement.

Anderson and McDonald argue that the contemporary global arms control regime is no longer working, since it fails to account for all nine nuclear-armed states. Instead, they advocate for a “deter and downsize” approach. They go on to argue that “future negotiations, at first between the United States and Russia, later including other nuclear states, should shift from attempting to orchestrate a numerical balance between strategic delivery vehicles to a slow but steady reduction of states’ total nuclear weapons stockpiles.”


CSIS hosted a strategic dialogue for U.S. and Russian experts focusing on crisis stability. Two workshops brought together Russian and U.S. experts to discuss how the evolution of technology, operational approaches, and policy affect crisis stability and what steps could be taken to enhance it given the evolving environment. Corresponding discussion papers highlight participants’ concerns that dangers are increasing and decision-makers may be overly optimistic about their capacity to manage, and perhaps effectively court, risk. The following papers are accessible via the above link: “Crisis Stability in the Twenty-First Century” by Anya Loukianova Fink; “Preventing Dangerous Military Incidents in Peacetime” by Rachael Gosnell; “Preventing Dangerous Military Incidents in Wartime” by Anton Lavrov; “The Future of U.S.-Russia Arms Control, Transparency, and Confidence Building” by Anastasia Malygina; and “Stability and Nuclear Risks in U.S.-Russian Relations” by Pavel Podvig; as well as a summary report by Olga Oliker.


This unclassified DSB report, chaired by Miriam John, outlines the monitoring and verification tools available to policy-makers and arms control negotiators in rich detail. In particular, it points to the inadequacy of “point” verification techniques and to the need for “persistent surveillance tailored to the environment [and military technology] of concern.”


Expressing skepticism about the reviving of formal nuclear arms control between the United States and Russia, Dunn and Alessi instead propose a way forward in coordinated unilateral measures. They argue that “the CTR Program and different verification experiments, can be exploited more aggressively to support that overall restructuring process.”
In order to overcome the impasse in nuclear disarmament amid challenges to the ideals enshrined in the NPT and lacking progress with the numbers-and-instruments-focused approach to disarmament, Ford proposes the “CCND Approach,” standing for “creating the conditions for nuclear disarmament” negotiations. The conditions include: 1) Robust and reliable nonproliferation assurances; 2) successful curtailment of other WMD threats; 3) stability after “Zero”; and 4) making “Zero” desirable.

Miles proposes an approach to U.S.-Russian arms control based on adaptive warhead limits. Such limits would allow the United States to account for Russian concerns without changing U.S. policy on ballistic missile defense (BMD). Notionally, the treaty would limit each side’s deployed nuclear stockpile to the larger of 1000 warheads or 10 times the number of BMD interceptors deployed by the other as part of its national missile defense system. In addition to providing a possible path to further nuclear warhead reductions, Miles argues, this initiative would strengthen strategic stability and provide increased transparency regarding missile defense programs.

This collection of essays, with contributions from nuclear policy and arms control experts, presents current national and institutional attitudes—including from the United States, Russia, China, France, Japan, the United Kingdom, and NATO—towards the nuclear ban treaty and assess whether these are likely to change over time. By offering analyses on the different perspectives, it aims to encourage a better understanding of the underlying motives and objectives of the treaty, the humanitarian impacts movement and the rationale of those who are cautious or hostile to the treaty.

Weber puts forth an argument for a multilateral ban on nuclear-armed cruise missiles and outlines practical steps towards the realization of that end. He describes these missiles as “the most dangerous and destabilizing class of nuclear weapon” and notes that developments in cruise missile and stealth capabilities eliminate the need to use nuclear-armed cruise missiles to overcome air defenses. Weber further argues that the nuclear
cruise missiles being developed as part of U.S. and Russian modernization programs can be used as bargaining chips in arms control negotiations.


Williams examines the gap between the 2018 NPR and existing arms control agreements. Specifically, she raises the prospect of negotiations concerning non-nuclear forces and the overall offense–defense balance essential to strategic stability, such as missile defense, that are left unaddressed by existing arms limitation frameworks. Williams goes on to suggest that “the challenge is to create an updated concept of arms control to incorporate new technologies, crossing domains.”

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