# FACING THE COMING ARMS CONTROL INTERREGNUM

**Workshop Summary** 

August 9-10, 2022

Center for Global Security Research
LAWRENCE LIVERMORE NATIONAL LABORATORY

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On August 9-10, 2022, the Center for Global Security Research (CGSR) at Lawrence Livermore National Laboratory (LLNL) hosted a workshop titled "Facing the Arms Control Interregnum." The workshop explored the anticipated competitive environment between the United States, Russia, and China which could emerge if the New START Treaty expires in February 2026 without a replacement strategic arms control agreement. Panels were grouped into two broad themes — the anticipated and potential trajectories of the major powers in this unconstrained environment, and the broader risks and damages that might result from these trajectories. The concluding panel and discussion focused on how best to anticipate, prepare for, and potentially manage these expected risks.

The workshop highlighted: 1) Competition is likely given the dynamics and the players, but each of the major powers has very different capacities to compete in an unconstrained environment; 2) The United States must get its thinking straight in several key areas, primarily how it should compete in this environment with a better positioned Russia and China led by personalist authoritarian leaders bent on changing the establishing global order; and, 3) Arms control needs to be re-focused and re-branded for this coming interregnum, with concentrations on identifying concrete problems that can be solved by mutually agreed solutions, determining where and how to incentivize or push Russia and China to participate in future arms control, and preparing to compete from a position of strength should competitors reject cooperative proposals.

Discussion was guided by the following key questions:

- What new forms of competition are possible? Likely?
- What should be done to better prepare?
- How long might the interregnum last? How and why might it end?

#### Key take-aways:

 An interregnum is defined as "a lapse or pause in a continuous series." If the continuous series of US-Russian arms control measures comes to an end in February 2026, the ensuing gap could be short or long. Many believe that the gap will last precisely as long

<sup>&</sup>lt;sup>1</sup> The views and opinions of author expressed herein do not necessarily state or reflect those of the United States government or Lawrence Livermore National Security, LLC, and shall not be used for advertising or product endorsement purposes.

as Presidents Putin and Xi remain in power, given their deep opposition to the existing rules-based order, sense of vulnerability to US power, and inherent skepticism of legal agreements governing the use and composition of their militaries. Others believe that there is a reasonable chance that Putin and Xi are pursuing "peace through strength" strategies to build leverage for an eventual return to the negotiating table.

- Expectations about how long the interregnum might last will shape the responses of the US, Russia, and China to the new circumstances. If the gap is expected to be short, as in 2010 (as the two parties sorted out the final details of a new deal with clear political support in both Washington and Moscow), then the interregnum will be a transition period to be weathered. But if there is no convergence, no negotiation, and no expectation of success, all are likely to adapt in significant ways to the expectation of unconstrained strategic competition by the others.
- The principal danger in the interregnum is that new forms of competition for strategic
  advantage will emerge, both nuclear (as states seek perceived quantitative or qualitative
  advantages in their force structures) and non-nuclear (as an intensification of nuclear
  competition reinforces intentions to compete for advantage in other domains such as
  cyber space, outer space, etc.).
  - In an unconstrained context, Russia will be well positioned to continue to adapt and to increase its nuclear forces given its active nuclear weapons complex. The scale of potential future growth is suggested by the scale of past production—as Russia has replaced most of its nuclear forces over the last decade, it could presumably roughly double its force in the decade ahead. But a substantial nuclear modernization would come at the expense of repairs to Russia's general purpose military forces—an obvious priority now for Moscow in the wake of its disastrous invasion of Ukraine.
  - China's "strategic breakout" raises significant questions about the scale, speed, and ultimate purpose of its nuclear build-up, particularly given the perceived lack of constraints. The common US assumption that China seeks parity with the US contrasts sharply with the absence in China of any discussion of parity or the value of being a nuclear peer to the US. Instead, Western experts are left to wonder what Xi's vision of a future China "at the center of the world stage, in the dominant position," might mean for China's future nuclear posture.
  - Given the state of its modernization cycle and nuclear complex, the US is less well
    positioned to compete in an unconstrained environment. It has some capability to
    upload warheads, reconvert launchers, and better utilize the heavy bomber force.
    But whatever arms control constraints it may or may not face in the decade ahead,
    the US nuclear posture of 2036 will be essentially the same posture as in 2026.
    Between 2036 and 2046, it might be adapted in some significant ways.
- The key risks in this context are that (1) Russia and China will keep warm production lines going, (2) China will follow Russia in developing "a nuclear scalpel for every military problem" at the regional level of war, and (3) the US will be unable or unwilling to

compete effectively in an unconstrained environment. The likely result is that the balance of strategic advantage shifts further and dangerously (by fostering the perception of advantages in Moscow and Beijing and thus motivating new probing and risk taking by Presidents Putin and Xi). The key risks for Russia and China are that their actions will motivate the US to overcome internal obstacles and take competition seriously, with the result that they face a stronger and more resolute US and a new division of deterrence labor between the US and its allies that strengthens US alliances.

- This competition will likely have far-reaching consequences for cooperative arms control
  and non-proliferation efforts. It would likely further erode strategic stability among the
  three (US, Russia, and China). It will inhibit dialogue and negotiations on possible
  guardrails. It would also undermine the broader multilateral treaty system, with
  competitive and spoiler dynamics impacting nuclear and non-nuclear mechanisms alike.
- To avoid these anticipated dangers and risks, the best course is to avoid the interregnum. The starting point is not, however, dialogue with Moscow. The starting point is getting US thinking straight. Arms control strategy must be grounded in a sound understanding of the new strategic environment and its particular nuclear risks. Russian leaders have defined "a new strategic equation" that encompasses all of the technical factors bearing on their assessment of strategic stability. They have also linked arms control in Europe with resolution of their grievances about a long list of "unacceptable conditions" in the European security order. The US response appears to have been an a la carte approach, which the Russians have rejected.
- US arms control strategy must also anticipate the failure to escape the gap and the uncertainty that will come with New START expiration in 2026. The US and its allies should thus enter the interregnum with a political strategy for exiting the interregnum. That is, they should have a set of concrete proposals for agreed political and military measures in Europe, Asia, and trilaterally that can credibly be defended as in the interests of all of the stakeholders, including Russia and China. They must be prepared to do more than say no to the agendas of Moscow and Beijing. They must clearly outline and demonstrate the competitive downsides to Russia and China of not agreeing to these cooperative proposals.
- These competitive downsides are grounded in the US ability to compete, one which is in urgent need of repair. This is a problem of both capability and capacity, largely in the nuclear weapons complex. The changes needed are as much cultural as fiscal. Risk acceptance must be recalibrated. Change agents must be empowered. Sustained leadership focus is required. In setting out a more competitive approach, the US should address the ambiguity that now exists about whether and why it intends to compete. It should affirm that it seeks a strategic posture that is "second to none." The US sees no practical political or military benefit in nuclear supremacy. It also rejects ceding supremacy to another power. "Second to none" requires competing to maintain US strategic advantages and to deny Russia and China new strategic advantages. The US should also be prepared to compete even more aggressively if Russia and/or China choose to do so.

- By being prepared to compete, the US reduces the likelihood of actually having to do so. Such preparations are a way of signaling national resolve to defend our interests. They help to disabuse adversary leaders of any mistaken ideas they may have adopted about that resolve. If the preparations to compete fail to do so, then some period of competition should have some salutary effect in this regard. Not least, it would create leverage that does not presently exist for Russia and China to join in new arms control measures (a.k.a. bargaining chips). The resulting arms races involve both costs and risks of arms races that the US should seek to avoid; but the US should also understand that those costs and risks must be compared with the costs and risks of a war born of the miscalculation of US resolve.
- In this new strategic environment, the US should re-assess the measure of strategic selfrestraint it exercises in the name of nuclear order and stability. In the 25 years between the end of the Cold War and Russia's military-backed annexation of Crimea, the US adopted many practices aimed at encouraging reciprocal nuclear restraint by others. These include the nuclear test moratorium and effective end (until recently) to nuclear modernization, the commitments to homeland missile defenses scaled against only limited strikes and to conventional precision strike capabilities for only "niche" purposes, the rejection of the weaponization of outer space, and, for a long period, the reluctance to engage in cyber offense. Retrospectively, some of this restraint paid dividends; much of it did not. In the new strategic environment, the strategic benefits of restraint are less clear while its costs are increasingly clear. Experts in Moscow and Beijing often see such self-restraint as confirmatory proof of American decline and retreat. Experts in allied capitals sometimes interpret such reluctance as symptomatic of an American that has grown too timid and thus as a signal of future US de-coupling in time of crisis and war. The US needs a discussion from first principles of how much self-restraint serves its interests in strategic stability in the current environment.

## Panel 1: Russia Without Constraints: Alternative Trajectories

- What is the baseline trajectory of Russian nuclear forces to 2036?
- What possible departures are plausible? Implausible? Why?
- What other potential developments in Russia's strategic posture might be consequential for the U.S. and its allies?

Russia's baseline trajectory out to 2036 regarding its strategic forces is relatively clear, with this clarity provided by two key factors. First, Russia is well into the strategic modernization program begun almost two decades ago. Most of its Soviet legacy forces (SS-18/SS-19/SS-25 ICBMs, DELTA III and IV SSBNs) now have been replaced by newly produced Russian systems (SS-27/RS-24/SS-29 ICBMs and BOREY SSBNs). Second, New START's transparency and verification regime has provided data on this modernization program as it proceeded. Between now and 2036, Russia will finalize this strategic modernization and develop and deploy (as necessary given political and military requirements and as possible given technical difficulties) its so-called novel systems in likely a niche capability. In a post New START world, Russia would likely utilize its robust nuclear warhead production complex to upload its strategic delivery systems, which have a built-in flexibility to accommodate such upload potential, and potentially build more launchers and missiles to augment its traditional strategic triad.

The trajectory of Russia's currently unconstrained non-strategic nuclear forces is also well understood. Russia has many dual-capable non-strategic systems. It has many types of warheads to deploy on these systems. Russia's doctrinal emphasis and perceived military necessity to maintain both the systems and the warheads is expected to continue. A reliance already seen as excessive and dangerous by many Western observers could further grow during this period.

There is some debate about Russia's future thinking on nuclear weapons given the disastrous performance of its general purpose forces in the war in Ukraine. Many argue that Russia will "double down" on nuclear weapons; it cannot afford to do otherwise given the conventional weakness displayed to the world on the battlefield. The question is whether this doubling down will involve simply doctrinal changes such as further lowering the nuclear threshold or an increased expenditure of resources to expand its nuclear forces beyond the current strategic modernization program.

Departures from these anticipated trajectories depend largely on Putin's mindset and expected Russian resource scarcities post-Ukraine. Political will may exist in the Kremlin to build more in an unconstrained world, but Russia will have to balance resource expenditures between expanding its strategic and non-strategic nuclear arsenals to parity in delivery systems, constructing more military facilities, overcoming technical challenges to build sizeable numbers of novel systems, and rebuilding its shattered conventional forces. This balance will under the constraints of likely long-term economic sanctions on its domestic economy and military procurement.

In an unconstrained world, the United States will likely face "numerical asymmetries across the board in nuclear systems" vis-à-vis Russia. A question remains whether these asymmetries — which have long been in existence outside of New START constrained systems — matter either politically or militarily for the United States and its allies enough to change the current equation

of arms control erosion and stalemate with Russia. Without investments and leverage, the United States lacks the leverage or bargaining chips to incentivize Russia to place constraints on nuclear forces increasingly likely to be seen as vital to its security and its regime survival. During the Cold War, arms control emerged several years after deep downturns in the bilateral relationship (e.g., after the 1968 crushing of the Prague Spring and the 1979 Soviet invasion of Afghanistan). While some participants noted that the gap between New START and the next agreement may not be a long as anticipated, the key question is whether President Putin given his calcified mindset sees any value in sitting down to the negotiating table.

#### Panel 2: China Without Constraints: Alternative Trajectories

- What is the baseline trajectory of Chinese nuclear forces to 2036?
- What possible departures are plausible? Implausible? Why?
- What other potential developments in China's strategic posture might be consequential for the U.S. and its allies?

In contrast to Russia, China's baseline trajectory is much harder to anticipate out to 2036 with more departures possible from today's still murky starting point. The unclassified signposts indicate that China's nuclear forces will improve in multiple areas simultaneously between now and 2030 and beyond. Looking qualitatively and quantitatively, it will be a larger, more diverse, and more sophisticated strategic nuclear force. It will be augmented and enhanced by a variety of emerging non-nuclear systems as well as an expanded theater-range set of nuclear capabilities.

Central to the question of where China is going is understanding why it has undertaken its recent significant nuclear force expansion. Here the capabilities are displayed on commercial imagery, but the intent remains unclear as China has not openly explained or discussed the reasons for this sudden growth in its capabilities. Discussion at the workshop ranged between the various military purposes for such an expansion based on Chinese assessments of U.S. capabilities and the desire for a more secure retaliatory capability. More interesting however was the discussion of political motivations for such an expansion. Xi's vision of a future China is one "at the center of the world stage, in the dominant position," and it remains uncertain where China's nuclear forces fit into this vision. Numbers and parity (or even superiority) may be a political driver for this vision. Like any politician, Xi wants to show domestic and international audiences that things are being done on his watch in accordance with his instructions, with silo construction potentially being the fastest or cheapest manner to achieve such numbers independent of military utility. Alternatively, a dominant position could simply be achieved by a more sizeable and diverse set of nuclear capabilities, similar to Russia's "nuclear scalpel for every problem" approach to theater and strategic deterrence.

Whereas Russia's nuclear force disparities are largely baked into analyses about the current set of geopolitical problems, China's new and emerging nuclear capabilities present a host of new developments which the U.S. and its allies must examine. China will have increased options in a regional conflict – for signalling, for coercion, and for warfighting – all of which have implications for U.S. extended deterrence. There are increased risks of inadvertent escalation and entanglement as China increases its dual-capable forces, although China may unhelpfully view these as useful in self-deterring the United States. This expansion also should have a marked

impact on China's long-standing arms control and non-proliferation narrative that it is a smaller nuclear power and a helpful actor in this multilateral space. With its sudden force expansion, China has not put forward a new narrative to replace its now outdated one. It can no longer claim based on most understood metrics to be a "responsible nuclear power," and it should face growing pressures from the disconnect between its growing arsenal and its refusal to engage in arms control or strategic stability discussions.

Another key point of discussion was constraints, as these impact the potential trajectories and departures China could and will pursue. In the Chinese case, what is notable is the absence of constraints. The nuclear complex, industrial capacity, and military spending can all support major force increases. The political will likewise seems to want to build up, but Xi's near-term and long-term objectives vis-à-vis Chinese nuclear forces remain a mystery. As one participant noted, it is always difficult to predict the impact of a particular leader on military force decisions. U.S. assessments of where Chinese nuclear forces will be numerically have been revised upward numerous times in recent memory. Lacking constraints, these surprises are likely to continue, and China's force expansion could go well beyond most reasonable estimates.

# Panel 3: The United States Without Constraints: Alternative Trajectories

- What is the baseline trajectory of U.S. nuclear forces to 2036?
- What possible departures are plausible? Implausible? Why?
- What other potential developments in the U.S. strategic posture might be consequential for Russia and China?

The baseline trajectory for U.S. nuclear forces between now and 2036 is largely shaped by the lack of flexibility in the nuclear modernization program of record. The U.S. nuclear complex and defense industrial base will be stretched to capacity to execute the current plan, and domestic political debates and longstanding bureaucratic statis likely mean that significant changes cannot be envisioned for foreseeable future. Simply put, the United States lacks the capacity to ramp up production like Russia and China in an unconstrained world.

This does not however mean that the United States lacks options. Some options are more plausible. The United States maintains a large reserve of warheads in the stockpile and has hundreds of "hooks" in which to place these warheads on ICBMs and SLBMs should the decision be made to upload existing systems. Additional ICBMs can be placed in silos currently empty due to New START limits. Launchers that have been rendered incapable of employing nuclear armaments to meet New START limits can be reconverted<sup>2</sup> to a nuclear role. Heavy bombers, long subject to artificial arms control counting rules, also represented a point of force expansion as the U.S. produces its Long-Range Stand Off (LRSO) cruise missile. The nuclear-armed sealaunched cruise missile (SLCM-N), if funded and executed, could begin coming into the arsenal mid/late next decade. Less plausible options include keeping Ohio-class SSBNs in the force, increasing warhead production rates, expanding theater nuclear forces, building new bases and

<sup>&</sup>lt;sup>2</sup> As explained in detail in the New START Treaty and the U.S. Article-by-Article Analysis, the text of the Treaty does not specify that such conversions needed to be done in an irreversible manner, only that they render the launcher incapable of employing nuclear armaments.

infrastructure, and developing a mobile ICBM capability. These plausible and less plausible options provide different levels of U.S. nuclear forces during this interregnum, although more analysis is needed on technical and operational challenges and tradeoffs between options.

The United States is fully aware of its constraints; the challenge is attempting to overcome them after decades of a lack of attention and a business-as-usual approach to the nuclear mission. The hedge must be reconceived from an emergency stockpile to a useable ready reserve capable of rapid movement into the operational force. NNSA infrastructure, sized for a New START force, must now be resized for something likely larger. Domestic political consensus and modernization funding need to be sustained. The services need to think through now potential changes to operations. Technical challenges likewise need to be analyzed and overcome.

The United States can actively compete in an unconstrained environment, but the nuclear element of this competition will require time and attention over the next ten to fifteen years to be at the level of Russia and China. In the meantime, the United States can impact dynamics in non-nuclear areas by pursuing capabilities outside of strategic nuclear forces in the form of missile defenses, conventional strike, hypersonics, cyber, space, and theater nuclear forces. Preparations and hard thinking now will ensure the United States is better prepared for likely future trends based on the trajectories of Russia and China.

# Panel 4: Calibrating the Risks of Intensifying Nuclear Competition

- Are bipolar or multipolar nuclear arms races likely? Why? Why not?
- What other forms of military competition would most affect the interests of the U.S. and its allies? Are these likely?

Participants agreed that competitive nuclear dynamics would likely intensify during an interregnum, as they will in non-nuclear dimensions across the board. "Arms racing," however, may not be the best term to describe these competitive dynamics, as it has come to be a pejorative suggesting wasteful spending, a lack of strategic thinking, and a process that has escaped the reins of rational policymaking. "Arms competition" may be a better term, despite the lack of examples in the past of such multi-sided competitions and how they were resolved using cooperative means. Based on the academic literature on arms racing, spiral models suggested back and forth dynamics in an environment of imperfect information and both sides defensively move to increase their security. Deterrence models in contrast feature status quo and revisionist powers seeking to maintain or upset the current balance of power respectively. Regardless of the model, Russia is already heavily reliant on its nuclear forces and will likely double down on this reliance after the conventional weaknesses on open display in Ukraine. It is fully capable of "racing." While China's motives are unclear, a larger nuclear force is likely intended for a larger nuclear role. The larger role could be political or military in nature, with different implications for U.S. and allied interests depending on whether these forces are intended for coercion, intimidation, or warfighting. It likewise is fully willing and able to race.

Triadic dynamics are unsurprisingly more complex than dyadic dynamics. The US expert community has a historical background in the US-Soviet competition, but much of the lessons from the past must be resurfaced, relearned, and revised for the new circumstances. US experts are just beginning to unpack the complexities of China's sudden nuclear expansion and the

cooperative dynamics between Russia and China that can range across a spectrum from opportunism to full alliance. Competition is expected to dominate, as each of the three main actors would likely continue in the absence of dialogue and mutually agreed restraints to assume the worst about the intentions and capabilities of the others and design their military forces accordingly.

More impactful to the participants however was not the *numbers* of participants in the system but the *types* of participants in the system. A deep topic of conversation was whether the United States had a Russia-China problem or a Putin-Xi problem in the interregnum, that is whether competitive dynamics would continue regardless of leadership or whether the regimes of Putin and Xi posed particular problems for competition. Both are long-tenured, increasingly personalist authoritarians. Both have mindsets of revisionist powers who believe they are entitled to a sphere of influence, they are bringing their states back to a point of assessed historical greatness on the world stage, and they are entitled to do so for the humiliation they endured at the hands of the United States or the West in the recent or distant past. They believe these ends can be achieved by military means, primarily by changing conditions by force at the regional level. The question is whether these mindsets and means would endure beyond these individual leaders: are they systemic in Russia and China, or the product of the experiences of these two leaders?

Given these dynamics and players, the United States will have to make a conscious decision to shift from its current comfortable stasis, or risk falling behind and being forced into action by a political or military shock to the system. Many of the impediments to competition in the United States are self-imposed restraints rather than externally imposed constraints. Allies have grown increasingly nervous by U.S. self-deterrence, exemplified by muted responses to shattering of norms (such as the recent Russian kinetic ASAT test) and willingness to postpone routine U.S. missile flight tests over anticipated Russian and Chinese concerns. One frequent talking point was that Russia and China have been racing, and the U.S. has not. Russia and China are decades into their modernization plans and are thus well positioned for an unconstrained world. The United States is just beginning its modernization plan and is poorly positioned; it should no longer have to negotiate within its own system over what is potentially doable to compete. Russia and China will likely set the pace, but second and third order effects outside the two-peer environment will also drive U.S. force decisions (e.g. Iran and North Korea) as will the competitive landscape in non-nuclear and emerging technologies. Success for the US and its allies means taking care of the quiet things: maintaining economic strength, investing in foundational scientists, and empowering security contributors. New coalitions and partnerships must be built to represent collective capabilities and burdensharing in the current and anticipated security environment.

# Panel 5: Calibrating the Damage to the Multilateral Treaty Regime

- What impact might competition and confrontation among the major powers have on the multilateral treaty regime?
- How will Russia's assault on norms, arms control and otherwise, affect the functioning of the UN Security Council in its arms control enforcement role?

The multilateral treaty regime across the board has been impacted by competition and confrontation among the major powers. This has long been the case in conventional arms control, as Russian obstreperous behavior has led to the collapse of the Conventional Forces in Europe Agreement and the Open Skies Treaty and the hobbling of the Organization for Security and Co-operation in Europe (OSCE). Simply put, Putin does not like being restrained in how he can deploy and move his conventional forces. Fresh thinking on regional conventional arms control regimes is needed as the frictions are clearly there, but a negotiation with Russia appears unlikely given Putin's perceptions. China has long attempted to portray itself as a good actor in arms control, but it has no experience (and likely no interest) in conventional arms control. While China portrays itself in a favorable light in regimes like the Nuclear Non-Proliferation Treaty (NPT) and the Comprehensive Nuclear-Test-Ban Treaty (CTBT), it is increasingly throwing its weight around in the Antarctic Treaty, putting on display how it also can be a disruptive spoiler in multilateral fora.

One of the most visible examples of these dynamics of competition and confrontation is Russian behavior at the Biological Weapons Conventional (BWC) and Chemical Weapons Convention (CWC). Given the vastly different treaty regimes, Russian approaches have been both similar and different. In both cases, Russian officials have relied on misinformation and disinformation to confuse the narrative, whether by spreading accusations of U.S. biological weapons labs in Ukraine or presenting invented counter narratives over chemical weapons use in Syria. Russian officials are also very capable of using Treaty process and protocol to serve their ends, whether outright subversion of the treaty regime or the slowrolling of collaboration and enforcement mechanisms. The Russian regime has also demonstrated a repeated willingness to go outside of treaty restraints if it suits them, aware that there is little cost or punishment from the international community for these actions. As the BWC lacks a verification standard, the Russians could simply choose to withdraw, citing fabricated allegations against the United States as their justification. In the CWC, where there is an extensive and detailed verification mechanism, Syria came as a shock to many who assumed the problem of chemical weapons was largely solved. Here the Russians can continue to try and hobble verification and enforcement efforts when it suits their interests.

This erosion has cascading implications, many of which have been visible for years but are now beginning to accelerate as competitive dynamics increase. There are already many fence sitters internationally who see the erosion as a product of an East-West Cold War 2.0 that does not involve or concern them, and thus these states are content to not speak up or take sides in a confusing conversation over treaties and norms that are beyond their bureaucratic capacity. At the United Nations, it is difficult to envision consensus on anything, not simply arms control and non-proliferation, given the dynamics between the United States, Russia, and China. This lack of consensus will lead to a lack of enforcement, on Russian and Chinese actions but additionally on the actions of other states who break agreements and norms (e.g., Syria, North Korea, Iran). The lack of corrective actions could further embolden states to ignore long-established agreements and norms and disillusion many states who place faith in international agreements to establish norms and maintain order. Looking pessimistically, this could lead to the collapse of remaining legally binding agreements and the prevention of any politically binding agreements in their place; more optimistically, it could lead to the pursuit and use of other mechanisms, formal and informal, to serve these purposes.

## Panel 6: Managing Risks

- What, if anything, can the U.S. and its allies do now to reduce the dangerous consequences of an interregnum?
- Should new arms control institutions and mechanisms be created as work-arounds to institutions paralyzed by major power rivalry?
- What first principles and U.S. national security priorities should guide strategy development through the uncertain period ahead?

Despite the expected competitive dynamics, there are a host of steps which can be taken now to prepare for this anticipated security environment. The war in Ukraine has already provided NATO states and other allies some guideposts for what transformation and unity look like in this expected environment. Many of these guideposts are based in a return to arms control first principles, beginning with explaining the linkage with deterrence and the prevailing security environment to experts, legislatures, and domestic publics. Arms control policy should be grounded in an understanding what exactly we want to achieve (e.g., reduce surprise, enhance stability, adopt to a tripolar world) and what an exit strategy from the interregnum would look like. The delicate points in the system must be identified where arms control could provide a solution. Someone must task the homework and grade the homework as arms control mechanisms are discussed and considered. There needs to be trust in the system – comprised of the data, the interlocutors, and the agreements – and a recognition that compromises are inevitable. If agreements are no longer working, they should be discarded or otherwise risk spreading infection to things that are working. New partners need to be brought into nuclear and strategic stability discussions, while new technologies need to be developed for future potential arms control regimes. All of this must be done in a competitive information environment, where active steps need to be taken constantly to maintain the moral high ground, push back on false information, publish intelligence information, and remain unified.

One of the principal risks is the new forms of danger that might occur and spill over into U.S. allies and partners, a risk heightened by a U.S. unwillingness to compete. One line was that the Americans appear more worried about their own nuclear weapons than those of Russia and China, and act accordingly to the worry of regional allies. Restraint worked well in the Deterrence 2.0 environment; it does not appear to be a viable strategy with these players in the Deterrence 3.0 environment. These new forms of danger include: the warm nuclear complexes in Russia and China, both of which provide options for further expansion; a Chinese theater nuclear force designed around Russian lines ("a nuclear scalpel for every problem"); a U.S. inability or unwillingness to compete that will continue to unfavorably shift the balance; continued Russian and Chinese provocations and probes; and, another cycle of disinvestment in U.S. capabilities and strategic thinking for this problem set. The United States needs not only to repair its ability to compete, but it must also define the objective for which it is competing (supremacy? stability? second to none?)

Given the problems in the existing agreements and mechanisms, workarounds appear enticing as grassroots movements could bypass political obstacles. These workarounds present dangers

as well however, as these would impact Western democracies far more than authoritarian competitors and could be taken for signs of division and weakness as they were in the 1930s.

Arms control is in urgent need of a rebranding, as the term to many appears as an outdated mechanism for bipolar Cold War nuclear competitions and at worse conjures up negative images of one-sided deals and capitulation for the sake of any agreement with authoritarian regimes. Arms control is also in need of a plan. The interregnum is likely to continue simply because the United States cannot negotiate with Russia and China under these leaders. They see no upsides to negotiating or downsides to not negotiating. Putin and Xi think they know everything they need to know, and thus find transparency and stability unappealing as organizing concepts. The United States has to develop concrete proposals that appear on the surface at least to be mutually beneficial to all players. The flip side of that coin is that the United States must have a demonstrated willingness and capability to pursue things that will negatively impact Moscow and Beijing's security calculations should they not engage in arms control.

There are likely points that can be uncovered in an interregnum where arms control could stabilize things at a new level, and these points likely lie in further comparative analysis of U.S., Russian, and Chinese nuclear modernization plans and departures. The key to establishing these new equilibrium points where some lessening of the competition could result is to clearly demonstrate that at certain points the United States has the upper hand and that further racing is simply added costs without advantages.



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