Nuclear Responsibility: A New Framework to Assess U.S. and Russian Behaviour

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Amelia Morgan and Heather Williams
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About the Authors

Heather Williams is a Lecturer in the Defence Studies Department and Centre for Science and Security Studies (CSSS) at King’s College London. She is also an adjunct Research Staff Member in the Strategy, Forces, and Resources Division of the Institute for Defense Analyses in Alexandria, Virginia, where she has worked since 2008. Until January 2015, Heather was a Research Fellow on Nuclear Weapons Policy at Chatham House and led projects on the Nuclear Non-Proliferation Treaty and the Humanitarian Impacts of Nuclear Weapons Initiative. She is also a co-President of Women in International Security (UK). Dr. Williams currently leads research projects on asymmetric arms control and emerging technologies, the impact of social media on conflict escalation, and U.S. messaging strategies on arms control and disarmament.

Amelia Morgan is a Research Assistant at the Centre for Science and Security Studies (CSSS) at King’s College London and a doctoral candidate at the Department of Defence Studies at King’s, where her research is fully-funded by the Defence Academy of the United Kingdom. Amelia previously worked at the International Centre for Security Analysis at the Policy Institute at King’s and as an intelligence analyst in the private sector. She holds a bachelor’s degree in Philosophy, Politics and Economics and a master’s degree in Non-Proliferation and International Security.

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Amelia Morgan and Heather Williams, King’s College London

Recently announced nuclear modernisation plans by the United States and Russia have revived claims that they are failing to live up to their disarmament obligations and are behaving as irresponsible nuclear actors. Many of these criticisms come from supporters of the Treaty on the Prohibition of Nuclear Weapons (TPNW), which opened for signature in September 2017. Yet TPNW proponents often reduce nuclear responsibility to a binary of possession or abolition: either Nuclear Weapon States (NWS) are actively disarming and reducing their arsenal sizes, and therefore are behaving responsibly, or they are modernising their arsenals and behaving irresponsibly.

But what constitutes responsible nuclear behaviour? Is it purely subjective? Or are there ‘widely accepted norms of behaviour’ observed by responsible nuclear states, as argued by William Walker? And more importantly, how can states become more responsible nuclear actors so as to strengthen the global nuclear order at a time when it is most fragile? Rather than succumb to the temptation to treat responsibility as purely subjective and ‘in the eye of the beholder’, this policy brief offers a framework for evaluating nuclear responsibility based on the following factors: observation of legal obligations, adherence to norms, and risk reduction.

Debates about modernisation and responsibility are likely to be prominent for the remainder of the 2020 review cycle of the Non-Proliferation Treaty (NPT), as was evidenced in the recent 2018 Preparatory Committee (PrepCom). The NWS, including the United States and Russia, will continue to feel pressure for their alleged failure to achieve deeper nuclear reductions, continued investment in nuclear weapons programmes, and lowering the threshold for nuclear use. These admonishments are not exclusive to supporters of the TPNW, but stem from a variety of critics.

In this policy brief we argue that the United States and Russia can demonstrate greater responsibility by jointly increasing transparency into their nuclear doctrines so as to avoid crisis escalation and further increasing nuclear risks. Additionally, they can offer either separate or joint visions for the future of arms control, to include further reductions. American nuclear policy can be

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1 Michael Krepon, referring to the adoption of the Treaty on the Prohibition of Nuclear Weapons, for example, said: “Not one nuclear-armed state is now in negotiations to reduce nuclear dangers and nuclear weapons. This is irresponsible behavior. In contrast, the states that have negotiated this treaty have acted responsibly.” See: “Stimson Statements: UN Nuclear Ban,” Stimson Center, 7 July 2017, https://www.stimson.org/content/stimson-statements-un-nuclear-ban. See also: Nick Ritchie, “Legitimizing and Delegitimizing Nuclear Weapons” in John Borrie and Tim Caughly (eds), Viewing Nuclear Weapons through a Humanitarian Lens (Geneva: UNIDIR, 2013).


more responsible by better explaining its nuclear investments so as to differentiate modernisation on safety and security from new capabilities. Russia can become more responsible by clarifying questions about its compliance with the 1987 Intermediate-range Nuclear Forces (INF) Treaty and increasing transparency into its own nuclear posture.

“Middle ground options may not only prove more practical but also more significant over the long term.”

Sceptics of this approach will presumably suggest that it absolves nuclear weapons possession and is mere rhetoric to mask malign intent. To the contrary, we argue that immediate disarmament is not the only way that states can demonstrate responsibility, reduce risks, and lay the groundwork for further nuclear reductions. These middle ground options may not only prove more practical but also more significant over the long term.

A Framework for Assessing Nuclear Responsibility

In nuclear discourse, ‘responsibility’ is employed in at least two ways. The first speaks to tasks or roles, whereby NWS are assigned responsibilities prospectively – to continuously reduce their stockpiles and to prevent proliferation in the future, for example. We also hold them retrospectively responsible for certain outcomes, such as their failure to prevent the dissemination of nuclear materials, or for their role in escalating tensions between adversaries. The second approach employs responsibility as an adjective, whereby behaviour is either deemed praiseworthy or condemnable; states are often qualified as either ‘responsible’ or ‘irresponsible’ or described as having acted responsibly. In short, states not only have responsibilities but are also tasked with being responsible.

This analysis is largely concerned with the latter understanding of responsibility: namely, how NWS can demonstrate responsibility with nuclear weapons. We identify three factors as the foundation of nuclear responsibility: compliance with legal obligations, adherence to norms, and pursuit of risk reduction measures. In doing so, we acknowledge that different audiences will prioritize different factors. We also accept that many of these factors are often intertwined and overlapping. Therefore, this framework attempts to capture varying priorities to offer options for strengthening responsibility across different audiences and actors.

We then apply this three-tiered framework to American and Russian nuclear behaviour across issues such as adherence to existing arms control agreements, including the NPT; observance of nuclear norms, including non-use; and nuclear risk reduction, including safety and security and avoiding crisis escalation.

Legal Obligations

The first factor of nuclear responsibility is compliance with legal obligations, such as those mandated by the NPT and other arms control treaties. The NPT, which opened for signature in 1968 and enjoys near-universal adherence has historically been the key legal institution outlining states’ obligations with regards to nuclear weapons and nuclear energy. In Article VI of the NPT, states pledge to, ‘pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament.’

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6 Kate Sullivan, Is India a Responsible Nuclear Power? S. Rajaratnam School of International Studies, 2014, p.1
States and Russia have made measurable progress in terms of quantitative reductions, progress has stalled in recent years and they have come under increasing pressure and criticism for failing to disarm at a faster pace.

Other legal obligations, such as bilateral arms control treaties including the 2010 New Strategic Arms Reduction Treaty (New START) and 1987 INF Treaty, provide explicit requirements for reducing U.S. and Russian nuclear weapons. Positively, both the United States and Russia continue to implement New START and met a February 2018 deadline on its central limits, which are nearly 90% lower than Cold War arsenals.

The value of arms control, however, extends beyond reductions themselves to include the behaviour it prescribes. In New START, for example, the United States and Russia are required to participate in data exchanges every six months, notify the other party of any changes in their strategic forces, and conduct 18 on-site inspections per year on each other’s forces. This arrangement provides insight into respective force sizes and composition. Yet it also affords unique transparency and promotes confidence between states parties.

Observance of Nuclear Norms

The second factor in the nuclear responsibility framework is the observance of nuclear norms, which provide a valuable source of restraint beyond the law and can be defined as ‘rules of the road.’ Indeed, it is often through normative understandings of what constitutes reasonable, fair, and appropriate behaviour that fosters stability and guides state conduct. As an example, the non-use of nuclear weapons – the most sacred of nuclear norms – was established by the stigma attached to using these weapons, not necessarily due to legal prescription but also on humanitarian grounds and because of the risks of retaliation.

Other nuclear norms include the norm of non-proliferation and nuclear security. While some argue North Korea’s nuclear programme undermines the norm of non-proliferation, the international response counterbalances this by condemning the Hermit Kingdom and offering it as an example of what not to do. The norm of non-proliferation is indeed imperfect, but the relatively low numbers of nuclear possessors suggests it remains strong. Similarly, a basic responsibility of all nuclear actors, captured in both legal texts and norms, is to maintain control of their nuclear weapons and prevent their spread to other states or non-state actors either through direct assistance or mismanagement and theft.

Reducing Nuclear Risks

Finally, states are expected to reduce the risks of nuclear weapons use, proliferation, or accidents. This has received considerable attention of late due to fears of terrorists acquiring nuclear weapons and a series of studies in 2014 into America’s nuclear infrastructure which found serious risks due to lack of management and investment. In one extreme case, nuclear weapons were unknowingly flown across the country. Other security breaches and technical failures have occurred in Europe and Asia. In short, states are expected to keep their arsenals safe and secure.

In addition to reducing the risks of theft and accident, nuclear responsibility calls on states to avoid scenarios that could involve nuclear weapons use either deliberately or due to misperception. Historically, one tool for avoiding escalation has been crisis communication and arms control, whereby states seek to promote strategic stability, transparency, and de-escalate tensions through consultative committees and communications channels. A more controversial means of nuclear risk reduction is maintaining a strong and credible nuclear deterrent, wherein the goal of nuclear deterrence is to prevent the use of nuclear weapons, as previously mentioned under the norm of non-use. This deterrence paradox has been prevalent throughout the nuclear age, but is arguably another tool for reducing the risk of nuclear bullying.

As this discussion demonstrates, responsibility is hardly a binary and none of these factors is without controversy. But this framework is offered primarily to prompt discussion about the responsibility lens and to identify areas where both the United States and Russia can potentially improve their nuclear responsibility.

U.S. Nuclear Responsibility amidst Modernisation

Turning first to legal responsibilities, one of the main criticisms of U.S. nuclear responsibility is that investment in nuclear modernisation undermines its legal commitment to Article VI of the NPT on the grounds that this is ‘vertical’ proliferation and increases reliance on nuclear weapons. For example, the 2018 Nuclear Posture Review (NPR) calls for a new low-yield warhead for submarine-launched ballistic missiles, cruise missile, and following through on modernisation plans from the Obama Administration. Including these modernisation plans and investment in the nuclear infrastructure, the United States plans to spend $1.2 trillion over the next 30 years.

But the modernisation debate suffers from at least two common fallacies that should be rectified, at least in the context of discussion on nuclear responsibility. The first fallacy is that investment in nuclear weapons is incompatible with disarmament. For decades the United States and Russia have been reducing the size of their arsenals through reciprocal arms control agreements while also investing in updating and replacing existing systems. Replacement of systems does indeed suggest the United States and Russia plan to maintain their nuclear arsenals for the foreseeable future, but while doing so they can also ‘pursue negotiations in good faith’ towards further reductions and eventual disarmament while avoiding an arms race, in compliance with the NPT.

“It is a fallacy to suggest that investment in nuclear weapons is incompatible with disarmament.”

The second fallacy is that modernisation increases nuclear risks and threatens strategic stability. On the contrary, modernisation does not, in and of itself, increase the risks associated with nuclear weapons but rather attempts to reduce risks. Investment in the nuclear weapons complex should not be assumed as going towards new capabilities, new weapons, or new means of delivery. To the contrary, such plans are necessary in order to maintain safe, secure, and reliable systems. Indeed, a common criticism of nuclear possessor states is that there have been too many ‘close calls’ with nuclear weapons due to security breaches, technical errors, or miscommunication. Investment in the nuclear infrastructure is intended to reduce these

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nuclear risks. As Mount argues: ‘modernisation that refurbishes and replaces systems with improved variants is necessary in order for such systems to continue to carry out their missions safely and reliably.’ Responsible nuclear modernisation, therefore, is a balance of improving safety and security, replacing systems as they age, retiring them if deemed redundant, and introducing new capabilities as required. This latter point is perhaps the most controversial. Nuclear postures are a product of security context, military planning, legal obligations, and humanitarian concerns—therefore, how states practice responsible nuclear sovereignty is also a product of what is considered to be in the national interest as determined by politicians, diplomats, and military planners.

In terms of nuclear norms, a common criticism of the recent U.S. NPR is that it reduces the threshold for nuclear use and potentially undermines the nuclear taboo. The NPR insists that it raises the threshold for nuclear use because a stronger deterrence and assurance posture will, ‘ensure that potential adversaries perceive no possible advantage in limited nuclear escalation, making nuclear employment less likely.’ Experts such as Oliver Meier argue the result is the opposite and that by broadening the use of nuclear weapons to deter non-nuclear threats, the United States is lowering the threshold. The goal of this policy brief is not to resolve this dispute, but rather to highlight that despite attempts to the contrary, America’s nuclear doctrine is at risk of being interpreted as undermining the norm of non-use.

In other areas of risk reduction, the United States has assumed an increased sense of vigilance. As discussed above, this includes financial investment in the nuclear infrastructure to strengthen safety and security and reduce risks of accident. In terms of the risks of escalation, the United States claims that it continues to observe its arms control agreements and has repeatedly requested further engagement with Russia on crisis communication.

**Russian Nuclear Responsibility: Wavering Commitment to Arms Control**

Russia is subject to the same legal responsibilities as the United States. Russia has been modernising its nuclear triad, introducing new capabilities, and also maintaining non-strategic nuclear capabilities, but has attracted far less criticism than American nuclear modernisation. Rather Russia’s compliance with its legal obligations has come into question in recent years. In 2014 the U.S. State Department alleged that Russia was in violation with the INF Treaty. Since then, in December 2017 the United States confirmed the 9M729 ground-launched cruise missile as the ongoing source of the violation.

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18 Oliver Meier, “The Nuclear Posture Review.”


The Russian Foreign Ministry denies the missile is in violation of the INF Treaty and in turn accuses the United States of violating the Treaty through the use of unmanned aerial vehicles and missile defence launch intercepts. In a March 2018 speech, Russian President Vladimir Putin announced Russia would be deploying a host of new capabilities, including hypersonic weapons, underwater drones, and nuclear-powered cruise missiles, sowing further confusion as to its military intentions.

Russian approaches to New START largely mirror those of the United States, whereby it continues to observe the treaty and met the required limits in February 2018. What remains opaque about Russian nuclear policy, however, is its interest in further arms control and risk reduction measures. Whereas the U.S. NPR clearly correlates capabilities, namely the new cruise missile, with the goal of returning to arms control, Russia does not have a similar vision for its new nuclear capabilities. Indeed, Russia offers minimal transparency into the intent of its various nuclear capabilities and has done little to resolve questions about its doctrine.

“In terms of nuclear norms, Russia’s nuclear doctrine is accused of lowering the threshold of nuclear use, similar to criticisms of the NPR. Russia’s doctrine is often described as ‘escalate to de-escalate’, whereby it would use nuclear weapons to end a conventional conflict that it was losing.” Russian experts, however, insist that this is a misrepresentation of Russian doctrine and instead point to the 2014 Military Doctrine, which stated that nuclear weapons would only be used ‘when the very existence of the state is under threat.' Again, this discussion is not meant to weigh in on these evaluations of doctrine, but rather to highlight the perception that Russia is lowering the threshold for use and potentially undermining the norm of non-use. This could have implications for crisis escalation and communication.

**Recommendations: A Responsibility to Set the Record Straight**

This framework proves useful for assessing national nuclear policies with potential beyond the United States and Russia. As argued, it moves beyond the binary whereby possession is ‘irresponsible’ and disarmament is ‘responsible’ and in the process opens intellectual and policy space for identifying options for strengthening responsibility that have potential to gain traction with NWS. It also offers a useful lens for comparing and contrasting NWS nuclear doctrines, and highlights at least three trends in U.S.-Russia relations.

First, for as long as nuclear weapons exist, the conceptualization of responsibility must account for the security context in which the weapons exist. This is not to rule out humanitarian or ethical influences on the goal of responsibility, rather to highlight that these factors could work in tandem but must include security considerations. Second, both the United States and Russia are modernising their arsenals, but not all modernisation is created equal, with some investment going to safety and security, thereby reducing nuclear risks, and others going to new capabilities.

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which have the potential to increase risks. And finally, both the United States and Russia can take steps to increase transparency and resolve misunderstandings about doctrine, and strengthen nuclear norms and reduce risks. Based on these trends, we offer five recommendations for how the United States and Russia can demonstrate a greater commitment to nuclear responsibility.

**Recommendation 1: Re-Engage with Arms Control**

Arms control offers one of the best tools for demonstrating responsibility by legally-binding states parties to their commitments, strengthening norms, and reducing nuclear risks. Therefore, the United States and Russia should find a resolution to disputes over the INF Treaty. One option would be to set a date at which point both will guarantee they are in full compliance, giving Russia time to withdraw any treaty-prohibited weapons in a face-saving option, and then restoring the INF verification protocols. Another option is reciprocal inspections of the alleged treaty-violating items, whereby Russia would inspect NATO missile defences in exchange for American inspection of Russian cruise missiles.23 While resolving the INF Treaty, Washington and Moscow should immediately agree to extend the New START agreement by five years, buying time for negotiating a follow-on.

In addition, both Washington and Moscow can offer either unilateral or joint visions for the future of arms control. Neither country currently identifies a clear way forward, increasing the likelihood that they are approaching a post-arms control world deprived of the transparency and predictability typically provided by arms control.

“The U.S. and Russia are approaching a post-arms control world deprived of transparency and predictability.”

**Recommendation 2: Increase Transparency to Reduce Misperceptions about Doctrine**

Our framework highlighted mutual misperception about strategic doctrines, which could increase nuclear risks and weaken the norm of non-use. Therefore, we recommend the United States and Russia engage in military-to-military dialogues explicitly to discuss their nuclear doctrines. Specifically, this would resolve confusion about the ‘escalate to de-escalate’ characterisation on both sides. These dialogues would not necessarily create legally-binding commitments nor would they lead to nuclear reductions, but they would contribute to existing norms and risk reduction as part of a responsibility-driven nuclear policy. Dialogues could be conducted with the explicit intention of demonstrating nuclear responsibility. These discussions could assumedly occur in the ongoing strategic stability talks, if they are not already doing so.

An additional measure is to introduce discussion of responsibility and doctrine into the NPT forum. For example, in the context of the ‘P5 process’, NWS could make the case for why they see their nuclear activities as responsible and in accordance with legal obligations, norms, and risk reduction, based on the framework provided here. This reinforced dialogue would inject new momentum and focus to the ‘P5 process’ and, although it is unlikely to satisfy many critics of the NWS, it may also yield opportunities for improving transparency, confidence-

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building measures, and identifying steps for additional risk reduction.

“The U.S. and Russia should engage in military-to-military dialogues explicitly to discuss their nuclear doctrines.”

A final opportunity to increase transparency is through engagement with non-governmental organisations (NGOs). To date, the United States has far exceeded Russia in these efforts, such as with a side event at the 2018 NPT PrepCom to clarify points in the recent NPR that focused on NGOs rather than states parties. Russia, along with China, would benefit from similar engagement to address potential misunderstandings about its military doctrine, capabilities, and modernisation.

Recommendation 3: Joint Statement on Reducing Nuclear Risks

To demonstrate a commitment to nuclear responsibility and strengthen nuclear norms, we recommend that the United States and Russia sign a joint statement on reducing nuclear risks. This could be similar to the Statement by the Euro-Atlantic Security Group that called for reinforcing the principle that nuclear war cannot be won and must never be fought and to preserve existing agreements and increase transparency and predictability into each other's nuclear arsenals and doctrines. Other examples include the 1990 Joint Statement between the United States and the Soviet Union, which called for practical steps by both sides to, ‘reduce the risk of outbreak of nuclear war, in particular as a result of misinterpretation, miscalculation or accident.’ Such an initiative could eventually be expanded to include all NATO members.

Recommendation 4: Commit to Nuclear Safety and Security

Terrorist threats, security failures, and legacies of mismanagement have illustrated the ongoing risks associated with American and Russian nuclear forces. Maintaining and increasing the security at nuclear facilities must be a principal priority going forward. Collaboration on nuclear security projects, such as best-practice exchanges and research and development of new security technologies, may be areas in which neither side has to make major concessions and can seek cooperation based on common interest. These efforts are particularly important given the conclusion of the Nuclear Security Summit process.

Recommendation 5: Separate Risk Reduction from the TPNW

The TPNW and the humanitarian impacts of nuclear weapons movement renewed discussion about nuclear effects and nuclear near misses at the same time as U.S.-Russia nuclear risks increased. While the TPNW is now a legal reality with normative ambitions (it has not yet entered into force), we do not recommend it as a forum for discussion of risk reduction. Rather, engagement on risk reduction should occur in the NPT context, bilaterally, or multilaterally, such as in NATO-Russia talks and new risk reduction initiatives. Advocates of the TPNW portray
nuclear weapons in a moral binary of good versus bad, disarmament versus deterrence, ethics versus security, and compliance versus violation of the NPT. As discussed in this policy brief, nuclear responsibility is more complex. Anything less than these nuanced discussions risks making false accusations about nuclear actors and further upsetting an already unsteady global nuclear order.