

Arms Control after Ukraine

Integrated Arms Control and Deterring Two Peer Competitors

By Heather W. Williams and Nicholas Smith Adamopoulos

Russia's invasion of Ukraine has illuminated longstanding cracks in the nuclear arms control regime. Legacy arms control tools had little utility as Russia eschewed arms control agreements and [transparency-based risk reduction measures](#) designed to avoid unwanted escalation. Russian aggression has included direct and indirect nuclear threats, such as [Russian president Vladimir Putin's statement](#) on September 21, 2022: "They [NATO] have even resorted to the nuclear blackmail. . . . I would like to remind those who make such statements regarding Russia that our country has different types of weapons as well." Russia's invasion of Ukraine is forcing a reckoning for the arms control community on the utility of arms control and risk reduction tools, many of which are designed to lower the chances of inadvertent escalation, in the face of an actor who intentionally escalates crises and uses nuclear weapons for coercion.

This reckoning comes as the United States also wrestles with how to deter two peer competitors, given China's growing strategic arsenal and regional ambitions. In 2020, U.S. Strategic Command (STRATCOM) commander [Admiral Charles Richard](#) stated, "We are on a trajectory for the first time in our nation's history to face two peer nuclear-capable competitors who have to be deterred differently, and we're working very hard to meet that challenge." And the [2022 U.S. National Defense Strategy](#) outlines the need to compete with China as a pacing challenge while accounting for the acute threat from Russia. If arms control is to have a future, it will have to work in tandem with these changing deterrence requirements.

In January 2022, the Project on Nuclear Issues published a study, [Integrated Arms Control in an Era of Strategic Competition](#), that offered a vision for the future of arms control evolving in parallel with integrated deterrence. Integrated arms control may go beyond the rigid structures that have shaped legacy U.S.-Russia arms control agreements by adopting new modalities, incorporating new systems, and including new actors. This policy paper applies the principles of integrated arms control to the changing deterrence landscape and argues that because arms control and deterrence work hand in hand, future U.S. arms control efforts will have to adapt to the changing strategic necessity of deterring two peer competitors.

However, arms control remains a path worth pursuing because of its benefits to strategic stability, risk reduction, transparency, and predictability. How the United States and arms control partners apply these principles will be determined by a variety of factors, including the outcome of the war in Ukraine and U.S. decisions about force posture. To be clear, prospects for arms control in the short term are not a cause for optimism; rather, this paper is intended as a first step in identifying the key questions that will determine the role of arms control while deterring two peer competitors.

This paper will first examine ways that the war in Ukraine may impact prospects for arms control, then pose first-order questions about future U.S. arms control policy. In so doing, it assumes Russia will remain a peer strategic competitor with a sizeable nuclear arsenal. Even if Russia emerges from the Ukraine crisis with significantly depleted conventional forces, its nuclear arsenal will be of even greater importance. The paper also assumes that China will continue on its current trajectory of [expanding its strategic arsenal](#). It concludes that balancing integrated arms control and integrated deterrence in the face of two peer competitors should focus on five priorities: 1) tailoring arms control to match deterrence requirements; 2) developing short-term risk reduction measures; 3) furthering allies' strategic priorities; 4) continuing U.S. strategic modernization; and 5) competing in emerging technologies while also exploring arms control opportunities.

Implications of the War in Ukraine for Arms Control

Russia's invasion of Ukraine on February 24, 2022, threatened to undermine not only European security and the wider international order but also the practice of arms control. The war in Ukraine has seen conventional forces deployed on a scale unprecedented since the collapse of the Soviet Union, prompted fears of nuclear and chemical weapons use, and poisoned prospects for dialogue on reducing or limiting nuclear weapons in the near term. Russia's activities in Ukraine have already proven to be damaging to international arms control and disarmament efforts, driving Moscow's decision to block consensus at the 2022 Nuclear Non-Proliferation Treaty (NPT) Review Conference. [Russian diplomats objected to the inclusion of language in the final document](#) expressing concern about operations and security at the Zaporizhzhia nuclear power plant in Ukraine, arguing it was designed "to settle scores with Russia by raising issues that are not directly related to the treaty." Although arms control has been under strain for at least a decade, the war in Ukraine has highlighted its limits in preventing intentional aggression and escalation. At the same time, arms control has made Russia's military buildup over the years more transparent and predictable.

Before proceeding, it is worth recalling what arms control is and what it is not. In their classic volume *Strategy and Arms Control*, Thomas Schelling and Morton Halperin defined arms control as "all the forms of military cooperation between potential enemies in the interest of reducing the likelihood of war, its scope and violence if it occurs, and the political and economic costs of being prepared for it." As they described, competition and cooperation can coexist in arms control agreements. Arms control efforts do not necessarily entail disarmament or arms reductions; indeed, as Schelling and Halperin noted, "Any agreement that reduced the capability for destruction in general war might make war more likely, in that the costs and risks in initiating it would not appear as great." Arms control is a tool for managing—rather than eliminating—competition and armaments.

Integrated arms control is a twenty-first-century tool that can be used while balancing competition and cooperation. It offers an approach that is more flexible than many historical arms control mechanisms and can include a diversity of actors, verification tools, and formats, ranging from bilateral treaties to informal multilateral risk reduction efforts. But Russia's invasion of Ukraine has tested the utility of arms control and raises difficult questions about prospects for future cooperation. Although the war continues at the

time of writing, a series of lessons learned can still be hypothesized regarding what the war will mean for arms control going forward.

First, the war in Ukraine has demonstrated the limits of arms control and risk reduction tools focused primarily on avoiding misperception or inadvertent escalation. Most historical arms control efforts centered on crisis stability and arms race stability, with an underlying assumption that crisis escalation would be due to misperception, inadvertency, or accident. But Russia's invasion of Ukraine **was not an accident**. It was not due to misperception of Ukrainian, the North Atlantic Treaty Organization's (NATO), or U.S. interests in the sense originally envisioned by most arms control theorists—although Putin may have overestimated his own military capabilities, misjudged Ukraine's resolve, and underestimated NATO's unity. The invasion cannot be blamed on a lack of crisis communication channels. The war in Ukraine was not a failure of existing risk reduction measures. Rather, most arms control tools were not matched to the nature of the Russian threat and intentional escalation. Presently, Russian and Chinese strategies for competition with the United States involve **manipulation of risk** underpinned by a **growing reliance** on nuclear weapons for coercion during a crisis. They do not want to reduce risks in certain scenarios. Combined with increasingly complex and integrated conventional and nuclear systems, these emerging adversary strategies will move future crises further from the Cold War-era escalation ladder and warrant a reassessment of the U.S. crisis management and arms control tool kit.

Second, Russian noncompliance with treaties and arms control norms is indicative of a broader aggressive turn in its strategic posture and intentions. Russia has consistently violated arms control obligations, including its 2007 suspension of the Treaty on Conventional Forces in Europe (CFE), violation of the Intermediate-range Nuclear Forces (INF) Treaty, and rollback of Cooperative Threat Reduction (CTR) programs. Additionally, it has used chemical agents as tools of assassination and continued to support the Bashar al-Assad regime in Syria despite its use of chemical agents in violation of the Chemical Weapons Convention (CWC). Moscow has drawn down participation in numerous cooperative risk reduction activities, decreased decisionmaking transparency, and backstopped its actions with nuclear threats. These data points reflect a wider trend of Russia attempting to remake the international order. In this case, arms control has served as a canary in the coal mine to the Kremlin's broader strategic intentions; while many of these agreements may now be moot, they point to an enduring value of arms control for adding transparency and predictability to an otherwise opaque and ambiguous actor.

Third, nuclear weapons are of increasing strategic value to ambitious autocrats hoping to pursue opportunistic aggression and risk manipulation. Putin has **relied on nuclear weapons** throughout the Ukraine crisis for both implicit and explicit bullying, announcing on February 27, 2022, “orders to the defense minister and chief of General Staff to introduce a special combat duty regime in the Russian army's deference [deterrence] forces.” The reference in the September 21 speech to “existential” risks to Russia—and the alleged threat of Ukraine invading Russian territory—is a direct link to Russian strategic doctrine. **Russian policy holds** that nuclear weapons may be employed to counter “aggression against the Russian Federation with the use of conventional weapons when the very existence of the state is in jeopardy.” It should be assumed that **China is closely watching** how Putin uses nuclear threats in Ukraine. Adversary escalation strategies rest on the assumption that they have **several asymmetric advantages** relative to the United States in stakes, geography, and authoritarian decisionmaking structure that would allow them to credibly threaten escalation in limited wars to the point of deterring U.S. activity in the region. Russia has attempted to leverage these asymmetries in Ukraine, along with integrating military and nonmilitary tools across phases of conflict, albeit with limited success.

Finally, rising tensions with China during the war in Ukraine may be a harbinger of future challenges for the United States in deterring two peer competitors. For the United States, nuclear deterrence has typically been a two-party game, and while some attention has historically been paid to the potential for China to become a nuclear competitor, this possibility has been comparatively limited until the past decade. The recent quantitative and qualitative expansion of Russian and Chinese nuclear arsenals has already offered a preview of future competition. In the midst of the Ukraine war, China has for the first time **conducted live-fire exercises** in areas Taiwan claims as its own territorial waters, demarcating six training areas that encircled the island for four days. Future nuclear arms control between major powers will have to address multiple actors and domains. Traditional arms control tools, including treaties, may struggle to incorporate and verify any limits on strategic systems. Additionally, arms control with only one competitor could create an opportunity for the other to pursue strategic superiority.

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Integrated Arms Control and Two Peer Competitors

The 2022 U.S. National Security Strategy **outlined** five principles for integrated deterrence, offering a vision that leverages all the tools of national power to deter adversaries through integration across domains, regions, the continuum of conflict, the U.S. government, and allies. As the United States moves toward a strategy of integrated deterrence, so too should it pursue a strategy of integrated arms control.

Despite the new challenges of an uncertain and rapidly changing strategic environment, the fundamental role of arms control as a complementary tool to deterrence has not changed. Indeed, the lessons learned from Ukraine should be to return to the first principles of arms control: negotiating agreements between competitors that can avoid war and escalation, balancing competition and cooperation, and flexibly adapting to a changing technological and geopolitical landscape. The increasingly complex and integrated conventional and nuclear systems at the core of Russian and Chinese strategy demand equally integrated strategies for deterrence and arms control.

But first, the U.S. interagency and its allies and partners should address first-order questions about whether arms control is in the national interest. The future of arms control will depend on the following questions:

- 1. Why** would the United States want arms control with Russia or China?
- 2. What** should be the focus of arms control efforts with Russia and China: crisis management, arms racing, or nuclear or nonnuclear capabilities?
- 3. Who** should be the focus of U.S. strategic arms control efforts: Russia, China, or both simultaneously?
- 4. When** should the United States engage Russia and China in arms control?
- 5. How** can the United States incentivize Russia and China to join arms control efforts while also strengthening deterrence?

Exploring each of these questions in turn can help identify arms control opportunities for the United States.

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Why would arms control with Russia or China be in the U.S. national interest? The [2022 Nuclear Posture Review \(NPR\)](#) lists the goals of arms control as “greater transparency and predictability, enhanced stability, reduced reliance on nuclear weapons and, ultimately, a world without nuclear weapons.” Historically the “why” behind arms control was a bit simpler: to avoid nuclear war. [Strategic stability was a conceptual tool](#) for ensuring a survivable second strike, which arguably would deter any nuclear escalation and war. On a practical level, it may be in the United States’ interest to set limits on Russian tactical nuclear weapons or China’s growing strategic arsenal, but decisionmakers should first reflect on the underlying reasons to pursue cooperation. U.S. arms control efforts should begin with a “why” that drives any subsequent agreements, whether it is to avoid nuclear war, strengthen strategic stability, or reduce risks of escalation. Of course, both Moscow and Beijing would demand something in exchange for any U.S. arms control efforts.

What should be the focus of arms control efforts with Russia and China: crisis management, arms racing, or nuclear or nonnuclear capabilities? Perhaps a harder question is what would the United States give up in exchange for any limits on Russian or Chinese systems? Russia and China have been continuously modernizing their strategic arsenals both quantitatively and qualitatively, whereas the United States is just now replacing all three legs of the triad. In blunt terms, there is not much “fat to trim” in the current U.S. nuclear arsenal if it also hopes to deter two peer competitors. What, therefore, could the United States offer Russia and China, and what would Washington want in return? The answers to these questions will ultimately depend on U.S. decisions about using force posture to deter two peer competitors. Force posture and sizing have historically driven strategic arms control agreements, not the other way around. But more informal arms control efforts, such as risk reduction measures or crisis communication, are not as directly tied to force posture and could be pursued independently, drawing on lessons learned from the war in Ukraine to avoid escalation in future crises.

Who should be the focus of U.S. strategic arms control efforts: Russia, China, or both simultaneously? A fundamental question for deterring two peer competitors is whether they are acting in concert or independently. The answer to this question might also change over time and the continuum of conflict, with adversaries cooperating during peacetime but splitting during a crisis or vice versa. An essential component of integrated deterrence is tailoring the multitude of deterrence tools to an adversary. Integrated arms control will also need to be tailored to two peer competitors; parallel bilateral agreements—each with its own format, timelines, and objectives—may be better suited for this. While a trilateral, legally binding, nuclear arms control agreement may be useful as an aspirational polestar, unwavering commitment to the pursuit of such an agreement in the current strategic environment may prove burdensome.

When should the United States engage Russia and China in arms control? Pressure on Washington is likely to increase with the approaching expiration of the New Strategic Arms Reduction Treaty (New START) in 2026 and from the NPT community to demonstrate progress on arms control and disarmament. But cooperation with Russia on any strategic issues is politically risky in the near future. The present U.S.-Russia relationship is defined by crisis management and attempts to strengthen deterrence against further escalation, as well as by assuring European allies. International opinion remains firmly with Ukraine, and Eastern European allies might perceive any overtures to Moscow for dialogue as concessionary or a sign of waning U.S. commitment. To be sure, now is not the time for in-depth arms control dialogue with Russia. But when the war in Ukraine ends, Washington will still face a hard choice. On the one hand, post-conflict

environments are historically a prime opportunity for arms control; on the other hand, President Joe Biden has labeled Putin a “war criminal,” meaning any future dialogue and cooperation will require delicate communications and explanations for allies and the public. Engaging with Beijing will face similar timing challenges as China continues to expand its arsenal. Leadership in Washington should pursue arms control with Moscow and Beijing when the geopolitical climate permits—and when there is a clear “why” and “what” to justify arms control overtures.

How can the United States pursue arms control with Russia and China? Will the format be bilateral or trilateral, formal or informal? And what are the incentives for Moscow and Beijing to join? Arms control can range from treaties to more informal agreements. In a 1985 edition of their original work, Schelling and Halperin lamented, “We regret that informal understandings and unilateral actions seem to have taken a back seat to the quest for formal agreements,” seeing potential for arms control in informal and unilateral agreements. Following the war in Ukraine, Russia’s conventional forces will likely be depleted, and it may react by increasing reliance on its nuclear deterrent. Moscow may be reluctant to agree to any limits on its strategic forces in such a climate, although this will depend on the outcome of the war. Likewise, arms control is seemingly at odds with China’s expanding arsenal. Moreover, the transparency that typically accompanies arms control goes against current Chinese practices. But there are also potential incentives for Russia and China to engage in arms control over time. First and foremost, the war in Ukraine may prove to be a “reality check” on nuclear risks and escalation for the entire international community, similar to the environment following the Cuban Missile Crisis. Additionally, as Russia will be forced to rebuild its conventional forces and China faces economic challenges in the aftermath of the pandemic, neither country can easily afford an arms race with the United States.

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Five Priorities for Arms Control after Ukraine

The Biden administration has [identified a series of priorities](#) for arms control going forward, to include reestablishing leadership in arms control, emphasizing strategic stability, and avoiding costly arms racing. Balancing the requirements for deterring two peer competitors with the commitment to leading on arms control presents numerous challenges. These include rebuilding interest and confidence in arms control as a practice for strengthening strategic stability, particularly within Congress, in addition to the questions raised above. Obviously, the specifics of what arms control will look like amid deterring two peer competitors cannot be predicted, as this will be heavily influenced by the outcome of the war in Ukraine and U.S. force-posture decisions, but this paper offers five priorities that can guide such efforts: tailoring arms control to adversaries, using short-term risk reduction tools, supporting allies’ strategic interests, continuing nuclear modernization, and integrating emerging technologies.

Trilateral arms control is a tempting prospect of “one treaty to rule them all;” however, as previously mentioned, achieving this is unlikely and may not be the best means for deterring two peer competitors. What deters Moscow will not necessarily resonate in Beijing, and vice versa. Future arms control with Russia may need to prioritize conventional forces, as both NATO members and Russia have made a push for defense production of conventional capabilities, including tanks and artillery, during the war in Ukraine. Future arms control with Russia will also likely have to prioritize tactical nuclear weapons given the quantitative

imbalance. Conversely, arms control with China might be better focused on capturing its growing strategic nuclear arsenal or nonnuclear strategic capabilities, along with emerging technologies. Forcing a trilateral version of New START in the near to mid-term may serve little strategic purpose and fail to contribute to integrated deterrence and strategic stability if it holds cooperation with one adversary hostage to cooperation with the other. The U.S.-Russia and U.S.-China rivalries do not resemble each other, nor should arms control. Instead, the United States can pursue parallel, concentrated bilateral efforts to strengthen deterrence vis-à-vis Moscow and Beijing, respectively, while also [pursuing multilateral efforts when possible](#).

Future arms control prospects appear grim and may take years to materialize. In the meantime, the United States and its allies should prioritize short-term risk reduction measures. This might take the form of confidence-building exercises—or establishing codes of conduct and rules of the road. In 2020, the Carnegie Endowment for International Peace [offered specific risk reduction proposals](#), such as data exchanges, transparency for warhead storage facilities, and launch notification agreements. When the United States can return to dialogue with Russia—or perhaps in the context of the P5 Process, a set of ongoing dialogues among the five countries the NPT designates as “nuclear weapon states”—these transparency measures could be part of a wider discussion on risk reduction. In addition to practical risk reduction measures, [norms and rules of the road](#) can also play a role in limiting the deployment of emerging technologies or potentially destabilizing nuclear and nonnuclear capabilities. During this interlude, the United States can also build capacity for future arms control efforts, such as training the next generation of negotiators and inspectors and promoting interagency expertise, including among the U.S. Department of Energy’s national laboratories.

A third priority for post-Ukraine arms control while deterring two peer competitors will be furthering allies’ strategic interests—though this will not be straightforward. A strong deterrent (and, therefore, strong extended deterrent) should be at the forefront of U.S. strategic planning. Yet European and Asian allies have different understandings of U.S. credibility, security cooperation agreements, and threat perceptions regarding various adversaries. Arms control agreements need to take into account U.S. forward-deployed assets, military exercises, or other forms of cooperation with allies. Future arms control efforts will have to engage allies early and ensure that cooperation with an adversary does not come at the cost of credibility with an ally. This is not a new challenge for the United States, but it will be increasingly complex in the face of two peer competitors, multiple arms control channels, and increasingly anxious allies. The need to tailor assurance to allies is another reason to consider parallel tracks when engaging Moscow and Beijing on arms control.

Amid these cooperation efforts, the United States should continue with its nuclear modernization and plan to compete with Russia and China in advanced technologies. In a testimony before the U.S. Senate Committee on Armed Services on September 20, 2022, chair of the Congressional Commission on the Strategic Posture of the United States Madelyn Creedon [pointed to the importance of continuing to modernize all three legs of the nuclear triad](#), which she said had the support of the public and Congress. [Other experts](#) have warned, “As things stand today, it is not at all clear that within a few years the U.S. will retain enough to deter two well-armed nuclear competitors.” In addition, Rose Gottemoeller, a member of the commission, [stressed the need to](#) “rebuild our industrial capacity” in both the public and private sectors in order to compete with two adversaries. This need for improved capacity and competition is particularly important in advanced technologies. Although emerging technologies, such as AI-enabled and hypersonic weapons, have not played a major role in the war in Ukraine to date, their potential strategic importance should not be ruled out, especially as China is likely to have more success with these technologies than Russia and their military utility is not fully understood.

Future Arms Control Options

Future arms control options will ultimately depend on when and how the war in Ukraine ends, U.S. force posture decisions to deter two peer competitors, and wider geopolitical trends. Taking this into account, however, the framework of integrated arms control can help identify potential options that would contribute to avoiding nuclear war, strengthening strategic stability, and reducing risks of escalation. At the one end of the spectrum would be negotiating a New START follow-on—such as a treaty setting an overall warhead cap, to include both strategic and tactical nuclear weapons—between the United States and Russia before the treaty expires in 2026. Meanwhile, Washington might more actively engage China on [bilateral risk reduction efforts or through multilateral forums](#), such as the P5 Process, to ensure there is always a “human in the loop” in nuclear decisionmaking and launch command. A trilateral version of a warhead ceiling treaty might be an option in the early 2030s if China’s arsenal continues to grow as [expected](#). At the other end of the spectrum might be informal agreements, such as a trilateral commitment to refrain from cyberattacks on each other’s nuclear command and control, along with specific critical infrastructure targets. To reduce risks of crisis outbreak and escalation, nonnuclear opportunities for arms control could draw on lessons learned from the war in Ukraine, such as how risk reduction measures did or did not manage escalation, or building guardrails to slow the pace of future crises, such as “rules of the road” in contested geographical regions or poorly regulated domains like the information ecosystem.

Arms control will need to remain a tool of simultaneous competition and cooperation in the era of deterring two peer competitors. This presents numerous challenges for U.S. policymakers, who have to determine what the priority for arms control should be, whether to engage Russia and China individually or separately, and how to structure future agreements. The original principles of arms control—preventing war, managing competition, and maintaining flexibility—can continue to guide such efforts, but should be revisited and updated to reflect lessons learned from the ongoing war in Ukraine, along with the changing technological and geopolitical landscape. Integrated arms control, working in tandem with integrated deterrence, is the best way forward, albeit a challenging one. ■

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