

# Conference on Disarmament

16 August 2018

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**Note verbale dated 2 August 2018 from the Delegation of the United States of America to the Conference on Disarmament addressed to the Secretary-General of the Conference transmitting the United States response to CD/2042 (14 September 2015), titled “Letter dated 11 September 2015 from the Permanent Representative of the People's Republic of China to the Conference on Disarmament and the Chargé d'affaires a.i. of the Russian Federation regarding the United States of America analysis of the 2014 updated Russian and Chinese texts of the draft treaty on prevention of the placement of weapons in outer space and of the threat or use of force against outer space objects (PPWT)”**

The Delegation of the United States of America to the Conference on Disarmament presents its compliments to the Secretary-General of the Conference on Disarmament and has the honour of transmitting to the Secretariat a text containing the U.S. response to the letter of September 11, 2015, from China and Russia regarding the analysis by the United States of America of the draft “treaty on the prevention of the placement of weapons in outer space, the threat or use of force against outer space objects” (PPWT) (CD/2042). The United States Delegation would appreciate the Secretariat's assistance in issuing and circulating this text as an official document of the Conference on Disarmament.



## **Response by the United States of America to “Follow-up comments by the Russian Federation and the People's Republic of China on the analysis submitted by the United States of America of the updated Russian-Chinese draft PPWT” (CD/2042)**

### **Executive Summary**

1. This document provides further analysis by the United States of CD/2042 (14 September 2015) submitted by the Russian Federation and the People's Republic of China pertaining to the updated draft, “Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects” (PPWT), in light of the United States National Security Strategy published in December 2017 and the recently completed United States National Space Strategy. CD/2042 was submitted in response to questions raised by the United States in CD/1998 (3 September 2014).

2. The United States reiterates its view that the 12 June 2014, updated draft PPWT (CD/1985) is fundamentally flawed. This is essentially the same proposal that has been presented to the Conference on Disarmament since 1982. Russia and China assert in conclusory fashion that the draft PPWT “is currently the most effective and feasible way of preventing armed conflict in outer space,” yet provide no support for this proposition and ignore a number of fundamental, inherent problems with the proposal that are discussed in detail in this submission. CD/2042 does not satisfactorily address the many critical deficiencies in the draft PPWT that were previously raised regarding the scope of the proposal and its lack of an integral, legally binding verification regime.

3. This United States response to CD/2042 makes two key points: (1) it is not possible to craft an acceptable definition of a “weapon in outer space”; and (2) no space arms control treaty can be verified because most space systems are dual-use and on-orbit inspections for verification purposes are not feasible. Additionally, although Russia and China state that they “clearly cannot agree with the assertion by the United States of America position that ‘Article 2(4) of the United Nations Charter already prohibits the use of force or the threat of force against another State’s outer space objects’” (CD/2042, paragraph 8), the United States again reiterates its view that existing international legal obligations, as reflected in the United Nations Charter, prohibit the use of force or the threat of force against another State’s outer space objects, subject to the exceptions of the use of force in self-defence and as authorized by the United Nations Security Council.

4. Although the United States would prefer that the space domain remain free of conflict, we are preparing for and will continue to ensure that we are ready to meet and overcome any challenges that may arise. As the United States National Security Strategy and the United States National Space Strategy make clear, the return of great power competition is increasingly a major factor in shaping United States national space policy and strategy. At the same time that Russia and China are publicly and diplomatically promoting the non-weaponization of space and a political commitment of “no first placement” (NFP) of weapons in space, they remain committed to pursuing destructive anti-satellite weapons and space warfare capabilities. In contrast, a key part of the United States approach to international engagement in the matter has been to seek to ensure that all actors in space conduct safe and responsible operations in outer space through the implementation of pragmatic and voluntary bilateral and multilateral “best practice” guidelines, transparency and confidence-building measures (TCBMs), and norms of behaviour.

5. The consensus recommendations of the 2013 United Nations Group of Governmental Experts (GGE) on Transparency and Confidence-Building Measures in Outer Space Activities (A/68/189, 29 July 2013) continue to offer a solid starting point for discussions on addressing challenges to space security and sustainability. The United States encourages those States that have not fully implemented these recommendations to do so to the greatest extent practicable, rather than focusing attention on a proposed legally binding agreement that would not promote greater security for the outer space environment

and the activities that depend on it. The United States has submitted its views (in CD/2078, 16 September 2016) on implementing the GGE's recommendations to the Conference on Disarmament as a contribution to the CD's discussion of the GGE report.

## I. Definitions

6. First, the United States agrees with the notion that, in general, definitions can be considered a key element of an effective and verifiable arms control agreement, but, given the dual-use nature of some space systems, it is not possible to craft a definition of a "weapon in outer space" that would satisfy everyone's concerns and not unduly or unfairly constrain civil or commercial space activities. The United States notes that the proliferation of new kinds of constellations and space-based services compounds the challenge of verification and highlights this fundamental flaw in the PPWT proposal. Many of the capabilities emerging in today's space revolution, such as on-orbit servicing systems and active debris removal systems, provide excellent examples of systems that have legitimate, beneficial uses, but that are also inherently capable of being used to interfere with or disrupt other operators' space systems. In contrast, CD/2042's discussion of the "scope" of the updated draft PPWT raises more questions than it answers. The draft PPWT defines a "weapon in outer space" as "any outer space object or component thereof which has been produced or converted to destroy, damage or disrupt." It would be difficult, if not impossible, to draw a distinction between permissible and impermissible space objects under the definition of a "weapon in outer space" based on the draft PPWT. Any definition of a "weapon in space" intended to be unambiguous could either be so detailed that it becomes too complicated to apply effectively, or so vague that it invites exploitation, treaty violations and a deliberate weakening of the agreement. Additionally, without reliable, concrete and effective verification provisions, it would be impossible to determine whether a system has been "produced or converted to destroy, damage or disrupt." Such assessments would largely come down to arguments about intent that are difficult to prove or disprove and that would likely be a source of tension, mistrust, and miscalculation, rather than an "effective and feasible way of preventing armed conflict in outer space" as CD/2042 states.

## II. Verification

7. A review of CD/2042 reveals that Russia and China again failed to address the fundamental requirement for an integral verification regime. The United States position remains clear: it cannot support an approach to outer space security in which key legally binding provisions required for effective verification would only be determined through subsequent negotiations "of an additional protocol." Rather than addressing this requirement directly, CD/2042 unconvincingly attempts to rely on two inappropriate examples of legal instruments, particularly the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (i.e., Outer Space Treaty or OST) and the 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxic Weapons and on Their Destruction (i.e., Biological Weapons Convention or BWC), as justification for the absence of a verification mechanism in the updated PPWT. Regarding the reference to the BWC, the United States maintains that, as a general matter, it is not useful to extrapolate between vastly different topics; rather, the United States believes that a convention or proposal should be considered on its own merits.

8. In their 2006 Working Paper titled "Verification Aspects of PAROS" (CD/1781), Russia and China argue: "Technically, outer space verification measures would involve such cutting-edge technologies as survey, tracking, and spotting. There are not yet adequate technological conditions at the moment to make an effective verification regime possible." And in their 2009 document, "Principal questions and comments on the draft Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects (PPWT)" (CD/1872), Russia and China again acknowledged this reality, stating that: "it would seem appropriate to set aside the question

of verification and other contentious issues for the time being. In the future, as science and technology progress and when the conditions are right, the addition of a verification protocol to PPWT may be considered.” However, if key legally binding provisions required for effective verification are left for subsequent negotiation, and the treaty’s emphasis is on prohibiting certain actions rather than weapons development (thus potentially allowing the development of a weapons break-out capability), there may be greater incentive, not less, to develop, build, and possibly deploy space weapons prior to the establishment of an effective verification regime. Failure to include provisions for effective verification could also lessen the motivation to ultimately establish such a verification regime, as the political benefit of getting the PPWT regime in place would have been achieved and the potential costs of an effective verification regime would have been avoided. So not only would there be incentive to develop such weapons before an effective verification regime is developed, but there may also be an incentive to delay, slow, or prevent the conclusion of such a protocol.

9. Russia and China have suggested that the simple normative value of an agreement like the draft PPWT would be incentive enough to enter into such an agreement, whether or not a means of effective verification is included in the agreement. This assumes that all agreements have positive value. The United States disagrees with this view. Absent an available mechanism for effective verification, which in the case of the PPWT is unachievable in the United States view, such an agreement would provide States Parties political cover to claim they are compliant with the legal obligations under the treaty even if they knowingly engage in activities that would violate those obligations because there would be no means to verify their compliance.

10. Additionally, Russia has argued that a political commitment not to be the first to place weapons in outer space is sufficient to prevent an arms race in outer space. The NFP initiative contains no features that would make it possible to effectively confirm a State’s political commitment “not to be the first to place weapons in outer space,” nor does it meet the criteria for TCBMs established in the 2013 consensus report of the UN Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities (A/68/189, 29 July 2013).

11. Regarding the OST, prior to ratifying the treaty, the United States assessed that verification of the treaty’s ban on the placement of weapons of mass destruction (WMD) in outer space was possible. The United States had confidence at that time that, given the challenges that would have occurred regarding the deployment and maintenance of weapons of mass destruction on orbit and through the use of United States national capabilities, the OST was verifiable. Moreover, the United States assessed that no potential adversary would gain strategic advantage by placing WMD in outer space given other, more cost-effective, reliable, and timely means of basing and delivering such weapons. Finally, it is important to emphasize that the OST serves as a cornerstone of the international legal framework in outer space. Virtually all space-faring States are party to it, and it establishes certain critical legal concepts, including: that the exploration and use of outer space “shall be carried out for the benefit and in the interests of all countries”; and that international legal obligations, including the Charter of the United Nations, apply in outer space to the same extent they apply elsewhere. Accordingly, unlike the proposed PPWT, the OST is not strictly considered an arms control treaty, and efforts to draw a false equivalency between the two are misguided and diminish the broad utility of the OST.

### **III. The Use of Force in Space**

12. In CD/2042, Russia and China state they “clearly cannot agree with the assertion by the United States of America that ‘Article 2(4) of the United Nations Charter already prohibits the use of force or the threat of force against another State’s outer space objects.’” In other words, Russia and China suggest in CD/2042 that Article 2(4) of the United Nations Charter, and its prohibition of the use of force, may not apply in outer space.

13. The United States reiterates its view that existing international legal obligations, as reflected in Article 2(4) of the United Nations Charter, prohibit the use of force or the threat

of force against another State's outer space objects, subject to the exceptions on the use of force in self-defence and as authorized by the United Nations Security Council under Chapter VII of the United Nations Charter. Article III of the Outer Space Treaty (OST) expressly extends the application of international legal obligations, including the United Nations Charter, to activities in outer space. Consistent with Article III of the OST, the use of force by States in outer space is governed by the same established, long-standing rules of international legal obligations that apply to States' use of force on land, in the air, and at sea – that is, by the United Nations Charter, including Articles 2(4) and 51, as well as by customary legal obligations on the use of force. This includes the rules governing the use of force in the exercise of the inherent right of individual and collective self-defence in response to an armed attack, including the requirement that any use of force in self-defence must be limited to what is necessary and proportionate to address the imminent or actual armed attack.

14. In CD/2042, Russia and China assert that because the United Nations Charter “was drafted before the space age had begun,” and that, therefore, “the unqualified and direct application of the provisions of the Charter to such a sensitive area of international relations as outer space development requires further elaboration and clarification through negotiation between States.” The United Nations Charter, however, was drafted to meet the needs of all ages to come, and its provisions are not specific to particular domains or technologies.

15. CD/2042 also seizes on the fact that the phrase “use of force” is not explicitly defined under existing legally binding agreements to argue that this somehow means, absent further “clarification” or “elaboration,” that existing international legal obligations on the use of force does not apply to outer space. By the same logic, however, Russia and China must equally reject the application of existing international legal obligations on the use of force to States' use of force on land, in the air, and at sea. That they do not belies the assertion that Article 2(4) does not apply to outer space. As a general matter, States have not sought to define precisely (or state conclusively) what situations would constitute a “use of force” (or an “armed attack”) in other domains, and there is no reason that outer space should be different.

16. The United States does not agree with the suggestion in CD/2042 that there is a “gap” in existing legally binding agreements that needs to be filled by a new treaty-based ban on the use of force or threat of force in outer space. As noted, existing international legal obligations on the use of force – including Articles 2(4) and 51 of the United Nations Charter and customary legal obligations – currently and adequately addresses this issue, and as stated in CD/1998 on the draft PPWT, the United States would not support any attempt to define the concept of “use of force” or “threat of force” for purposes of such a treaty.

#### **IV. The Contributions of "Best Practice" Guidelines and TCBMs to Strengthening Safety, Stability, and Sustainability of Outer Space Activities**

17. The United States strongly supports the pursuit of voluntary bilateral and multilateral “best practice” guidelines and TCBMs as prudent ways to strengthen the safety, stability, and sustainability of outer space activities. TCBMs, such as releasing information about national space policies and strategies – suggested by Russia and China to be included as “preventive” verification measures – are already being done routinely by the United States and others in the interest of transparency. Such actions were recommended as voluntary TCBMs by the 2013 GGE on TCBMs in Outer Space Activities and are taken independently of any legally binding treaty proposals such as the updated PPWT. Although such TCBMs could enhance stability and prevent misperceptions, they could not fully substitute or solely serve as an effective verification regime in deterring violations and ensuring confidence in compliance in this realm.

18. The United States pursuit of voluntary “best practice” guidelines and TCBMs should be viewed as a call for crafting bilateral and multilateral arrangements that best achieve the desired cooperative outcome to address immediate concerns. Rather than focusing

international efforts towards protracted negotiations to conclude and ratify a legally binding instrument, the United States is convinced that many outer space challenges confronting the international community today could be addressed in the near-term through a collective use of voluntary measures such as guidelines, non-legally binding TCBMs, and, eventually, norms of safe and responsible behavior for the long-term sustainability and stability of outer space activities. Such voluntary measures would reinforce and supplement the existing international legal regime for outer space activities and contribute to building trust and confidence among nations in outer space. TCBMs work best because they can be constructed more quickly, yield timely results that benefit the outer space environment, and capitalize upon the shared interests of all space operators. The United States thus urges further international progress in implementing the consensus recommendations of the 2013 GGE report on outer space TCBMs.

## **V. Conclusion**

19. The United States has carefully analysed and assessed the 2008 and 2014 versions of the draft PPWT in great detail and with due consideration. The United States also has thoroughly studied the supplemental justification in CD/2042. By every measure, the United States has concluded that the updated draft PPWT remains a fundamentally flawed proposal. The proposed PPWT does not meet the United States criteria for an acceptable arms control measure.

20. The United States National Space Strategy calls for protecting our vital interests in space and strengthening the safety, stability, and sustainability of our space activities in order to advance United States security, economic prosperity, and scientific knowledge. Our national security posture focuses on identifying the policies, strategies, and capabilities needed to protect and defend the United States, our allies, and our partners, while continuing to uphold the free use and access to space. To address these changes, rather than pursuing "top down" treaty negotiations, we advocate pursuing proven, technically derived approaches with national and private sector space operators to define "best practices" that could be developed into non-binding voluntary guidelines. As such guidelines become internationally accepted, nations, including the United States, could choose to incorporate appropriate guidelines into national policy, law, and regulation. A legally binding instrument such as the flawed draft PPWT would not be credible or effective and should not be pursued.

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