

CONFERENCE ON DISARMAMENT

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**LETTER DATED 19 AUGUST 2008 FROM THE PERMANENT
REPRESENTATIVE OF THE UNITED STATES OF AMERICA
ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE
TRANSMITTING 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)" AS CONTAINED IN DOCUMENT CD/1839 OF
29 FEBRUARY 2008**

The Permanent Delegation of the United States of America to the Conference on Disarmament presents its compliments to the Secretary-General of the Conference on Disarmament at the United Nations Office in Geneva, and has the honor to submit the United States' paper on the draft "Treaty on Prevention of the Placement of Weapons in Outer Space and the Threat of Use of Force against Outer Space Objects (PPWT)," as contained in document CD/1839 of 29 February 2008.

We would be grateful if this letter and the attached paper could be issued and circulated as an official document of the Conference on Disarmament.

(Signed:)

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Ambassador
Permanent Representative of the
United States of America
to the Conference on Disarmament

ANALYSIS OF A DRAFT “TREATY ON PREVENTION OF THE PLACEMENT OF WEAPONS IN OUTER SPACE, OR THE THREAT OR USE OF FORCE AGAINST OUTER SPACE OBJECTS”

CONTEXT

1. On February 12, 2008, the Foreign Minister of the Russian Federation, Sergey Lavrov, on behalf of Russian Federation and the People’s Republic of China, formally submitted a draft of a “Treaty on Prevention of the Placement of Weapons in Outer Space, or the Threat or Use of Force against Outer Space Objects” to the Conference on Disarmament (CD) for its consideration. This draft text for a legally binding Treaty contained a “research mandate” – a term of art indicating that the proponents will continue to urge the CD to address outer space, but will not press for the negotiation of text of its draft treaty for now. Having prepared the ground, however, Russia and China are now in a position to propose a “negotiating mandate” to work on specific text.

This draft Treaty (circulated to the Conference on Disarmament as CD/1839 on February 29, 2008) draws upon elements of a draft international agreement outlined in a working paper (CD/1679) originally submitted to the Conference on Disarmament by China, Russia, and five other nations on June 28, 2002.

THE CORE TREATY OBLIGATION

2. The core obligation of the draft Treaty lies in Article II, which reads:

“The States Parties undertake not to place in orbit around the Earth any objects carrying any kinds of weapons, not to install such weapons on celestial bodies and not to place such weapons in outer space in any other manner; not to resort to the threat or use of force against outer space objects; and not to assist or induce other States, groups of States or international organizations to participate in activities prohibited by this Treaty.”

ANALYSIS OF KEY PROVISIONS *(See summary table on page 7)*

3. Some key aspects of the wording in this draft Treaty are vague, so any analysis of the text is inherently provisional. However, it is possible to draw preliminary conclusions in several areas:

No Use Or Threats To Use Force Against Space Objects

4. The draft Treaty prohibits, among other things, the resort to the threat or use of force against outer space objects.¹

- (i) The term “hostile” – as it relates to prohibited actions and as contained in the Article I definitions of “use of force” and “threat of force” – appears to be intended to capture only actions which are taken against another country’s satellite(s), which are not part of a mutually-agreed cooperation program.

5. The definition of “use of force” in the draft Treaty also includes the following *significant departure* from the version outlined in the aforementioned 2002 (CD 1679) working paper:

- (i) Specifically, the draft definition of “use of force” captures *not only* “hostile” counter-space activities against another country’s space objects that result in permanent and irreversible damage, but *also hostile activities and actions that cause temporary and reversible effects*, such as from radio frequency jamming and optical sensor dazzling.
- (ii) Furthermore, another significant departure is that it also would capture the deliberate alteration of the orbit of another country’s satellite.

6. Article V states that nothing in the Treaty “may be interpreted as impeding the exercise by the States Parties of their right of self-defense in accordance with Article 51 of the Charter of the United Nations,” and thus can be interpreted as having a temporizing effect on the Article II prohibition.

- (i) It is not clear exactly how the drafters intend the Article II prohibition and the Article V inherent right of self-defense to be read together. For example, would it be possible for a country, in the self-proclaimed exercise of self-defense, to use an ASAT to destroy or temporarily disable a satellite -- an act that would otherwise be prohibited by Article II -- and still stay in compliance with the Treaty?
- (ii) One possible reading is that, if a Party determines that its self-defense depends upon its use of force against another country's space assets, it may, consistent with its Treaty obligations, employ such means.
- (iii) Furthermore, even though the term “threat of force” is defined within the term “use of force,” (“...the threat of [hostile] actions [against outer space objects]), exactly what would constitute a “threat” is not clear. For example,
 - (a) Would developing an ASAT capability constitute a threat?

¹The draft defines “‘use of force’ or the ‘threat of force’” to mean “any hostile actions against outer space objects including, *inter alia*, actions aimed at destroying them, damaging them, temporarily or permanently disrupting their normal functioning or deliberately changing their orbital parameters, or the threat of such actions.”

- (b) Would destroying one's own on-orbit satellite be construed as constituting a threat to others?
- (c) Would a close fly-by of either one's own, or another country's, satellite constitute a threat?
- (d) Does demonstrating a threat require some overt and unambiguous military action?

Space-Based Weapons

7. Article II prohibits the placement in orbit² around the Earth of any objects carrying any kind of weapons, the installation of such weapons on celestial bodies, and the stationing of any such weapons in outer space³ in any other manner.

8. When read together with the definitions in Article I, Article II of the draft Treaty prohibits the **deployment or stationing of any weapons in space, regardless of the military mission, and regardless of the specific technologies employed by the weapon system in question.**

- (i) In addition to anti-satellite (ASAT) systems, the draft Treaty prohibits the *deployment* of space-based *missile defense* interceptors, lasers, and other missile defense-related weapon capabilities employing other physical principles.
- (ii) There are **no** prohibitions, however, on the research, development, production, and terrestrial storage of space-based, for example, anti-satellite or missile defense weapons.

Terrestrial-Based Weapons

9. There are **no** prohibitions on the research, development, testing, production, storage, or deployment of *terrestrial-based* anti-satellite weapons (*e.g.*, direct-ascent ASAT interceptors, ground-based lasers, and jammers).

- (i) The deployment of terrestrial-based ASATs would **not** be prohibited, provided, for example, that such deployment is not read to constitute a "threat of force."

²Article I defines "outer space" to mean "the space above the Earth in excess of 100 km above sea level."

³"Weapon in outer space" is defined in Article I as "any device placed in outer space, based on any physical principle, which has been specially produced or converted to destroy, damage or disrupt the normal functioning of objects in outer space, on the Earth or in the Earth's atmosphere, or to eliminate a population or components of the biosphere which are important to human existence or inflict damage on them."

- (ii) To the extent that terrestrial-based ASATs could be used to substitute for, and perform the functions of, space-based weapons against, for example, space objects, their deployment would undermine the object and purpose of the proposed draft treaty.
- (iii) Furthermore, to the extent that terrestrial-based ASATs could perform the functions of space-based ASATs, the Treaty's Article II prohibitions would be irrelevant.

10. For terrestrial-based, *missile defense-related* "weapons," there are **no** direct or indirect constraints or limitations on related research, development, testing, production, storage, deployment, or operations.

Testing

11. The draft Treaty would prohibit the **testing of space-based** counter-space capabilities through the Article II prohibition on the placement in orbit around the Earth of "any objects carrying any kind of weapons."

12. The reference to "hostile" actions (against outer space objects) in the draft Treaty's definitions of "use of force" and "threat of force" establishes an important caveat and, thus, it may be possible to interpret the draft Treaty as ***not prohibiting tests against a country's own cooperative outer space objects (i.e., targets) employing ground-, sea-, or air-based weapons.***

- (i) For example, China's test of a ground-based, direct-ascent ASAT on January 11, 2007 against its own weather satellite would – under this interpretation – have been permitted under the draft Treaty provisions.

13. Additionally, terrestrial-based ***testing against another country's space object*** also would ***not be prohibited*** if the test only involved a "fly-by," with no physical impact (e.g., no intercept and creation of debris) on the space object target, unless it were construed to be a "threat" of hostile action.

Compliance/Enforcement Mechanism

14. Another potentially troublesome provision lies in Article VIII of the draft Treaty, which would require an "Executive Organization" (to be established by the States Party to the Treaty) to "organize and conduct consultations" and to "take steps to put an end to the violation."

- (i) Executive organizations do exist under arms control regimes, e.g., the creation of an Organization for the Prohibition of Chemical Weapons (OPCW) and a Comprehensive Nuclear Test Ban Treaty Organization (CNTBTO).

- (ii) Both the Chemical Weapons Convention and the Comprehensive Nuclear Test Ban Treaty explicitly recognize the need for the settlement of disputes in conformity with the provisions of the Charter of the United Nations.
- (iii) Neither the OPCW nor the CNTBTO has such an extraordinary mandate as the draft Treaty's "Executive Organization" and both offer ultimate recourse to the UN Security Council.

15. Such an open-ended and ill-defined compliance/enforcement authority, vested in an international body other than the UN Security Council, if taken literally, would be unprecedented and, furthermore, unacceptable. In particular, the types of "steps to put an end to the violation" are not specified or de-limited: thus, the Article VIII language could be interpreted very broadly, and potentially in a way contrary to the national security interests of a Party to this Treaty.

16. The failure to set sufficiently detailed parameters on the conduct of the "Executive Organization" is another serious flaw in the draft Treaty (although the text notes that an additional protocol would be negotiated to address the specific functions of the executive organization).

Treaty Amendment Process

17. The Article X provision regarding adoption of amendments to the draft Treaty by simple majority vote – without the right of a State Party to block adoption – also is unacceptable. No sovereign government would agree to a legally-binding instrument in which its national security interests could be jeopardized by a simple majority of subscribing States exercising their amendment rights. Any amendment process must be based upon the principle that no State Party should be bound by a subsequently adopted amendment unless it agrees to it implicitly or explicitly, in order to preserve that country's supreme national interests.

Verification Regime and Transparency and Confidence-Building Measures

18. The draft Treaty does not include an integral, legally-binding verification regime for effectively monitoring compliance with its obligations, including prohibitions.

19. More importantly, as acknowledged by Russian officials during informal PAROS discussions in the Conference on Disarmament on February 14, 2007, verification of an ASAT ban is unrealistic.

- (i) However, the draft Treaty does provide for the possibility of subsequently negotiating a verification protocol.

20. The draft Treaty also encourages the subsequent negotiation of voluntary transparency and confidence-building measures.

- (i) The United States supports voluntary TCBMs which can reduce the chance of miscalculation or misinterpretation during a crisis.
- (ii) However, such TCBMs should be developed without linkage to any arms control agreement.
- (iii) Any such TCBMs are not substitute for an effective verification regime.

<i>The Russian-Chinese Treaty Proposal: Summary of Possible Implications*</i>					
BASING MODE	SPACE-BASED COUNTER-SPACE	SPACE-BASED MISSILE DEFENSE	GROUND-BASED COUNTER-SPACE	SEA-BASED COUNTER-SPACE	AIR-BASED COUNTER-SPACE
• RESEARCH	<i>NO CONSTRAINTS OR LIMITATIONS</i>				
• DEVELOPMENT					
• TESTING AGAINST OWN COUNTRY'S SPACE OBJECTS	PROHIBITED	PROHIBITED	<i>PERMITTED</i>	<i>PERMITTED</i>	<i>PERMITTED</i>
• PRODUCTION	<i>NO CONSTRAINTS OR LIMITATIONS</i>				
• STORAGE					
• DEPLOYMENT	PROHIBITED	PROHIBITED	<i>NO CONSTRAINTS OR LIMITATIONS</i>		
• OPERATIONAL USE IN A HOSTILE ACTION AGAINST ANOTHER COUNTRY'S SPACE OBJECTS	<p style="text-align: center;">PROHIBITED <i>(Except when required for "self-defense")</i></p>				

***NOTE:** Some key aspects of the wording in Russia's draft Treaty are vague; any analysis of the text is inherently provisional

U.S. GOVERNMENT POLICY AND SELECTED KEY CONCLUSIONS

21. For the past thirty years, it has been the consistent policy of the United States to oppose arms control concepts, proposals, and legal regimes that:
- (i) seek prohibitions on military or intelligence uses of space; or
 - (ii) fail to preserve the rights of the United States to conduct research, development, testing, and operations in space for military, intelligence, civil, or commercial purposes.
22. The Russian-Chinese draft Treaty provides no grounds for the U.S. to either:
- (i) change its long-standing principle that arms control constraints or limitations on space-based systems or activities – beyond the existing in force regimes – are not in the national security interests on the United States;
 - (ii) support establishing an *ad hoc* committee to negotiate any such Treaty at the Conference on Disarmament.
23. If anything, several provisions in this submission (CD/1839) are even more unacceptable than the draft agreement outlined in a 2002 Chinese-Russian working paper (CD/1679).
24. For nearly three decades, the United States has consistently posited that it is not possible to develop an effectively verifiable agreement for the banning of either:
- (i) space-based “weapons” *or*
 - (ii) terrestrial-based anti-satellite systems.
25. Since the draft Treaty only bans the placement of weapons in space (and thus indirectly prevents the testing of on-orbit weapons), a Party could build a breakout capability – consistent with the provisions of the Treaty – as the proposed draft Treaty would not ban the research, development, production, or storage of (orbital) anti-satellite systems, nor would the proposed draft Treaty prohibit the testing of otherwise prohibited space-based weapons if they were tested against cooperative orbital targets by launching the test vehicle into a sub-orbital trajectory.
26. Further, as a general operating principle, the United States does not support an approach in which key legally-binding provisions required for the operation, viability, and effectiveness of an agreement would only be determined through subsequent negotiations. This proposed Treaty would require such subsequent negotiations.
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