



## GLOBAL ENTERPRISE TO STRENGTHEN NONPROLIFERATION AND DISARMAMENT

# DISCUSSION PAPER: NUCLEAR DOCTRINE

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January 2019

### I. Background

This paper explores the role of nuclear doctrine in shaping nuclear requirements, force postures, use policy, and arms control, including nuclear disarmament and nonproliferation related agreements and actions.

Nuclear doctrine encompasses the goals and missions that guide the deployment and use of nuclear weapons, that determine each Nuclear Weapon States' (NWS) force structure, declaratory policy and diplomacy. The dominant goals of nuclear doctrine most often include deterrence, target destruction, assurance of allies, and a hedge against an uncertain future. But the drivers of nuclear decision-making also include ideas of power and prestige, domestic politics, and legacy deployments.

The strategic context has undergone major changes in the last thirty years, global nuclear stocks have been reduced in size significantly, and most nuclear force structures have involved major reductions in the number of nuclear systems deployed, particularly tactical options. Yet there has also been some degree of continuity in the commitment to nuclear deterrence and postures amongst the five NWS since the end of the Cold War. For example, the attachment to a strategic triad within both the United States and Russia has remained extremely strong.

During the Cold War there eventually emerged a strong shared belief among the principal nuclear adversaries that the use of any nuclear weapons would not be possible to contain and would likely escalate to an all-out exchange. This belief was reinforced by multiple wargames. Weapons at all levels, from battlefield to strategic, were deployed for deterrence purposes, to convince the adversary that they would be matched in any possible scenario. Any thoughts of fighting to win a nuclear war were squashed. Talk of a nuclear posture that includes prevailing if strategic deterrence fails is emerging in the latest U.S. Nuclear Posture Review (NPR) (and articulated by Mr. Gregory Weaver, one of the principals in the U.S. Department of Defense

\*This paper was commissioned by NTI to inform discussions related to the Global Enterprise to Strengthen Nonproliferation and Disarmament. The views expressed are solely those of the author and do not necessarily reflect those of NTI or of other participants in the Global Enterprise.

responsible for the NPR 2018, at the UN First Committee in 2018) and has dangerous implications for implied potential intention to fight a nuclear war to “win.” The Russians also appear to be rejecting the assumption in the latter years of the Cold War that nuclear use cannot be contained.

The shared belief today is that the strategic relationships amongst the NWS have deteriorated, possibly for as long as two of the three decades since the Cold War. Whilst arsenal numbers continued to decline well into the new century, the seeds of the current crisis were apparent soon after 2000. The George W. Bush administration’s 2002 NPR and decision to withdraw from the bilateral Anti-Ballistic Missile (ABM) Treaty was strongly criticized by the Russian government. President Vladimir Putin explicitly referred to that ABM decision when announcing in March 2018 new nuclear systems designed to circumvent U.S. missile defenses.

There now appears to be a greater willingness to actively threaten the use of nuclear weapons. NWS are all investing extensively in modernizing their nuclear forces, and their nuclear doctrines appear to flirt with new missions for those forces, such as the deterrence of non-nuclear strategic attacks, including even cyber-attacks. The need for states to re-establish processes that recognize and develop nuclear responsibilities, particularly those that nuclear armed states have to the wider international community, is stronger today than at any time since the Cold War. If possible, this would involve the preservation of arms control processes that have served to establish trust, strategic stability and contain the tendency to arms racing.

#### **A. Immunity to change in NWS: tensions between deterrence and disarmament**

Deterrence and disarmament debates are often divorced, and yet they have major impacts upon each other. Declaratory policy and disarmament diplomacy can be seen as part of the signaling behind any effective deterrent posture, which also has to exist within an international framework regulated by international law. NWS are legally and politically committed to multilateral, step-by-step disarmament, expressed most clearly in the agreed final documents of recent successful NPT Review Conferences (1995, 2000 and 2010). In particular they are committed under Action 5c (2010), “to further diminish the role and significance of nuclear weapons in all military and security concepts, doctrines and policies.” Yet NWS remain resistant to even modest initial concrete proposals. This could be due to a belief that deterrence could be more fragile than is sometimes explicitly assumed.

The credibility of nuclear deterrence is strongly affected by an adversary’s belief in the probability that a leader could authorize use of a nation’s nuclear weapons in the event that an existential crisis to vital interests to their state are impacted and that the capability exists to carry out that decision. Nuclear weapons do not exist in a vacuum; deterrence is affected by psychology, the perceptions of personality types, the broader strategic context within which

states sit, and the shared assumptions that underlie the signaling, amongst many other factors. The variables involved are indeterminate and interact in unpredictable ways, so that it is impossible to apply any certainty to deterrence.

With such unimaginable consequences of getting it wrong, the result is polarization. Some people see an imperative to escape this dependency on nuclear weapons before deterrence fails and nuclear weapons are used. Thus, in recent years, they have increasingly called for and pursued more urgent moves to abandon the practice. Other people conclude nuclear deterrence needs to be particularly robust and credible lest an adversary misperceive signals. Thus, they resist steps designed to assure adversaries or limit the application of nuclear threat. Such assurance, they believe, could be exploited (you give them an inch and they take a mile) and make it more likely that active deterrence threats will be required.

This tension between deterrence and disarmament is particularly evident in the area of declaratory policy. Declaratory policy forms part of the signaling that is the essence of nuclear deterrence. But military planners are keen to maintain ambiguity over the circumstances of future potential nuclear use in order to retain their freedom of action. They also want to avoid giving clarity to an enemy who might then feel freedom to operate below red lines, or even to test them and call the bluff. Postures therefore often refer to vague ideas such as vital interests and avoid specifics. Indeed, it is sometimes implied that ambiguity is central to any effective nuclear deterrent posture. However, excessive ambiguity in declaratory policy signals a lack of respect for the security of other states and also harms disarmament diplomacy more than is commonly assumed within NWS. It also increases the risk of misperception in a crisis. This presents a serious obstacle to further disarmament progress.

Offering specific nuclear assurances to adversaries does not necessarily show a reduced willingness to contemplate use of nuclear weapons in other circumstances; indeed, some greater clarity can strengthen deterrence where it may be particularly needed. For example, a No First Use (NFU) policy combined with a robust second-strike posture is likely to deliver more credible and effective deterrence against an adversary than a high readiness posture with rhetoric that could invite bluff-calling.

It is also important to recognize that obstacles to disarmament are dynamic, affected by a variety of factors, including disruptive technologies, trust and the strategic environment, shifts in geopolitical power, and leadership. What looks impossible one year may be achieved the next, and vice versa. Progress can be achieved in incremental steps, or it may simply involve preparing the groundwork or conditions, ready for unpredictable future shifts. Uncertainties generally lead to hedging and are a serious obstacle to progress on disarmament.

## **B. Recognition of two tiers within the NWS**

A brief glance at the size of arsenals and the posture of the five NWS will quickly show that the status of the United States and Russia is very different from that of the UK, France and China. This has been recognized in bilateral treaties such as INF and New START. But the prospect for collaboration between the other three (each of which has its own version of credible minimum deterrence (CMD), for example) has been underdeveloped. Similarly, there has been little effort by the United States and Russia to understand the logic behind the doctrines of the three and whether there are any lessons regarding sufficiency of a nuclear deterrence doctrine for credibility. Some options in this paper could be discussed at the level of the three.

## **C. Non-Nuclear Weapon States (NNWS) allies**

The tension between deterrence and disarmament is exacerbated by the challenges for some NWS in delivering credible extended deterrence (assurance) to allies. Those allies themselves also sit in an uncomfortable position, caught between supporting the nuclear doctrine of their sponsors but also recognizing the need for further progress on global nuclear disarmament. They tend to be more willing to acknowledge the risks and unintended consequences of those doctrines. These allies actively engaged in the intergovernmental meetings of the Open Ended Working Group and the humanitarian impacts of nuclear weapons within the 2015 NPT Review Cycle, meetings largely boycotted by the NWS. They are frequently the principal source of pragmatic step-by-step 'progressive' multilateral disarmament proposals within multilateral fora.

## **D. NNWS opposition to nuclear deterrence**

Much of the international community remains resolutely opposed to any attempts to legitimize nuclear deterrence. They equally are frustrated with the lack of progress in moving away from dependency upon nuclear weapons, which are seen as a universal threat. For these NNWS, the Treaty on the Prohibition of Nuclear Weapons (TPNW) is seen as an articulation of the pre-existing position that nuclear weapons offend international law on a number of counts, as well as an attempt to strengthen the norm against them. International diplomacy is seen as the primary arena to achieve progress in this area, and the entry into force of the TPNW as the best hope in a generation for strengthening the norm against nuclear weapons and achieving some concrete progress on global disarmament. NWS have declared the TPNW to be deeply unhelpful, under-developed (lacking in effective verification measures, for example), and polarizing. They believe it fails to account for the security situation that drives their nuclear postures.

But as they reject the TPNW, the NWS need to urgently consider alternative mechanisms to engage NNWS in a manner that respects their position and the need for progress. Indeed,

Action 5e from 2010 requires them to “consider the legitimate interest of non-nuclear-weapon States in further reducing the operational status of nuclear weapons systems in ways that promote international stability and security.” The wider international community believes the NWS have made little progress in this area since 2010. The U.S. NPR of 2018 appears to expand upon the non-nuclear scenarios which might trigger a U.S. nuclear response, and the Russians are introducing new offensive nuclear systems.

## **II. Exploring possible options**

### **A. Dialogue amongst NWS on nuclear doctrine**

The NWS are committed to a dialogue on strategic stability within the formal “P5 Process,” which has recently undergone a modest revival whilst China has been in the Chair. There are different interpretations of the meaning of strategic stability among the NWS and how to go about strengthening it. Discussion at all levels, within the NWS and in more public arenas, is very important. In particular, those responsible for nuclear doctrine need to demonstrate they have strategic stability at the core of their decision-making and to better understand what actions the others think would be destabilizing or could be misperceived. Such dialogue can also help to avoid competing ideas, such as strategic dominance, creeping into nuclear doctrines and exacerbating security dilemmas. It is important to develop habits of cooperation amongst deterrence decision-makers, based upon strategic empathy, to avoid these traps.

By the latter years of the Cold War, a norm had emerged that leaderships generally refrained from naked nuclear threats. Such threats were seen as dangerous and unnecessary, and also undermining public support for the systems upon which governments relied for stability. This norm appears to be under pressure, with Presidents Putin and Trump in particular apparently willing to explicitly threaten nuclear attacks, verbally and sometimes implied by Russian military maneuvers. Whilst nuclear deterrence relies upon implied threat, such rhetoric remains irresponsible and strategic stability would be served by an agreement to refrain from such behavior.

The NWS would benefit from private frank exchanges among themselves on how postures impact upon one another, on mutual restraint to avoid spirals in destabilizing capabilities, and on pathways to reducing the salience of nuclear weapons within broader defense and deterrence postures. Below are a series of potential options for engagement among the NWS on doctrine and posture.

#### **Option 1: NWS Discussions of Posture, Doctrine, and Mutual Restraint in P5 Process**

**NWS should continue and intensify discussions of nuclear posture, doctrine, and mutual restraint in the context of the P5 process.** This may lead to discussions on a code of conduct or

similar initiative that seeks voluntary constraints on nuclear doctrine as a step towards more formal arrangements. This pragmatic proposal could include reporting on progress to the wider NPT community during the 2020 Review Cycle.

*Option 2: UK-France-China Trilateral Discussions of Credible Minimum Deterrence CMD)*

**Specifically, the UK, France and China could jointly explore their criteria for CMD as a means to better understand the basis for each other's posture.** It may be that deterrence strategists could better explain why they see their own particular nuclear doctrine as sufficient and why they believe a less expansive doctrine could serve other NWS (especially Russia and the United States). In particular this dialogue could play an important role enabling the Chinese to see that their strategic position is treated seriously by the Europeans, while also encouraging them to remain in a constrained posture rather than to move to a triad posture and some form of strategic competition with the United States.

*Option 3: NWS Discussion of Limits on Acceptable Nuclear Posture and Policy*

**NWS need to discuss the limits to acceptable nuclear posture, and to agree on the basis for these limits, recognizing the interdependence of nuclear postures.** There needs to be some demonstrable confidence that today's leaders responsible for nuclear weapon decisions recognize the degree of risk that events are likely to rapidly escalate out of control the moment nuclear weapons are used. This renewed sense of risk could be reinforced through joint analysis and gaming of alternative outcomes to the Cuban missile and Able Archer crises. All NWS could declare their nuclear postures are exclusively for deterrence purposes, while clarifying what is to be deterred. They also could avoid particularly destabilizing nuclear weapon systems, such as those that are dual-capable (such as nuclear cruise missiles), and ensure that their nuclear C3I is detangled from conventional military decision-making.

*Option 4: NWS Hold Public Events on Their Nuclear Doctrines*

In recent years the U.S. government has held open side events at UNGA and NPT meetings to explain U.S. nuclear doctrine. These events are a welcome opportunity for dialogue between defense officials and the broader diplomatic disarmament community.

**All five NWS could hold events on their nuclear doctrines at NPT and UN meetings, and could consider engaging in longer exchanges in Geneva or New York.** These meetings could include explanations of ambitions for changes in doctrine, and current understanding of the conditions for positive doctrinal changes, such as a move to sole purpose, reduced salience and reduced readiness. There has been insufficient engagement at the political level in intergovernmental disarmament discussions. All NWS could consider following the example of the UK in 2008 when Des Browne, then UK Secretary of State for Defence, became the first and only Defense

Minister to address the UN Conference on Disarmament (CD). It was in this speech that the Minister launched the P5 Process.

*Option 5: NWS Efforts to Explain Nuclear Doctrines as Relates to International Law*

The polarization within the international community is driven by the lack of progress on multilateral disarmament, but it also comes from a frustration with the apparent attitude amongst the NWS that they and their nuclear doctrines exist above the law and in perpetuity.

**NWS could do more to explain how their nuclear doctrine conforms to the Law of Armed Conflict and International Humanitarian Law, and in particular the principles of necessity, discrimination, proportionality, respect for neutrality, and the avoidance of unnecessary suffering.**

**B. Declaratory policy**

All NWS have a declaratory policy, usually spread across official strategy documents, speeches and declarations, or resolutions. Whilst proposals are often discussed in binary terms (such as a NFU policy) they are usually graded, and therefore open to incremental change. India, for example, has an explicit NFU, but has more recently suggested that it would consider nuclear retaliation against strategic use of chemical or biological weapons (CBW). A common objection to treating tighter declaratory policy as serious contribution to disarmament is that in the heat of any serious crisis decision-makers will not be constrained by such policy, and that some governments are quicker to declare and then to renege on such declarations. Whilst it may be partially true, it is deeply cynical to fully discount the substantial signaling and peacetime posture benefits arising from declaratory policy. An explicit NFU, for example, can impose meaningful constraints on nuclear posture, because of its impact on training and exercises, command and control procedures, legal advice and other blocks on freedom of decision-making.

Declaratory policy is usually determined on a unilateral basis. The U.S. government seriously considered a declaration that deterring nuclear attack or threat would be the sole purpose of its nuclear weapons during its 2010 NPR and again in 2016. It rejected the idea, in part, on the basis that allies (particularly Japan) might have seen this as a reduced commitment to extended deterrence. A bilateral dialogue between China (which has an NFU) and the United States (which does not because of the perceived need to reassure the Japanese against a Chinese threat) could encourage greater understanding and open the possibility for improvement in relationships. There is now a public campaign within the United States to persuade leading Democrats to endorse an NFU policy. President Putin took many people by surprise by making what appeared to be a declaration of sole purpose in his speech to the Valdai Club in 2018.

### Option 6: Dialogue on Declaratory Policy within P5 Process

**NWS could start a dialogue on declaratory policy within the P5 process.** This dialogue would help in clarifying understanding of each other's policies and open up space for states to make requests of each other for assurance. It would also open the possibility for coordinated declarations, statements of shared understanding, or even more formal multilateral arrangements to emerge (such as a mutual NFU, or a joint declaration that nuclear weapons are only to be considered a weapon of last resort). There may be some particular benefit to a discussion between UK, France and China, as these three states share some similarities in their nuclear postures.

### Option 7: Consultations on How NWS Could Strengthen Negative Security Assurances (NSAs)

NWS have all issued some form of assurance to most NNWS that they will not suffer the threat of nuclear attack (negative security assurances). Whilst the principal threat of nuclear exchange is between the nuclear armed states themselves, these assurances demonstrate good faith toward the rest of the international community and limit the salience of nuclear weapons. However, they come with some conditions for NNWS that have evolved over time, and which may include: their compliance with the NPT; that they do not engage in strategic-impact attacks, particularly those using CBW; and that they are not in alliance with a NWS. Moves in the direction of making NSAs unconditional could send an olive branch to the NNWS at a time when good will within the NPT is essential.

**There is therefore is a good case for NWS to now review the conditions they specify in their NSAs.** Ideally, NWS would do this in consultation with each other and with NNWS in international fora (such as the CD). They may currently be more open to an incremental process that involves unilateral moves that modestly tighten their conditions, or to discussing amongst themselves coordinated moves. Progress on strengthening and ratifying legally-binding protocols to Nuclear Weapon Free Zones would also help.

### **C. Creating the Conditions for Nuclear Disarmament**

Improving the context for disarmament, in particular the strategic security environment, will certainly assist progress. This effort has to include a focus on the negative impacts arising from nuclear postures. One lesson from the 1990s is that political and institutional commitment to nuclear deterrence can outlive the original strategic imperatives. Some of the systemic impacts of individual state policies of nuclear deterrence exist independently of the broader security environment.

The U.S. State Department has recently launched its "Creating the Conditions on Nuclear Disarmament" (CCND) initiative, that initially appears to be open-ended and inclusive. Many



states, including allies, have been cautious in welcoming this initiative. That caution stems primarily from the broader context of other Trump Administration initiatives that have appeared hostile to multilateralist approaches and perceived ambiguity around the term “conditions,” which many have interpreted as “pre-conditions.” Improving global and regional strategic security has unquestionable intrinsic benefit, but implying this is necessary to future disarmament steps is deeply divisive as well as inaccurate (not least because disarmament also depends upon attitudes and perceptions). However, this initiative, at face value, could be an important contribution to developing transparency and a constructive international dialogue on issues of critical importance to success in disarmament, including regional security, trust and confidence building, and the impact of disruptive technologies. This coming 12 months could prove instrumental in how this initiative progresses within the international community and how much it can contribute to a constructive dialogue.

#### *Option 8: Appropriately Balanced Engagement on CCND*

The U.S. State Department will need on the one hand, to adaptively balance the need for inclusive openness as well as to amend the initiative to address concerns already expressed and on the other hand, to provide credible leadership in driving it and avoiding too broad or vague a focus. It will also need to include assessments of the negative unintended consequences and risks of nuclear doctrines. Other states will need to find a dynamic balance between constructive criticism and engagement.

### **III. Conclusion**

Most of these options involve the NWS themselves acting unilaterally, bilaterally, together as a five or as a three (UK, France and China), exploring incremental changes to their nuclear doctrines in a manner that signals recognition of their nuclear responsibilities towards each other and the broader international community. The recent revitalization of the so-called P5 Process provides an obvious forum for some of the more sensitive and frank conversations between the NWS, particularly if this is seen as not only valuable in its own right but also as preparation for greater transparency and discussion with the wider international community at NPT and UN meetings (particularly First Committee and the CD). The purposes in tightening nuclear posture involve risk reduction, improving relations between NWS, but also in signaling intent to NNWS. This last means that NNWS have an opportunity to express their priorities in amendments to nuclear doctrine and to make particular requests of the NWS, and a responsibility of NWS to communicate effectively with NNWS. There has been a reluctance in some parts of the disarmament community to address nuclear deterrence and doctrine head-on, but real progress demands this approach.