

REDESIGNING EXTENDED DETERRENCE IN THE THIRD NUCLEAR AGE: ALLIANCE MODERNIZATION IN THE ROK-U.S. ALLIANCE

Hanbyeol Sohn



The international nuclear order is entering the "Third Nuclear Age," defined by simultaneous near-peer nuclear competition with Russia and China alongside North Korea's advancing capabilities. This brief argues that pressure to redesign extended deterrence now originates as much from Washington's strategic requirements as from allied demand. The United States faces credibility challenges regarding not only its willingness to employ nuclear weapons but also the sufficiency of its nuclear capabilities. Using the Republic of Korea as a primary case, this brief examines how the alliance must evolve from a provider-protectee model toward genuine co-management of the nuclear order.

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The Changing Nuclear Order and the Challenge to Extended Deterrence

The international nuclear order is undergoing a transformation of historical magnitude. The emergence of what analysts have termed the "Third Nuclear Age" is defined by the simultaneous presence of multiple nuclear actors pursuing qualitative and quantitative expansion, the erosion of the arms control architecture, and the growing prospect of multi-front nuclear contingencies. The 2022 *U.S. Nuclear Posture Review* (NPR) acknowledged, for the first time in

the history of American strategic planning, the prospect of having to deter two major nuclear powers—Russia and China—concurrently, while also managing the threat posed by North Korea and Iran.¹

The fragility of deterrence in this multipolar environment is not simply a matter of numbers. As Vipin Narang and Scott Sagan argue in their foundational edited volume, multipolarity creates cascading interdependencies among nuclear dyads that Cold War bilateral frameworks are wholly inadequate to address.² When three or more

nuclear-armed states interact simultaneously, the stability assumptions derived from U.S.-Soviet deterrence theory no longer hold. Crisis dynamics become more opaque, misperception risks multiply, and the connection between extended deterrence credibility and regional stability becomes harder to manage.

Within this environment, the extended deterrence architecture that has underpinned U.S. alliance relationships since the Cold War is under mounting strain. South Korea and other U.S. allies in the Indo-Pacific have long harbored concerns about the credibility of the American nuclear umbrella—specifically, whether the United States would, in extremis, risk nuclear escalation on behalf of a non-nuclear ally. The 2023 Washington Declaration and the establishment of the Nuclear Consultative Group (NCG) between the United States and the Republic of Korea were direct institutional responses to this anxiety.³

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Underpinning these institutional developments is a broader shift in U.S. strategic posture toward Conventional-Nuclear Integration (CNI). The 2024 joint guidelines on ROK-U.S. nuclear deterrence and nuclear operations formally proclaimed an "integrated extended deterrence" system in which U.S. nuclear forces and South Korea's advanced conventional capabilities operate as a unified whole. Since the 2018 NPR, the United States has supplemented its flexible response options with low-yield nuclear capabilities, signaling that nuclear employment is not categorically excluded even in response to a conventional attack. The direction is unambiguous: credible deterrence in the Third Nuclear Age requires integrating conventional and nuclear instruments, and that integration requires active allied participation.

However, a significant and underappreciated shift is now taking place: the impetus for redesigning extended deterrence is increasingly coming from Washington itself, not only from allies. The 2026 *National Defense Strategy* notably omitted the term "extended deterrence" entirely—a rhetorical departure that signals a conceptual repositioning of how the United States frames its alliance security commitments.⁴ For U.S. allies, this shift is unsettling: the strategic foundation on which their security guarantees rest appears to be changing, and it is changing without their input.

The Congressional Commission on the Strategic Posture of the United States (Strategic Posture Commission), in its landmark 2023 report, warned explicitly that the United States must develop a new nuclear strategy capable of addressing the risk of opportunistic or simultaneous attacks by China and Russia and that this requires deeper integration with allied conventional capabilities.⁵ The State Department's International Security Advisory Board (ISAB), reporting concurrently, reinforced this assessment: while the fundamental logic of deterrence does not change

simply because the United States faces two near-peer nuclear competitors, the institutional infrastructure for allied assurance must be substantially modernized.⁶

Strategic Simultaneity and the Dilemma of Multi-Front Deterrence

The Third Nuclear Age is fundamentally characterized by what this brief terms "strategic simultaneity"—the condition in which the United States and its allies must manage deterrence relationships across multiple adversaries and geographic theaters concurrently. This creates a set of structural dilemmas that did not exist during the Cold War's essentially bipolar framework.

First, U.S. nuclear resources are finite. Deterring Russia in Europe, managing China's nuclear buildup in the Indo-Pacific, and maintaining credible extended deterrence over the Korean Peninsula simultaneously places extraordinary demands on the U.S. strategic force posture. The 2024 NCG joint communiqué acknowledged the need for tailored deterrence solutions, but the underlying resource competition remains.⁷

Second, strategic simultaneity produces what might be called the "decoupling dilemma" for U.S. allies. If the United States demonstrates nuclear restraint in response to Russian coercion in Europe, South Korea and Japan may question whether Washington would respond differently in the Indo-Pacific. Conversely, a robust U.S. nuclear response in Asia could alarm European allies. The interconnected nature of deterrence credibility means that U.S. behavior in one theater affects extended deterrence perceptions in others—a dynamic that Cold War bilateral deterrence theory was not designed to manage.

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also by the broader trajectories of U.S.-China and U.S.-Russia competition. If U.S. global deterrence credibility is eroded by the demands of multi-front competition, North Korea's deterrence calculus is correspondingly affected—creating precisely the conditions that invite opportunistic provocation from Pyongyang. These realities demand that extended deterrence be reconceptualized not as a bilateral relationship, but as an element of a broader, interconnected deterrence ecosystem in which the stability of one theater is inseparable from that of another.

The Limits of the Legacy Alliance Model

Despite the rapidly evolving strategic environment, U.S. alliance management strategy has remained largely anchored in Cold War-era frameworks. Three structural characteristics of the legacy model have become increasingly problematic.

- **Asymmetric consultation:** While the United States formally consults with allies on nuclear

strategy, substantive decision-making authority over nuclear employment remains exclusively American. Allied governments receive political assurances, but their access to actual targeting deliberations, employment planning, and scenario-specific decision frameworks has historically been limited. The NCG represents a meaningful first step toward addressing this asymmetry, but its operational depth remains to be fully developed.⁸

- **Unilateral strategy design:** Extended deterrence has historically been an American product that allies receive rather than co-design. Deterrence strategy—including the specification of redlines, proportionality thresholds, and escalation management frameworks—has been conceived in Washington and offered to allies on a largely take-it-or-leave-it basis.

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As the 2018 NPR made clear through its language on flexible response options, U.S. nuclear strategy is driven primarily by American strategic logic rather than by jointly developed allied frameworks.⁹

- **Ad hoc reassurance:** When allied anxiety spikes—following a North Korean nuclear test, a Chinese military provocation, or Russian nuclear signaling—the United States responds with demonstrative actions: strategic bomber overflights, ballistic missile submarine port calls, and high-level political statements. These measures are valuable but inherently episodic. They treat alliance anxiety as a political communication problem rather than as a strategic architecture problem.

Underlying these structural issues is a fundamental gap between “sufficiency” and “satisfaction” in the extended deterrence relationship. Brad Roberts, drawing on his experience as Deputy Assistant Secretary of Defense for Nuclear Policy, has articulated this tension clearly: U.S. officials assess that existing capabilities are sufficient to deter North Korean aggression, but this objective assessment fails to engage with the distinct question of whether South Korean policymakers and the public find this capability architecture satisfying.¹⁰ The Strategic Posture Commission similarly recognized that extended deterrence must address both the objective military dimension and the subjective confidence dimension.¹¹

The “sufficiency vs. satisfaction” gap is not merely a matter of political optics. It has direct political consequences. Under this assessment, the United States remains skeptical of South Korean proposals for tactical nuclear redeployment, nuclear sharing arrangements, or indigenous nuclear armament—all of which reflect a public and political demand that Washington has been slow to engage with on its own terms. If South Korean

decision-makers and citizens do not believe that the extended deterrence umbrella is sufficiently credible and responsive, the political sustainability of the alliance is undermined, pressure for independent nuclear capabilities grows, and the deterrence posture becomes less effective because it fails to communicate the necessary degree of resolve to Pyongyang. Closing this gap therefore requires not only military adjustments but also a fundamental realignment of how the two allies jointly define and communicate deterrence adequacy.

Allied Requirements and Contributions: The South Korean Case

Key Allied Requirements

South Korea's engagement with the extended deterrence agenda illustrates how allied requirements are evolving from demands for passive protection toward claims for active co-management. Three categories of requirements stand out.

- **Institutionalizing nuclear commitment:** The Washington Declaration and the NCG were established in direct response to South Korean demands that the U.S. nuclear commitment be embedded in durable institutional mechanisms rather than resting on political declarations alone. The NCG model draws on—but deliberately differs from—NATO's Nuclear Planning Group (NPG), reflecting the distinct strategic context of Northeast Asia, where the primary threat is geographically proximate and qualitatively different from the Russian threat that shapes NATO's nuclear posture.¹²
- **Enhanced joint planning authority:** South Korea has increasingly sought participation at the front end of deterrence strategy design, not merely consultation after American decisions

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have been made. While the ROK-U.S. Tailored Deterrence Strategy addresses the broad deterrence posture, nuclear planning—targeting, employment sequencing, and escalation thresholds—remains exclusively American.¹³ Seoul's push for deeper engagement reflects a judgment that deterrence strategies designed without substantive allied input risk misalignment with the realities South Korea must manage.

- **Integrated strategic messaging:** Nuclear deterrence is to a significant degree a psychological and political signaling enterprise. The 2024 NCG Joint Statement identified integrated strategic messaging as a priority, recognizing that divergent U.S. and allied communications on deterrence posture undermine credibility.¹⁴ South Korea seeks to be a co-sender, not merely a recipient, of deterrence communications directed at Pyongyang.

Key Allied Contributions

The evolution of allied requirements has been accompanied by an expansion of what South Korea can and is willing to contribute to the extended deterrence architecture. These contributions are material as well as institutional.

- **Non-nuclear participation in nuclear operations:** Drawing on NATO's SNOWCAT (Support of Nuclear Operations With Conventional Air Tactics) model, South Korea has developed a framework for contributing conventional capabilities—intelligence, surveillance, and reconnaissance (ISR) assets, precision strike systems, and air defense—in support of U.S. nuclear operations.¹⁵ Bee Yun Jo has analyzed this framework as an emerging form of "conventional-nuclear integration as alliance practice," in which allied conventional contributions provide the operational scaffolding within which U.S. nuclear options are exercised.¹⁶
- **Supporting strategic asset visibility:** Following the Washington Declaration, the United States has regularized the deployment of strategic assets—ballistic missile submarine visits to South Korean ports, and strategic bomber overflights—as demonstrative elements of its extended deterrence commitment. South Korea is seeking to move beyond symbolic deployments toward structured advance consultation on the timing, scale, and modalities of strategic asset deployments, integrating them with combined exercises and crisis response protocols.
- **Technology and industrial burden-sharing:** The military-technical dimension of extended deterrence—advanced conventional strike, missile defense, and space and cyber capabilities—is increasingly central to South Korea's contribution. This constitutes what might be

called the "industrial internalization" of deterrence: developing the production capacity and technological depth to sustain the capabilities on which integrated deterrence depends.¹⁷ The trajectory points toward a "technology-operations-policy" triple integration, in which South Korea's defense industrial capacity, operational contributions, and institutional participation become mutually reinforcing pillars of a shared deterrence ecosystem.

Co-managing the Nuclear Operating System

The convergence of American strategic requirements and allied demands must be understood not as a collision of interests, but as a shared imperative to build a new paradigm—the co-management of the nuclear order. The United States seeks controllable allied autonomy; South Korea seeks substantive participation. The gap between these positions cannot be bridged through negotiation or transactional bargaining. It can only be closed if the alliance evolves to the point where deterrence is genuinely managed together. South Korea's experience points the way: the institutionalization of nuclear commitments, the deepening of joint planning, non-nuclear participation in nuclear operations, and industrial burden-sharing through technological partnership are all dimensions of a single process—building what might be called a shared Nuclear Operating System.

From Washington's perspective, the ROK-U.S. alliance is no longer a simple provider-protectee relationship. The United States wants South Korea to expand its role as a regional stabilizer and contribute to maintaining the nuclear balance across the Indo-Pacific. This is not merely a matter of burden-sharing in financial terms; it represents a transition toward sharing the responsibilities of strategic deterrence itself. What Washington en-

visions is an ally that actively brings its advanced conventional capabilities, missile defense architecture, and space and cyber capacities to bear in complementing America's global deterrence structure.

From Seoul's perspective, the core of extended deterrence is not the guarantee but joint control. If the United States fails to demonstrate sufficient deterrence against China, Russia, and North Korea simultaneously, South Korea's security is fundamentally undermined. South Korea therefore seeks to be not a passive recipient but a co-designer of deterrence—securing transparent and symmetric consultation rights at every stage of threat assessment, response decision-making, and force planning, and institutionalizing its contributions through ISR, precision strike, and missile defense.

The new integrated deterrence system is not the arithmetic sum of the two allies' capabilities.¹⁸ It must go beyond information sharing and crisis response mechanisms to encompass a regularized ROK-U.S. Deterrence Posture Assessment, joint operational and capability planning, standing crisis consultation protocols, and multilateral exercises linking the ROK-U.S. alliance with U.S.-Japan frameworks and NATO. It also means that South Korea's defense industrial capacity compensates for American production shortfalls relative to those of its peer competitors, institutionalizing the cooperation required for nuclear deterrence in the fullest sense.

Conclusion

The defining feature of the Third Nuclear Age is the interdependence of multipolar nuclear threats across regions. If the United States cannot check China and Russia, that vacuum translates directly into instability for its allies. The future of extended deterrence therefore lies not in American

provision but in ROK-U.S. co-management of the nuclear balance—shaping a favorable nuclear order rather than merely reacting to an unfavorable one. The United States must move beyond reassuring South Korea and begin treating it as a core partner in managing that order. South Korea, in turn, must participate not as a consumer of American strategy but as a responsible co-architect of it. Only then can the ROK-U.S. alliance evolve beyond passive extended deterrence into what it must become: an integrated nuclear alliance.

Author –

Hanbyeol Sohn is a Professor in the Department of Strategy Studies at Korea National Defense University (KNDU), where he serves as Director of the Center for Nuclear/WMD Affairs and Director of Research Planning at the Research Institute for National Security Affairs (RINSA). His research focuses on nuclear strategy, extended deterrence, and Korean Peninsula security.

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