



# AN INTEGRATED APPROACH TO DETERRENCE POSTURE

REVIEWING CONVENTIONAL AND NUCLEAR FORCES IN A NATIONAL DEFENSE STRATEGY

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The primary deterrence challenge facing the United States today is preventing aggression and escalation in limited conventional conflicts with a nuclear-armed adversary. It is a difficult conceptual and practical challenge for both conventional and nuclear strategy—but existing Pentagon strategy development processes are not equipped to integrate these tools to meet the challenge.

At the conceptual level, two strategy documents guide U.S. deterrence policy. The 2018 National Defense Strategy (NDS) described how multiple layers of conventional forces can help to deter aggression by nuclear-armed adversaries while the 2018 Nuclear Posture Review (NPR) proposed new nonstrategic nuclear options to enhance deterrence of aggression and nuclear use. The two documents each present a strategy for deterring nuclear-armed adversaries in regional conflicts and serve as valuable public diplomacy tools to explain U.S. strategic thinking and intentions to allies and partners, potential adversaries, the public, and Congress.

However, it is not clear how the strategies described in the NDS and the NPR relate to each other. What is the respective role of nuclear and conventional weapons in managing escalation in a limited conflict? How can conventional weapons deter and respond to an adversary's limited nuclear employment? As nuclear forces consume an increasing proportion of Pentagon procurement budgets, how should the services balance competing nuclear and conventional priorities? While these questions of national policy go unanswered, combatant commands are also struggling with a number of practical challenges with operating conventional forces under the shadow of nuclear escalation. Are combatant commands prepared to conduct nuclear signaling and employment operations during a limited conventional conflict, given complex logistical and strategic challenges? How can conventional forces operate effectively in an environment that may be degraded by nuclear use?

While the two strategy documents provide concepts for how each type of force can deter, they do not present an integrated approach for how the country will deter nuclear-armed adversaries from armed aggression. To effectively confront the challenge of a limited conventional conflict with a nuclear-armed adversary, the United States needs an integrated concept of deterrence: a strategy for posturing and if necessary employing conventional and nuclear forces to attain allied objectives at the lowest possible level of escalation.<sup>1</sup>

Currently, the Pentagon is exploring these issues under the Conventional-Nuclear Integration (CNI) concept, which was highlighted as a leading priority in the 2018 NPR.<sup>2</sup> Though the concept has never been clearly defined, combatant commanders and strategists have applied the CNI label to a wide range of decisions—including operational planning, military training and exercises, preparations to fight in a nuclear environment, and acquisitions of command-and-control and strike platforms. We argue that the current concept of CNI is incomplete. CNI should not be understood as a requirement that commanders and acquisitions managers should adhere to in order to maximize warfighting effectiveness. Some forms of integration could increase stability risks, create costly redundancy in force structure, or alarm allies. Instead, CNI should be understood first and foremost as a matter of national policy. How the United States integrates its nuclear and conventional forces should follow from the president's guidance for the role of nuclear

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1 Warden 2020. Ideally, an integrated concept of deterrence will also define the role of space, cyber, and nonmilitary options and incorporate them into operational concepts. While they may be critically important to deterrence success or to producing an effective response, these other options are outside the scope of this article. For more on cross-domain deterrence, see Gartzke and Lindsay 2019; Mallory 2018.

2 The 2018 NPR states: "U.S. forces will ensure their ability to integrate nuclear and non-nuclear military planning and operations. Combatant Commands and Service components will be organized and resourced for this mission, and will plan, train, and exercise to integrate U.S. nuclear and non-nuclear forces and operate in the face of adversary nuclear threats and attacks." U.S. Department of Defense 2018, 21.

weapons in US deterrence posture, new operational concepts for managing escalation in limited conflicts with nuclear-armed adversaries, and rational decisions for allocating finite resources.

The incoming administration will have an opportunity to review the strategies presented in the 2018 NDS and NPR. During the campaign, President-elect Joe Biden emphasized the need to reduce reliance on nuclear weapons and stated that, “the sole purpose of the U.S. nuclear arsenal should be deterring—and if necessary, retaliating against—a nuclear attack.”<sup>3</sup> As the incoming administration implements Biden’s vision for U.S. nuclear weapons policy, it should also review conventional force structure and plans. Reducing the role of nuclear weapons will require close integration of nuclear and conventional forces at the level of strategy to ensure the nation’s overall deterrence posture is effective and efficient against the range of threats nuclear-armed adversaries present. Implementing that integrated strategy requires understanding and evaluating existing CNI efforts and clearly defining how nuclear and conventional forces should and should not be integrated at the operational level. But how should the incoming administration structure the defense policy reviews to meet these objectives?<sup>4</sup>

An integrated defense strategy needs an integrated policy review. The practice of conducting a separate NDS and NPR has prevented past administrations from clearly defining the role, responsibilities, and requirements for nuclear and conventional forces. Rather than conduct a discrete NPR, the Biden administration should embed its nuclear posture review within an integrated NDS. This paper describes the importance of integrating deterrence policy at the strategic and operational levels, explains why a single integrated review is the best option for restructuring the policy reviews, and examines the implications for combatant commands and the services.

## Current status of conventional-nuclear integration

For several decades, U.S. strategists sought to increase the credibility and effectiveness of nonnuclear options for escalation management.<sup>5</sup> The 2002 NPR grouped nuclear and non-nuclear strike systems in the same vertex of its New Triad concept and was criticized from the left as blurring the line between nuclear and conventional weapons—giving allies and adversaries the impression the United States may be more likely to consider nuclear weapons at low levels of escalation—or increasing the risk that an adversary would perceive conventional operations as a threat to its nuclear forces.<sup>6</sup> The 2013 Nuclear Employment Guidance directed “increased reliance on conventional or non-nuclear strike capabilities...” as “a central part of reducing the role of nuclear weapons,” a concept that was criticized from the right as an implausible effort to substitute conventional for nuclear strike options.<sup>7</sup> These efforts helped to improve the credibility of both nuclear and conventional options but also demonstrated that these measures can have unexpected political and strategic effects, which depend not only on the specific capabilities proposed and the operational concepts they reflect, but also on how these measures are communicated.

In recent years, these efforts have been categorized under the CNI label. Though CNI has never been defined clearly, it has emerged as a major priority for the Pentagon. So far, CNI recommendations generally fall into four categories: enabling effective operations in a conflict marked by nuclear signaling or

3 Burns 2020.

4 The president-elect and senior national security advisors have not committed to conduct a new NPR or NDS or described how they plan to set national defense strategy in the new administration.

5 The recommendation is not new. It dates back to the intellectual predecessors of flexible response in the Army, Navy, and the RAND Corporation in the 1940s and 50s. In the 1980s, strategists on both sides of defense and deterrence debates urged what we now call conventional-nuclear integration. See, for example, Iklé and Wohlstetter 1988.

6 U.S. Department of Defense 2002. For criticism, see Levin and Reed 2004; Frankel, Scouras, and Ullrich 2016, 12.

7 U.S. Department of Defense 2013, 1–5.

employment, confronting hybrid adversary strategies, developing more effective options for nuclear use, justifying efforts to mix nuclear and conventional capabilities in upcoming systems.<sup>8</sup> Each of these concerns represents an important challenge for Pentagon officials. However, the new administration should develop an explicit policy for CNI at the level strategy before allowing the previous administration's CNI activities to proceed at the acquisitions, planning, and operational levels. Consider each category of CNI recommendations in turn.

First, experts have applied the term CNI to a range of logistical and operational issues that arise when conventional and nuclear forces are operating in the same area of responsibility.<sup>9</sup> For both forces to carry out their missions effectively, nuclear and conventional operations must be sufficiently integrated to enable and deconflict effective signaling and posturing, intelligence and reconnaissance support, battlespace management, and strike operations. In a crisis, planners will have to make decisions about how to balance nuclear and conventional options: dual-capable airframes for possible nuclear signaling or employment; tactical air capabilities to escort nuclear strike missions that are also in high demand for air superiority or land-attack missions; intelligence and reconnaissance assets that must identify targets for ongoing conventional operations as well as potential nuclear missions; logistics assets, including refueling aircraft, that will also be in short supply and possibly attrited by enemy operations. If the United States uses a nuclear weapon, it must minimize the disruption to U.S. or allied conventional missions, which are likely central to the alliance's political objectives in the ongoing conflict.

As it coordinates nuclear and conventional operations, the United States should not reflect operational concepts that rely on options that blur the lines between nuclear and conventional weapons. In describing how the Air Force is responding to external challenges, Lt. Gen. Richard M. Clark noted, "the lines are a bit more blurred between conventional and nuclear, so that's driven us to start thinking in ways that may be different than we thought about in the last 20 years or so."<sup>10</sup> U.S. officials are correct when they warn that Russian and Chinese decisions to intermingle nuclear and conventional systems pose significant escalation risks. If CNI increases the risk that an adversary mistakenly perceives U.S. conventional operations as preparing for nuclear escalation, it could increase the risk that limited conventional conflicts become nuclear conflicts. The challenge for the United States is to manage the risks posed by these destabilizing practices without mirroring them.<sup>11</sup>

Consistent with its commitment to a sole purpose policy, the incoming administration should ensure that CNI efforts strengthen rather than blur the line between nuclear and conventional weapons. Integrating nuclear and conventional planning is an opportunity to develop clear, credible conventional options for deterring and responding to adversary aggression and nuclear use. The administration should clearly delineate the limited functions of nuclear weapons and make clear that CNI is not misunderstood as an effort to enable nuclear forces to assume more missions from conventional forces.<sup>12</sup> Conventional-nuclear integration should reduce, rather than increase, reliance on nuclear forces—a stated goal of the president-elect.

8 Manzo and Miles 2016.

9 Peters, Anderson, and Menke 2018.

10 Cohen 2020.

11 In late 2020, STRATCOM has emphasized its term "strategic deterrence" in contexts where nuclear weapons had previously been declared inapplicable, including in referring to programs to improve the non-nuclear B-1B bomber's ability to deliver hypersonic conventional munitions and deterrence of Iran. Though STRATCOM's concept most likely does not reflect the integration of political and nonmilitary of the Russian concept that shares the same name, it clearly does refer to closer integration of conventional and nuclear strike options. U.S. Strategic Command 2020. On the Russian concept, see Fink 2017. STRATCOM also recently released images showing a mixed nuclear and conventional loadout on a B-2 bomber. Kristensen 2020. This messaging not only raises the risk that adversaries perceive B-1B as a nuclear-capable system in peacetime for treaty accountability or signaling, but also in wartime.

12 Lewis and Sagan 2016.

Second, some U.S. officials justify integrating conventional and nuclear operations on the grounds that Russia, China, and North Korea have developed “hybrid nuclear-conventional strategies” that envision limited nuclear and strategic conventional strikes for coercive purposes early in conflicts.<sup>13</sup> The “escalate to deescalate” concept, in which an adversary could resort to early nuclear use to terminate a conflict following limited conventional aggression, has dominated recent U.S. deterrence debates and has been used to justify for new limited nuclear options. However, leading area experts have warned that there is little evidence that these concepts accurately reflect Russian and Chinese doctrine.<sup>14</sup> Russian plans concentrate on strategic conventional strikes for escalation management and do not envision nuclear use as a way of consolidating gains from aggression, while Chinese doctrine remains doubtful about the possibility of controlling escalation across the nuclear threshold.<sup>15</sup>

The 2018 NPR states, “integrating and exercising all instruments of power has become increasingly important as potential adversaries integrate their military capabilities,” especially for managing “limited nuclear escalation and non-nuclear strategic attack.”<sup>16</sup> The concept rightly recognizes that an artificial division between nuclear and conventional planning could constrain U.S. options from deterrence or response to limited nuclear employment, especially in a conflict where nuclear use may not be confined to a later phase of a limited conflict but could hypothetically occur at the outset of a conflict or between two phases of conventional fighting. CNI steps that are reacting to an inaccurate reading of Russian or Chinese doctrine could bring about the very instability they are intending to prevent — for example, by mirror-imaging Russian concepts or provoking Chinese countermeasures to excessive nuclear signaling in Asia. The incoming administration should review standing assessments of adversary doctrine and reevaluating CNI efforts that are predicated on inaccurate or uncertain assessments.

Third, CNI has been attached to efforts to improve the ability of U.S. and allied forces to continue to operate in an environment that has been degraded by nuclear use. Senior defense officials now commonly reference the need for U.S. and allied forces to “fight in, around, and through” areas that have sustained a nuclear detonation.<sup>17</sup> Both conventional and nuclear deterrence may depend on an ability to continue to operate after nuclear use, which may in some circumstances require forces to disperse from centralized bases; hardening of aircraft, ships, vehicles, and facilities; robust and redundant battlefield awareness capabilities; and specialized medical capabilities. However, it is not necessarily the case that the services and combatant commands should maximize these efforts. More is not necessarily better. Decisions to harden, disperse, and support forces to defend them against a nuclear detonation depend on decisions about the role of U.S. nuclear forces and U.S. signaling to allies and adversaries that can only be made in a policy review. To take one example, an administration that reduces U.S. reliance on nonstrategic nuclear options may perceive a corresponding reduction in the likelihood of a U.S. or adversary nonstrategic nuclear detonation, or may identify other priorities for improving the credibility of conventional options. Whether, where, and to what extent U.S. forces need the capability to fight in a nuclear warzone should be determined as part of a defense policy review that considers threat assessments, risks to the joint force, and other fiscal and strategic priorities, including readiness.

Fourth, defense officials have sometimes referred to CNI in presenting efforts to develop strike and command, and control, and communications (C3) systems that can perform both conventional and

13 Peters, Anderson, and Menke 2018. See also Roberts 2020. On Russia, see Bruusgaard 2016; Johnson 2018.

14 North Korea experts have found some justification for the idea that Pyongyang could resort to early nuclear use to terminate a conflict in the regime’s statements and weapons programs, but the country’s marked military inferiority means that the risk that it employs a nuclear weapon to consolidate gains from conventional aggression is relatively low. Narang and Panda 2020; Lewis 2017; Mount 2019.

15 Olikier 2016; Tertrais 2018; Kofman and Fink 2020; Cunningham and Fravel 2019.

16 U.S. Department of Defense 2018, 21.

17 McCullough 2020.

nuclear missions. Adm. Charles Richard, Commander of U.S. Strategic Command (USSTRATCOM), promised that “you will see us doing conventional-nuclear integration in a way that we have never done before,” namely that there would be “a high degree of integration” between next-generation nuclear and conventional command-and-control systems.<sup>18</sup> Some deterrence experts have warned that “entanglement” of nuclear and conventional systems can introduce significant risks for strategic stability—for example if an adversary misperceives dual-capable weapons platforms as a nuclear signal or nuclear attack, or if it strikes dual-purpose command-and-control systems intending to gain an advantage in a conventional conflict but inadvertently affects U.S. nuclear weapons systems.<sup>19</sup> For example, if an adversary attacked U.S. dual-purpose command-and-control systems early in a limited conflict, it could put Washington in the undesirable position of having to escalate the conflict and retaliate as if the enemy had intended to attack U.S. nuclear forces, or to back down from the threat to do so.<sup>20</sup> Adversary strikes on dual-capable weapons platforms or command-and-control systems could inadvertently escalate a conflict. The United States is currently pursuing capabilities and operational concepts that increase this risk.<sup>21</sup> Whether it is necessary or advisable to run these risks is an important question for a defense policy review. The answer will constitute guidance of civilian leadership to shape the evolution of CNI.

CNI should not be understood as an objective or requirement that services and combatant commands should work to maximize. In each of these four areas, maximizing CNI could decrease strategic stability and the credibility of the overall U.S. deterrence posture. Maximizing integration could mirror the destabilizing practices of adversaries, blur the line between conventional and nuclear use, unnecessarily decrease the effectiveness and readiness of conventional forces, and raise the risk of nuclear escalation. The incoming administration, which is committed to sole purpose and reducing the reliance on nuclear weapons, should reassess CNI activities in each of these four areas.

#### *CNI in doctrine and command relationships*

As the incoming administration considers a policy framework for CNI efforts, it should ensure that military doctrine and command relationships support these concepts. Current military doctrine does not clearly assign responsibility for planning nuclear operations for regional contingencies,<sup>22</sup> which is necessary for effective conventional-nuclear integration at the operational level. JP 3-72 states that the “geographic combatant commander (GCC), supported by USSTRATCOM” is prepared “to perform nuclear targeting to generate desired effects and achieve objectives,” while JP 3-35 states that “specialized planning is typically conducted by USSTRATCOM in coordination with the supported GCC.”<sup>23</sup> In practice, retired combatant commanders report that they expected STRATCOM and Air Force Global Strike Command to serve as a supporting command for the GCC in all circumstances short of a major strategic nuclear exchange, providing functional forces as requested.<sup>24</sup>

18 U.S. Strategic Command 2020.

19 Acton 2018.

20 Manzo 2011.

21 With respect to dual-capable weapons platforms, the upcoming F-35 nuclear-capable variant, administration statements about nuclear-capable cruise missiles on unspecified naval vessels, and new hypersonic missile employment concepts could all increase this risk. With respect to command-and-control platforms, the Joint All-Domain Command-and-control program and upcoming early-warning satellites pose entanglement risks.

22 Saxton and Cancian 2020 identifies several other gaps in doctrine.

23 U.S. Joint Chiefs of Staff 2019, vii; U.S. Joint Chiefs of Staff 2018, III-12.

24 Authors’ interviews, May, 2020.

A fully integrated plan would need to nuclear and conventional options to produce a variety of strategic effects that are best understood by the functional command at different junctures in an evolving campaign plan that is developed by the geographic command.<sup>25</sup> It is not sufficient for STRATCOM to review nuclear appendices attached to GCC operational plans, as was the case in the past.<sup>26</sup> GCCs cannot afford to consider strategic stability and escalation management to be a STRATCOM responsibility, given the risks of nuclear escalation in even a limited, regional conventional war between the United States and a nuclear-armed adversary. However, GCCs cannot and should not assume these planning responsibilities either.

A new nuclear policy review should reevaluate the planning process for conflicts with nuclear-armed adversaries and establish a system that directly involves STRATCOM staff in the development and revision of integrated GCC campaign plans at each level of conflict with the task of managing escalation in ways consistent with the president's guidance. An integrated campaign plan will be better equipped to manage escalation from conventional conflict up to and beyond the nuclear threshold by assessing the escalation risks of conventional operations, responding to nuclear threats in accordance with the president's guidance, and preparing nuclear options at each phase of conflict as necessary. Civilian officials should review and revise existing operational plans to ensure that the plans reflect the president's guidance on sole purpose and reduced reliance on nuclear forces.

Command responsibilities and coordination may be complex in a limited conflict with a nuclear-armed adversary. In conflict, nuclear operations can be requested by the combatant commander or STRATCOM, or ordered by the president. In general, GCC clearly commands conventional forces, including dual-capable forces that carry nonstrategic and strategic nuclear weapons. In a conflict, the GCC would be responsible for executing nuclear operations short of a major nuclear exchange. However, joint doctrine also notes, "it is possible for Commander, USSTRATCOM, to control nuclear forces while the GCC provides command-and-control of conventional forces in a conventional conflict with a nuclear element."<sup>27</sup> But which command has responsibilities for nuclear and strategic conventional signaling and strike in which circumstances? These relationships are not yet clearly defined in doctrine. A policy review of CNI efforts and planning procedures is needed to ensure that STRATCOM and the GCCs can effectively implement a president's escalation management strategy in a limited conflict with a nuclear-armed adversary.

## The need for an integrated review

Conventional-nuclear integration is a critical question for an incoming administration committed to adjusting the role of nuclear weapons. How the United States chooses to pursue CNI will define the nation's nuclear and conventional deterrence posture for the coming decades. For this reason, the incoming administration's defense strategy review should ensure that plans, acquisitions, and operations support an integrated strategy in ways consistent with the president's guidance. If the administration does not develop and implement a clear strategy to guide CNI efforts, the oversight could complicate or undermine its deterrence strategy, either because reducing reliance on nuclear weapons leads to new vulnerabilities that are not addressed by conventional forces or because integration measures inadvertently threaten strategic stability or escalation management options. How the United States conducts CNI will depend on decisions about political objectives in a conflict, fiscal priorities, and the role of nuclear forces that require

25 Tecott and Halterman 2020.

26 U.S. Joint Chiefs of Staff 1996, B-1.

27 U.S. Joint Chiefs of Staff 2019.

presidential guidance. In other words, before CNI affects acquisitions, training, or operational concepts, it must first be resolved as a matter of policy.

But how and when can the president and senior defense officials develop a deliberate CNI policy? In practice, conducting a discrete NPR has inhibited the Pentagon's ability to determine the relationship between conventional and nuclear forces because that is not the review's purpose.<sup>28</sup> The task of an NPR is to articulate the role and force structure requirements of nuclear weapons within a broader national security strategy. Too often, this process has encouraged officials to think of deterrence as primarily a nuclear problem rather than a challenge that requires effective coordination of all available tools. As a result, responsibility for drafting and communicating the nation's deterrence strategy has been assigned to experts in nuclear weapons policy with limited interaction from strategists in other parts of the Pentagon. Consider how the narrow scope of an NPR has inhibited attempts to develop an integrated deterrence strategy in the areas of defense strategy, operational planning, and acquisitions.

### *Strategy*

The challenge of a limited conflict with a nuclear-armed adversary implicates both nuclear and conventional forces. Both forces should be prepared to attain the political objectives while adhering to any parameters to limit unintended escalation. In order to maximize deterrent credibility and flexibility, the president should have credible and ready conventional options for limiting and responding to escalation in a conflict in addition to a set of nuclear signaling and employment options consistent with the role of nuclear weapons articulated in U.S. strategy documents. It is not sufficient to determine the utility of nuclear or conventional forces in isolation. Given the nature of the challenge, it would be irresponsible and ineffective to reduce reliance on nuclear forces without careful consideration of the capabilities of conventional forces to perform deterrence and warfighting missions.

Managing escalation in a limited conflict with a nuclear-armed adversary demands that both U.S. conventional and nuclear forces support a common strategy to reduce the risk of sending conflicting signals, creating inadvertent escalation pressures, or maintaining capabilities that are suboptimal for a given task. An integrated strategy is necessary because in a limited conflict with a nuclear-armed adversary it cannot be the case that nuclear forces conduct deterrence while conventional forces concentrate on warfighting. For this reason, an integrated strategy will require both conventional and nuclear forces to adapt to meet the challenge.

Conventional forces must be prepared to attain limited military objectives—such as repelling an enemy ground assault, attacking air defense systems, or deterring limited nuclear use—while calibrating their operations to avoid unintended escalation. In a crisis, civilian officials may impose restrictions on military operations designed to limit escalation. In a crisis where avoiding escalation may be as important an objective as winning on the ground, a GCC's adaptive planning must be prepared to react to emergent military and political developments in theater as well as the requirements of escalation management. In addition to deterring aggression and waging a war, conventional forces may also be required to deter nuclear use by signaling an ability to escalate the intensity of their operations, preempting a nuclear attack by targeting an enemy's dual-capable delivery systems, conventional forces that support nuclear operations, or strategic forces, or responding to nuclear use by imposing graduated costs against an adversary. The United States cannot afford to trust that nuclear weapons will deter every potential instance of nuclear use, that an adversary will respond predictably to nuclear signaling or use, or that a president will authorize the use of nuclear weapons. Conventional forces must be prepared to manage escalation with nuclear-armed adversaries.

<sup>28</sup> Roberts 2020.



Nuclear strategy can also be adapted and improved in an integrated deterrence strategy. In a limited conflict, one of the primary functions of nuclear forces is to enable conventional forces to secure allied political objectives, whether by coercing an adversary into limiting its combat operations or deterring it from using or threatening to use nuclear weapons to gain a military advantage. Ideally, nuclear operations would not impede the ability of conventional forces to secure political objectives and would enhance, rather than detract from, the credibility of conventional deterrence.

Moreover, integrating U.S. and allied conventional strategy with U.S. nuclear strategy can help tailor nuclear deterrence more precisely to specific regions and contingencies. Tailored deterrence, a consistent emphasis of recent NPRs, is all the more important for an integrated deterrence strategy focused on regional deterrence of nuclear-armed adversaries. Accounting for the full measure of U.S. and allied conventional capabilities that can be brought to bear on a regional conflict may illuminate opportunities to further reduce reliance on nuclear forces, clarify requirements for nuclear options, or identify escalation risks that may not be visible when looking at either ally's strategy in isolation but may emerge from the overlap between the two.<sup>29</sup> Involving allies in an integrated defense review, and coordinating with them to develop credible conventional options, may well help the new administration explain and refine its concept of sole purpose. In addition, the review should put in place procedures to improve coordination with allies on integrated conventional-nuclear defense strategy

As a policy review of CNI and planning procedures streamlines U.S. campaign plans, the United States should also coordinate with allies to clarify the role they may play in supporting U.S. nuclear signaling or employment missions. Discussing operational plans involving potential nuclear use with allies are among the most difficult, sensitive consultations to have and allies are likely However, greater dialogue between U.S. policy makers and their allied counterparts in peacetime, as part of a strategy review at the stage of plans development or revisions, would ease the later burden of consulting allies in the midst of a conflict.

Ensuring that a U.S. president can communicate about potential nuclear options with his or her allied counterparts in a crisis may require new procedures and communications systems, especially for Asian allies.<sup>30</sup> The more these issues can be settled in peacetime, the better prepared the alliance will be for the complex and sensitive coordination that will have to take place in a crisis.

To accomplish these tasks, an integrated defense review should draw on the president's guidance to clearly define the narrow set of missions that may require nuclear forces as well as the set of missions that are conventional-only. Rather than an NPR process that concentrates on the utility, credibility, and budgetary authority of nuclear forces, an integrated review can identify the best tools for this very complex job.

### *Planning*

Planning for limited conflict with a nuclear-armed adversary requires that conventional forces are prepared not only to defend allies under attack, but to support regional stability in peacetime, calibrating the application of force to manage escalation, deter nuclear use in a crisis, and provide credible and effective options for responding to nuclear use if it becomes necessary. These missions require a change in perspective: in a world where conventional forces can hold at risk an enemy's leadership and strategic forces, operational commanders must not only maximize battlefield effectiveness but also be aware of how

29 For example, U.S. strategists have repeatedly expressed concern about South Korea's assertive counterprovocation plans toward North Korea. One reason is that escalating a low-level conflict may serve Seoul's interests in a limited conflict but may create unexpected risks at the nuclear level. More discussion is available in Mount 2019.

30 Mount and Vaddi 2020.

their actions could lead a conflict to escalate, including to the nuclear level.<sup>31</sup> As Schelling wrote, a limited conventional war between two nuclear powers is more about the manipulation of risk than about prevailing on the battlefield. His observation that “an all-out effort to destroy enemy capabilities and an all-out effort to coerce enemy decisions may not be compatible with each other” in nuclear targeting also applies to a limited conventional conflict between nuclear-armed adversaries.<sup>32</sup>

In a crisis or a limited conflict, allied conventional forces may intentionally or unintentionally signal intentions that can affect adversary behavior. Conventional planners now must be aware of how an adversary may perceive or misperceive not only by major steps like initiation of the “Time Phased Force Deployment Data” plans for flowing forces to the Korean peninsula—but also a range of other actions, including target selection, flight plans and missile trajectories, possible misidentification of ISR aircraft, electromagnetic operations, carrier movements, and scores more. As in nuclear targeting, the president may order that conventional operations avoid certain categories of targets or remain confined to certain geographical boundaries. This may require modifying the location, targets, payloads, or delivery vehicles for certain operations in ways that may not seem optimally effective. Moreover, regional commanders should be prepared to rapidly deploy or redeploy conventional forces to communicate readiness to escalate or deescalate in specific ways as required by national political objectives determined by civilian leadership. These considerations introduce an element of contingency and adaptiveness to the planning process from a new range of factors.

Policymakers must be ready to deliver, and commanders must be ready to implement, orders that both manipulate nuclear risk and meet allied objectives in the conflict at hand within specific defined parameters. Nuclear options should support the ability of conventional forces to meet the president’s selected political objectives in a range of plausible contingencies, but the objective of integrated planning should be to minimize the pressure on the president to resort to nuclear use by developing sufficient nonnuclear options.<sup>33</sup> To meet any of the requirements of this section, nuclear and conventional plans will have to be integrated to a high degree.

### *Acquisitions*

The last major advantage of an integrated strategy is that it can provide better guidance for acquisitions policy. By more precisely defining the roles and missions for nuclear and conventional forces, an integrated strategy can define clearer requirements for capabilities needed to manage the risk of limited conflicts with nuclear-armed adversaries and can rationally allocate finite resources between different potential force packages. The lack of an integrated strategy has allowed nuclear weapons acquisitions programs to be isolated from the broader process to prioritize capabilities and has provided officials no opportunity to evaluate the fiscal and strategic tradeoffs of nuclear weapons programs. In the last decade, the practice of conducting a discrete Nuclear Posture Review has contributed to a situation where nuclear weapons programs are prioritized without due consideration of the attendant effects these decisions have on conventional deterrence posture.

31 In recent years, experts have identified several emerging technologies and practices that could increase the destabilizing effects of conventional forces. Talmadge 2017; Biddle and Oelrich 2016; Lieber and Press 2013; Panda and Acton 2020.

32 Schelling 20, 214.

33 The most direct U.S. statement on the subject appeared in the 2013 nuclear employment guidance: “DoD is directed to conduct deliberate planning for non-nuclear strike options to assess what objectives and effects could be achieved through integrated non-nuclear strike options, and to propose possible means to make these objectives and effects achievable. Although they are not a substitute for nuclear weapons, planning for non-nuclear strike options is a central part of reducing the role of nuclear weapons.” U.S. Department of Defense 2013, 6.

In recent years, the costs for the nuclear arsenal increased rapidly—well beyond the initial projections provided to the public and to Congress.<sup>34</sup> Even as acquisition programs for a new ICBM and a range of nuclear warheads have accelerated, defense experts have warned that the administration has not adequately resourced its National Defense Strategy. Attack submarines, new frigate programs, the European Reassurance Initiative, force posture in Europe, and other conventional deterrence priorities have been subjected to steep cuts.<sup>35</sup> Faced with prospect that the National Nuclear Security Administration—the organization charged with producing and maintaining the U.S. nuclear weapons stockpile—would not receive a massive increase this year, its administrator appealed directly to Congress and received authorization to spend nearly one quarter more this year on defense nuclear programs than last year, a sum that the Trump administration hoped to offset by cutting an Virginia-class attack submarine.<sup>36</sup>

The aggregate effect has been to increase reliance on nuclear deterrence at the expense of conventional deterrence. If this was a deliberate decision, it does not appear in any official strategy document. The challenge of a limited conflict with a nuclear-armed adversary requires a strong conventional deterrent.<sup>37</sup> Only a strategy review that integrates both nuclear and conventional forces can provide rational guidance for apportioning scarce resources between nuclear and conventional forces.

## How to conduct an integrated deterrence posture review

Early in the new administration, President Biden will likely issue a Presidential Study Directive (PSD) directing the Secretary of Defense to review defense strategy and nuclear weapons policy. In initiating a new review of national defense strategy, the PSD should direct the Pentagon to integrate conventional and nuclear deterrence strategies in specific ways consistent with the president’s vision for the role of nuclear weapons in U.S. posture. If the president intends to shift to sole purpose or reduce reliance on nuclear weapons, the PSD should clearly define these terms and issue guidance about how to achieve these objectives in an integrated deterrence strategy.<sup>38</sup> In addition, the PSD might also decide to direct analytical reviews on specific questions, such as the number, posture, and role of specific strategic or nonstrategic weapons systems or presidential nuclear employment authorization procedures. Concurrent with drafting the PSD, the White House will have to decide whether to pause or otherwise modify any major acquisition programs when it issues the 2022 budget request shortly after taking office, decisions that may affect the structure or outcome of the reviews.<sup>39</sup> Providing guidance about the assumptions and the questions for a review can help to ensure that the president’s preferences are reflected in the final documents while avoiding a “hollow review” that examines questions that the president has already decided.

How should the president structure the defense policy reviews to ensure that they develop an effective concept of CNI consistent with his guidance? The NPR process to date has inhibited development of a

34 Congressional Budget Office 2019.

35 Mehta and Gould 2020.

36 Capaccio 2020.

37 A range of conservatives and former officials have argued the importance of conventional deterrence and some have criticized the Trump administration for not properly resourcing it. Colby and Solomon 2016; Gallagher 2019; Colby 2018.

38 To prevent misconceptions about sole purpose, the PSD should also clearly state whether or not the Pentagon policy review teams should make, or consider making, other significant shifts in the role of nuclear weapons, such as no first use.

39 The White House will have to decide which programs should be cancelled or modified outright in a Presidential Policy Directive (PPD). These changes should be provided as input to the NDS process. The PSD can direct the review to examine the requirements for other programs, either to determine requirements or to produce analysis that the president can draw upon in deciding the future of these systems. Due to their accelerated pace, it may be necessary to pause certain programs in order to allow the NDS process to review them fully (for example, the B61-12 nonstrategic nuclear gravity bomb).

cohesive, effective, and fiscally sustainable deterrence posture and should be discontinued.<sup>40</sup> To develop an integrated strategy for deterrence and defense in limited conflicts with nuclear-armed adversaries the review has to focus on this question, incorporate personnel from the geographical, conventional, and functional nuclear weapons communities; consult with allies and partners; and ensure that a range of interagency partners can contribute to the process.

Experts have proposed multiple options for restructuring the reviews, including a Strategic Posture Review that covers some combination of nuclear, strategic conventional, missile defense, space, and cyber capabilities<sup>41</sup> or a discrete Deterrence Posture Review that would present an integrated concept of deterrence.<sup>42</sup> A more modest option might modify the existing NPR process to include budget officials from OMB or the Comptroller's office to implement guidance about fiscal tradeoffs provided by senior NSC or Pentagon officials.<sup>43</sup> Each option could provide an opportunity for a more integrated strategy, but would run the risk that the NPR would be disconnected from the NDS to an extent that inhibits the development of an integrated strategy. Because CNI will define deterrence strategy, and deterrence is at the heart of American defense strategy, these questions should simply form the core of the next defense review.

The next administration should review nuclear posture as a subsidiary component of its NDS process. One of the central functions of the next administration's NDS should be to develop an integrated strategy to deter conventional aggression from nuclear-armed adversaries, to deter nuclear use in a regional conventional conflict, and, if necessary, to respond to nuclear use. The NDS should reflect the president's guidance for how to integrate conventional and nuclear strategy, his vision for sole purpose, and should publicly communicate the role, structure, and mission of the nuclear arsenal. Senior White House officials should chair regular interagency policy meetings to coordinate the process and input presidential guidance, as they did for the 2010 NPR. To ensure that the strategy is implemented consistently, it should accompany the development of a joint operational concept for escalation management in a limited conflict with nuclear-armed adversaries. Civilian officials should be prepared to review the joint operational concept and all existing plans following release of the new NDS.<sup>44</sup>

Developing an integrated deterrence strategy in the NDS will require the input of personnel from the conventional and nuclear communities. The Under Secretary of Defense for Policy and Vice Chairman of the Joint Chiefs of Staff should initiate interagency working groups that include participants from the NSC, Department of State, NNSA, combatant commands, and Intelligence Community.<sup>45</sup> As they structure the review, senior officials should select one or more central scenarios designed to develop an integrated strategy for deterrence of limited aggression and deterrence of nuclear use in a limited conflict. The primary working groups—consisting of representatives from the relevant GCCs, the conventional strategy community, and the nuclear strategy community—can test hypothetical force packages against these scenarios. Senior civilian officials leading the review, from the NSC, OMB, or the Under Secretary of Defense for Policy, are ultimately responsible for ensuring that the policies developed by any functional groups (for example, a group tasked with examining requirements for the ICBM force) are required by

40 This paper does not take a position on the Missile Defense Review or other official documents, but they face similar considerations.

41 Bunn and Sokolsky 2001. U.S. decision makers have addressed strategic nuclear force and national missile defense issues in an incremental and uncoordinated manner. Too often, force structure decisions have been driven by long-term programmatic, budgetary, arms control, and political pressures rather than by long-term strategy and objectives. The forthcoming Strategic Posture Review (SPR)

42 Mount 2018; Rose 2020.

43 This option would recover this aspect of the Clinton Quadrennial Defense Review process. The new administration could push for greater coordination between separate NDS and NPR teams during their respective strategy reviews, adapting or augmenting the coordination process used by civilian officials in 2009 and 2017.

44 Schulman, Friend, and Karlin 2019.

45 In practice, the best-suited officials to lead these working groups are the Deputy Assistant Secretaries of Defense for Strategy and Force Development (SFD) and Nuclear and Missile Defense Policy (NMD) and the J5 Deputy Director for Strategic Stability.

integrated deterrence concepts developed to manage plausible scenarios. The Deputy Assistant Secretary of State at the Bureau of Arms Control, Verification, and Compliance should lead an interagency working group to develop arms control policy that informs future force structure plans and threat reduction discussions in the NDS, complementing integrated deterrence aims.

In subsuming the NPR, the NDS would also be responsible for a number of its other important functions. An integrated review must publicly communicate the president's vision for the role of U.S. nuclear weapons; issue declaratory policy and negative security assurances; reiterate the NPR Article 6 commitment to pursue nuclear disarmament; affirm extended nuclear deterrence commitments to allies;<sup>46</sup> and must also coordinate with NNSA on stockpile stewardship, research and development, and acquisitions.<sup>47</sup> These tasks should be performed in an unclassified public document that summarizes the NDS or a separate unclassified nuclear employment guidance summary.<sup>48</sup>

Throughout the process, the NDS team will have to consult closely with U.S. allies on extended nuclear deterrence and other aspects of nuclear weapons policy in addition to extended conventional deterrence policy. Previous NPRs have been strengthened by early and frequent consultations with allies in order to explain forthcoming changes in U.S. policy and to review alliance policy. In addition, the NDS should involve allied officials and regional combatant commanders closely in the development of an integrated allied deterrence posture. An integrated deterrence review should inform allies how the United States is reducing its reliance on nuclear weapons while meeting its extended deterrence guarantees, how those changes make allies more secure, and should explore any alliance-specific measures that should accompany these changes.<sup>49</sup>

Integrating conventional and nuclear forces is necessary to maintain effective deterrence of nuclear-armed adversaries in a limited conflict. To meet the challenge effectively, conventional and nuclear forces must reflect a rational prioritization of finite fiscal resources, must both support the same concept of escalation management, and must be able to perform their missions effectively in a crisis. But it is not enough to simply integrate. How and why the United States chooses to integrate its acquisitions, plans, and operations will shape its deterrence posture for decades to come and so must be guided by a deliberate strategy and by the president's vision for the role of nuclear forces. An integrated strategy should not reflect destabilizing adversary practices or increase U.S. reliance on nonstrategic nuclear forces for managing a regional conflict. To the contrary, the incoming administration should start conventional-nuclear integration at the strategy level to reflect its commitment to sole purpose, reduce reliance on nuclear forces, and develop a comprehensive strategy to limit the risk that a regional conflict could escalate to the nuclear level.

46 Roberts 2013.

47 Furthermore, the NDS should decide whether to issue statements on whether the United States accepts mutual vulnerability with Russia and China, as well as the scope and function of U.S. missile defenses toward these countries. The Trump administration made dramatic changes to prior U.S. government statements on both issues and the Biden administration will have to choose whether to adopt these changes, revert them, or develop new policy.

48 The 2010 and 2018 NPRs also addressed nuclear nonproliferation, nuclear terrorism, arms control policy, and enterprise issues. While arms control and nuclear weapons enterprise policy should be covered under the integrated deterrence component of the NDS to ensure the strategy and its force structure recommendations can be implemented effectively, nuclear nonproliferation and counterterrorism policy should be subject to a separate process, such as a review conducted by the State Department's Bureau of International Security and Nonproliferation.

49 For example, some allies may suggest specific conventional force structure or force posture changes to compensate for reduced reliance on nuclear weapons, which should be evaluated on a case-by-case basis.

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Cover image: A U.S. Air Force B-52H Stratofortress leads a flight of four Swedish JAS-39 Gripen's June 11, 2015, during a BALTOPS 2015 mission over the Baltic Sea. Photo by Swedish Armed Forces via [Air Force Global Strike Command](#).