

AGREEMENT
BETWEEN THE GOVERNMENT OF JAPAN
AND THE EUROPEAN ATOMIC ENERGY COMMUNITY
FOR CO-OPERATION
IN THE PEACEFUL USES OF NUCLEAR ENERGY

AGREEMENT
BETWEEN THE GOVERNMENT OF JAPAN
AND THE EUROPEAN ATOMIC ENERGY COMMUNITY
FOR CO-OPERATION
IN THE PEACEFUL USES OF NUCLEAR ENERGY

The Government of Japan and the European Atomic Energy Community (hereinafter referred to as "the Community"),

Desiring to continue and further develop a long-term, stable co-operation which may benefit Japan, the Community and third parties in the peaceful and non-explosive uses of nuclear energy on the basis of mutual benefit and reciprocity;

Recognizing that Japan, the Community and its Member States have attained a comparable advanced level in the peaceful uses of nuclear energy and in the security afforded by their respective laws and regulations concerning health, safety, the peaceful uses of nuclear energy and the protection of the environment;

Desiring also to make long-term co-operative arrangements in the field of the peaceful and non-explosive uses of nuclear energy in a predictable and practical manner, which take into account the needs of their respective nuclear energy programmes and which facilitate trade, research and development and other co-operative activities between Japan and the Community;

Reaffirming the strong commitment of the Government of Japan, the Community and the Governments of its Member States to nuclear non-proliferation including the strengthening and efficient application of the related safeguards and export control regimes under which co-operation in the peaceful uses of nuclear energy between Japan and the Community should be carried out;

Reaffirming the support of the Government of Japan, the Community and the Governments of its Member States for the objectives of the International Atomic Energy Agency (hereinafter referred to as "the Agency") and its safeguards system and their desire to promote universal adherence to the Treaty on the Non-Proliferation of Nuclear Weapons, done on July 1, 1968 (hereinafter referred to as "the Non-Proliferation Treaty");

Noting that nuclear safeguards are applied in all Member States of the Community pursuant to the Treaty establishing the European Atomic Energy Community, done on March 25, 1957 (hereinafter referred to as "the Euratom Treaty");

Recognizing the principle of the free movement of nuclear material, equipment and non-nuclear material within the Community contained in the Euratom Treaty; and

Recognizing also the significance of a high level of transparency concerning the management of plutonium in order to reduce the risk of proliferation of nuclear weapons and to ensure the protection of workers, the general public and the environment,

Have agreed as follows:

ARTICLE 1 Definitions

For the purposes of this Agreement:

- (a) The term "Parties" means the Government of Japan and the Community. The term "Party" means one of the above "Parties".
- (b) The term "the Community" means both:
 - (i) the legal person created by the Euratom Treaty; and
 - (ii) the territories to which the Euratom Treaty applies.
- (c) The term "persons" means any natural person, undertaking or other entity governed by the applicable laws and regulations in the respective territorial jurisdiction of the Parties, but does not include the Parties.
- (d) The term "appropriate authority" means, in the case of the Government of Japan, the government agency designated by the Government of Japan, and in the case of the Community, the European Commission or such other authority as the Community may at any time notify in writing to the Government of Japan.
- (e) The term "unclassified information" means information not bearing a security classification placed by either of the Parties or by an individual Member State of the Community.

- (f) The term "nuclear material" means
- (i) "source material", namely, uranium containing the mixture of isotopes occurring in nature; uranium depleted in the isotope 235; thorium; any of the foregoing in the form of metal, alloy, chemical compound, or concentrate; any other material containing one or more of the foregoing in such concentration as the Board of Governors of the Agency determines under Article XX of the Statute of the Agency, done on October 26, 1956 (hereinafter referred to as "the Statute"), and the appropriate authorities of both Parties inform each other, in writing, to accept; and such other material as the Board of Governors of the Agency determines under Article XX of the Statute and the appropriate authorities of the Parties inform each other, in writing, to accept.
 - (ii) "special fissionable material", namely, plutonium; uranium-233; uranium enriched in the isotope 233 or 235; any material containing one or more of the foregoing; and such other material as the Board of Governors of the Agency determines under Article XX of the Statute and the appropriate authorities of both Parties inform each other, in writing, to accept. The term "special fissionable material" does not include "source material".
- (g) The term "sensitive nuclear material" means separated plutonium (including plutonium contained in mixed oxide fuel) or uranium enriched to more than 20% in the isotope 235 and/or uranium 233.
- (h) The term "equipment" means major items of plant, machinery or instrumentation, or major components thereof, which are especially designed or manufactured for use in nuclear activities, and which are specified in Part A of Annex A to this Agreement.
- (i) The term "non-nuclear material" means heavy water, or any other material suitable for use in a nuclear reactor to slow down high velocity neutrons and increase the likelihood of further fission, as specified in Part B of Annex A to this Agreement.

- (j) The term "nuclear material recovered or produced as a by-product" means special fissionable material derived from nuclear material transferred pursuant to this Agreement or by one or more processes from the use of complete nuclear reactors transferred pursuant to this Agreement and, if the Government of Japan and the European Commission, following consultations between the European Commission and the Government of the Member State of the Community concerned, agree in writing prior to its transfer, any other equipment specified in Part A of Annex A to this Agreement which is intended to be transferred pursuant to this Agreement.

ARTICLE 2

Scope of co-operation

1. The Parties shall co-operate under this Agreement to promote and facilitate nuclear trade, research and development and other activities between or in Japan and the Community for peaceful and non-explosive uses of nuclear energy, in the mutual interests of producers, the nuclear fuel cycle industry, utilities, research and development institutes and consumers while abiding by the principles of non-proliferation.
2. The Parties shall co-operate in the following ways:
 - (a) Either Party or authorised persons may supply to or receive from the other Party or authorised persons nuclear material, equipment and non-nuclear material, on such terms as may be agreed upon between the supplier and the recipient.
 - (b) Either Party or authorised persons may perform nuclear fuel cycle services and other services within the scope of this Agreement for or receive such services from the other Party or authorised persons, on such terms as may be agreed upon between the supplier and the recipient.
 - (c) The Parties shall encourage co-operation between themselves and between persons by exchange of experts. When co-operation pursuant to this Agreement requires such exchanges of experts, the Parties shall facilitate the entry of the experts to Japan and the Community and their stay therein.

- (d) The Parties shall facilitate supply and exchange of unclassified information as may be agreed between themselves, between persons, or between either Party and persons.
- (e) The Parties may co-operate and encourage co-operation between themselves and between persons in other ways as deemed appropriate by the Parties.

3. Co-operation as specified in paragraphs 1 and 2 above shall be subject to the provisions of this Agreement and the applicable international agreements, laws and regulations in force in Japan and in the Community.

ARTICLE 3 Items subject to the Agreement

1. Nuclear material transferred between Japan and the Community, whether directly or through a third country, shall become subject to this Agreement upon its entry into the territorial jurisdiction of the receiving Party, only if the supplying Party has notified the receiving Party in writing of the intended transfer and the receiving Party has confirmed in writing that such item will be held subject to this Agreement and that the proposed recipient, if other than the receiving Party, will be an authorised person under the territorial jurisdiction of the receiving Party.

2. Equipment and non-nuclear material which are transferred between Japan and the Community, whether directly or through a third country, shall become subject to this Agreement upon their entry into the territorial jurisdiction of the receiving Party, only if:

- (a) in the case of transfers from Japan to the Community, the Government of Japan or, in the case of transfers from the Community to Japan, the Government of the Member State of the Community concerned or, as appropriate, the European Commission, has decided that the transfer of such items shall take place under this Agreement; and
- (b) the supplying Party has notified the receiving Party in writing of the intended transfer and the receiving Party has confirmed in writing that such items will be held subject to this Agreement and that the proposed recipient, if other than the receiving Party, will be an authorised person under the territorial jurisdiction of the receiving Party.

3. The written notifications and confirmations required under paragraphs 1 and 2 above shall be made in accordance with the procedures referred to in Article 14 of this Agreement.

4. Nuclear material, equipment and non-nuclear material subject to this Agreement shall remain subject to this Agreement until:

- (a) such items have been transferred beyond the territorial jurisdiction of the receiving Party in accordance with the relevant provisions of this Agreement;
- (b) the Parties agree that such items should no longer be subject to this Agreement; or
- (c) in the case of nuclear material, it is determined in accordance with the provisions for the termination of safeguards in the relevant agreements referred to in paragraph 1 of Article 8 of this Agreement, that the nuclear 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 practicably irrecoverable.

ARTICLE 4

Co-operation on nuclear research and development

1. As provided for in Article 2 of this Agreement, the Parties shall develop co-operation on research and development for peaceful and non-explosive uses of nuclear energy between themselves and their agencies and, in respect of the Community, in so far as it is covered by its specific programmes. The Parties or their agencies, as appropriate, may allow the participation in such co-operation of researchers and organisations from all research sectors, including universities, laboratories and the private sector. The Parties shall also facilitate such co-operation between persons in this field.

2. The Parties shall conclude a separate agreement for the purpose of further developing and facilitating activities subject to this Article.

ARTICLE 5
Implementation of the Agreement

1. The provisions of this Agreement shall be implemented in good faith in such a manner as to avoid hampering, delay or undue interference in the nuclear activities in Japan and in the Community and so as to be consistent with the prudent management practices required for the economic and safe conduct of their nuclear activities.

2. The provisions of this Agreement shall not be used for the purpose of seeking commercial or industrial advantages, nor of interfering with the commercial or industrial interests, whether domestic or international, of either Party or authorised persons, nor of interfering with the nuclear policy of either Party or of the Governments of the Member States of the Community, nor of hindering the promotion of the peaceful and non-explosive uses of nuclear energy, nor of hindering the movement of items subject to or notified to be made subject to this Agreement either within the respective territorial jurisdiction of the Parties or between Japan and the Community.

3. Nuclear material subject to this Agreement may be handled based on the principles of fungibility and proportionality when it is used in mixing processes where it loses its identity, or is deemed to lose it, in the process of conversion, fuel fabrication, enrichment or reprocessing.

4. In implementing the provisions of this Agreement, Japan, the Community and its Member States shall act in conformity with the provisions of the Convention on Nuclear Safety, which entered into force on 24 October 1996.

ARTICLE 6
Intellectual property

The Parties shall ensure the adequate and effective protection of intellectual property created and technology transferred pursuant to the co-operation under this Agreement in accordance with the relevant international agreements and the laws and regulations in force in Japan and in the European Communities or their Member States.

ARTICLE 7
Peaceful use

1. Co-operation under this Agreement shall be carried out only for peaceful and non-explosive purposes.

2. Nuclear material, equipment and non-nuclear material transferred pursuant to this Agreement and nuclear material recovered or produced as a by-product shall not be used other than for peaceful purposes; nor shall they be used for any nuclear explosive device, for research on or for development of any such device.

ARTICLE 8
Agency and Euratom safeguards

1. Co-operation under this Agreement shall require the application, as appropriate, of safeguards by the Community pursuant to the Euratom Treaty and acceptance of the application of safeguards by the Agency pursuant to the following safeguards agreements:

- (a) the Agreement between the Government of Japan and the Agency in implementation of paragraphs 1 and 4 of Article III of the Non-Proliferation Treaty, done on March 4, 1977 (hereinafter referred to as "the Safeguards Agreement for Japan"), as supplemented by an Additional Protocol, done on December 4, 1998;
- (b) the Agreement between the Republic of Austria, the Kingdom of Belgium, the Kingdom of Denmark, the Republic of Estonia, the Republic of Finland, the Federal Republic of Germany, the Hellenic Republic, Ireland, the Italian Republic, the Grand Duchy of Luxembourg, the Kingdom of the Netherlands, the Portuguese Republic, the Kingdom of Spain, the Kingdom of Sweden, the Slovak Republic, the Community and the Agency in implementation of Article III (1) and (4) of the Non-Proliferation Treaty, done on April 5, 1973 (hereinafter referred to as "the Safeguards Agreement for the Member States of the Community other than the United Kingdom of Great Britain and Northern Ireland and the French Republic"), as supplemented by an Additional Protocol, done on September 22, 1998, as subsequently amended;
- (c) the Agreement between the United Kingdom of Great Britain and Northern Ireland, the Community and the Agency for the application of safeguards in the United Kingdom of Great Britain and Northern Ireland in connection with the Non-Proliferation Treaty, done on September 6, 1976 (hereinafter referred to as "the Safeguards Agreement for the United Kingdom"), as supplemented by an Additional Protocol, done on September 22, 1998; and

- (d) the Agreement between France, the Community, and the Agency for the application of safeguards in France, done on July 27, 1978 (hereinafter referred to as "the Safeguards Agreement for France"), as supplemented by an Additional Protocol, done on September 22, 1998.

2. Nuclear material transferred pursuant to this Agreement and nuclear material recovered or produced as a by-product shall be subject:

- (a) while within Japan, to safeguards of the Agency pursuant to the provisions of the Safeguards Agreement for Japan; and
- (b) while within the Community, to safeguards applied by the Community pursuant to the Euratom Treaty and, where applicable, to safeguards of the Agency pursuant to the provisions of the Safeguards Agreement for the Member States of the Community other than the United Kingdom of Great Britain and Northern Ireland and the French Republic, the Safeguards Agreement for the United Kingdom or the Safeguards Agreement for France.

3. In the event that for any reason the Agency does not apply safeguards as required by paragraph 2 above, the Parties shall forthwith consult to take rectifying measures and, in the absence of such rectifying measures, shall immediately enter into arrangements which conform to safeguards principles and procedures of the Agency and provide effectiveness and coverage equivalent to that intended to be provided by the safeguards of the Agency specified in paragraph 2 above.

ARTICLE 9 Retransfers

1. Nuclear material, equipment and non-nuclear material transferred pursuant to this Agreement and nuclear material recovered or produced as a by-product shall not be retransferred beyond the territorial jurisdiction of the receiving Party, except into the territorial jurisdiction of the supplying Party unless the receiving Party is provided with the assurances of fulfilment of the conditions set out in Annex B to this Agreement in an appropriate way, or unless, in the absence of such assurances, the prior written consent of the supplying Party is obtained.

2. In addition to complying with the provisions of paragraph 1 above, the following items transferred pursuant to this Agreement shall not be retransferred beyond the territorial jurisdiction of the receiving Party, except into the territorial jurisdiction of the supplying Party, without the prior written consent of the supplying Party:

- (a) sensitive nuclear material; and
- (b) equipment for enrichment, reprocessing or production of heavy water

unless, in the case of items transferred from Japan to the Community, they will be subject to the appropriate bilateral agreement for co-operation in the peaceful uses of nuclear energy between the Government of Japan and the Government of the receiving third country or, in the case of transfers from the Community to Japan, the receiving third country is included on a list to be drawn up by the Community, and notification of such retransfers has been given by the receiving Party to the supplying Party.

ARTICLE 10 Transparency

The Parties shall exchange information in respect of the safe and effective management of nuclear material, equipment and non-nuclear material transferred pursuant to this Agreement.

ARTICLE 11 Physical protection

1. In respect of nuclear material transferred pursuant to this Agreement and nuclear material recovered or produced as a by-product, the Government of Japan, the Governments of the Member States of the Community and, as appropriate, the European Commission, shall apply measures of physical protection according to the criteria which they have individually adopted and which bring about, as a minimum, protection at levels set out in Annex C to this Agreement.

2. In respect of international transport of nuclear material subject to this Agreement, Japan, the Member States of the Community and, as appropriate, the Community shall act in conformity with the provisions of the Convention on the Physical Protection of Nuclear Material, which entered into force on February 8, 1987, to which they are parties.

ARTICLE 12
Existing agreements

1. The provisions of this Agreement shall be regarded as complementary to the provisions of the Agreement between the Government of Japan and the Government of the United Kingdom of Great Britain and Northern Ireland for Co-operation in the Peaceful Uses of Nuclear Energy, done on February 25, 1998 and to the provisions of the Agreement between the Government of Japan and the Government of the French Republic for Co-operation in the Peaceful Uses of Nuclear Energy, done on February 26, 1972, as amended by the Protocol between the same Parties, done on April 9, 1990 and shall, where appropriate, take precedence over the provisions of the said bilateral agreements.

2. To the extent that the provisions in the bilateral agreements referred to in paragraph 1 of this Article provide for rights or obligations for the Government of Japan, the Government of the United Kingdom of Great Britain and Northern Ireland or the Government of the French Republic beyond those contained in this Agreement, those rights and obligations will continue to be implemented under the said bilateral agreements.

3. Notwithstanding the provisions of paragraph 1 of Article 3 of this Agreement, the provisions of this Agreement shall apply to nuclear material which has been transferred before the entry into force of this Agreement between Japan and the United Kingdom of Great Britain and Northern Ireland and between Japan and the French Republic pursuant to the bilateral agreements referred to in paragraph 1 above.

4. Notwithstanding the provisions of paragraph 1 of Article 3 of this Agreement, the provisions of this Agreement shall apply to nuclear material which has been transferred before the entry into force of this Agreement between Japan and Member States of the Community other than the United Kingdom of Great Britain and Northern Ireland and the French Republic, if the Parties agree that such nuclear material will be made subject to this Agreement.

ARTICLE 13
Suspension and termination

1. If Japan, or the Community or any of its Member States at any time following entry into force of this Agreement:

- (a) acts in violation of the provisions of Articles 7, 8, 9 or 11 of this Agreement, or the decisions of the arbitral tribunal referred to in Article 15 of this Agreement; or
- (b) terminates or materially violates any of its safeguards Agreements with the Agency referred to in paragraph 1 of Article 8 of this Agreement,

the Government of Japan or the Community respectively shall have the right to cease further co-operation under this Agreement in whole or in part, or to terminate this Agreement and to require the return of any nuclear material transferred pursuant to this Agreement.

2. If the Community or any of the Member States of the Community other than the United Kingdom of Great Britain and Northern Ireland and the French Republic detonates a nuclear explosive device, the Government of Japan shall have the right specified in paragraph 1 above.

3. If the United Kingdom of Great Britain and Northern Ireland or the French Republic detonates a nuclear explosive device using any nuclear material transferred pursuant to this Agreement, the Government of Japan shall have the right specified in paragraph 1 above.

4. If Japan detonates a nuclear explosive device, the Community shall have the right specified in paragraph 1 above.

5. Before either Party takes steps to cease co-operation in whole or in part under this Agreement or to terminate this Agreement, or to require such return, the Parties shall consult for the purpose of taking corrective measures and shall, where appropriate, carefully consider the following, taking into account the need to make such other appropriate arrangements as may be required:

- (a) the effects of taking such steps; and
- (b) whether the facts which gave rise to consider such steps were caused deliberately.

6. Rights under this Article shall be exercised only if the other Party fails to take corrective measures within an appropriate period of time following the consultations.

7. If either Party exercises its rights under this Article to require the return of any nuclear material transferred pursuant to this Agreement, it shall compensate the other Party or the persons concerned for the fair market value thereof.

ARTICLE 14
Operational procedures

The appropriate authorities of the Parties shall establish and if necessary amend operational procedures for the purpose of the effective implementation of the provisions of this Agreement.

ARTICLE 15
Consultation and arbitration

1. With a view to promoting co-operation under this Agreement, the Parties may at the request of either of them, consult with each other through diplomatic channels or other consultative fora.
2. If any question arises concerning the interpretation or application of this Agreement, the Parties shall, at the request of either of them, consult with each other.
3. If any dispute arising out of the interpretation or application of this Agreement is not settled by negotiation, mediation, conciliation or other similar procedure, the Parties may agree to submit such dispute to an arbitral tribunal which shall be composed of three arbitrators appointed in accordance with the provisions of this paragraph. Each Party shall designate one arbitrator who may be a national of Japan or of a Member State of the Community and the two arbitrators so designated shall elect a third, a national of a state other than Japan or a Member State of the Community, who shall be the Chairman. If, within thirty days of the request for arbitration, either Party has not designated an arbitrator, either Party may request the President of the International Court of Justice to appoint an arbitrator. The same procedure shall apply if, within thirty days of the designation or appointment of the second arbitrator, the third arbitrator has not been elected, provided that the third arbitrator so appointed shall not be a national of Japan or of a Member State of the Community. A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall require the concurrence of two arbitrators. The arbitral procedure shall be fixed by the tribunal. The decisions of the tribunal shall be binding on the Parties.

ARTICLE 16
Status of Annexes

The Annexes to this Agreement form an integral part of this Agreement. They may be modified by mutual consent in writing of the Government of Japan and the European Commission without amendment of this Agreement.

ARTICLE 17
Entry into force and duration

1. This Agreement shall enter into force on the thirtieth day after the date on which the Parties exchange diplomatic notes informing each other that their respective internal procedures necessary for entry into force of this Agreement have been completed and shall remain in force for a period of thirty years.

This Agreement shall be automatically extended for five-year periods thereafter unless either Party notifies the other Party in writing to terminate this Agreement not later than six months prior to the expiry date.

2. Notwithstanding cessation of further co-operation under this Agreement in whole or in part, or termination of this Agreement for any reason, the provisions of Articles 7, 8, 9 and 11 of this Agreement shall continue in effect.

This Agreement and its Annexes are drawn up in two originals in the Danish, Dutch, English, Finnish, French, German, Greek, Italian, Japanese, Portuguese, Spanish and Swedish languages. In case of divergence, the Japanese and English versions shall prevail over the other language versions.

IN WITNESS WHEREOF the undersigned, being duly authorised thereto by the Government of Japan and the European Atomic Energy Community respectively, have signed this Agreement.

DONE at Brussels, this twenty-seventh day of February, 2006.

For the Government
of Japan:

河村武和

For the European Atomic
Energy Community:

Piebalgs

ANNEX A

Part A

1. Complete nuclear reactors:

Nuclear reactors capable of operation so as to maintain a controlled self-sustaining fission chain reaction, excluding zero energy reactors, the latter being defined as reactors with a designed maximum rate of production of plutonium not exceeding 100 grams per year.

2. Nuclear reactor vessels:

Metal vessels, or major shop-fabricated parts therefor, especially designed or prepared to contain the core of a nuclear reactor as defined in paragraph 1 above, as well as relevant nuclear reactor internals as defined in paragraph 8 below.

3. Nuclear reactor fuel charging and discharging machines:

Manipulative equipment especially designed or prepared for inserting or removing fuel in a nuclear reactor as defined in paragraph 1 above.

4. Nuclear reactor control rods and equipment:

Especially designed or prepared rods, support or suspension structures therefor, rod drive mechanisms or rod guide tubes to control the fission process in a nuclear reactor as defined in paragraph 1 above.

5. Nuclear reactor pressure tubes:

Tubes which are especially designed or prepared to contain fuel elements and the primary coolant in a nuclear reactor as defined in paragraph 1 above at an operating pressure in excess of 50 atmospheres.

6. Zirconium tubes:

Zirconium metal and alloys in the form of tubes or assemblies of tubes, and in quantities exceeding 500 kg in any period of 12 months, especially designed or prepared for use in a nuclear reactor as defined in paragraph 1 above, and in which the relation of hafnium to zirconium is less than 1:500 parts by weight.

7. Primary coolant pumps:

Pumps especially designed or prepared for circulating the primary coolant for nuclear reactors as defined in paragraph 1 above.

8. Nuclear reactor internals:

Nuclear reactor internals especially designed or prepared for use in a nuclear reactor as defined in paragraph 1 above, including support columns for the core, fuel channels, thermal shields, baffles, core grid plates and diffuser plates.

9. Heat exchangers:

Heat exchangers (steam generators) especially designed or prepared for use in the primary coolant circuit of a nuclear reactor as defined in paragraph 1 above.

10. Neutron detection and measuring instruments:

Especially designed or prepared neutron detection and measuring instruments for determining neutron flux levels within the core of a nuclear reactor as defined in paragraph 1 above.

11. Plants for the reprocessing of irradiated fuel elements, and equipment especially designed or prepared therefor.

12. Plants for the fabrication of nuclear reactor fuel elements, and equipment especially designed or prepared therefor.

13. Plants for the separation of isotopes of uranium and equipment, other than analytical instruments, especially designed or prepared therefor.

14. Plants for the production or concentration of heavy water, deuterium and deuterium compounds and equipment especially designed or prepared therefor.

15. Plants for the conversion of uranium and plutonium for use in the fabrication of fuel elements and the separation of uranium isotopes as defined in paragraphs 12 and 13 above respectively, and equipment especially designed or prepared therefor.

Part B

1. Deuterium and heavy water:

Deuterium, heavy water (deuterium oxide) and any other deuterium compound in which the ratio of deuterium to hydrogen atoms exceeds 1:5000 for use in a nuclear reactor as defined in paragraph 1 of Part A above, in quantities exceeding 200 kg of deuterium atoms in any period of 12 months.

2. Nuclear grade graphite:

Graphite having a purity level better than 5 parts per million boron equivalent and with a density greater than 1.50g/cm³ for use in a nuclear reactor as defined in paragraph 1 of Part A above, in quantities exceeding 30 metric tons in any period of 12 months.

ANNEX B

- (i) Items retransferred will be used only for peaceful and non-explosive purposes in the receiving third country.
- (ii) If the receiving third country is a non-nuclear weapon state, all nuclear material in that country is and will be subject to the application of safeguards by the Agency.
- (iii) In the case that nuclear material is retransferred, safeguards by the Agency will be applied to the nuclear material in the receiving third country.
- (iv) In the case that nuclear material is retransferred, adequate measures of physical protection of the nuclear material will be maintained in the receiving third country, as a minimum, at levels set out in Annex C.
- (v) Items retransferred will not be further retransferred beyond the receiving third country to another country unless the latter country provides assurances equivalent to those set out in this Annex B.

ANNEX C
Levels of physical protection

The agreed levels of physical protection to be ensured by the Government of Japan, the Governments of the Member States of the Community and, as appropriate, the European Commission in the use, storage and transportation of nuclear material as categorized 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 arrangements among sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient States, 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 among sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient States, respectively, in case of international transport, specifying time, place and procedures for transferring transport responsibility.

CATEGORY I

Nuclear material in this category shall be protected with highly reliable systems against unauthorised 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 trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response authorities. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorised access or unauthorised removal of the nuclear material concerned.

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

TABLE: CATEGORISATION OF NUCLEAR MATERIAL

Nuclear Material	Form	Category I	Category II	Category III
1. Plutonium ^(a)	Unirradiated ^(b)	2 kg or more	Less than 2kg but more than 500g	500g or less ^(c)
2. Uranium-235	Unirradiated ^(b) - uranium enriched to 20% ^{235}U or more - uranium enriched to 10 % ^{235}U but less than 20% ^{235}U - uranium enriched above natural, but less than 10% ^{235}U ^(d)	5 kg or more	Less than 5kg but more than 1kg 10kg or more	1kg or less ^(c) Less than 10kg ^(c) 10kg or more
3. Uranium-233	Unirradiated ^(b)	2 kg or more	Less than 2kg but more than 500g	500g or less ^(c)
4. Irradiated fuel			Depleted or natural uranium, thorium or low-enriched fuel (less than 10% fissile content) ^{(e)(f)}	

(a) Plutonium with an isotopic concentration of plutonium-238 exceeding 80% shall not be included.

(b) Nuclear material not irradiated in a reactor or nuclear material irradiated in a reactor but with a radiation level equal to or less than 1 Gy/hr (100 rads/hr) at one metre unshielded.

(c) Less than a radiologically significant quantity should be exempted but should be protected in accordance with prudent management practice.

- (d) Natural uranium, depleted uranium, thorium and quantities of uranium enriched to less than 10 % not falling in Category III should be protected in accordance with prudent management practice.
- (e) Although this level of protection is recommended, it would be open to the Government of Japan, the Governments of the Member States of the Community and the European Commission, as appropriate, upon evaluation of the specific circumstances, to assign a different category of physical protection.
- (f) Other fuel which by virtue of its original fissile material content is classified as Category I or II before irradiation may be reduced one category level while the radiation level from the fuel exceeds 1 Gy/hr (100 rads/hr) at one metre unshielded.

