CENTER FOR GLOBAL SECURITY RESEARCH

Lawrence Livermore National Laboratory

# Nuclear Order and Global Disorder

## Annotated Bibliography

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Center for Global Security Research
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Prepared By: Rupal Mehta, Candace Huntington, Tess Schmidt, Sarah Sobalvarro, and Abby Wilson[1]

**Key Questions:**

- What are the constituent elements of the international nuclear order?
- How have they been affected by growing disagreement about the international political order?
- What can be done to safeguard the nuclear order and to promote its continued peaceful evolution?
- What must be done to hedge against its catastrophic collapse, including via nuclear use?

**Panel Topics:**

1. The Contracting "Rules-Based" International ***Political*** Order
2. The Eroding International ***Nuclear*** Order
3. The Non-Proliferation Regime: In Transition or Collapse?
4. The Dynamic Balance of Power Between and Among the Nuclear Weapons States
5. The Tattered U.S. Nuclear Umbrella
6. Imagining Alternative Nuclear Futures
7. Toward a New Strategy for Nuclear Order
8. Questions and Challenges Facing the U.S.

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## **Panel 1:** The Contracting "Rules-Based" International *Political* Order

- Why is the order contracting? What do its opponents seek? What do we seek?
- How is it contracting?
- Can a contracted and contested international political order long survive?

1) Stefan Lehne, "The Rules-Based Order vs. the Defense of Democracy." Carnegie Endowment for International Peace (September 18, 2024). https://carnegieendowment.org/research/2024/09/rules-based-order-vs-the-defense-of-democracy?lang=en.

   Lehne argues that political frames are not just used as explanations for domestic policy initiatives but also as instruments of foreign policy. Political frames express an ambition to transform the international environment according to a state's desires or explain an initiative to protect the state's interests/values that might be under external threat. Further, Lehne argues that most western powers operate with two frames: a rules-based order and a defense of democracy. The rules-based order frame revolves around rallying a group of countries against an identified adversary. This has been recently used by western powers and countries in the Indo-Pacific to address rising security concerns pertaining to China. Additionally, the defense of democracy frame focuses on alerting domestic audiences to the challenges authoritarian states present and strengthening the bond with Western allies. Both ideals have been criticized by China and Russia, who see such frames are strategies propagated by Western powers to maintain hegemony. The author argues that to increase buy-in to such political frames, Western powers must reinforce their commitment to international order and preparedness, instead of seeking to transform the international system through an inclusive process.

2) Matthew Kroenig and Jeffrey Cimmino, "Strategic Context: The Rules-Based International System," Atlantic Council (December 16, 2020). https://www.atlanticcouncil.org/content-series/atlantic-council-strategy-paper-series/strategic-context-the-rules-based-international-system/.

   The authors argue that the rules-based international system has been helpful in forging peace, prosperity, and freedom across the international context but has come under increasing strain as autocratic states gain influence. A system founded on ideas of collaboration and cooperation between states has now come under attack due to regional tensions, unequal global economic integration, populist movements. Such pressures have highlighted weaknesses in the current order. As it stands, the United States plays a large role in setting the precedent for collaboration and cooperation but has recently adjusted the manner in which it participates in the system.

3) Leslie Vinjamuri, "The Fracturing of the U.S.-led Liberal International Order" in *Competing Visions of International Order*, Chatham House (March 27, 2025). https://www.chathamhouse.org/2025/03/competing-visions-international-order/01-fracturing-us-led-liberal-international-order

The liberal world order has prevailed since 1945 but has been faced with many doubters. As the principal architect of that order, the United States has also played a long-standing role in protecting it. However, China's increased influence, frustrations of countries in the Global South, and increased U.S. nationalist priorities have given rise to suggestions claiming the order is contracting. Vinjamuri's argument rests on shifting U.S. priorities and the rise of other key states pursuing other methods to ensure their own state's survival – including increased interests in nuclear proliferation.

4) Robert Kagan, "A Superpower, Like it or Not: Why Americans Must Accept their Global Role," *Foreign Affairs (*February 16, 2021*)*. https://www.foreignaffairs.com/articles/united-states/2021-02-16/superpower-it-or-not

Kagan asserts that the United States is uniquely positioned to lead the liberal international order due to its power, wealth, and geographical position. The growing American sentiment that the United States should limit its international role has led to an uncertainty or reluctance to engage in overseas commitments. Kagan argues this sentiment has confused and misled U.S. allies and adversaries and led to messy half-hearted international resolutions and conflict. Instead, he argues that Americans must accept that the global responsibility of the United States is enduring and comes with great costs, but is better than the alternative, described as a "world of power vacuums, chaos, conflict, and miscalculation."

## Panel 2: The Eroding International *Nuclear* Order

- What are the constituent elements of that order?
- Why and how are they eroding?
- How far has the erosion progressed?

1) Anonymous, "Slouching Towards a Nuclear Gomorrah," *Survival* 65, no. 6 (2023), pp. 137-158. https://www.tandfonline.com/doi/abs/10.1080/00396338.2023.2285608

This article explores the elements of the international nuclear order: respect for the non-use of nuclear weapons or obtainment of nuclear weapons by non-specified states, the near moratorium on nuclear testing, arms control and verification, the safe control of nuclear material, extended deterrence, efforts to prevent nuclear terrorism, and the right to harness nuclear energy. The decline of this order stems from multiple factors: nuclear states have recently taken measures to modernize their nuclear arsenals, penalties for having nuclear weapons have weakened, cooperation against nuclear terrorism has dwindled, and competition in nuclear energy rewards incentivizes a disregard for safety agreements. As the United States is both a founding member of the current nuclear order and partially responsible for its erosion, the author proposes that the United States signals a willingness to adapt the current nuclear agreement in exchange for global participation in a new rules-based nuclear order. This would involve rhetoric, doctrinal, and structural changes to current defense posture, which address Russian and Chinese perceptions of insecurity stemming from U.S. missile-defense posture. It also requires the establishment of a new arms control framework, with customized incentives

for non-recognized nuclear states to freeze stockpiles and a new global energy partnership that avoids implicit benefits to existing nuclear states.

2) Vipin Narang, Ankit Panda, and Pranay Vaddi, "Nuclear Proliferation Will Haunt 'America First," *War on the Rocks* (March 10, 2025). https://warontherocks.com/2025/03/nuclear-proliferation-will-haunt-america-first/

   Allied powers of the United States have increasingly expressed an openness in acquiring or developing nuclear weapons due to the perceived isolationism of the United States. The authors argue that this runs contrary to President Trump's "America First" strategy, as it will diminish American power and weaken U.S. coercive ability in conflict. Increased nuclear proliferation by U.S. allies would likely motivate non-allied countries to proliferate as well, increasing the potential for crises in which the United States would need to intervene in defense of these allies. Lastly, if allies pursue nuclear weapons, they must understand that their reprocessing and enrichment facilities will be vulnerable to attack from adversaries, and the United States would likely cease security guarantees during this process.

3) Doreen Horschig and Heather Williams, "The Crumbling Nuclear Order," *Foreign Affairs*, (September 16, 2024). https://www.foreignaffairs.com/china/crumbling-nuclear-order.

   Horschig and Williams argue that norms against nuclear use, proliferation, and testing have been undermined by U.S. adversaries who often work together to destabilize the international order; further, the authors ague that these norms have also been weakened by the United States, through the rejection of the CTBT and a potential return to nuclear testing in a second Trump administration. The dissolution of any one of these norms inherently threatens the other two and would have disastrous consequences for global stability. Horschig and Williams recommend that the United States broaden its relationships in the Global South, where many countries support nuclear norms, and seek to establish consensus through conversations around differing perspectives on nuclear issues. The United States must also work with allies in NATO and in the Indo-Pacific, continuing to support deterrence while also embracing risk reduction measures.

4) Alexander K. Bollfrass and Stephen Herzog, "The War in Ukraine and Global Nuclear Order." *Survival* 64, no. 4 (2022), pp.7-32. https://www.tandfonline.com/doi/full/10.1080/00396338.2022.2103255

   Bollfrass and Herzog explore the impact that Russia's 2022 invasion of Ukraine and subsequent actions may have on the nuclear order. Although Putin's actions undermined the international system and weakened the prospect for U.S.-Russian agreements, it also gave way to a greater awareness of the grave dangers of nuclear warfare, possibly setting the stage for a renewed nuclear order. The Russia-Ukraine war will likely increase calls for nuclear disarmament but may also garner greater public support for nuclear weapons for protection, as many European states move to align themselves more closely with NATO. The nuclear order has come under stress in the past in times of global crisis, and the authors argue it is too early to predict the effect the war will have (though the authors predict that a Russian victory would make nuclear disarmament much more difficult).

## **Panel 3:** The Non-Proliferation Regime: In Transition or Collapse?

- If in transition, to what? If in collapse, why?
- How can we distinguish between transition and collapse?
- What impact has the demise of the legacy arms control structure had on the nonproliferation regime? Would some extension of restraint by the U.S. and Russia have a significant positive impact on the regime?

1) Adam Thomson and Paul Ingram, "How Would Humans React to Nuclear Catastrophe?" in Protecting the Nuclear Non-Proliferation Treaty in Turbulent Times: Commentary Collection, European Leadership Network, (July 31, 2024). https://europeanleadershipnetwork.org/report/protecting-the-nuclear-non-proliferation-treaty-in-turbulent-times-commentary-collection/

   Governments are not sufficiently prepared for the societal impacts of nuclear war. Significant research has been done on the physical consequences of nuclear war, but there is a gap in understanding of the social, economic, and political impacts. Accordingly, there are gaps as well in the planning by governments to address them. Nuclear war could lead to several global catastrophes, including mass migration that would put strain on existing borders, damage to infrastructure disrupting transportation, shipping, energy, and communications systems, and significant economic disruption. More work must be done to better understand how nuclear war would impact basic human needs. The authors argue that governments should identify the top priorities and develop better response plans for such a contingency. Informing government officials of these effects would also ensure that they understand the consequences of a nuclear exchange and could incentivize them to reduce risks.

2) Christopher Ford, "Nonproliferation, Disarmament, and the New Washington, D.C.," Remarks for Wilton Park (December 16, 2024). https://www.newparadigmsforum.com/nonproliferation-disarmament-and-the-new-washington-d-c

   The arms control community should expect some significant changes under the Trump Administration. On diplomatic statements, incoming officials will not have time for rhetorical statements that lack substance. They will also not be afraid to make the United States seem more isolated with more direct political language. For example, Ford argues that this is not the time to push for complete disarmament. Recent events, including great power aggression, nuclear weapons buildups, regional tension, and Russia's continued violation of existing arms control arrangements remains some of the main hurdles to disarmament. There are growing debates within the United States about the need for a strong nuclear posture to address these challenges. Ford further argues that the West can enhance its deterrence posture without abandoning arms control and disarmament. This will require changes to the international system that will motivate a return to arms control. Ultimately, it may be better to build up one's forces than be faced with instability or war.

3) Rose Gottemoeller, "Arms Control is Not Dead Yet," *Foreign Affairs* (April 15, 2025). https://www.foreignaffairs.com/united-states/arms-control-not-dead-yet

While the international arms control regime is deteriorating, there are opportunities for the United States to pursue arms control with Russia and China. President Trump has remained consistent in his view of nuclear weapons as a costly and risky investment that should be restrained. Arms control efforts with Russia and China will require different approaches. The United States should restore the historical arms control regime with Russia while persuading China that stability can be achieved through greater transparency and predictability. With its rapidly expanding nuclear capabilities, China could reach the New START warhead limit by 2035. Reaching those limits could trigger a U.S. response as well as a three-way arms race. With New START expiring in February 2026, there could be an opportunity for a fresh start in arms control. The United States should pursue separate negotiations with Russia and China. With Russia, the United States could propose to extend New START, as well as seek other limits on nuclear warheads. With China, the United States could propose that China adheres to the New START limits, increase transparency around its nuclear modernization, and increase communications channels and notification systems. Even if legally-binding treaties aren't feasible within the current security environment, Gottemoeller argues that there are opportunities for political agreements to reduce nuclear risks.

4) Toby Dalton and Ariel Levite, "The Nonproliferation Regime Is Breaking: Fixing It Will Require Tougher, Smarter Inspections," *Foreign Affairs* (January 13, 2022). https://www.foreignaffairs.com/united-states/nonproliferation-regime-breaking

In order to strengthen the nonproliferation regime, Dalton and Levite argue that there should be changes made to how the IAEA monitors nuclear activity to include closer inspection for signs of weaponization or development of delivery systems. While some events have eroded the NPT, it has remained remarkably stable over time, and the norm against proliferation has grown stronger. The major challenges to the NPT regime include lack of progress towards disarmament among nuclear-weapons states, the emergence of alternatives include the Treaty on the Prohibition of Nuclear Weapons (TPNW), increasingly aggressive behavior of states outside the NPT (i.e. the DPRK), and the lack of sufficient separation between peaceful nuclear activity and nuclear activity for military purposes. The most damaging actions have been carried out by nuclear-weapons states, who have pursued proliferation activities outside the NPT. The NPT regime can be strengthened by first having countries that are pursuing peaceful uses of nuclear technology carry out the IAEA Additional Protocol, which allows the IAEA to conduct more invasive monitoring activities. This would serve as an example to other states who are or want to pursue peaceful uses (such as Australia). Second, the IAEA could develop better monitoring procedures to check for the development of nuclear warheads and delivery systems.

## **Panel 4:** The Dynamic Balance of Power Between and Among the Nuclear Weapon States

- Is that balance becoming more or less stable as Russia, China, and the US modernize and adapt their nuclear forces?
- How might the balance be transformed? Tech developments? Policy choices? Shocks?
- Given arms control's demise, what opportunities remain to regulate the balance?

1) Mallory Stewart, "Engaging China and Russia on Arms Control: An Interview with U.S. Assistant Secretary of State Mallory Stewart," Arms Control Association (May 2024). https://www.armscontrol.org/act/2024-05/interviews/engaging-china-and-russia-arms-control-interview-us-assistant-secretary

   Under the Biden administration, State Department officials prioritized engaging both Russia and China on arms control. Despite expressing willingness to engage with both countries without preconditions, neither country has made a good faith effort to have a constructive dialogue with the United States. If New START expires in 2026 without a follow-on agreement, the biggest risk is an unrestrained arms race which would benefit no one. The P5 offers a platform for dialogue, but few substantive discussions have been held. The United States has attempted to engage China on discussions related to risk reduction, yet the two sides still disagree on fundamental arms control concepts. China seems unwilling to substantively engage or put proposals on the table outside of its no-first-use policy. The United States did develop a political declaration on the military uses of artificial intelligence (AI), but rapid developments in emerging technologies may make this very challenging to convert into a legally-binding treaty.

2) Rebecca Heinrichs and Yashar Parsie. "Nonproliferation in Great Power Competition." Hudson Institute (February 24, 2025). https://www.hudson.org/arms-control-nonproliferation/nonproliferation-great-power-competition-rebeccah-heinrichs

   Nonproliferation is facing increasing challenges from today's evolving security environment. While there are some compelling arguments for proliferation, nonproliferation is still the best option for the U.S.'s security because it reduces the risks of entanglement while allowing the United States to maintain its regional influence. It also incentivizes U.S.'s allies to build up their conventional capabilities and reduces the risks of nuclear use. The example of South Korea demonstrates the real risks of proliferation and the benefits to the United States of pursuing a nonproliferation policy. South Korea faces an increasingly hostile and aggressive nuclear threat from the DPRK and relies on the United States for its security. The United States must both demonstrate the capability to defend South Korea as well as provide assurances to the country that demonstrate the U.S.'s commitment. The United States could strengthen its extended deterrence to South Korea by deploying more forward conventional forces, enhancing missiles defenses for the region and the U.S. homeland, and deploying limited nuclear capabilities to the region to demonstrate commitment and deter escalation.

3) Matthew Costlow, Robert Peters, and Kyle Balzer, "A Misleading Metaphor: The Nuclear 'Arms Race'," *War on the Rocks* (November 20, 2023). https://warontherocks.com/2023/11/a-misleading-metaphor-the-nuclear-arms-race/

   The authors argue that the concept of a 3-way arms race may not be the most useful framework for analyzing the current nuclear order between the U.S., China, and Russia. There is no commonly agreed-upon definition of an arms race, and the action-reaction dynamic is not the only driver of arms buildups; other drivers can depend heavily on the strategic culture of the state. Historic analyses of Cold War arms production do not produce any consistent patterns of arms racing, and the same is true today. The United States, China, and Russia are not caught up in a rigid action-reaction cycle that is typical of an arms race. The United States should expect that China and Russia may react to its own nuclear developments, but not in the ways they expect.

The United States should recalibrate its expectations for Russian and Chinese nuclear developments within this context, understanding that they might not be seeking pure nuclear parity.

4) M. Taylor Fravel, "China: Balancing the U.S., Increasing Global Influence," in Competing Visions of International Order, Chatham House (March 27, 2025). https://www.chathamhouse.org/2025/03/competing-visions-international-order/01-fracturing-us-led-liberal-international-order

   Fravel argues that China is trying to shape the international order by balancing U.S. power and exerting more of its own influence across the globe. It asserts an alternative version of a global order based on Westphalian ideas, in contrast to the West's liberal values. China uses an array of diplomatic tools to counter U.S. influence, including close bilateral relationships with Russia and Pakistan, membership in regional frameworks, and participation in international organizations. China has also built up its military capabilities, made efforts to increase its economic independence, divide European allies, develop ties with the developing world, and sow doubt about the U.S.'s leadership role in the international system. Ultimately, China's alternative vision of the global world order is in conflict with the U.S. international order.

5) Eric Edelman, "America's Latest Problem: A Three-Way Nuclear Race," *Foreign Policy* (June 2, 2025). https://foreignpolicy.com/2025/06/02/us-nuclear-weapons-deterrence-command-control-nc3-decapitation-strike-china-russia-strategy-geopolitics/

   The United States will eventually face two nuclear peers and must contend with how to deter two nuclear adversaries and how to handle the possibility of a joint China-Russia nuclear attack. Of particular concern on Russian and Chinese weapons developments that can target the U.S.'s NC3 and threaten a decapitation strike, including ASAT, cyber, and hypersonic missiles. While Russia and China have been modernizing their nuclear arsenals, the United States has been lagging behind. Edelman argues that the United States should prioritize strengthening two components of the NC3 system to enhance deterrence: the continuity of operations/continuity of government system and the mobile alternate command posts.

## Panel 5: The Tattered U.S. Nuclear Umbrella

- How do allied concerns affect the nuclear order?
- How plausible is a nuclear cascade among U.S. allies and partners?
- How plausible is a renewal of allied assurance?

1) Chelsey Whiley, "What Role for U.S. Extended Deterrence in Northeast Asia under Trump?" IISS (December 13, 2024). https://www.iiss.org/online-analysis/online-analysis/2024/12/what-role-forus-extended-deterrence-in-northeast-asia-under-trump/.

   U.S. security assurances to allies in the Indo-Pacific have helped stabilize the region as both North Korea and China enhance their nuclear capabilities. Previous administrations emphasized reassuring Northeast Asian allies and strengthening U.S. capabilities. However, Whiley questions the strength of such endeavors under the Trump administration. The author notes how under the

Biden administration trilateral military exercise, Freedom Edge, was in place. The exercise focused on theater-level readiness by focusing on cooperative ballistic missile defense, air defense capabilities, anti-submarine warfare and defensive cyber training. Such systems have been employed more readily as a form of U.S. extended deterrence. The Biden administration had also reached out to China and Russia to engage multi-lateral efforts towards achieving a consensus on arms-control issues. Due to the current administration's inclination towards transnationalism, allies have raised concerns regarding the nuclear umbrella. Whiley notes that U.S. regional allies may change their general approach to nuclear issues which results in proliferation. Additionally, both China and North Korea could be emboldened to continue expansion of their current nuclear capabilities.

2) Richard K. Betts, "Nervous Allies and Trump: Nuclear Lessons from NATO," *The Washington Quarterly* 48, no. 1 (2025). https://bpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/1/2181/files/2025/04/Betts_TWQ_48_1.pdf

   Betts analyzes the costs for allies to proliferate indigenously. The primary concerns resolve around the actual economic cost, risk of alienation to America, and putting the validity of the NPT at risk. Betts advocates for American allies to manage their fear of abandonment from the nuclear umbrella. His paper delves into the likelihood of nuclear sharing and both the opportunities and costs the espouse from such a policy. Under previous administrations, the idea of nuclear sharing has been explored. This is mainly through the avenue of employing NATO as a nuclear power itself. Betts concludes that due to the changing security environment and degradation of alliances, nuclear sharing would not be enough, and states would be increasingly inclined to develop their own nuclear weapons program.

3) Nobumasa Akiyama, "How Should Japan Consolidate the Credibility of Extended Deterrence?," AJISS-Commentary (November 16, 2023). https://www.jiia.or.jp/en/ajiss_commentary/how-should-japan-consolidate-the-credibility-of-extended-deterrence.html

   Following Russia's invasion of Ukraine, both Japan and South Korea have called for greater credibility and reassurance that the United States would follow through on its extended nuclear deterrence commitments. As debates have risen amongst Japanese and South Korean people, Akiyama makes note of how a consideration must be made regarding the military utility of extended deterrence against security threats and the effect of reassurance on the policy makers and citizens of allied countries. To effectively do so, the author argues that threats must be correctly identified, and sufficient deterrence architecture must incorporate nuclear and conventional forces. Additionally, Akiyama urges for better diplomatic efforts between allies in the Indo-Pacific as a way to undermine China's assertive behavior. The U.S.'s extended deterrence arrangements are essential to the state survival of Japan, but Japan must also strengthen its own deterrence and counterstrike capabilities to adequately managing emerging threats from China and North Korea.

4) Héloïse Fayet, Andrew Futter, Ulrich Kühn, Łukasz Kulesa, Paul van Hooft, and Kristin Ven Bruusgaard, "Forum: European Nuclear Deterrence and Donald Trump," *Survival* 67, no. 1 (2025), pp.123-142. http://tandfonline.com/doi/full/10.1080/00396338.2025.2459011

   With the current Trump administration shifting its focus towards the Indo-Pacific, European powers have been engaging in conversations to ensure the security on the European theater. As

President Trump continues to adjust policies on transatlantic relations, there has been an increase in manners where the Dutch, Polish, British, French, and German powers have declared a need to build up European nuclear and conventional deterrence to effectively respond to the Russian threat. To achieve this, effective coordination between Amsterdam, Warsaw, Berlin, and Paris is required. One proposed mechanism is through increased investment in conventional deterrence assets and increased nuclear arsenals. France and Britain have also been encouraged to share more information about their nuclear capabilities and work jointly to participate in NATO's internal nuclear deliberations. These efforts could ensure a reliable long-term political strategy for ensuring a stable European theater.

5) Japan-U.S. and Security Studies Unit, "Toward Improving the Effectiveness of Extended Deterrence in the Japan-U.S. Alliance," Sasakawa Peace Foundation (June 2, 2025). https://www.spf.org/en/seminar/list/20250602.html

Japan faces an increasingly dangerous security environment with growing nuclear threats from China, North Korea, and Russia. The rising Taiwan issue, increasing nuclear capabilities from both China and North Korea, and the lack of deployable operational mechanisms through the Japan-U.S. alliance has highlighted a need for change in the Japanese nuclear deterrence posture. The Sasakawa Peace Foundation has revealed 15 policy recommendations to further discuss each recommendation and implications. The recommendations are focused on strengthening the Japan-U.S. alliance, strengthening the posture of the Japanese Self-Defense Forces, increasing domestic preparedness and review in Japan, and reduce overall risk of a nuclear cascade in the Indo-Pacific.

## Panel 6: Imagining Alternative Nuclear Futures

- What alternative futures are plausible in the near to medium term? What would be their constituent elements?
- If the existing order dramatically collapses, perhaps with nuclear employment, is a follow-on order even plausible? Why?
- What new alignments and norms might take shape in a post-collapse order?

1) Anna Peczeli, Brad Roberts, Jonas Schneider, Adam Thomson, Oliver Thränert and Heather Williams, "Redesigning Nuclear Arms Control for New Realities," Zurich: Center for Security Studies, ETH Zürich (November 2021). https://css.ethz.ch/en/publications/css-policyperspectives/details.html?id=/r/e/d/e/redesigning_nuclear_arms_control_for_new

Arms control is necessary however the changing security environment alongside lack of transparency, increased ambiguity, and misperceptions bring states closer to confrontation instead of collaboration. Thus, Peczeli et al advocate for a reformed arms control framework to account for emerging technologies and retain effectiveness of nuclear deterrence. In essence, Peczeli et al suggest a multilateral approach to nuclear arms control. Given NATO's role in conventional arms control, focusing on behaviors to determine sources of instability is much more valuable and attainable. For forming political strategy, the authors suggest the following building blocks: 1) view adaption of nuclear arms control as a long-term project, 2) renew and diversify leadership, 3) rebuild institutions and human capital, 4) enhance and expand strategic

dialogues, 5) understand that arms control requires compromise, 6) re-calibrate public discourse, 7) focus on the reduction of nuclear dangers, and 8) while pursuing transparency, predictability, and adversary restraint to not erode deterrence.

2) Leslie Vinjamuri, "Envisioning the Future International Order" in *Competing Visions of International Order*, Chatham House (March 27, 2025). https://www.chathamhouse.org/2025/03/competing-visions-international-order/01-fracturing-us-led-liberal-international-order

   Global crises and escalating tensions have accelerated the collapse of the current rules-based order, creating an opportunity for a renewed international system. Vinjamuri describes a few possibilities for the future of the international system, detailing the uncertain future of the transatlantic partnership given a possible U.S.-Russia deal, China's rising power, and a possible return to a world of regional spheres of influence carved out by great powers. Many states wish for a global system that grants them greater autonomy and is less divided between competing world powers. She also raises the possibility of a new U.S.-led international order under a future President, which meets the demand for international cooperation and reconciles the growing challenges caused by the climate crisis, large-scale demographic changes, and rapid technological advancements.

3) Emma Belcher, "Transforming our Nuclear Future with Ridiculous Ideas," Bulletin of Atomic Scientists (December 7, 2020). https://thebulletin.org/premium/2020-12/transforming-our-nuclear-future-with-ridiculous-ideas/

   Belcher argues that the international system should emerge from the COVID-19 pandemic with a plan to establish international stability through phased nuclear disarmament. She details the lack of diversity and inclusion in defense policy discussions, calling for an increased diversity of opinions and backgrounds in the field of nuclear policy. These efforts may appear ridiculous at first, and will encounter resistance, due to the dominance of the "game theory framework" in nuclear policy, and the fact that the military-industrial complex benefits from nuclear deterrence. Another challenge lies in the fact that proponents of disarmament are often dismissed as naive, but Belcher suggests that a possible solution could lie in incorporating past knowledge and exercising strategic foresight to plan for the future.

4) Zachary S. Davis, "Renovating the Nuclear Nonproliferation Regime for the Emerging World Order," in *Aligning Arms Control with the New Security Environment,* Michael Albertson, ed. (Livermore, CA: Center for Global Security Research, 2024). https://cgsr.llnl.gov/sites/cgsr/files/2024-08/2024-0528-cgsr-cccasional-paper-aligning-arms-control.pdf.

   Davis assesses the success and failures of the nonproliferation regime, acknowledging future threats, and proposing mechanisms to ensure the regimes longevity. The construction and implementation of the International Atomic Energy Agency (IAEA) eliminated nuclear-weapons program in South Africa, Iraq, and across South America. Furthermore, the IAEA promoted a multilateral campaign to combat nuclear smuggling and hold states accountable if they sought to attain nuclear weapons. Treaties such as the Joint Comprehensive Plan of Action (JCPOA), Comprehensive Nuclear Test Ban Treaty (CTBT), and the 2010 New Strategic Arms Reduction Treaty (New START) reinforced the norms of the nonproliferation regime. Despite such treaties and

norms, the regime had its weaknesses. As both Russia and China seek to dismantle the rules-based world order, existing norms and alliances are called into question. Davis suggests that if the current nonproliferation regime is falling apart and the U.S. - the identified global leader of the regime – can no longer lead it, Waltz's free market laissez-faire approach might be more attainable. Under such an order, nuclear deterrence would work as the prospect for nuclear retaliation is lowered as rational actors will refrain from taking nuclear risks. Further, Davis proposes certain methods to sustain the current nonproliferation regime. The first being greater transparency, keeping arms control alive, responding to disarmament pressures expressed through NPT Article 6 diplomacy and TPNW. Regardless, Davis argues for use of extended deterrence as it solves to security dilemma and ensures the status quo of nonproliferation.

## Panel 7: Toward a New Strategy for Nuclear Order

- How can international stakeholders in nuclear order most effectively work together to safeguard nuclear order and promote its continued peaceful evolution?
- What can be accomplished in the absence of a stable global political order?

1) Paul Gerwitz, "China, The United States, and the Future of a Rules-Based International Order," The Brookings Institution (July 22, 2024). https://www.brookings.edu/articles/china-the-united-states-and-the-future-of-a-rules-based-international-order.

   Gerwitz explores the disagreement between the United States and China on the rules-based international order and who gets the power to decide what those rules should be. Gerwitz argues that the United States may misperceive Chinese intentions – suggesting that China does not want to dismantle the international order but rather make revisions that better suit its needs. To move forward, Gerwitz argues that the United States also needs to better understand China's expanding relationships with BRICS and other developing countries, as the United States, cannot be uncompromising. Examining the U.S.'s non-negotiables and identifying potential changes that align with China's interests would provide the United States with an opportunity to maintain power and order while still improving the system.

2) Corey Hinderstein, "Remarks at the Institute for Nuclear Materials Management Annual Meeting," U.S. Department of Energy (July 22, 2024). https://www.energy.gov/nnsa/articles/acting-principal-deputy-administrator-corey-hinderstein-remarks-institute-nuclear

   Russia and China are rejecting U.S. actions for arms control to influence their involvement with Ukraine and Taiwan. Rejecting arms control in conjunction with North Korea and China growing their nuclear arsenals reflects the growing nuclear dangers and changing nuclear order. There is also a growing challenge as new reactor designs and fuels become available, and new threats, such as cyberattacks and UAVs, are employed. This will require innovation and creativity to identify possible safeguards, develop ways to foster creativity, and explore larger international solutions. NNSA works with more than 100 partners in other countries and multilateral organizations, such as the IAEA, INTERPOL, and the UN Office on Drugs and Crime, to continue peaceful nuclear activities worldwide.

3) Doreen Horschig and Astrid Chevreuil, "Can France and the United Kingdom Replace the U.S. Nuclear Umbrella?," Center for Strategic and International Studies (March 4, 2025). https://www.csis.org/analysis/can-france-and-united-kingdom-replace-us-nuclear-umbrella.

   With the growing uncertainty over the U.S. commitment to NATO and European nuclear deterrence, NATO countries, especially France and Germany, are considering whether a European deterrence is a viable option. Although the Trump Administration is not taking specific actions, the strategic messaging of "burden shifting" to Europe has raised the question of how much political commitment the United States would be willing to follow if a conflict arose. As is, the current French and British nuclear forces complement the U.S.'s extended deterrent and could not be a viable solution on their own due to the amount and type of weapons in their arsenals. It is also complicated by France's insistence on having independence in its nuclear decision-making and lack of participation in NATO's nuclear planning group. Horschig and Chevreuil offer suggestions for discussions that Germany could have with the United States, NATO, and other European states to clarify the roles these states play and increase transparency and public awareness, leading to lasting improvements.

4) Patricia Jaworek, Mark Melamed, Lynn Rusten, and Steve Andreasen, "Navigating Disruption in the Global Nuclear Order: Managing Risks and Shaping a New Way Forward," Nuclear Threat Initiative (April 9, 2025). https://www.nti.org/analysis/articles/navigating-disruption-in-the-global-nuclear-order-managing-risks-and-shaping-a-new-way-forward/

   These authors argue for a two-pronged approach to addressing the changing nuclear environment. First, a short-term plan to reaffirm principles and implement steps to manage risks. Second, a long-term strategy to create a more stable system that relies less, or not at all, on nuclear weapons for security. These will be possible by maintaining the nuclear taboo, continuing to work towards nuclear disarmament, and communication between states in good and bad times. In the long term, it will be important to develop an alternative security architecture that would provide an option for a world without nuclear weapons and apply overarching norms and principles cross-sectionally.

## Panel 8: Questions and Challenges Facing the U.S.

- What is at stake for the U.S. in the eroding order and its potential collapse?
- Where is U.S. leadership necessary and possible?
- What should it seek from others? Allies? Adversaries? Onlookers?

1) Lewis A. Dunn, "A Last Chance to Prevent Nuclear Anarchy: Can Trump Engage China and Russia Before It's Too Late?" *Foreign Affairs* (December 4, 2024). https://www.foreignaffairs.com/united-states/last-chance-prevent-nuclear-anarchy

   Dunn argues that President Trump should take the lead in increasing cooperation among the P5. He specifically focused on the Trump administration's need to engage directly with China and Russia, both to deter them as nuclear adversaries, but to work with them as collaborators against nuclear anarchy. With the growing potential for nuclear escalation through New START expiring in February 2026, Russia already breaking New START, the NPT weakening, and a potential nuclear

arms race developing with China. He suggests that a joint assessment could be conducted with former civilian and military representatives from each P5 state to discuss without each country formally engaging. This would happen while the states agree to a 6-month nuclear cooling-off period for nuclear restraint, which could be extended if the assessment finds shared dangers. There could also be talks with NATO and Russia, as well as Indo-Pacific allies and China, to reduce bilateral risks; however, the focus should be on a global effort.

2) Hal Brands, "The Renegade Order: How Trump Wields American Power," *Foreign Affairs* (February 25, 2025). https://www.foreignaffairs.com/united-states/renegade-order-trump-hal-brands.

   An eroding liberal world order would lead to the end of the peace, prosperity, stability, and democratic supremacy that have persisted. To prevent this loss, Brands argues that President Trump needs to follow the idea that order comes from power in order to squeeze adversaries and allies. Further, Brand argues that if Trump follows his destructive instincts and the United States becomes less globally engaged, it will only help its enemies end the U.S.-led system and move away from achieving its global interests. This would shift the government to a zero-sum approach of stopping adversaries rather than a positive-sum approach to spreading democratic values. In addition to this, the United States would need to build up its military, develop a tougher stance with allies, work towards peace in Ukraine, challenge the Eurasian axis, and exploit escalation.

3) Niall Ferguson, "How to Win the New Cold War," *Foreign Affairs* (January 7, 2025). https://www.foreignaffairs.com/united-states/win-new-cold-war-china-trump-niall-ferguson

   Ferguson argues that President Trump should draw inspiration from former President Reagan to address the domestic and international challenges facing the United States. One aspect of this is to be flexible, balancing the hawk (increases defense spending, military attacks, and brinkmanship) with the dove (holding back or seeking de-escalation and disarmament). Ferguson argues that this should be President Trump's approach to handling the situation with China. Further, Ferguson contends that the Trump Administration should seek a deal that would ultimately lead to disarmament and peace, but in order to do so, President Trump may need to soften his attitude toward China to achieve it.

4) Robert Peters, "A Roadmap for Rebuilding America's Nuclear Arsenal," The Heritage Foundation (March 4, 2025). https://www.heritage.org/defense/report/road-map-rebuilding-americas-nuclear-arsenal

   Peters argues that the United States must build a larger arsenal that is credible and would both deter and defeat any possible aggression. This provides guidance for actions the Trump Administration could take on a national level, such as issuing a new Nuclear Posture Review, giving a national address on the importance of the nuclear arsenal, and developing a two-peer deterrence strategy. It also has suggestions for strengthening the nuclear triad, preparing to conduct a nuclear test again, and reinvigorating the nuclear industrial base. Peters suggest that all of these would require Congress to approve at least $100 billion of additional funding for the nuclear enterprise to guarantee that the U.S.'s commitment remains credible in the future.