

First Meeting of States Parties to the Treaty on the Prohibition of Nuclear Weapons

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English only

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Agenda item 11 (c)

Consideration of the status and operation of the Treaty and other matters important for achieving the objectives and purpose of the Treaty: Deadlines for the removal from operational status and destruction of nuclear weapons and other nuclear explosive devices, and their removal from national territories (article 4)

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Working paper submitted by the facilitator, South Africa

I. Introduction

1. The Treaty on the Prohibition of Nuclear Weapons was adopted on 7 July 2017 and, following the deposit of the fiftieth instrument of ratification or accession with the Secretary-General on 24 October 2020, entered into force on 22 January 2021, in accordance with its article 15 (1).
2. Article 2 of the Treaty provides for each State party to submit a declaration to the Secretary-General, declaring whether:
 - (a) It owned, possessed or controlled nuclear weapons or nuclear explosive devices and eliminated its nuclear weapon programme;
 - (b) It owns, possesses or controls any nuclear weapons or other nuclear explosive devices;
 - (c) There are any nuclear weapons or other nuclear explosive devices in its territory or in any place under its jurisdiction or control that are owned, possessed or controlled by another State.
3. Article 8 of the Treaty provides for the First Meeting of States Parties to the Treaty on the Prohibition of Nuclear Weapons. The Treaty goes further to provide directly for the First Meeting to determine two aspects related to article 4, i.e., the deadlines for nuclear-armed States (art. 4 (2)) and nuclear hosting States (art. 4 (4)).



II. Nuclear-armed States

4. The Treaty provides two pathways for a State party that owned, possessed or controlled nuclear weapons after 7 July 2017 to become a party to the Treaty:

(a) Article 4 (1) provides that a State can join the Treaty after it has eliminated its nuclear weapon programme, including the elimination or irreversible conversion of all nuclear-weapon-related facilities, prior to the entry into force of the Treaty for the State party, and then shall cooperate with the competent international authority, to be established pursuant to article 4 (6) of the Treaty, for the verification of the irreversible elimination of its nuclear weapons programme;

(b) Article 4 (2) provides that a State party that owns, possesses or controls nuclear weapons or other nuclear explosive devices at the time of the entry into force of the Treaty for the State party shall immediately remove them from operational status, and destroy them as soon as possible but not later than a deadline to be determined by the First Meeting of States Parties, in accordance with a legally binding, time-bound plan for the verified and irreversible elimination of that State party's nuclear weapon programme, including the elimination or irreversible conversion of all nuclear-weapons-related facilities.

5. In addition to the elimination, removal and destruction of its weapons, a State party covered by article 4 (2) is required to eliminate its nuclear weapon programme in a verified, time-bound manner according to a specific plan negotiated between the State party joining and the treaty-designated "competent international authority" and approved by a Meeting of States Parties or Treaty review conference. While this plan will be specific for each nuclear-armed State, a deadline to be determined by the First Meeting of States Parties for the destruction of nuclear weapons will apply to all such States that join the Treaty while still possessing their weapons.

6. The process of destruction of nuclear weapons within a deadline determined by the First Meeting of States Parties is not intended to be an isolated activity. The Treaty requires such destruction be in accordance with a legally binding, time-bound plan for the verified and irreversible elimination of that State party's nuclear weapon programme, including the elimination or irreversible conversion of all nuclear-weapons-related facilities. These facilities will include the ones used for destroying nuclear weapons. The term "elimination or irreversible conversion of all nuclear-weapons-related facilities" should be defined in the context of the time-bound plan for the elimination of a nuclear weapons programme that would be negotiated with the competent international authority. The details of such plans could be developed during the intersessional process with input from the Treaty's scientific advisory body once it is set up and operating.

7. Various independent technical studies over the past 25 years suggest a range of between 10 to 20 years for the destruction of nuclear weapons by nuclear-armed States.¹ That year range reflects the estimated size of the national nuclear weapon stockpiles and the total global arsenal at the time the estimate was made. The most recent studies, specifically made in the context of the Treaty, and taking into account the significant reduction in nuclear weapon stockpiles since the end of the Cold War, suggest destruction time frames of 10 years.

¹ Past studies are cited in the review of the relevant literature provided during informal consultations by Zia Mian and Moritz Kütt and are available in M. Kütt and Z. Mian (2019) "Setting the Deadline for Nuclear Weapon Destruction under the Treaty on the Prohibition of Nuclear Weapons", in *Journal for Peace and Nuclear Disarmament*, vol. 2, iss. 2, pp. 410–430, available at <https://doi.org/10.1080/25751654.2019.1674471>.

8. The Treaty on the Prohibition of Nuclear Weapons is not the first disarmament treaty to require the establishment of a deadline for the destruction of treaty-prohibited weapons and as such can draw on the experience of setting such deadlines and possible extensions in other relevant recent treaty processes. The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (the Chemical Weapons Convention) provides for a State party to destroy all chemical weapons pursuant to the verification annex and in accordance with the agreed rate and sequence of destruction, and that such destruction shall begin no later than 2 years after the Convention enters into force for that State party and shall finish not later than 10 years after entry into force. A State party is not precluded from destroying such chemical weapons at a faster rate. A State is permitted an extension to that deadline, at most up to five years, if approved by the Executive Council of the Chemical Weapons Convention. The Anti-Personnel Mine Ban Treaty makes provision for the destruction of all stockpiled anti-personnel mines that a State party owns or possesses or that are under its jurisdiction as soon as possible but not later than four years after entry into force of the Treaty for that State party. A party may submit a request to the Meeting of States Parties or a Review Conference for an extension of up to 10 years of the deadline for completing the destruction of such anti-personnel mines, with supporting justification and proposed mitigation measures. The Convention on Cluster Munitions provides for States parties to declare and destroy their stockpiled cluster munitions within eight years. However, there is also a provision for an extension of the deadline for completing the destruction by a period of up to four years and, in exceptional circumstances, the possibility to request an additional extension of up to four years. It is possible that a nuclear-armed State, despite good-faith efforts to destroy its weapons “as soon as possible”, may not be able to meet the deadline set by the First Meeting of State Parties and appropriate actions, as seen from the examples above, could be considered.

9. The parties to the Treaty should acknowledge the possibility that the legally binding, time-bound plan for the verified and irreversible elimination of a State party’s nuclear programme may face challenges to stay on schedule and could lead to extension requests.

10. The facilities required for the destruction of nuclear weapons or nuclear explosive devices are already available. Nuclear-armed States carry out warhead dismantlement at dedicated facilities that, in most cases, are also the facilities used for weapon assembly, warhead maintenance and modernization.

11. Since joining the Treaty would require an end to all warhead assembly and modernization activities, the facilities currently used for these programmes could be used for weapon disassembly, allowing for an increased capacity and faster rate of dismantlement and destruction than might be expected by simply extrapolating from current warhead dismantlement capacity and rates. Furthermore, since the Treaty requires warheads be irreversibly destroyed, it is possible that some current dismantlement and destruction processes could be redesigned to safely speed up these processes.

12. Accordingly, destruction could take place after the disassembly of the nuclear weapon, through irreversible mechanical or chemical alteration of all weapon components such that they cannot be used in a weapons assembly without substantive additional processing steps, that is, the components would require remanufacture to be used in a weapon.

III. Nuclear hosting States

13. Article 4 (4) of the Treaty requires that each State party that has any nuclear weapons or other nuclear explosive devices in its territory or in any place under its jurisdiction or control that are owned, possessed or controlled by another State shall ensure the prompt removal of such weapons, as soon as possible but not later than a deadline to be determined by the First Meeting of States Parties. Upon the removal of such weapons or other explosive devices, that State party shall submit to the Secretary-General a declaration that it has fulfilled its obligations under this article.

14. Independent analysis of the experience of past removals and transportation of nuclear weapons from deployment in host States back to bases in the weapon owning States allows for setting a technically sound deadline for weapon removal.² Previously, far larger numbers of nuclear weapons have been stationed, based or deployed in host States, and many more States have been host States. Currently, there are an estimated total of 100 nuclear weapons stationed in five host countries, and all belong to one State. Allowance will need to be made for planning and preparation for weapon removal and the safe and secure transfer back to storage in the nuclear-armed State.

15. Historical examples of nuclear weapon removals from past deployments show that the physical removal of nuclear weapons from host States to the weapon-owning State could be done in a safe and secure manner within a maximum period of 90 days.

IV. Recommendations

16. In the pursuit of the full and effective implementation of article 4 (2) and 4 (4) of the Treaty, the present working paper puts forward the below recommendations, based on technical and scientific information for States parties for deadlines to be determined by the First Meeting of State Parties.

(a) Destruction deadlines

17. The First Meeting of States Parties should adopt a maximum upper limit of 10 years as the deadline required for nuclear weapons destruction, in accordance with a legally binding, time-bound plan for the verified and irreversible elimination of that State party's nuclear weapon programme, including the elimination or irreversible conversion of all nuclear-weapons-related facilities, pursuant to article 4 (2).

(b) Extension request

18. As in other disarmament treaties with weapon destruction deadlines, the First Meeting of States Parties should also acknowledge the possibility of extension requests and agree to establish a maximum extension period up to five years. An extension request may be granted by a Meeting of States Parties or a Review Conference on an exceptional basis to overcome unexpected difficulties in the disarmament process. The extension request must not exceed the number of years strictly necessary for that State Party to complete its obligations under article 4 (2), and the State Party must stay within the maximum allowed extension period. Such a request should contain:

² M. Kütt and Z. Mian, "Setting the Deadline for Nuclear Weapon Removal from Host States under the Treaty on the Prohibition of Nuclear Weapons", in *Journal for Peace and Nuclear Disarmament*, March 2022. Available at <https://sgs.princeton.edu/sites/default/files/2022-03/kuett-mian-2022.pdf>.

- (a) The duration of the proposed extension;
- (b) A detailed explanation of the reasons for the proposed extension, including a description of the challenges met in fulfilment of the original plan;
- (c) An updated and detailed plan for destruction that specifically includes measures to address the challenges met in fulfilling the original plan.

19. The specific requirements of extension requests could be elaborated upon by a future Meeting of States Parties or Review Conference of the Treaty, on the basis of advice from the Scientific Advisory Group and information from relevant international technical agencies.

20. The extension decision of the States parties to the Treaty must be approved by a Meeting of State Parties or the Review Conference and should be informed by the recommendations of the Scientific Advisory Group and relevant international technical agencies.

(c) Removal deadlines

21. With regard to deadlines for the removal of nuclear weapons from hosting States, and given historical precedents, a deadline of up to a maximum period of 90 days should be adopted by the First Meeting of States Parties. This is to ensure safe and secure transfer of all nuclear weapons out of the host State.
