



ON 'GREAT POWER COMPETITION'

NUCLEAR RISK REDUCTION POLICY BRIEF NO. 1

ANKIT PANDA

HIGHLIGHTS

- Reducing the risk of nuclear-weapon use linked to strategic competition involving the United States, the Russian Federation, and China requires addressing mistrust among these States.
- Revitalizing bilateral strategic dialogues can strengthen mutual understanding, which is a prerequisite to more concrete arms control and disarmament activity.
- Confidence-building and transparency efforts in the nuclear sphere should incorporate systematic consideration of non-nuclear and cross-domain issues that can drive escalation possibilities, and involve engagement with non-nuclear weapon States.

CONTEXT

The post-Cold War 'unipolar moment', marked by the geopolitical dominance of the United States, has given way to an era of contestation. The competitive multipolar dynamic between the United States, the Russian Federation, and China in particular is contributing to greater volatility in relations between these 'great powers' as well as broader international relations, as it complicates multilateral global governance. The lessened predictability of the situation, accompanied by a paucity of means to regulate the relations of those States or to allow effective communication including in crisis, means there is greater risk of nuclear-weapon use. This brief outlines some of the risk drivers, discusses regional implications, and suggests measures in support of nuclear risk reduction.

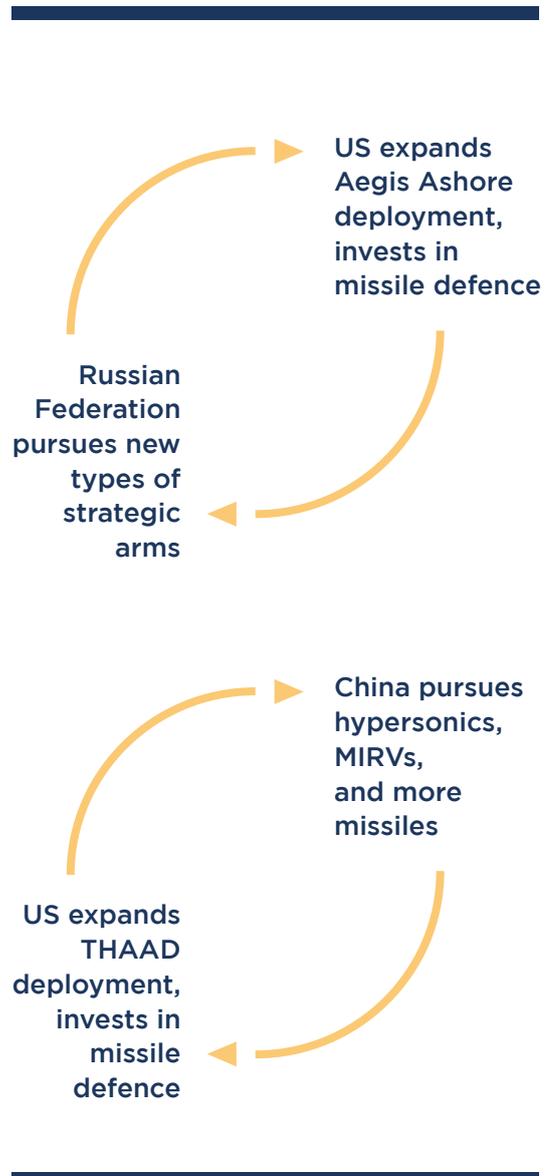
COMPETITION AND NUCLEAR RISK

Strategic Mistrust

Deepening mistrust characterizes readings of others' nuclear doctrines and intentions among some nuclear-armed States. China and the Russian Federation accuse the United States of expanding the role for nuclear weapons in national defence. The United States accuses China and the Russian Federation of "catalyzing a new nuclear arms race".¹ Bilateral dialogues have had limited success in assuaging respective concerns about their nuclear doctrines, while trilateral processes of dialogue are absent except in the context of broader discussions among the 'P5'—the five NPT nuclear-weapon States. As a result, nuclear posture planning and thinking on deterrence are being built upon perceptions of rivals' intentions that may not be accurate. In a crisis, misperception can drive inadvertent escalation. Misperception may also fuel arms-racing behaviour that can in itself heighten the risk of crisis.

Technology Races

Investments in certain critical technologies (see Policy Brief No. 2) are driving action-reaction dynamics in this 'great power competition'. For instance, the Russian Federation is developing a range of new strategic weapons to counter US missile defences.² China, claiming that its response to US missile defence developments would "definitely not stay on words only", has tested new types of missiles.³ The United States for its part cites Chinese and Russian arsenals in its efforts to "deter and counter these rapidly advancing regional offensive missile capabilities", including by investing in missile defences, fuelling the cycle.⁴



¹ C.A. Ford, *US Priorities for "Next-Generation Arms Control"*, Arms Control and International Security Papers, vol. 1, no. 1, April 2020, <https://www.state.gov/wp-content/uploads/2020/04/T-paper-series-1-Arms-Control-2.pdf>.

² E. Gomez, "Russia Claims Its New Nuclear Weapons Are a Response to U.S. Missile Defense", *The National Interest*, 15 March 2020, <https://nationalinterest.org/blog/buzz/russia-claims-its-new-nuclear-weapons-are-response-us-missile-defense-132747>.

³ Defense Ministry's Regular Press Conference on March 30, China Military, 31 March 2017, eng.mod.gov.cn/Press/2017-03/31/content_4777097.htm.

⁴ *Missile Defense Review 2019*, Office of the Secretary of Defense, <https://media.defense.gov/2019/Jan/17/2002080666/-1/-1/1/2019-MISSILE-DEFENSE-REVIEW.PDF>.

“Nuclear posture planning and thinking on deterrence are being built upon perceptions of rivals’ intentions that may not be accurate.”



Missile Defense Agency

Demise of Arms Control

Mutual suspicions heighten the perception that forms of self-restraint such as legally binding arms control agreements have unacceptable security costs. The US withdrawal from the INF Treaty in 2019 appeared predicated both on concerns about a Russian missile system that it alleged violated the Treaty and on strategic competition with China. Washington is also examining whether to extend New START through the prism of a trilateral competitive dynamic. Yet predictability and stability in the US–Russian relationship will suffer without a bilateral structure that allows each side to address specific concerns about the other’s capabilities. Fewer constraints on US and Russian capabilities will also impact strategic planning in China and elsewhere.⁵ States may also be more prone to crises linked to misperception or misunderstanding in the absence of the transparency, verification, and confidence-building linked to arms control, an activity historically powered by the Russian–US process.

⁵ L. Xuanzun, “China Urged to Expand Nuclear Arsenal to Deter US Warmongers”, Global Times, 8 May 2020, <https://www.globaltimes.cn/content/1187775.shtml>.

Estimated Nuclear Weapons Stockpiles



Source for world nuclear forces: SIPRI Yearbook 2020 (all figures approximate)

REGIONAL IMPLICATIONS

Great power competition and mistrust have intensified some regional security dilemmas involving other nuclear-armed or nuclear-allied States. For instance, growth in China’s nuclear and related capabilities, linked to strategic competition with the United States, has ramifications for **Southern Asia**. India relies on a policy of credible minimum deterrence but may feel the need to size its force to deter China, even if it exacerbates perceptions of threat on the part of Pakistan. Risk of nuclear use has long loomed over crisis situations in the region, most recently in Balakot in 2019, especially as some in Pakistan harbour doubts as to India’s commitment to ‘no first use’.⁶

At times, regional tensions have fed back into great power security dynamics. Moves by the United States and its allies to deter the Democratic People’s Republic of Korea in **Northeast Asia** have affected Russian and Chinese perceptions. China has concerns that the X-band radar accompanying a THAAD battery deployed in the Republic of Korea (in response to capabilities of the Democratic People’s Republic of Korea) might be able to cue US homeland missile defences, posing a threat to the effectiveness of China’s strategic nuclear deterrent against the United States. This has driven increased cooperation between the Russian Federation and China, including a joint anti-ballistic missile defence computer simulation exercise.

US-Russia Arms Control Under Fire



ABM TREATY
2002: US WITHDRAWS



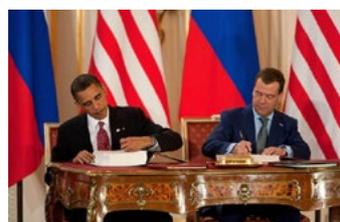
CFE TREATY
2015: RUSSIA ENDS
ACTIVITIES



INF TREATY
2019: US WITHDRAWS



OPEN SKIES TREATY
2020: US ANNOUNCES
INTENT TO WITHDRAW



NEW START
DUE TO EXPIRE IN 2021

⁶ Pakistan Army Green Book 2020, Pakistan Army General Headquarters, Rawalpindi, February 2020, <https://ndu.edu.pk/downloads/Green-Book-2020-Final-06-Feb-2020.pdf>.

⁷ A. Panda, “THAAD and China’s Nuclear Second-Strike Capability”, *The Diplomat*, 8 March 2017, <https://thediplomat.com/2017/03/thaad-and-chinas-nuclear-second-strike-capability/>.

RECOMMENDATIONS

Extend New START

The New START agreement expires in February 2021. The Russian Federation offered to extend the agreement unconditionally in December 2019 but it is not yet clear if the two sides will agree to do so—with or without conditions. A New START extension allows the United States and the Russian Federation to preserve a baseline of quantitative parity in their nuclear forces. While New START does not currently address some new systems, it offers a provision for parties to raise the question for consideration, providing a way to incorporate them in future agreements. This reflects the Treaty's potential as a forum for discussion and in addressing strategic mistrust. In contrast, the total erosion of verifiable limits on existing arsenals can worsen arms races dynamics—and can have cascading effects, for instance as potential (and now unimpeded) intercontinental ballistic missile launcher deployments in Asia alter the strategic calculus of other nuclear-armed States.

Enhance Bilateral Engagement

United States–Russian Federation. Outsized focus on aspects of specific arms control treaties (such as New START extension, or INF compliance) does not adequately capture the scope of Moscow and Washington's strategic agendas nor the fundamental perception gaps between them. Divergent statements on bilateral strategic security dialogues in 2019 and 2020 suggest a lack of mutual understanding on matters of strategic stability, and on issues ranging from doctrine to arms control concepts. US insistence that future arms control negotiations involve China should not preclude the United States and the Russian Federation tackling other arms-related matters of concern, including capabilities outside the jurisdiction of New START—such as non-strategic nuclear weapons. Dialogue could also help assuage anxieties on both sides..

United States–China. The United States extended a formal invitation to China in December 2019 for a strategic security dialogue on nuclear risk reduction and arms control. But as of August 2020, China had not accepted this offer. Meanwhile, a continued lack of Chinese transparency about its nuclear forces and related strategic capabilities complicates efforts for China and the United States to build strategic trust. Yet confidence-building between the two sides seems a prerequisite to more concrete efforts in the area of arms control. More promising policy options then may entail consultation on strategic stability issues, including in relevant domains such as space and cyber, through continued military-to-military contacts, and the resumption of broader discussions for mutual understanding such as the Diplomatic and Strategic Dialogue.

Explore Trilateral Possibilities

China's nuclear arsenal is widely believed to still be an order of magnitude smaller than those of the United States and the Russian Federation, but its nuclear forces have diversified in recent years. Both the Russian Federation and the United States have meanwhile continued to develop strategic capabilities that may affect stability. Each State should carefully consider the stakes and work to reach agreements to reduce uncertainties that otherwise feed into worst-case scenario planning and can drive misperception and miscalculation. Exploratory conversations to identify contours of future arrangements could help kickstart the process. After all, the two rounds of the Strategic Arms Limitation Talks between the United States and Soviet Union extended five and seven years; talks could rebuild trust and decelerate technology race dynamics. Such talks must account for asymmetries between the States—for example by focusing on deployments, systems of concern, and ratios. One Chinese scholar argued that trilateral negotiations involving China might be possible if they were “not about the number of weapons but strategic stability”.⁸

⁸ J. Fan, “Trilateral Negotiations on Arms Control? Not Time Yet”, *China-US Focus*, 13 September 2019, <https://www.chinausfocus.com/peace-security/trilateral-negotiations-on-arms-control-not-time-yet>.

SELECTED DOCTRINAL POINTS OF CONTENTION

How might the United States' clarification of the "extreme circumstances" that could warrant a nuclear response pose more questions than it answers? Its 2018 Nuclear Posture Review lists example targets of "significant non-nuclear strategic attack" but lacks clear definition or boundaries. This position raises concern that the scope for nuclear use has expanded, especially as the document elsewhere cites the need to "enhance the flexibility and range of its tailored deterrence option", including against regional aggression.⁹

How does the Russian Federation's denial of an 'escalate to de-escalate' strategy impact on the possibility for any pre-emptive or preventive nuclear use short of existential threat consid-

eration? Some argue its June 2020 document on nuclear deterrence raises further uncertainty as to its nuclear threshold by allowing for use against aggression that threatens its "sovereignty and territorial integrity"—including a conventional attack in a regional war.¹⁰

China's commitment to nuclear 'no first use' is treated with scepticism in some Western strategic circles, including by the head of US Strategic Command.¹¹ How does China's 'no first use' posture reconcile with apparent growth in its offensive nuclear capability, including through the pursuit of technologies like MIRVs and growth in nuclear forces and capabilities, and developments in its triad of air-, land-, and sea-based nuclear forces?

Expand Multilateral and International Processes to Reduce Nuclear Risk

Intensify the P5 Process. Over the last five years, the P5's members have convened annual meetings and consulted with each other on nuclear topics. They should move to improve transparency among themselves and with non-nuclear armed States—of both policy and process, for instance by regularizing dialogue with the Non-Proliferation and Disarmament Initiative. Continued discussion and parsing of doctrine and posture concerns might boost dyadic or triadic consultations. To continue facilitating "assessment of each other's strategic intentions", the P5 could expand their present focus on doctrines and nuclear policy following the 2020 NPT Review Conference (delayed due to COVID-19).¹² Discussion of respective nuclear modernization plans represents a possible way ahead.

Engage Relevant Parties. Regional entanglements underline the need to expand the reach of the risk reduction conversation. The notion of 'strategic risk reduction' adopted by the P5 can be one useful base. Regional and subregional dilemmas (which can be non-nuclear in nature) can lead to escalation at the

strategic level, something that requires more sustained attention among strategic policymakers. The US-led 'Creating an Environment for Nuclear Disarmament' initiative, which has developed a work plan with risk reduction as one of its agenda items and includes participation from eight of the nine nuclear-armed States, might be a potential forum for commencing such discussion. Continued engagement by other means, including with non-NPT nuclear-armed States, and at the military and technical levels, will be necessary.

Account for Non-Nuclear Triggers. Contemporary nuclear dynamics suggest the need for a multifaceted approach that includes consideration of non-nuclear issues that can drive nuclear escalation. Activities of particular concern include large-scale war planning and military exercises, the deployment of certain new military systems, and development of precision-strike strategic capabilities, including by non-nuclear weapon States. Confidence-building and transparency measures can help to prevent misunderstanding, for instance with the installation of military deconfliction lines, regular briefings on maritime exercises (e.g. through the NATO-Russia Council), or transparency and information exchange (e.g. the Vienna Document of the OSCE).

⁹ US Department of Defense, Nuclear Posture Review 2018, 2018, p. 12, 21, <https://media.defense.gov/2018/Feb/02/2001872886/-1/-/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>; Bureau of Arms Control, Verification and Compliance, Strengthening Deterrence and Reducing Nuclear Risks: The Supplemental Low-Yield US Submarine-Launched Warhead, Arms Control and International Security Papers, vol. 1, no. 4, 24 April 2020, <https://www.state.gov/wp-content/uploads/2020/04/T-Paper-Series-4-W76.pdf>.

¹⁰ N. Sokov, "Russia Clarifies its Nuclear Deterrence Policy", Vienna Center for Disarmament and Non-Proliferation, 3 June 2020, <https://vcdnp.org/russia-clarifies-its-nuclear-deterrence-policy/>.

¹¹ US Strategic Command and US Northern Command SASC Testimony, 13 February 2020, <https://www.stratcom.mil/Media/Speeches/Article/2086752/us-strategic-command-and-us-northern-command-sasc-testimony/>.

¹² Remarks by H. E. Ambassador Li Song on Nuclear Strategy and Nuclear Disarmament in the CD Informal Session, 15 May 2019, www.china-un.ch/eng/dbtyw/cjkk_1/cjthsm/t1663732.htm.

Acronyms

ABM	Anti-Ballistic Missile (Treaty)
CFE	(Treaty on) Conventional Armed Forces in Europe
INF	Intermediate-Range Nuclear Forces (Treaty)
MIRVs	multiple independently targetable re-entry vehicles
NATO	North Atlantic Treaty Organization
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
OSCE	Organization for Security and Cooperation in Europe
START	Strategic Arms Reduction Treaty
THAAD	Terminal High Altitude Area Defense

About this brief

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Note

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