

Japan's Views on a Fissile Material Cut-off Treatyⁱ
(submitted pursuant to UNGA Resolution 67/53 paragraph 2)

Significance of an FMCT

1. An effective Fissile Material Cut-off Treaty (FMCT) would strengthen international disarmament and non-proliferation regimes, broaden and reinforce efforts to ensure the security of nuclear materials, and bolster international security. As the next logical step in the international community's march toward nuclear disarmament, it is therefore imperative that negotiations on an FMCT commence without further delay.

(Relevance to Nuclear Disarmament and Non-Proliferation)

2. Article 6 of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) stipulates that Parties to the Treaty undertake 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. Moreover, paragraph 12 of the NPT preamble states that Parties desire to further the easing of international tension and the strengthening of trust between states "in order to facilitate the cessation of the manufacture of nuclear weapons, the liquidation of all their existing stockpiles, and the elimination from national arsenals of nuclear weapons and the means of their delivery." These provisions reflect international acceptance of the fact that efforts to eliminate nuclear weapons necessitate measures to put a stop to their manufacture and bring an end to the nuclear arms race.
3. To further these objectives and ensure continued progress toward the goal of a world free of nuclear weapons, it is both necessary and important that qualitative capping of nuclear weapons development through a comprehensive ban on nuclear testing be complemented by a quantitative capping accomplished by a ban on the production of fissile material for nuclear weapons or other nuclear explosive devices. To meet the former requirement, it is essential that the Comprehensive Nuclear-Test-Ban Treaty (CTBT) enter into force on the earliest possible date. Fulfilling of the latter prerequisite requires that negotiations begin on an FMCT. With both the CTBT and an FMCT in place, the world will at last have the tools needed to realize the cessation of both the manufacture of nuclear weapons and the nuclear arms race, creating an environment conducive to subsequent elimination of nuclear weapons.

4. The international community has made clear its assessment of the need for an FMCT on multiple occasions. Decision 2 of the 1995 NPT Review and Extension Conference and the final documents of the NPT Review Conferences of 2000 and 2010, including the 2010 Action Plan, all contain calls for the immediate commencement of FMCT negotiations. Furthermore, the adoption by an overwhelming majority of states at the 67th UN General Assembly of the resolution put forward by Japan entitled “United action towards the total elimination of nuclear weapons” (A/RES/67/59) and the resolution tabled by Canada on an FMCT (A/RES/67/53) demonstrates broad international awareness of the importance of an FMCT to nuclear disarmament and non-proliferation.

5. In addition to opening the way for further steps toward a nuclear-weapons-free world, an FMCT would play a substantial role in enhancing international security. By establishing for the first time a binding, permanent, universally applicable, international legal obligation to abstain from production of fissile material for nuclear weapons, an FMCT would represent a significant improvement over the present situation, in which reversible, non-binding moratoria have been unilaterally and politically declared by only four of the five NPT nuclear-weapon states. An FMCT therefore promises to further constrain the nuclear arms race, thereby ensuring greater stability in the security environment for nuclear-weapon states and non-nuclear-weapon states alike. It could also integrate the states not party to the NPT and currently not under international nuclear disarmament obligations into a mainstream international nuclear disarmament and non-proliferation regime. To build momentum toward this outcome and for a start to FMCT negotiations, each nuclear-weapon state and nuclear-weapon possessor should now declare a moratorium on further production of fissile material or maintain a moratorium if one already exists.

(Significance in Relation to Nuclear Security)

6. An FMCT could also enhance the security of fissile material for military use (encompassing nuclear-weapon as well as other non-nuclear-weapon military uses such as naval propulsion) in states possessing nuclear weapons. Such material is presently not subject to any existing international regulatory framework. Given persistent concerns about the possibility of nuclear material falling into the hands of non-state actors, the need to ensure the security of such material must also number

among the reasons for the speedy conclusion of a treaty.

7. For example, depending on the extent of verification or safeguards measures, an FMCT would strengthen state accounting and control measures for fissile materials for nuclear-weapon use. In addition, an FMCT could establish new obligations for physical protection of fissile material for nuclear weapons, helping to fill the need for strengthened measures to prevent the diversion and proliferation of such material. Regarding fissile material for naval propulsion, it would also be desirable from a nuclear security perspective to include voluntary declarations in an FMCT based on state accounting and control measures, physical protection obligations, and a ban or strict controls on transfers to third countries.

The Modality of FMCT Negotiations

8. Although an FMCT would encompass obligations primarily from states possessing nuclear weapons, in order to build confidence in the treaty as a vital element of the global nuclear disarmament process, it will be critically important to apply the knowledge and experience of not only nuclear-weapon states, but non-nuclear weapon states, particularly those with expertise in the peaceful use of nuclear energy. It would therefore be most desirable for the negotiations to take place at the Conference on Disarmament in Geneva, as all relevant states are members of this body. Unfortunately, however, after sixteen years of effort to reach agreement on a start to the negotiations, the CD remains at an impasse on this issue. Hence, states should not limit their activities on this matter to the CD, but seek out opportunities for progress wherever they may arise including in the work of the group of governmental experts (GGE) on an FMCT.
9. Enjoying the support of a large majority of states, negotiations should proceed in accordance with the mandate contained in the Shannon Report (CD/1299), which also provides a flexible basis for dealing with existing stocks in the course of negotiations. The reopening of the mandate would not be productive. Furthermore, resolution of the contentious issue of treatment of existing stocks of fissile material should not be made a condition for starting negotiations. Time-consuming, abstract, political discussion of whether or not to include existing stocks would not be productive. Rather, consideration should be given to a specific categorization of what stocks should be covered by the treaty, and how, as described below (see

paragraph 20-21).

Major Issues

(Core Obligations)

10. There exists wide agreement – indeed, consensus – that the core obligations under an FMCT must include a commitment to abide by a prohibition on the production of fissile material for nuclear weapons. In other words, the core purpose of an FMCT is to stop any increase in the amount of fissile material for nuclear weapons available to a state party beginning from entry into force of the treaty. This prohibition should require parties to refrain not merely from “production” in a narrow sense, but from any activity that increases the amount of fissile material for nuclear weapons available to a party. Therefore, such activities, as described in the next two paragraphs, should be treated as being effectively synonymous with “production”. (It should be noted that fissile material for civil use should not be subject to a production ban under an FMCT.)
11. Commitment to such a broadly conceived ban should entail an obligation to close down or decommission any production facilities for fissile material for nuclear weapons or convert them to non-nuclear-weapon use. The ban should also proscribe any attempt of a “reversion” of such facilities to a condition in which production of fissile material for nuclear weapons could be resumed. The ban on “reversion” should extend to fissile material for nuclear weapons declared by states-parties as being in excess of that needed for their national security or for nuclear weapons purposes, preventing the subsequent return of such material to stockpiles.
12. “Diversion” of existing stocks of fissile material, as well as of that produced in the future, from civil purposes to use in nuclear weapons should also be subject to a ban. Likewise, the receiving from, or transfer to, another country of fissile material for nuclear weapons should be barred, as should the provision of assistance to another country to help it produce fissile material for nuclear weapons.
13. Considering the increasing importance of nuclear security, accounting and control measures for, and physical protection of, fissile material for nuclear weapons should also be mandatory.

(Definition of Fissile Material for Nuclear Weapons)

14. To the extent that it does not adversely impact peaceful uses of nuclear energy, an FMCT should feature a broad general purpose criterion like those in the CWC and BTWC to define prohibited materials in order to close to the greatest possible extent any potential loophole. Simply stated, an FMCT should prohibit the production of any fissile material for use in any nuclear weapon or nuclear explosive device. Specifically, such materials would include those defined as “special fissionable material” under Article XX of the International Atomic Energy Agency (IAEA) Statute, namely plutonium 239, uranium 233, and uranium enriched in the isotopes 235 or 233, provided these materials are produced for weapons purposes. Engaging with the IAEA, experts should examine the merits of also including transuranic elements such as neptunium and americium.

(Definition of Production)

15. The general purpose criterion should also apply to activities associated with production of fissile material. In order to ensure compliance with obligations under an FMCT, it will be important to define activities representing the starting point of fissile material production for nuclear weapons purposes as broadly as possible. This will facilitate early detection of violations of the treaty. One starting point activity would be enrichment of uranium. Here, there should not be a percentage-based delineation – 20 per cent enrichment, for example – separating legitimate activity from illicit. Rather, any enrichment undertaken for nuclear-weapons purposes should be prohibited. Another starting point activity would be irradiation. The treaty would ban not only separation and reprocessing of plutonium for use in nuclear weapons, but any irradiation carried out to produce plutonium for such a purpose. In addition, an FMCT should prohibit any activities that result in the increase of the amount of fissile material for nuclear weapons purposes, including those described above (see paragraph 10-13).

(Verification)

16. Along with irreversibility and transparency, verifiability is recognized as a general principle for nuclear disarmament. In addition, as the Shannon Mandate holds that an FMCT should not only be non-discriminatory, irreversible, and transparent, but an “internationally and effectively verifiable treaty”, there needs to be consideration of concrete methods to ensure effective verification, assuming that an FMCT will incorporate verification measures. Verification of an FMCT should confirm that

production of fissile material is not taking place, but it should not be limited to this purpose. Other obligations that could fall under the treaty should also be verified to the extent possible. Specifically, verification activities should confirm that facilities for the production of fissile material for nuclear weapons are closed down, decommissioned, or converted to non-nuclear-weapon use and that such facilities have not undergone reversion to nuclear-weapon purposes; confirm that fissile material for nuclear weapons declared as being in excess of that needed for national security or for nuclear-weapon purposes has not been returned to stockpiles for nuclear-weapon purposes (in this regard, the Trilateral Initiative between the United States, the Russian Federation and the IAEA would be worth examining); and confirm that stocks of fissile material for nuclear weapons or nuclear explosive devices have not increased. Verification in these areas would ensure irreversibility of an FMCT.

17. Taking into account the possibility of future advances in verification technology, the scope of verification activity should be made subject to future revision. In addition, voluntary offer safeguard agreements concluded between nuclear-weapon states and the IAEA presently allow facilities and material to be withdrawn from the scope of verification activity for reasons of national security. The provisions of such agreements should be made to conform to those of an FMCT so that there are no discrepancies between obligations under the two instruments.

(Link Between Prohibited Materials and Activities (“Definitions”) and the Objects of Verification Activity (“Verification”))

18. Though materials, facilities, and activities prohibited under the treaty (“definitions”) will certainly be closely linked to the objects of verification activity (“verification”) -- thus the issue of the link between “definitions” and “verification”, as customarily referred to in discussions on this subject), this does not mean they should be one and the same. Rather, it is best that these be conceived of flexibly and separately. Instead of limiting a ban on fissile material production based on what can presently be verified given costs and current technologies, materials and activities to be prohibited (“definitions”) should first be put forward based on the object and purpose of the treaty. Only then should consideration be given to cost-benefit analyses and technologies in order to specify what can practically be subjected to verification. As a result, the materials and activities that are prohibited may not necessarily correspond perfectly to those that are subject to verification. The same

already holds true in the case of safeguards in NPT non-nuclear-weapon states. Specifically, the NPT bans the manufacture of “nuclear weapons or other nuclear explosive devices” (Article 2) and subjects all nuclear material (“all source or special fissionable material”) to safeguards in non-nuclear-weapon states (Article 3). However, the actual safeguards have multiple and varying scopes and degrees of applicability, employing the terms “directly usable material” and “indirectly usable material” as safeguard concepts in order to cover all types of nuclear material. This approach should serve as a useful reference for an FMCT.

19. Subjecting all materials and activities prohibited by an FMCT to verification would be ideal, but flexible application of verification measures based on such changing factors as cost and strategic value of materials and facilities at any given point in the course of a long-term nuclear disarmament process is also possible. What is important, therefore, is that materials and activities actually subjected to verification be modifiable in such a way that they can be altered as needed in response to changes in the perceived strategic value of fissile material at any given point in the nuclear disarmament process, reassessment of the costs and benefits of verification, and developments in verification technology.

(Treatment of “Existing Stocks”)

20. Regarding the matter of whether to include existing stocks of fissile material within the scope of an FMCT, it would be best to first examine concretely what is meant by “existing stocks” and “including within the scope” of the treaty. Only then will it be possible to find common ground on this issue. With regard to the question of what is meant by “existing stocks”, the treaty should cover at least three categories of stocks of fissile material: stocks for use in nuclear weapons, stocks for other military use, and stocks declared as being in excess of those needed for national security or for nuclear-weapon purposes. Answering the question of what is meant by “including within the scope” of the treaty entails examination of what obligations are to be imposed on such stocks if they are to be part of the scope.
21. Based on these considerations, an FMCT should ban the following activities as they pertain to each of the three categories of stocks. Firstly, transfers of stocks for nuclear weapons to third countries should be prohibited. Secondly, although some argue that verification may be difficult from the perspective of military confidentiality, diversion to nuclear-weapon purposes of fissile material stocks

designated for military use other than nuclear-weapon use should also be banned. Thirdly, “reversion” of excess fissile material stocks to stockpiles for use in nuclear weapons should also be prohibited.

22. While the issue of whether to include obligations for future reduction and elimination of “existing stocks” in an FMCT still remain open to debate, it should be possible to find common ground on obligations such as those identified in paragraph 21.
23. In view of the importance of strengthening nuclear security, the following activities should also be considered for inclusion in an FMCT. Regarding the first category of stocks, depending on the outcome of pending discussions on whether the treaty should make the reduction and elimination of stocks of fissile material for nuclear weapons mandatory by encompassing a ban on “stockpiling”, it would be well worth examining transparency-enhancing measures, such as voluntary declarations, as well as physical protection obligations. As for the second category of stocks, subsection of their transfer to third countries to a ban or strict controls, provisions for submission of voluntary declarations based on state accounting and control measures, and mandatory physical protection measures to enhance nuclear security should all be considered. Concerning the third category of stocks, consideration should be given to measures that subject fissile material stocks declared as excess to verification, reduction, and elimination obligations. However, this will need to be examined further during the negotiations.

(Structure and Duration in Force of the Treaty)

24. In order to conclude a treaty, some have voiced support for a two-phased approach involving agreement first on core obligations, and separate negotiations later on verification provisions to be treated as a separate international agreement. Japan does not agree to such an approach. The text of the treaty itself should at the very least provide for a basic verification framework and set of objectives. As with the CTBT, detailed verification provisions could be contained in a separate protocol, but this should be adopted at the same time as the treaty. Further specification about verification implementation measures, on the other hand, could be included in a supplementary document drafted after the treaty and protocol are adopted, much like an operational manual prepared for on-site inspections under the CTBT.

25. Given the object and purpose of an FMCT, the treaty should be of unlimited duration.

(Organizational Issues)

26. As excessive creation of international organizations is undesirable, any new agency established under the treaty should be as limited in size and function as possible. From the perspective of costs and benefits, making maximum use of the expertise of the IAEA will be important, but if the IAEA becomes the verification body for the treaty, it is conceivable that there could be times at which representatives of states not party to the FMCT might be given responsibility for verification of the treaty as members of the IAEA Board of Governors. This will need to be addressed. One approach could be to establish an FMCT agency of minimal size to handle secretariat functions with a decision-making body while assigning only actual verification tasks to the IAEA.

ⁱ This document does not prejudge Japan's positions in future negotiations.