

**Agreement between the U.S. and The International Atomic Energy Agency concerning Atomic Energy: Cooperation in Peaceful Application.**

Agreement signed  
at Vienna May 11, 1959; Entered into force August 7, 1959.

The United States of America and the International Atomic Energy Agency,

Desiring to set forth areas of co-operation in the peaceful application of atomic energy including the basis on which special nuclear material, source material and reactor material will be made available by the United States to the Agency for use in Agency activities:

Agree as follows:

Article I

For purposes of this Agreement:

- (a) "Agency" means the International Atomic Energy Agency.
- (b) "United States" means the Government of the United States of America, or any agency of the United States Government acting on behalf of the United States.
- (c) "Parties" mean the United States and the Agency. "Party" means one of the above-mentioned "Parties".
- (d) "Agency Statute" means the Statute of the Agency as amended from time to time.
- (e) "Person" means (1) any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency and (2) any legal successor, representative, agent or agency of the foregoing.
- (f) "Reactor material" means any material, other than special nuclear material or source material, of special importance or desirability for use in reactors or in research thereon.
- (g) "Source material" means (1) uranium, thorium, or any other material determined by mutual agreement of the United States and the Agency to be source material; (2) any of the foregoing in the form of metal, alloy, chemical compound, or concentrate; or (3) ores containing one or more of the foregoing materials, in such concentration as may be determined from time to time by mutual agreement.
- (h) "Special nuclear material" means plutonium-239, uranium-233, uranium enriched in the isotopes 235 or 233, any material containing one or more of the foregoing, now specified as "special fissionable material" in subparagraph 1, Article XX of the Agency Statute, and any other material determined by mutual agreement of the United States and

the Agency to be special nuclear material. "Special nuclear material" does not include "Reactor material" or "Source material".

(i) "Agency activity" means any activity set up by the Agency or any Member or group of Members thereof under the aegis of the Agency or conducted with the assistance of the Agency for research or development or practical application of atomic energy for peaceful purposes.

## Article II

A. The United States will make available to the Agency pursuant to the Agency Statute, as set forth in paragraph B of this Article, for use in Agency activities 5,000 kilogrammes of contained uranium-235 together with the amounts of special nuclear material which will match in amount the sum of all quantities of special nuclear material made available by all other Members of the Agency prior to 1 July 1960. The United States will also, from time to time, make available to the Agency such additional quantities of special nuclear materials, including contained uranium-235, as may be authorized by the United States. The uranium supplied hereunder may be enriched up to 20 per cent in the isotope uranium-235 provided, however, that the parties may agree to a higher enrichment with respect to uranium to be used in research reactors, material testing reactors or for research purposes.

B. The United States undertakes to make special nuclear material available to the Agency at the United States Atomic Energy Commission's published charges applicable to the domestic United States distribution of such material in effect at the time, it being understood that the foregoing shall not affect the existence of the Commission's authority to assist and encourage research on peaceful uses or for medical therapy by making such material available to the Agency without charge during any calendar year in a quantity which at the time of transfer does not exceed in value US \$ 50,000.

C. The special nuclear material made available to the Agency pursuant to the Agency Statute will be used or pursuant to the Agency's direction and in its behalf distributed by the Agency in accordance with the Statute of the Agency and rules and regulations made pursuant thereto. The United States will retain such material until needed by the Agency. When requested by the Agency, the United States will deliver such material to the Agency or pursuant to the Agency's direction and in its behalf to a Member or a group of Members designated by the Agency. The parties shall agree on the compensation for such material, its form and composition, delivery schedule and related matters.

D. The United States will assist the Agency in obtaining source material and reactor materials from persons under the jurisdiction of the United States, if sources are available to the Agency on reasonable terms, the United States may make such material available to the Agency. Such material made available to the Agency will be used or pursuant to the Agency's direction and in its behalf distributed by the Agency in accordance with the Statute of the Agency and rules and regulations made pursuant thereto. The United States, when requested by the Agency, will deliver such material to the Agency or

pursuant to the Agency's direction and in its behalf to a Member or group of Members designated by the Agency. The parties shall agree on the compensation for such material, its form and composition, delivery schedule and related matters.

E. The United States will accept the return of source and special nuclear material made available pursuant to this Agreement for reprocessing on terms and conditions to be agreed, and will, unless the parties agree otherwise, return to the Agency either the amount of source and special nuclear material recovered therefrom or an equivalent amount of source and special nuclear material recoverable therefrom.

F. The United States may, at the request of the Agency, and subject to the laws of the United States and to the Agency Statute, purchase, for use solely in the peaceful application of atomic energy, special nuclear material recovered or produced from special nuclear material and source material as a result of Agency activities, at such prices and on such other terms and conditions as may be agreed.

### Article III

The application or use of any material, equipment or facilities, or use of any information (including design drawings and specifications), made available by the United States shall be the responsibility of the Agency, or of any Member of the Agency to which the Agency shall transfer such material, equipment, facilities, or information, in accordance with the Agency Statute, and the United States does not warrant the suitability of such information, material, equipment or facilities, for any particular use or application except to the extent the parties may otherwise specifically agree. All agreements for the lease of any special nuclear material, source material or reactor material pursuant to this Agreement shall include a mutually acceptable provision relieving the lessor of liability arising out of or in connexion with material after delivery.

### Article IV

The United States undertakes that subject to the applicable laws, regulations and license requirements of the United States, persons under the jurisdiction of the United States will be permitted to make arrangements to transfer and export material, equipment or facilities, and to perform services in the peaceful uses of atomic energy for the Agency, or upon request of the Agency, for a Member or group of Members of the Agency, or for a person under the jurisdiction of such Member in connexion with an Agency activity with which such Member is associated.

### Article V

The Agency guarantees, to the full extent of its statutory powers, that:

(a) The safeguards set forth in the Agency Statute shall be maintained and implemented as provided in the Agency Statute with respect to material, equipment or facilities, made available by the United States or persons under its jurisdiction for use in Agency

activities.

(b) No material, equipment or facilities, transferred pursuant to this Agreement will be used for atomic weapons or for research on or for development of atomic weapons or for any other military purposes.

(c) Material, equipment or facilities, used, transferred or re-transferred pursuant to this Agreement shall be used or transferred only in accordance with the Agency Statute and this Agreement.

## Article VI

This Agreement shall enter into force on the day on which each Party to this Agreement shall have received from the other Party written notification that it has complied with all requirements for the entry into force of such Agreement and shall remain in force for a period of twenty years.

IN WITNESS WHEREOF, the undersigned representatives have signed this Agreement pursuant to duly constituted authority.

DONE at Vienna, in duplicate, this 11th day of May, 1959.

FOR THE UNITED STATES OF AMERICA:

Harold C. Vedeler

FOR THE INTERNATIONAL ATOMIC ENERGY AGENCY:

Sterling Cole

INTERNATIONAL ATOMIC ENERGY AGENCY Atomic Energy: Cooperation in Peaceful Application

Agreement amending and extending the agreement of May 11, 1959. Signed at Vienna February 12, 1974; Entered into Force May 31, 1974. With exchange of letters Signed at Vienna August 29, 1973 and January 16, 1974.

## **AMENDMENT TO THE AGREEMENT FOR CO-OPERATION BETWEEN THE UNITED STATES OF AMERICA AND THE INTERNATIONAL ATOMIC ENERGY AGENCY**

The United States of America and the International Atomic Energy Agency,

Desiring to amend the Agreement for Co-operation Between the United States of

America and the International Atomic Energy Agency, signed at Vienna on May 11, 1959 (hereinafter referred to as the "Agreement for Co-operation"),

Agree as follows:

#### ARTICLE I

Article II of the Agreement for Co-operation is amended by:

(a) Deleting in paragraph A thereof the phrase", as set forth in paragraph B of this Article,"; and

(b) Deleting paragraphs B and E thereof and relettering paragraphs C, D and F as B, C, and D respectively.

#### ARTICLE II

Article VI of the Agreement for Co-operation is amended by deleting "twenty years" and substituting in lieu thereof "fifty-five years, it being understood that the Agreement may be extended by agreement of the Parties pursuant to their statutory requirements".

#### Article III

This Amendment shall enter into force on the date on which each Party shall have received from the other Party written notification that it has complied with all requirements for such entry into force.

IN WITNESS WHEREOF, the undersigned representatives have signed this Amendment pursuant to duly constituted authority.

DONE at Vienna, in duplicate, this twelfth day of February, 1974.

FOR THE UNITED STATES OF AMERICA:

Gerald F. Tape

FOR THE INTERNATIONAL ATOMIC ENERGY AGENCY:

Sigvard Eklund

INTERNATIONAL ATOMIC ENERGY AGENCY Atomic Energy: Cooperation in Peaceful Application

Agreement amending the agreement of May 11, 1959, as amended and extended.  
Signed at Vienna January 14, 1980; Entered into force May 6, 1980.

## **SECOND AMENDMENT TO THE AGREEMENT FOR CO-OPERATION BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY AND THE UNITED STATES OF AMERICA**

The International Atomic Energy Agency and the United States of America,

Desiring to amend the Agreement for Co-operation between the International Atomic Energy Agency and the United States of America, signed at Vienna on 11 May 1959, as amended on 12 February 1974 (hereinafter referred to as the "Agreement for Co-operation"),

AGREE as follows:

### **ARTICLE I**

Article IV of the Agreement for Co-operation is amended by the addition of the following sentences:

"The applicable laws, regulations and licence requirements of the United States include criteria for the arrangements for transfer and export and the performance of services referred to in the foregoing sentence, as set forth in the Annex and the Appendix thereto. The Appendix may be modified by mutual consent of the Parties, without amendment of this Agreement. For the purpose of implementing the arrangements set forth in the Annex, the Agency may act as an intermediary at the request of a Member State or group of Member States."

### **ARTICLE II**

1. Sub-paragraphs (a) and (b) of Article V of the Agreement for Co-operation are amended as follows:

"(a) Safeguards in accordance with the Agency's Statute and the Agency's safeguards system shall be maintained and implemented by the Agency with respect to all Agency activities in which material, equipment or facilities made available pursuant to this Agreement are used. Small quantities of source material and special nuclear material subject to this Agreement may be transferred to Member States by the Agency for safeguards related purposes. Any such material so transferred may be deemed to be exempt from the application of safeguards, provided that the total quantity of such material shall not at any time exceed in quantity one effective kilogram, as defined in the Agency's safeguards system. Any such material shall remain subject to this Agreement regardless of its physical location until the Parties agree that any such material has been consumed, or has been diluted in such a way that it is no longer usable for any nuclear activity relevant from the point of view of safeguards, or has become practically irrecoverable."

"(b) Material, equipment or facilities transferred pursuant to this Agreement, and material used in or produced through the use of any such material, equipment or facilities, shall not be used for nuclear weapons or any other nuclear explosive device, for research on or development of any nuclear explosive device, or for any other military purpose."

2. Sub-paragraph (c) of Article V of the Agreement for Co-operation is amended by the addition of the following sentence:

"In cases where the United States transfers material, equipment or facilities in accordance with this Agreement for the Agency's own use, such material, equipment or facilities and any special nuclear material used in or produced through the use of such material, equipment or facilities may be transferred by the Agency only upon agreement by the United States."

### ARTICLE III

This Amendment shall enter into force on the date on which the Agency receives from the United States written notification that it has complied with all requirements for such entry into force.

IN WITNESS WHEREOF, the undersigned representatives have signed this Amendment pursuant to duly constituted authority.

DONE at Vienna, this fourteenth day of January 1980, in duplicate in the English language.

For the UNITED STATES OF AMERICA:

Roger Kirk

For the INTERNATIONAL ATOMIC ENERGY AGENCY:

Sigvard Eklund

### ANNEX

#### UNITED STATES CRITERIA FOR TRANSFER AND EXPORT ARRANGEMENTS

Section A. Material, equipment or facilities made available to the Agency pursuant to the Agreement for Co-operation in connection with a "supply agreement" shall not be used in any Agency activities in a non-nuclear-weapon Member State or group of Member States unless, at the date of transfer, the Member State or group of Member States has entered into an agreement or agreements with the Agency for the application of safeguards and such safeguards are being maintained and implemented in accordance with the Agency's Statute and the Agency's safeguards system with respect to all nuclear activities being

carried out within its territory, under its jurisdiction or under its control anywhere. For the purposes of this Annex, a "supply agreement" means:

- (1) Any agreement entered into with the United States after the entry into force of the Second Amendment to the Agreement for Co-operation for supply under the latter Agreement; or
- (2) Any other agreement as mutually agreed and to the extent applicable.

For the purposes of this Section, the implementation of an agreement with the Agency pursuant to Article III, 4 of the Treaty on the Non-Proliferation of Nuclear Weapons or of an equivalent safeguards agreement, for example, an agreement with the Agency pursuant to Article 13 of the Treaty for the Prohibition of Nuclear Weapons in Latin America, acceptable to the United States, shall be considered to fulfill the conditions stated in the first sentence of this Section.

Section B. Any supply agreement shall include inter alia:

- (1) Provisions assuring that the rights and obligations of the parties under the supply agreement continue to apply in connection with the supplied material, equipment or facilities and with any special nuclear material used in or produced through the use of such material, equipment or facilities, including subsequent generations of special nuclear material, until such time as the Agency has terminated the application of safeguards thereto in accordance with the Agency's safeguards system; and
- (2) Provisions according to which the recipient Member State or group of Member States shall, upon the request of the United States, inform or permit the Agency to inform the United States of the status of all inventories of source or special nuclear materials subject to Agency safeguards pursuant to all agreements with such State or States; however, in the case of a recipient Member State or group of Member States party to a safeguards agreement pursuant to the Treaty on the Non-Proliferation of Nuclear Weapons or to an equivalent safeguards agreement, for example, an agreement pursuant to the Treaty for the Prohibition of Nuclear Weapons in Latin America, acceptable to the United States, the United States needs be informed only with respect to the status of inventories of source or special nuclear materials which are subject to the provisions of the supply agreement.

Section C. Material transferred pursuant to any supply agreement and material used in or produced through the use of any material, equipment or facilities so transferred may be stored by the Agency or the recipient Member State or group of Member States to the extent consistent with the Agency's Statute: provided that plutonium or uranium-233 (other than that contained in irradiated fuel elements) or uranium enriched to twenty per cent or more in the isotope 235 shall be stored only in facilities agreed to in advance by the United States.



Section D. Material transferred pursuant to any supply agreement and material used in or produced through the use of any material, equipment or facilities so transferred shall not be reprocessed or in the case of plutonium, uranium-233, uranium enriched to twenty per cent or more in the isotope 235, or irradiated source or special nuclear material otherwise altered in form or content unless the United States agrees.

Section E. Uranium transferred pursuant to any supply agreement and uranium used in any material, equipment or facilities so transferred may be enriched after transfer up to twenty per cent in the isotope 235 only if the United States agrees. Such uranium shall not be enriched after transfer to twenty per cent or more in the isotope 235 unless specifically provided for by the supply agreement or by an amendment thereto.

Section F. Adequate physical protection shall be maintained with respect to any material, equipment or facilities transferred pursuant to any supply agreement or used in or produced through the use of any material, equipment or facilities so transferred. Prior to any such transfer the recipient Member State or group of Member States shall agree to the levels for the application of physical protection set forth in the Appendix to the Annex, and to the maintenance of adequate physical protection measures in accordance with such levels. The physical protection measures to be maintained by the recipient Member State or group of Member States shall as a minimum provide protection comparable to that set forth in document INFCIRC/225/Rev. 1, published by the Agency and entitled: "The Physical Protection of Nuclear Material", or in any revision of that document agreed to by the United States and the recipient Member State or group of Member States.

Section G. No sensitive nuclear technology may be transferred pursuant to any supply agreement unless specifically provided for by such agreement or by an amendment thereto. "Sensitive nuclear technology" means any information (including information incorporated in equipment or facilities) which is not available to the public and which is important to the design, construction, fabrication, operation or maintenance of any facility designed or used primarily for uranium enrichment, reprocessing of nuclear fuel, heavy water production or fabrication of nuclear fuel containing plutonium, or such other information as the United States may designate prior to transfer of the information.

Section H. Material, equipment or facilities transferred pursuant to any supply agreement and any special nuclear material used in or produced through the use of such material, equipment or facilities may be transferred by the recipient Member State or group of Member States only upon agreement by the United States.

Section I. Any arrangements entered into by the United States with a non-nuclear-weapon Member State or group of Member States in connection with any supply agreement shall provide that in the event the Agency is, for any reason, unable to continue to apply its safeguards with respect to the material, equipment or facilities referred to in Section H above, United States safeguards, or other appropriate safeguards measures as the Governments may agree, shall be applied in that Member State or group of Member States with respect to such material equipment or facilities.

Section J. Any arrangements referred to in Section I above shall further provide that if at any time a non-nuclear-weapon Member State or group of Member States in which there is an Agency activity involving material, equipment or facilities transferred pursuant to any supply agreement:

(1) Carries out any nuclear activity with respect to which the application of Agency safeguards is not then provided for in an agreement in force with the Agency as contemplated in Section A of this Annex;

(2) Does not permit the Agency to apply safeguards, in accordance with the Agency's safeguards system, to any nuclear activity carried out within its territory, under its jurisdiction or under its control anywhere;

(3) Does not comply with any provision of a supply agreement referred to in Section A of this Annex;

(4) Detonates a nuclear explosive device; or

(5) Is in material non-compliance with an Agency safeguards agreement;

the United States shall have the right to:

(a) Cease further co-operation with the Member State or group of Member States under the Agreement for Co-operation; and

(b) Require the return of any material, equipment or facilities which are subject in such State or States to the provisions of the supply agreement.

## APPENDIX

### Levels of physical protection

Pursuant to Section F of the Annex, the agreed levels of physical protection to be ensured by the competent national authorities in the use, storage and transportation of the materials listed in the attached table shall as a minimum include protection characteristics as follows.

### CATEGORY III

Use and storage within an area to which access is controlled.

Transportation under special precautions including prior arrangement between sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of the supplier State and the recipient State, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

CATEGORY II

Use and storage within a protected area to which access is controlled, i.e. an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control, or any area with an equivalent level of physical protection.

Transportation under special precautions including prior arrangements between sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of the supplier State and the recipient State, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

CATEGORY I

Materials in this category shall be protected with highly reliable systems against unauthorized use as follows.

Use and storage within a highly protected area, i.e. a protected area as defined for Category II above, to which, in addition, access is restricted to persons whose trust-worthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorized access or unauthorized removal of material.

Transportation under special precautions as identified above for transportation of Category II and III materials and, in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces.

TABLE: CATEGORIZATION OF NUCLEAR MATERIAL

Material: Form	Category
	I II III
1. Plutonium:[a,f] Unirradiated [b]..... 2 kg or more.....Less than 2 kg but more than 500 g.	500 g or less [c]
2. Uranium-235[d]: Unirradiated: [b] -Uranium enriched to 20 percent..... 5 kg or more.....Less than 5 kg but more than 1 kg.	1 kg or less [c] than 1

-Uranium enriched to 10 percent.....	10 kg or more .....	Less than 10
U235 but less than 20 percent		kg [c]
-Uranium enriched above natural, .....		10 kg or more
but less than 10 percent U235.		
3. Uranium-233: Unirradiated [b].....	2 kg or more....Less than 2 kg but more	500 g or less [c]
	than 500 g.	

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- a All plutonium except that with isotopic concentration exceeding 80 percent in plutonium-238.
  - b. Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one meter unshielded.
  - c. Less than a radiologically significant quantity should be exempted.
  - d. Natural uranium, depleted uranium and thorium and quantities of uranium enriched to less than 10 percent not falling in category III should be protected in accordance with prudent management practice.
  - e. Irradiated fuel should be protected as Category I, II or III nuclear material depending on the category of the fresh fuel. However, fuel which by virtue of its original fissile material content is included as Category I or II before irradiation should only be reduced one Category level, while the radiation level from the fuel exceeds 100 rads/h at one meter unshielded.
  - f. The State's competent authority should determine if there is a credible threat to disperse plutonium malevolently. The State should then apply physical protection requirements for category I, II or III of nuclear material, as it deems appropriate and without regard to the plutonium quantity specified under each category herein, to the plutonium isotopes in those quantities and forms determined by the State to fall within the scope of the credible dispersal threat.