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# Conference on Disarmament

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## Australia

### Working paper

#### Outline of possible verification provisions of the Fissile Material Cut-Off Treaty

##### Paragraph 1 Basic undertakings

1.1 No Party shall, after the entry into force of the Treaty for that Party, produce *fissile material* for use in nuclear weapons or other nuclear explosive devices, or use any fissile material produced thereafter in nuclear weapons or other nuclear explosive devices.

1.2 Each Party shall accept verification measures as outlined in this Treaty on all fissile material produced after the entry into force of the Treaty for that Party.

##### Paragraph 2 Verification objective

2.1 The objective of verification is the timely detection of:

2.1.1 Diversion of significant quantities of *fissile material subject to the Treaty* from *non-proscribed uses* to the manufacture of nuclear weapons or nuclear explosive devices or for purposes unknown; and

2.1.2 Undeclared *production of fissile material*, i.e. failure to declare *production of fissile material* required by the Treaty to be declared.

##### Paragraph 3 Verification agreement

3.1 The *verification agency* for the Treaty shall be the International Atomic Energy Agency (IAEA) – “the Agency”.

3.2 Each Party shall conclude with the Agency a safeguards agreement, additional protocol and subsidiary arrangements, or amendments to its existing safeguards agreement, additional protocol and subsidiary arrangements as necessary – collectively described as the *verification agreement* – to give effect to the provisions of the Treaty.

##### Paragraph 4 Implementation of verification measures

4.1 Each Party shall cooperate with the Agency to facilitate the effective implementation of verification measures pursuant to the Treaty and the related verification agreements.

4.2 The Agency shall conduct verification activities so as to:

4.2.1 Ensure appropriate protection for national, commercial and industrial secrets and other confidential information coming into the possession of the Agency or Agency inspectors in the conduct of their duties;

4.2.2 Avoid undue interference in non-proscribed nuclear activities;

4.2.3 Have regard to efficiency, including by taking due account of information available from other relevant verification arrangements;

4.2.4 Be consistent with prudent management practices required for the economic and safe conduct of nuclear activities.

4.3 Each Party shall have the right for representatives to accompany Agency inspectors during the conduct of on-site verification activities, provided that the effective and independent function of the inspectors shall not thereby be delayed or otherwise impeded.

**Paragraph 5 Privileges and immunities**

5.1 The *verification agreement* shall specify the privileges and immunities to be granted to the Agency and inspectors for the independent exercise of their functions, so as to ensure they will be in a position to discharge their functions and responsibilities under the Treaty and the verification agreement effectively.

**Paragraph 6 Records and reports**

6.1 Each Party shall maintain accounting and operating records, and related records, with respect to *fissile material* and *nuclear facilities subject to the Treaty*, and *related locations*, necessary to facilitate effective and efficient implementation by the Agency of verification measures pursuant to the Treaty and the verification agreement.

6.2 Each Party shall provide to the Agency an initial report of *fissile material* and *nuclear facilities subject to the Treaty*, and *related locations* and *related information* pursuant to the Treaty.

6.3 Each Party shall provide to the Agency periodic reports on changes in the inventory of *fissile material subject to the Treaty*, and periodic updates on the other matters referred to in paragraph 6.2.

**Paragraph 7 Verification measures**

*Design review*

7.1.1 Each Party shall provide the Agency with design information for *nuclear facilities subject to the Treaty*, including information on such characteristics of a facility that may bear on the verification objective and verification procedures, and shall provide the Agency with any changes to such design information.

*Inspections*

7.2.1 The Agency shall have the right to undertake inspections and *access* at any *site* or location necessary to verify the *correctness* and *completeness* of information contained in reports and records;

7.2.2 The purpose of inspections may include:

7.2.2.1 Verification of the inventory of *fissile material subject to the Treaty*;

7.2.2.2 Verification that such material is not diverted to *proscribed activities*;

7.2.2.3 Verification and re-verification of facility design information as necessary to meet the verification objective;

7.2.3 The purpose of *access* may include:

7.2.3.1 Verification activities to derive assurance of the absence of *undeclared fissile material* and *proscribed activities*;

7.2.3.2 Verification activities to resolve questions or inconsistencies relating to the correctness and completeness of information provided by the Party.

7.3 Other measures

7.3.1 The Agency shall have the right to implement technical measures in support of the verification objective, including *containment and surveillance*, location-specific environmental sampling, and wide-area environmental sampling.

7.4 Clarification of information

7.4.1 At the request of the Agency each Party shall supply amplifications or clarifications of any information provided, in so far as relevant for the purpose of verification.

7.5 Access to persons

7.5.1 Agency inspectors shall have access to any person who by reason of his or her occupation deals with *fissile material* or *nuclear facilities subject to the Treaty*, as necessary to meet the verification objective.

#### **Paragraph 8 Managed access**

8.1 Each Party shall have the right to establish, in consultation with the Agency, arrangements for managed access at *sites* or locations in order to protect against the disclosure of national, commercial and industrial secrets and other confidential information, or to prevent the dissemination of proliferation sensitive information, provided such arrangements shall not preclude the Agency from conducting activities necessary to meet the verification objective.

8.2 Detailed provisions on managed access are at Annex XX.

#### **Paragraph 9 Special inspections, challenge inspections, clarification visits**

9.1 The Agency may make a special inspection at any *site* or location if it considers that information provided by a Party, including explanations from the Party and information obtained from verification activities, is not adequate for the Agency to meet the verification objective.

9.2 Any Party may request the Agency to undertake a challenge inspection in order to resolve any questions concerning possible non-compliance with the Treaty by another Party. In the case of such a request, the provisions in Annex ZZ shall apply.

9.3 Any Party may request clarification from another Party, directly or with or through the Agency, of any matter that may cause concern about possible non-compliance with the basic obligations of this Treaty. If the Party the subject of the request agrees, clarification may include clarification visits to relevant locations by representatives of the requesting Party and/or the Agency.

#### **Paragraph 10 Non-proscribed non-peaceful activities**

10.1 A Party may use *fissile material subject to the Treaty* in non-proscribed non-peaceful activities, such as military propulsion reactors, provided appropriate verification

arrangements are applied to provide assurance that such fissile material is not used for nuclear weapons or nuclear explosive devices.

10.2 The Party and the Agency shall consult on verification arrangements that recognise the sensitivity of non-proscribed non-peaceful activities, but which enable the Agency to meet the verification objective.

10.3 Detailed provisions on such verification arrangements are set out in Annex XX on managed access.

#### **Paragraph 11 Termination of verification**

11.1 Verification measures shall terminate on fissile material subject to the Treaty upon determination of the Agency that:

11.1.1 It has ceased to be *fissile material subject to the Treaty*, through irradiation or down-blending; or

11.1.2 It has been consumed or diluted in such a way that it is no longer usable for a *proscribed activity* or has become practicably irrecoverable.

#### **Paragraph 12 International transfers**

12.1 Each Party shall report to the Agency all intended transfers out of the State of *fissile material subject to the Treaty*, and all receipts of *fissile material* required to be subject to the Treaty, and provide the Agency with the necessary opportunity to verify such transfers.

#### **Paragraph 13 Continuation of Treaty commitments**

13.1 If for any reason the Treaty ceases to apply in a particular State, all *fissile material* and nuclear facilities that were subject to the Treaty at the time of its cessation, and all *fissile material* produced, processed or used in or in connection with such *fissile material* or nuclear facility after the cessation of the Treaty's application, including subsequent generations of produced *fissile material*, shall remain subject to the commitment of the Treaty against the use of *fissile material* for the manufacture of nuclear weapons or nuclear explosive devices.

13.2 The State shall continue to cooperate with the Agency in the implementation of the *verification agreement* with respect to the *fissile material* and nuclear facilities referred to in paragraph 13.1.

#### **Terms requiring definition – include:**

##### Fissile material

- (a) High enriched uranium, i.e. uranium enriched to 20% or more in the isotope uranium-235;
- (b) Plutonium containing less than 80% of the isotope plutonium-238;
- (c) Uranium-233;
- (d) Neptunium-237;
- (e) [Americium-241].

##### Fissile material subject to the Treaty

Unirradiated fissile material produced after the Treaty's entry-into-force. (see para. 11)

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Unirradiated fissile material

Fissile material with a radiation level equal to or less than [1 Gray/hour] at one metre unshielded.

Production of fissile material

- (a) High enrichment, i.e. enrichment to 20% or more in the isotope uranium-235;
- (b) Reprocessing, i.e. separation of plutonium or uranium-233 from fission products.

Nuclear facility subject to the Treaty

- (a) Fissile material *production facilities*, i.e. enrichment plants and reprocessing plants;
- (b) Closed-down or decommissioned production facilities;
- (c) Facilities, and locations outside facilities, where fissile material subject to the Treaty is stored, processed or used.

Site

An area in which a nuclear facility subject to the Treaty is located.

Related location

A location in which activities related to production, processing use or storage of fissile material subject to the Treaty take place.

Related information

Information related to production, processing use or storage of fissile material subject to the Treaty.

Proscribed activity

- (a) Use of *fissile material subject to the Treaty* for the manufacture of nuclear weapons or nuclear explosive devices;
- (b) Undeclared production of fissile material.

Non-proscribed activity

Any activity that is not a proscribed activity. Non-proscribed activities include separation of minor actinides from unirradiated plutonium that is not subject to the Treaty.

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