Mr Andrew Carlton Olivo, PgCert, Nuclear Deterrence, Harvard Extension School, Harvard University – Written evidence (NPT0016)

Question One. What is your evaluation of the current level of risk that nuclear weapons, of any type, could be used?

1. The potential use of nuclear weapons defies conventional risk analysis in that, while the overall potentiality is low, the impact of any such use beyond a single-use incident is extreme. Recent events have shown that relatively localized and limited events can have global impact, and that both the United Kingdom and the world in general are ill-prepared to meet such threats. Soberingly, these “high-impact, low-probability” are equivalent to a single-detonation nuclear incident, with even a limited exchange far exceeding the impacts of “high-impact” events by several orders of magnitude.

2. Viewing the question presented in frame with the analysis above, the answer is sobering. The current risk that nuclear weapons could be used is high.

3. This evaluation does require qualification. It is not the intentional use of nuclear weapons which present the greatest risk, rather it is the risk of accidental use. Unintentional use which results in general use remains the highest-probability use scenario.

Question Two. Ahead of the 2020 Review Conference of the Nuclear Non-Proliferation Treaty (NPT), what are the biggest challenges facing global nuclear diplomacy?

1. The biggest challenges facing global nuclear diplomacy are a lack of enforcement mechanism, the self-interest of nuclear states, uncertainty over stockpile sizes, and certainty over the outcome of disarmament. Each individually presents a substantial challenge to the Treaty, and together they present a major impediment to the continuing relevance of the NPT process.

2. It is no pleasure to state that the Treaty regime and nuclear diplomacy in general suffer from the inherent nature of international diplomacy – for some less-powerful states, it is a rules-based system, but for more-powerful states the world is a fundamentally anarchic system. This imbalance was reinforced and incentivized by the introduction of nuclear weapons.

3. The lack of an enforcement mechanism is a birth defect which has grown to hobble the adult. The NPT itself is silent on the matter, and efforts to establish such have been for naught. So long as states can act in their own perceived best interests with minimal real consequences, they will do so. Understandably, seeing a party disregard or “creatively interpret” the NPT (as was the case for China in its dealings with Pakistan) without suffering any real consequences devalues the entire effort.
4. Other components of the non-proliferation regime face equally grave impediments. Functionally, the entirety of the regime faces the same issue: states are clearly acting in their self-interest instead of in other state’s self-interest. For many of the states, entering into these treaties offers diplomatic and popular succor, but one must avoid being deceived by this: when the soft-power benefits of these treaties are challenged by hard-power concerns, the treaties will yield to a state’s overall interests.

5. These concerns are abutted by a strong practical impediment: the effects of disarmament are well-known, and destructive to the disarmament regime. The states which have either surrendered their nuclear weapons or halted development programs represent a sobering memorial to the risks of disarmament. Those not protected by the “umbrella” of the United States evince a disturbing trend: most of the states who have terminated their nuclear weapons program at any stage have seen their systems of government change dramatically or their country invaded shortly thereafter. Argentina, Belarus, Brazil, Iraq, Libya, Romania, South Africa, Ukraine, and Yugoslavia all speak truth to this trend. In sum, a state or regime must, in some cases literally, be suicidal to give up nuclear weapons.

6. A direct result of the problem above is that the opposite concern also becomes harder to solve. This is the North Korean example. Not only does Chairman Kim Jong-Un gain great power in the mere possession of nuclear weapons, any disarmament would likely risk the termination of the regime. For a nation that has already proliferated, it is simply not personally, politically, or militarily possible for that state to give up what it has achieved.

7. None of these problems are helped by the fact that, for much of the world, it seems as though nuclear countries who are signatories are not keeping up their end of the bargain when it comes to eventual disarmament. While the stockpiles of the United States and Russia have decreased markedly, the ultimate stated goal is complete denuclearization. However, it would seem that nobody truly believes that is the case. Since the turn of the millennium, arsenal sizes have remained rather constant, and some members have started building more weapons or engaging in massive refurbishments of their current deterrents. The original end-game intent of the NPT seems to have completely stalled.

8. In a very odd sense, then, the only honest brokers in nuclear diplomacy are those who are not members of the NPT. Generally, they have the same reasons for obtaining a deterrent as any other state does, and they also have reason to proliferate in certain circumstances. This is no different than the past actions of major NPT members, with the sole exception that the non-NPT states are being honest about their situation.

Question Three. To what extent will the United States’ withdrawal from the Iran nuclear deal, as well as US efforts to achieve the denuclearization of the Korean Peninsula, affect the wider nuclear non-proliferation regime?
1. The withdrawal of the United States from the Joint Comprehensive Plan of Action (JCPOA) simply confirms and conforms to ongoing practice. It has become abundantly clear that states will follow non-proliferation agreements to the extent that they do not fundamentally challenge a perceived interest they have. The United States doing so simply follows precedent - it sets no new independent precedence of its own.

2. The withdrawal does, however, emphasize a point which affects agreements globally and non-proliferation agreements specifically. Since the 1990’s, domestic politics in the United States has prevented it from making the same sort of solemn commitments the world was accustomed to receiving from it. The tortured formulation of many recent agreements, protocols and accords alone tell the story – the lack of the term “treaty” is the direct result of the difficulty any American administration now has in bringing a treaty to Congress for ratification.

3. US efforts on the Korean Peninsula are an example of geopolitical reality. States who wish to proliferate absent the support of a nuclear country are quite aware what the example of North Korea shows: if a state is willing to suffer economic degradation, and if it can take a hostage like Seoul, then there is no legal or political impediment to proliferating.

Question Four. To what extent and why are existing nuclear arms control agreements being challenged, particularly the Intermediate-Range Nuclear Forces Treaty (INF) and the New Strategic Arms Reduction Treaty (New START), and what prospect is there for further such agreements? What prospects are there of progress in negotiating a Fissile Material Cut-Off Treaty (FMCT)?

1. Aside from some initial bellicose words from the current American Administration concerning New START, so far the Treaty has escaped any insurmountable challenges to its implementation. While there have been disagreements over monitoring compliance with the Treaty (squabbles over the similar Treaty on Open Skies being emblematic) generally New START has been adhered to by the parties.

2. The only intermediate-term threat to New START is fundamental – it is a bilateral agreement between only two nuclear powers. Obviously, this does not reflect the current reality of multipolar proliferation, and expanding arsenals of several other countries. For the United States or the Russian Federation to agree to any cuts beyond New START, the now-relatively-large number of nuclear weapons which are possessed by third parties will need to be addressed.

3. The INF, however, is in a grave state. This has come about in part because of the same difficulty which plagues post-New START disarmament negotiations. In declaring that the Treaty did not serve Russia’s interests in 2007, President Putin may have blamed the United States, but in doing so he was covering for a far greater and more immediate concern to the Russian Armed Forces: China. While NATO is
the putative target for new Russian intermediate systems, the deeper truth is that China is now an equivalent threat to Russia. However, the INF does not address this development, leading to the familiar multipolar nuclear problem discussed before. While China is not included in the INF, the Treaty becomes a real hindrance to Russia and to a lesser extent the United States (as only US and UK allies such as Japan, South Korea and Taiwan are threatened by Chinese intermediate-range forces).

4. The INF suffers from the additional problem that it is not only outdated strategically, it is also outdated technologically. Ongoing weapon development by both parties has blurred the line of what qualifies as “intermediate” (indeed, the US’s nuclear-capable Tomahawk system is a fine example of this) and led to ongoing definitional disputes which undermine the treaty. Even newer technologies such as unmanned vehicles present new difficulties for the treaty as well, as do emerging technologies such as hypersonic weapons.

5. So long as there is no multilateral process which includes all nuclear states, and there remains no enforcement mechanism beyond Strongly Worded Resolutions and sanctions on caviar imports, the prospects for the negotiation of effective future agreements are dim. Proposed agreements such as the FMCT will continue to languish and be undermined by the very parties to the treaty in question.

Questions Five and Six. What effect will nuclear renewal programmes have on the nuclear non-proliferation and disarmament regime? To what extent could technological developments—including in missile capabilities, warhead strength, and verification—undermine existing non-proliferation and arms control agreements? To what extent will technological developments, both directly relating to nuclear weapons and in the wider defence and security sphere, affect nuclear diplomacy?

1. Aside from a fulfilling a role as convenient scapegoats for the more intractable problems which non-proliferation and disarmament regimes face, nuclear renewal programs present minor challenges to the current regimes. Many of the technologies which supposedly undermine or threaten present agreements have actually been in use for some time. While there is no doubt that continuing modernization will be blamed for any instability in the nuclear regimes, the actual impact will be marginal.

2. With specific attention to nuclear deterrence, the only truly destabilizing technology would be one which allows a nation-state to have a guaranteed first-strike ability which would deny the opponent the option for a retaliatory strike. To date, there are technologies which lessen the possibility of detection, but no technology has been brought forward which would afford the attacker a guarantee of disabling any potential second-strike retaliatory capability which their opponent has already developed.
3. Ongoing technological developments which offer the prospect of such a diminution of deterrence in the intermediate-to-long term mostly have nothing to do with nuclear weapons themselves. The most effective technology currently on the horizon concerns cyber warfare capabilities paired with artificial intelligence. It is conceivable in the future that an AI could synthesize a combination of cyber attacks on nuclear warning and control systems and traditional weaponry which would give the AI and national commanders sufficient assurance that a retaliatory strike could be averted. Such a situation is a real threat, and may be addressed through a combination of cyber deterrence, enhanced defensive systems, “gentlemen’s agreements” and formal treaties banning the development of such integrated systems. Of course, any such agreement is subject to the same pitfalls and handicaps which affect other treaties which have already been mentioned.

Question Seven. If it were to enter into force, how would the Treaty on the Prohibition of Nuclear Weapons (commonly referred to as the Ban Treaty) affect efforts to prevent the proliferation of nuclear weapons and bring about disarmament?

1. It now appears that the Ban Treaty will come into force, at some point in the near future. Whether or not it will is ultimately irrelevant, because the treaty would have no effect on disarmament nor on proliferation.

2. The aforementioned NPT already contains a solemn and entirely ignored commitment to total nuclear disarmament. Unlike the Ban Treaty, the NPT commitment was undertaken with the assent of the major nuclear states of the time as signatories and initiators of the entire process. It is obvious folly to assume that, having violated a clear commitment they intentionally included in a treaty to which they were essential parties, nuclear states would suddenly decide to follow the whims of several dozen non-nuclear states as expressed in a process in which they were uninterested.

3. The problem of having no nuclear states or states which are protected by a nuclear state as signatories is fatal. In the United Nations’ haste to sign a treaty, it went unnoticed that the list of the signatories to the Ban Treaty is an indictment and not a compliment to the effectiveness and value of the Treaty. A nuclear treaty to which states such as Timor-Leste, Kiribati, Fiji and Jamaica are parties is of the same effect and utility as a Treaty on the Prohibition of Snow would be with those same countries as signatories.

4. The Treaty is premised on the idea that the world can effectively “stigmatize” certain classes of weapons in order to eliminate them from the inventories of all nations. This argument derives from Ambassador Samantha Power’s seminal book “A Problem from Hell,” which applies the theory to chemical weapons. In the time since the book was published
and the idea of “stigmatization” became popular in the disarmament community, much has occurred to challenge the idea of such a “stigma.” Sadly, and with all due respect, it cannot escape notice that Power’s central thesis – that states must intervene and effectively enforce prohibitions in order to establish this stigma – has been widely disproven by Ambassador Power herself. Events in the United Kingdom and Syria show that despite significant economic pressure via sanctions, chemical weapon use against civilians has actually increased. It was also shown that this humanitarian imperative remains subject to political considerations, and that establishing such a stigma for any such type of weapons is not a sufficient reason to engage the kinetic power of the United States or her allies.

5. Simply put, the concept of a general stigma against a weapon is insufficient to overcome political and strategic considerations, and in a real-world example of the idea, stigma was insufficient for protecting the lives of thousands. There is no reason to think that the same effort with nuclear weapons would lead to a better outcome. Indeed, stigmatizing the use of nuclear weapons may even call into question the deterrent value of some states’ arsenals, which would lead to a higher, and not lower, chance of a nuclear exchange.

Question Nine. How effective a role has the UK played in global nuclear diplomacy in recent years? How could the UK more effectively engage on nuclear non-proliferation and disarmament? What should the UK Government’s priorities be ahead of the 2020 NPT Review Conference?

1. The United Kingdom has played an important role in recent nuclear diplomacy. As discussed previously, effective verification is a major impediment to the conclusion of any future nuclear weapons treaties, and the UK-Norway Initiative to formalize an effective way for all nations, without the risk of proliferation, to participate in compliance monitoring is laudable. If there is to be a chance to escape my admittedly pessimistic outlook on nuclear disarmament and proliferation diplomacy, the work of the Initiative would be crucial to a favorable outcome. Additionally, the UK’s work on providing a legitimate way for states to gain the expertise necessary for the development of a domestic nuclear energy program without risking proliferation is crucial not only to the nuclear proliferation regime, but to any prospect of avoiding the worst climate change scenarios which the Earth currently faces.

2. The United Kingdom could more effectively engage on proliferation and disarmament issues by being an honest broker, by acting as a necessary restraint on the ambitions of the United States, and by furthering the integration of a common European nuclear policy.

3. Being an honest broker is at once the most difficult and easiest charge. Generally, every country is aware that nuclear weapons disarmament is a
far-off dream. The uniquely British reputation for cool-headed competence (current events notwithstanding) offers it the opportunity to move nuclear diplomacy ahead by enabling all states to operate on a clear playing field. The UK should be willing to say that which her allies will not – that nuclear weapons are not going away, that the peace and solvency of Europe relies in part on the terrible bargain of fielding nuclear weapons as an alternative to large conventional forces, that it is both unfair and inevitable that some nations can utilize these weapons to hegemonic ends, and that disarmament is the work of generations of patient confidence-building and not some quick-fix proposition.

4. Speaking from a North American perspective, the United Kingdom serves a much more important role than it often gives itself credit for. As the events of the last century have shown, the United States and Canada are hesitant to act where there is not at least tacit approval by the United Kingdom. While there have been unavoidable tensions at times (such as the Suez Crisis) the United Kingdom nevertheless represents a very real “conscience” to both policymakers and the public across the Atlantic. It is important then for the United Kingdom to continue to act in this capacity on nuclear proliferation and disarmament issues, with the aim of influencing the United States towards gradual disarmament and away from ill-considered nuclear ventures.

5. Far more controversially, the United Kingdom should act to deepen and further European cooperation on nuclear weapons issues. Nuclear diplomacy needs a positive example of responsibility, trust and multilateralism, else the dreams of disarmament and non-proliferation will never be realized. To that end, further integration of American, British and French nuclear doctrine, capabilities and systems should be vigorously pursued. Additionally, it is critical that Germany be given a role in any truly European nuclear strategy. Bitter experience has shown that it is preferable that Germany, as former American Secretary of State James Baker told General Secretary Gorbachev, be included in the diplomatic structures of modern Europe than to be excluded and let alone. With specific regard to disarmament and non-proliferation, German participation would show that it is possible to have a key role in managing a nuclear weapons program without proliferation, which will be necessary for any verifiable and complete denuclearization. This initiative would also show that the risk of proliferation can be addressed by directing efforts towards the multilateral management of nuclear weapons, decreasing the incentive for a state to gain their own deterrent. Finally, German integration would offer an example to other nations that non-proliferation can benefit national security. Given the recent history of denuclearized states discussed earlier, the need for a positive outcome to incentivize states to avoid proliferating is of primary importance.